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Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



SSC MTS



SBI PO



BPSC



UPTET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

SBI Clerk 2021 (Mains) Memory-Based Test (01-Oct-2021) (Shift 2)

Total Time: 2 Hour : 40 Minute

Total Marks: 200

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks	Sectional Timing
1	General/Financial Awareness	50	50	0.25	1	35 Min
2	General English	40	40	0.25	1	35 Min
3	Quantitative Aptitude	50	50	0.25	1	45 Min
4	Reasoning Ability & Computer Aptitude	50	50	0.25	1	45 Min

- 1.) A total of 160 minutes is allotted for the examination.
- 2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.
- 3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

General/Financial Awareness

1. The agriculture and food management under the Atma Nirbhar Bharat Abhiyan have been _____ Agriculture infrastructure fund. (+1, -0.25)
- a. Rs. 50000 crores
 - b. Rs. 80,000 crores
 - c. Rs. 2 lakh crores
 - d. Rs. 1 lakh crores
 - e. Rs. 75,000 crores
-
2. In order to attract, more foreign exchange the Government of India decided to allow foreign investment in LLP firms, what is full form of 'LLP' as used in this reference? (+1, -0.25)
- a. Local Labour Promotion
 - b. Low Labour Projects
 - c. Limited Loan Partnership
 - d. Longer Liability Partnership
 - e. Limited Liability Partnership
-
3. SBI Payments has partnered with Hitachi Payment Services to develop the capability to acquire e-RUPI transactions on the Yono SBI Merchant app. The e-RUPI platform is developed by which of the following? (+1, -0.25)
- a. NPCI

- b. C-DAC
 - c. Wipro
 - d. TCS
 - e. Infosys
-

4. Who will launch e-RUPI, a person and purpose-specific digital payment solution in August 2021? (+1, -0.25)

- a. Narendra Modi
 - b. Amit Shah
 - c. Rajnath Singh
 - d. Nirmala Sitharaman
 - e. Venkaiah Naidu
-

5. Which of the following won the Oeil d'or (Golden Eye) award for best documentary at the 74th Cannes Film Festival in July 2021? (+1, -0.25)

- a. And What is the Summer Saying
 - b. A Night of Knowing Nothing
 - c. Last Mango Before the Monsoon
 - d. Exit Through the Gift Shop
 - e. The Thin Blue Line
-

6. Choose the correct statement regarding e-RUPI ? (+1, -0.25)
- a. e-RUPI is a cashless and contactless instrument for digital payment.
 - b. It is a QR code or SMS string-based e-Voucher, which is delivered to the mobile of the beneficiaries.
 - c. It has been developed by the National Payments Corporation of India.
 - d. It is launched by PM Narendra Modi
 - e. All of the above

-
7. In March 2021, who among the following was appointed as the new Chief Statistician of India (CSI)? (+1, -0.25)
- a. GP Samanta
 - b. Manish Kumar Jain
 - c. BP Kanungo
 - d. P. Vijaya Kumar
 - e. Sudha Balakrishnan

-
8. Which of the following is not a Public sector bank? (+1, -0.25)
- a. Canara Bank
 - b. Oriental Bank of commerce
 - c. Nainital Bank

- d. Allahabad Bank
 - e. None, all are public sector banks
-

9. Chanda Kocchar had to step down from her position of CEO & MD of ICICI bank owing to some charges against her. Who among the following has replaced her? (+1, -0.25)

- a. Shaktikanta Das
 - b. Ajay Tyagi
 - c. Amitabh Chaudhari
 - d. Sandeep Bakshi
 - e. UV Sinha
-

10. Neeraj Chopra won India's first Olympic gold in athletics with a best attempt of 87.58m in the men's javelin throw final. What is weight of the Javelin?? (+1, -0.25)

- a. 1000 grams
 - b. 700 grams
 - c. 800 grams
 - d. 900 grams
 - e. 600 grams
-

11. Choose the correct option regarding FAME Scheme? (+1, -0.25)

- a. To promote manufacturing of electric and hybrid vehicle technology.

- b. FAME stands for Faster Adoption and Manufacturing of Hybrid and Electric vehicle
 - c. FAME India is a part of the National Electric Mobility Mission Plan.
 - d. The Fame scheme was announced in 2019 with an outlay of ₹10,000 crores.
 - e. All of the above
-

12. Which of the following Spanish city will host the 22nd Laureus World Sports Awards in a virtual ceremony owing to the raging COVID-19 pandemic? (+1, -0.25)

- a. Madrid
 - b. Barcelona
 - c. Seville
 - d. Bilbao
 - e. Granada
-

13. The degree of tropic of cancer is_____. (+1, -0.25)

- a. 22° 45'N
 - b. 22° 30'N
 - c. 23° 15'N
 - d. 23° 30'N
 - e. 23° 45'N
-

14. Which of the following has partnered with Savitribai Phule Pune University, Maharashtra, to train the youth in automobile retail? (+1, -0.25)
- a. Hyundai
 - b. Maruti Suzuki India
 - c. Mahindra and Mahindra
 - d. TVS Motor Company
 - e. Ford Motor Company
-

15. Elaine Thompson-Herah broke Florence Griffith Joyner's 33-year-old Olympic record in the women's 100 meters, She belongs to which country? (+1, -0.25)
- a. Ghana
 - b. Venezuela
 - c. Jamaica
 - d. Sudan
 - e. None of these
-

16. The Union Cabinet approved an increase in the Fair and Remunerative Price (FRP) n sugarcane to how many rupees per quintal based on a 10 per cent recovery? (+1, -0.25)
- a. Rs. 150
 - b. Rs. 200
 - c. Rs. 250

d. Rs. 290

e. Rs. 320

17. The International Hockey Federation has extended the terms of its president and Executive Board. Who among the following is the president of the federation? (+1, -0.25)

a. Narinder Dhruv Batra

b. Tayyab Ikram

c. Danae Andrada

d. Hazel Kennedy

e. Erik Cornelissen

18. Which of the following card has topped in total cards issued in India as per November 2020? (+1, -0.25)

a. Rupay

b. Visa

c. Maestro

d. Mastercard

e. None of these

19. Vistara is a joint venture of Tata Sons Private Limited and which of the following country airline?? (+1, -0.25)

a. Singapore

- b.** Australia
 - c.** USA
 - d.** UK
 - e.** Thailand
-

20. Nobel Peace Prize winner Muhammad Yunus will receive the Olympic Laurel award at the 2020 Tokyo Games. From which of the following countries does he belong? **(+1, -0.25)**

- a.** Pakistan
 - b.** Bangladesh
 - c.** Egypt
 - d.** Indonesia
 - e.** Turkey
-

21. Atal Pension Yojana is applicable for the citizen between the age of ? **(+1, -0.25)**

- a.** 18-60 years
 - b.** 16-55 years
 - c.** 18-65 years
 - d.** 18-50 years
 - e.** 18-40 years
-

22. In March 2021, Thomas Bach was re-elected as president of which of the following organisations? (+1, -0.25)
- a. FIFA
 - b. ICC
 - c. International Olympic Committee
 - d. World Athletics
 - e. International Hockey Federation

23. The government has permitted _____ foreign investment under the automatic route in oil and gas PSUs which have received in-principle approval for strategic disinvestment. (+1, -0.25)
- a. 100 per cent
 - b. 90 per cent
 - c. 80 per cent
 - d. 50 per cent
 - e. 50 per cent

24. United Nations University(UNU) Headquarters is located in _____ (+1, -0.25)
- a. Tokyo
 - b. Washington
 - c. Bonn

- d. Putrajaya
 - e. Vienna
-

25. Which among the following states is the largest producer of tea in the country? (+1, -0.25)

- a. Assam
 - b. Maharashtra
 - c. Andhra Pradesh
 - d. Jharkhand
 - e. West Bengal
-

26. Who among the following is the author of the book 'The Argumentative Indian'? (+1, -0.25)

- a. Arundhati Roy
 - b. Jhumpa Lahiri
 - c. Amitav Ghosh
 - d. Amartya Sen
 - e. None of these
-

27. _____ had the largest renewable water resources per capita worldwide as of 2017, at roughly 79000 cubic meters per inhabitant. (+1, -0.25)

- a. Canada

- b. Argentina
 - c. India
 - d. South Africa
 - e. Ghana
-

28. The Union Cabinet recently approved a Rs 12,195-crore Production Linked Incentive scheme for domestic manufacturing of which among the following sector? (+1, -0.25)

- a. Cement
 - b. Steel
 - c. Telecom
 - d. Textiles
 - e. Jute
-

29. Which of the following districts ranked first in the first edition of the North Eastern Region District SDG Index Report? (+1, -0.25)

- a. Bishnupur
 - b. East Sikkim
 - c. East Garo Hills
 - d. North Sikkim
 - e. Dibang Valley
-

30. In July 2021, Gift-City regulator IFSCA set up an expert committee to recommend an approach towards development of the Longevity Finance Hub. The IFSCA is headquartered in which city? (+1, -0.25)
- a. Gurugram
 - b. New Delhi
 - c. Mumbai
 - d. Gandhinagar
 - e. Ahmedabad

-
31. Agriculture Minister Narendra Singh Tomar's government was setting up 10,000 farmer producer organizations (FPO) with an outlay of _____. (+1, -0.25)
- a. Rs 4,285 crore
 - b. Rs 5,876 crore
 - c. Rs 6,465 crore
 - d. Rs 6,865 crore
 - e. Rs 8,825 crore

-
32. Savdhan Rahein Safe Rahein' campaign was launched by..... (+1, -0.25)
- a. Bajaj Finserv
 - b. SBI
 - c. Niti Ayog

- d. RBL
 - e. HDFC
-

33. New York Marathon is sponsored by_____ (+1, -0.25)

- a. TCS
 - b. Infosys
 - c. Wipro
 - d. Oracle
 - e. Byjus
-

34. In June 2021, Which country has replaced Mauritius as the top source of FDI in India, according to DIPP, Ministry of Commerce and Industry? (+1, -0.25)

- a. Singapore
 - b. Australia
 - c. Japan
 - d. USA
 - e. China
-

35. Which among the following is not an insurance company functioning in India? (+1, -0.25)

- a. ICICI Prudential

- b. INGVysya
 - c. National Securities Depository Limited
 - d. New India Assurance company
 - e. General insurance company
-

36. The Insurance (Amendment) Bill, 2021 seeks to amend the Insurance Act (+1, -0.25)
of which year?

- a. 1934
 - b. 1936
 - c. 1938
 - d. 1940
 - e. 1942
-

37. Goa Carnival Dates for 2021 begin on Saturday the Saturday _____ 2021 (+1, -0.25)
and finishes on Shrove Tuesday which is 16th February 2021.

- a. 13th February
 - b. 12th February
 - c. 11th February
 - d. 10th February
 - e. 15th February
-

38. Which state has named Indian women's hockey team player Vandana Kataria as the state's Department of Women Empowerment and Child Development brand ambassador? (+1, -0.25)
- a. Uttar Pradesh
 - b. Uttarakhand
 - c. Bihar
 - d. Gujarat
 - e. Haryana

-
39. According to RBI's National Strategy for Financial Inclusion, minimum radius in which banking facilities should be available to a person is (+1, -0.25)
-
- a. 5 km
 - b. 50 km
 - c. 20 km
 - d. 6 km
 - e. None of the above

-
40. Brisbane has been formally awarded hosting rights for the Olympic Games of which year? (+1, -0.25)
- a. 2028
 - b. 2030

- c. 2032
 - d. 2034
 - e. 2036
-

41. The _____ Railways has become the first fully electrified railway zone in India on March 30, 2021 **(+1, -0.25)**

- a. West Central
 - b. Western
 - c. West East
 - d. Eastern
 - e. East Central
-

42. The Union Cabinet has approved amendments to GIBNA Act to facilitate the privatization of public sector general insurance firms. What does 'G' stand for in GIBNA? **(+1, -0.25)**

- a. Gold
 - b. General
 - c. Goods
 - d. Give
 - e. Guarantee
-

43. HDFC Ltd has received a _____ loan from the International Finance Corporation (IFC), the World Bank Group's investment arm, to be used for green housing by India's largest housing finance firm. (+1, -0.25)

- a. \$350 million
- b. \$250 million
- c. \$180 million
- d. \$400 million
- e. \$390 million

44. Which country has recently unveiled the world's first 600 km/hr high-speed maglev train? (+1, -0.25)

- a. China
- b. Japan
- c. France
- d. Spain
- e. UK

45. In July 2021, Prime Minister Narendra Modi launched the Academic Bank of Credit (ABC) for UG/PG Students under NEP 2020. It has been set up by which of the following institutions? (+1, -0.25)

- a. AICTE
- b. UGC

- c. NCERT
 - d. NCTE
 - e. UPSE
-

46. In September 2021, which of the following and the Indian Institute of Science have announced a partnership to set up an Artificial Intelligence and Machine Learning (AI-ML)? (+1, -0.25)

- a. Axis Bank
 - b. Kotak Mahindra Bank
 - c. HDFC Bank
 - d. ICICI Bank
 - e. Bank of Baroda
-

47. Which among the following is the name of the mobile application launched by the Department of Food and Public Distribution under the ONORC plan? (+1, -0.25)

- a. Parivaar ka Ration
 - b. Track Ration
 - c. Ration under a Roof
 - d. Distribute Ration
 - e. Mera Ration
-

48. In September 2021, which of the following and Directorate General of Civil Aviation of India (DGCA) have entered into a working arrangement to achieve common safety and environmental protection standards? **(+1, -0.25)**
- a. International Civil Aviation Organization
 - b. Joint Aviation Authorities
 - c. European Union Aviation Safety Agency
 - d. Civil Aviation Safety Authority
 - e. UK Civil Aviation Authority

49. In August 2021, with a view to further promote sports, which state has increased the cash award money for the Olympic medalists? **(+1, -0.25)**
- a. Gujarat
 - b. Haryana
 - c. Punjab
 - d. Rajasthan
 - e. Uttar Pradesh

50. In June 2021, the tenure of the Production-Linked Incentive (PLI) scheme for large scale electronics manufacturing had been extended by one year. This scheme will now continue till which years? **(+1, -0.25)**
- a. 2022-23
 - b. 2023-24

c. 2024-25

d. 2025-26

e. 2026-27

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Your Personal Exams Guide

General English

51. Direction: Read the following passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these. (+1, -0.25)

The latest GDP growth data released by the Central Statistics Office show that India's economy expanded by 7.9 per cent in the three months ended March, a sharp acceleration from the marginally downsized 7.2 per cent achieved in the preceding quarter. Significantly, that this growth has been achieved despite a **prolonged** and widespread drought, which would certainly have dampened rural demand, is noteworthy. Even if it is assumed that this provisional figure is likely to be revised downward by about 10 basis points, in line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies. The result of the strong fiscal fourth-quarter performance is that growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15. And the wind in the sails was clearly the **robust** private consumption expenditure, which increased 7.4 per cent last fiscal compared to 6.2 per cent the year earlier. But then, different statistics offer different perspectives and some of the other data released by the CSO paint a more modest picture of the economy. Gross Value Added at basic prices provisionally grew 7.2 per cent for the full year, barely nudging up from the 7.1 per cent pace posted in 2014-15, and slower than the Reserve Bank of India's projection for 7.4 per cent growth. The GVA figure is significant because it strips the impact that taxes and subsidies have on the overall GDP number. Thus a substantial 5.6 per cent contraction in the amount the government spent on subsidies helped inflate GDP and helped in extending the pace of growth.

The outlook for the current quarter and the rest of this year may then hinge a lot on this year's monsoon: firstly, in terms of the volume of rainfall, and then critically in its geographical and seasonal distribution. Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy than help provide the widely expected demand fillip. And with the CSO data

revealing private sector investment having slowed and showing barely any signs of **revival**, the onus of providing some investment stimulus may rest squarely with the government – through increased public expenditure outlays. RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on June 7. Given the growth data, the forecast for a normal monsoon, and the global uncertainties, he would be justified if he opts to hold interest rates and wait and watch instead.

Which of the following statements can be inferred as TRUE according to the passage given above?

- a. RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement in June end
- b. Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy than help provide the widely expected demand fillip
- c. Different statistics offer different perspectives, and some of the other data released by the CSO paint a more modest picture of the economy
- d. Both (2) and (3)
- e. Both (1) and (2)

52. Direction: Read the following passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these. (+1, -0.25)

The latest GDP growth data released by the Central Statistics Office show that India's economy expanded by 7.9 per cent in the three months ended March, a sharp acceleration from the marginally downsized 7.2 per cent achieved in the preceding quarter. Significantly, that this growth

has been achieved despite a **prolonged** and widespread drought, which would certainly have dampened rural demand, is noteworthy. Even if it is assumed that this provisional figure is likely to be revised downward by about 10 basis points, in line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies. The result of the strong fiscal fourth-quarter performance is that growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15. And the wind in the sails was clearly the **robust** private consumption expenditure, which increased 7.4 per cent last fiscal compared to 6.2 per cent the year earlier. But then, different statistics offer different perspectives and some of the other data released by the CSO paint a more modest picture of the economy. Gross Value Added at basic prices provisionally grew 7.2 per cent for the full year, barely nudging up from the 7.1 per cent pace posted in 2014-15, and slower than the Reserve Bank of India's projection for 7.4 per cent growth. The GVA figure is significant because it strips the impact that taxes and subsidies have on the overall GDP number. Thus a substantial 5.6 per cent contraction in the amount the government spent on subsidies helped inflate GDP and helped in extending the pace of growth.

The outlook for the current quarter and the rest of this year may then hinge a lot on this year's monsoon: firstly, in terms of the volume of rainfall, and then critically in its geographical and seasonal distribution. Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy than help provide the widely expected demand fillip. And with the CSO data revealing private sector investment having slowed and showing barely any signs of **revival**, the onus of providing some investment stimulus may rest squarely with the government – through increased public expenditure outlays. RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on June 7. Given the growth data, the forecast for a normal monsoon, and the global uncertainties, he would be justified if he opts to hold interest rates and wait and watch instead.

What was the result of the strong fiscal fourth-quarter performance?

- a. India's economy expanded by 7.5 per cent in the three months
- b. The government spent on subsidies helped inflate GDP, and by extension the pace of growth
- c. Growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15
- d. India's economy expanded by 7.9 per cent in the three months
- e. None of these

53. Direction: Read the following passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these. (+1, -0.25)

The latest GDP growth data released by the Central Statistics Office show that India's economy expanded by 7.9 per cent in the three months ended March, a sharp acceleration from the marginally downsized 7.2 per cent achieved in the preceding quarter. Significantly, that this growth has been achieved despite a **prolonged** and widespread drought, which would certainly have dampened rural demand, is noteworthy. Even if it is assumed that this provisional figure is likely to be revised downward by about 10 basis points, in line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies. The result of the strong fiscal fourth-quarter performance is that growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15. And the wind in the sails was clearly the **robust** private consumption expenditure, which increased 7.4 per cent last fiscal compared to 6.2 per cent the year earlier. But then, different statistics offer different perspectives and some of the other data released by the CSO paint a more modest picture of the economy. Gross Value Added at basic prices provisionally grew 7.2 per cent for the full year, barely nudging up from the 7.1 per cent pace posted in 2014-15, and slower than the Reserve Bank of India's projection for 7.4 per cent growth. The GVA figure is significant because it strips the impact that taxes and

subsidies have on the overall GDP number. Thus a substantial 5.6 per cent contraction in the amount the government spent on subsidies helped inflate GDP and helped in extending the pace of growth.

The outlook for the current quarter and the rest of this year may then hinge a lot on this year's monsoon: firstly, in terms of the volume of rainfall, and then critically in its geographical and seasonal distribution. Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy than help provide the widely expected demand fillip. And with the CSO data revealing private sector investment having slowed and showing barely any signs of **revival**, the onus of providing some investment stimulus may rest squarely with the government – through increased public expenditure outlays. RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on June 7. Given the growth data, the forecast for a normal monsoon, and the global uncertainties, he would be justified if he opts to hold interest rates and wait and watch instead.

According to the author, why the GVA figure is significant?

- a. Because with the CSO data revealing private sector investment having slowed and showing barely any signs of revival
- b. Because the wind in the sails was clearly the robust private consumption expenditure, which increased 7.4 per cent last fiscal compared with 6.2 per cent the year earlier
- c. As given the growth data, the forecast for a normal monsoon, and the global uncertainties, he would be justified if he opts to hold interest rates and wait and watch instead
- d. Because it strips the impact that taxes and subsidies have on the overall GDP number
- e. None of these

54. Direction: Read the following passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these. (+1, -0.25)

The latest GDP growth data released by the Central Statistics Office show that India's economy expanded by 7.9 per cent in the three months ended March, a sharp acceleration from the marginally downsized 7.2 per cent achieved in the preceding quarter. Significantly, that this growth has been achieved despite a **prolonged** and widespread drought, which would certainly have dampened rural demand, is noteworthy. Even if it is assumed that this provisional figure is likely to be revised downward by about 10 basis points, in line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies. The result of the strong fiscal fourth-quarter performance is that growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15. And the wind in the sails was clearly the **robust** private consumption expenditure, which increased 7.4 per cent last fiscal compared to 6.2 per cent the year earlier. But then, different statistics offer different perspectives and some of the other data released by the CSO paint a more modest picture of the economy. Gross Value Added at basic prices provisionally grew 7.2 per cent for the full year, barely nudging up from the 7.1 per cent pace posted in 2014-15, and slower than the Reserve Bank of India's projection for 7.4 per cent growth. The GVA figure is significant because it strips the impact that taxes and subsidies have on the overall GDP number. Thus a substantial 5.6 per cent contraction in the amount the government spent on subsidies helped inflate GDP and helped in extending the pace of growth.

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stimulus may rest squarely with the government – through increased public expenditure outlays. RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on June 7. Given the growth data, the forecast for a normal monsoon, and the global uncertainties, he would be justified if he opts to hold interest rates and wait and watch instead.

Which of the following statement(s) can not be inferred as **TRUE** according to the passage?

- a. The GVA figure is significant because it strips the impact that taxes and subsidies have on the overall GDP number
- b. A substantial 5.6 percent contraction in the amount the government spent on subsidies helped inflate GDP and by extension the pace of growth
- c. In line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies
- d. That this growth has been achieved despite a prolonged and widespread drought, which would not certainly have dampened rural demand, is noteworthy
- e. All of the above

55. Direction: Read the following passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these. (+1, -0.25)

The latest GDP growth data released by the Central Statistics Office show that India's economy expanded by 7.9 per cent in the three months ended March, a sharp acceleration from the marginally downsized 7.2 per cent achieved in the preceding quarter. Significantly, that this growth has been achieved despite a **prolonged** and widespread drought, which

would certainly have dampened rural demand, is noteworthy. Even if it is assumed that this provisional figure is likely to be revised downward by about 10 basis points, in line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies. The result of the strong fiscal fourth-quarter performance is that growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15. And the wind in the sails was clearly the **robust** private consumption expenditure, which increased 7.4 per cent last fiscal compared to 6.2 per cent the year earlier. But then, different statistics offer different perspectives and some of the other data released by the CSO paint a more modest picture of the economy. Gross Value Added at basic prices provisionally grew 7.2 per cent for the full year, barely nudging up from the 7.1 per cent pace posted in 2014-15, and slower than the Reserve Bank of India's projection for 7.4 per cent growth. The GVA figure is significant because it strips the impact that taxes and subsidies have on the overall GDP number. Thus a substantial 5.6 per cent contraction in the amount the government spent on subsidies helped inflate GDP and helped in extending the pace of growth.

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Choose the word which is most nearly the OPPOSITE in meaning to the word '**prolong ed**' as highlighted in the passage.

- a. Lengthy
- b. Timid
- c. Prominent
- d. Moderate
- e. Brief

56. Direction: Read the following passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these. (+1, -0.25)

The latest GDP growth data released by the Central Statistics Office show that India's economy expanded by 7.9 per cent in the three months ended March, a sharp acceleration from the marginally downsized 7.2 per cent achieved in the preceding quarter. Significantly, that this growth has been achieved despite a **prolonged** and widespread drought, which would certainly have dampened rural demand, is noteworthy. Even if it is assumed that this provisional figure is likely to be revised downward by about 10 basis points, in line with the revisions for recent quarters, the number would still end up keeping India at the top of the heap among the world's fastest-growing major economies. The result of the strong fiscal fourth-quarter performance is that growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15. And the wind in the sails was clearly the **robust** private consumption expenditure, which increased 7.4 per cent last fiscal compared to 6.2 per cent the year earlier. But then, different statistics offer different perspectives and some of the other data released by the CSO paint a more modest picture of the economy. Gross Value Added at basic prices provisionally grew 7.2 per cent for the full year, barely nudging up from the 7.1 per cent pace posted in 2014-15, and slower than the Reserve Bank of India's projection for 7.4 per cent growth. The GVA figure is significant because it strips the impact that taxes and subsidies have on the overall GDP number. Thus a substantial 5.6 per

cent contraction in the amount the government spent on subsidies helped inflate GDP and helped in extending the pace of growth.

The outlook for the current quarter and the rest of this year may then hinge a lot on this year's monsoon: firstly, in terms of the volume of rainfall, and then critically in its geographical and seasonal distribution. Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy than help provide the widely expected demand fillip. And with the CSO data revealing private sector investment having slowed and showing barely any signs of **revival**, the onus of providing some investment stimulus may rest squarely with the government – through increased public expenditure outlays. RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on June 7. Given the growth data, the forecast for a normal monsoon, and the global uncertainties, he would be justified if he opts to hold interest rates and wait and watch instead.

Choose the word which is most nearly the SIMILAR in meaning to the word '**robust**' as highlighted in the passage.

- a. Quick
- b. Sleek
- c. Vigorous
- d. Nasty
- e. Offensive

57. Directions: Identify the correct pair of synonyms or antonyms from the given table. (+1, -0.25)

A. Toil	D. Industrial
B. Malign	E. Sloth
C. Kinglet	F. Vulnerable

- a. B-F
- b. C-E
- c. A-F
- d. A-E
- e. A-D

58. Directions: Identify the correct pair of synonyms or antonyms from the given table. (+1, -0.25)

A. Solitude	D. Repel
B. Obstreperous	E. Noisy
C. Whim	F. Desire

- a. C-D
- b. A-F
- c. B-E
- d. A-E
- e. B-D

59. Directions: Identify the correct pair of synonyms or antonyms from the given table. (+1, -0.25)

A. Cite	D. Disagreement
B. Distinction	E. Excited
C. Assent	F. Quote

- a. A-F
- b. C-E
- c. B-F
- d. C-F
- e. A-E

60. Directions: In the following question, a sentence is given with four words marked as (A), (B), (C), and (D). These words may or may not be placed in the correct order. Four options with different arrangements of these words have been provided. Mark the option with the correct arrangement as the answer. If no rearrangement is required, mark option (5) as your answer. (+1, -0.25)

The U.S. has a rich history of shaping or **toppling(A)** foreign governments and **seeking(B)** to influence forces made **abroad(C)** that had an **impact(D)** on American shores.

- a. A-B
- b. B-C
- c. C-D

d. A-D

e. No change required

-
61. In the given question, four words are printed in bold and are numbered A, B, C, and D. Of these, the positions of two of these words may be incorrect and need to be exchanged to make the sentence correct. Find the two words which need to be exchanged. In case the given sentence is correct, your answer is (E), i.e., 'No correction required.' (+1, -0.25)

Chelsea's Eden Hazard has revealed his **appreciation (A)** for Manchester United **manager (B)** Jose Mourinho and **said (C)** the Portuguese is the one coach he would like to **work (D)** with again.

a. Both A-B and C-D

b. Both A-C and B-D

c. Both A-D and B-C

d. Only C-D

e. No correction required

-
62. In the given question, four words are printed in bold and are numbered A, B, C, and D. Of these, the positions of two of these words may be incorrect and need to be exchanged to make the sentence correct. Find the two words which need to be exchanged. In case the given sentence is correct, your answer is (E), i.e., 'No correction required.' (+1, -0.25)

There is a view among the public that the **across (A)** of the rupee has been the **appreciation (B)** of a general **result (C)** of the dollar **depreciation (D)** all currencies.

a. Only A-D

- b. Both B-C and A-D
- c. Only B-D
- d. Both A-B and C-D
- e. The sentence is correct

63. In the following question, a sentence is given with certain words in bold. (+1, -0.25)
Choose the pair/s of such words which need to be interchanged so as to make the sentence grammatically correct and meaningful.

With the virus running (A) **riot** across the Americas and (B) **forecasts** in Africa the downside risks (C) **outweigh** the others, the treasury (D) **surging** (E) **eschew** the traditional approach of (F) **charting** a middle path through upside and downside risks.

- a. A-C, D-E
- b. A-F
- c. C-E
- d. B-D
- e. C-F

64. In the following question, a sentence is given with four words marked as (A), (B), (C) and (D). These words may or may not be placed in the correct order. Four options with different arrangements of these words have been provided. Mark the option with the correct arrangement as the answer. If no rearrangement is required, mark option (5) as your answer. (+1, -0.25)

During the **hanging(A)** , the rope had been strangled(**B**) on the neck of the **supposed(C)** "witch" and sheplaced(**D**) to death.

- a. C - D
- b. B - D
- c. A - B
- d. B - C
- e. No arrangements

65. In the following question a part of the sentence is underlined. Below are given alternatives to the underlined part, which may improve the sentence. Choose the correct alternative. In case no improvement is needed ,choose the option that indicates 'No improvement'. (+1, -0.25)

Virat Kohli described his 137- run stand with Rohit Sharma in the third ODI as "probably one of the most calculated partnerships, he further said that if dew factor had come into play it **will become impossible for the visitorsto** win the game from there.

- a. would become impossible for the visitors.
- b. would have become impossible for the visitors.
- c. will have been impossible for the visitors.
- d. could become impossible for the visitors.
- e. No improvement

66. Direction: Which of the phrases given below the sentence should replace the word/phrase given in bold in the sentence to make it grammatically (+1, -0.25)

correct? If the sentence is correct as it is given and no correction is required, select 'No correction required' as your answer.

This is not the first time the minister's name **has come up** in this controversial deal.

- a. have come up
- b. has come up
- c. have upcoming
- d. No correction required
- e. None of the above

-
67. Direction: A sentence is given below with four words highlighted in bold. One of these highlighted words may be either wrongly spelt or incorrect in the context of the sentence. Find the word which is wrongly spelt or inappropriate, if any. That word is your answer. If all words are correctly spelt and also appropriate in the context of the sentence, mark 'All correct' as your answer. (+1, -0.25)

Tears **roared** from my eyes and a **piercing pain crept** up my throat like a spider.

- a. roared
- b. piercing
- c. pain
- d. crept
- e. All correct

68. Direction: In the given question a sentence is divided into five parts out of which the last part is correct. Out of the remaining four, there are errors in three parts. Choose the part that doesn't have an error. If all the four parts are correct, mark E i.e. All are correct as the answer. (+1, -0.25)

In modern time, they were made fashionable **(A)** from Hillary Clinton, who displayed a **(B)** penchant for having wearing them with **(C)** panache to everything from special **(D) occasions to low-key affairs.**

- a. In modern time, they were made fashionable
- b. from Hillary Clinton, who displayed a
- c. penchant for having wearing them with
- d. panache to everything from special
- e. All are correct

-
69. Select the phrase/connector from the given three options which can be used to form a single sentence from the two sentences given below, implying the same as expressed in the statement sentence. (+1, -0.25)

The weather forecast predicted heavy snowfall. The whole day was rather sunny and hot.

- 1. Consequently
 - 2. However
 - 3. Moreover
- a. Only 3
 - b. Only 2
 - c. 2 and 3

- d. Only 1
- e. 1 and 2

70. Directions: Choose the combination that completes the sentence. (+1, -0.25)

A. I didn't tell her that he was late	i. yet	E. a cat
B. I will be going to the market	ii. because	F. Not now, I still have time.
C. I have two goldfish	iii. for	G. I didn't want to cause her any alarm.

- a. B-iii-G
- b. C-i-G
- c. A-ii-G
- d. C-iii-E
- e. A-iii-G

71. Directions: Choose the combination that completes the sentence. (+1, -0.25)

A. It was recognized as the flu,	i. so	D. five hours.
B. There is some debate as to	ii. although	E. the poor should even try to feed themselves.
C. I've waited at that station	iii. still	F. records describe conditions which were highly likely to have been polio.

- a. B-i-F
- b. A-ii-F
- c. B-ii-F
- d. C-i-E
- e. A-iii-E

72. Directions: In the following question, the word at the top is used in five different ways. Choose the option in which the usage of the word is incorrect or inappropriate. (+1, -0.25)

WAVE

- a. I was **waving** my hand like mad but he never once looked in my direction.
- b. You'll have to wait till the policeman **waves** the car on.
- c. You can't just **wave** me away as if I were a child!
- d. They **waved** at us as we drove by.
- e. Will you help me **wave** this table to the back room?

73. Directions: In the following question, the word at the top is used in five different ways. Choose the option in which the usage of the word is incorrect or inappropriate. (+1, -0.25)

LIEU

- a. He was offered a cash bonus, or stock options in **lieu**.
- b. He worked on Sunday and took Monday off in **lieu**.
- c. They gave some books in **lieu** of payment for the work I did.
- d. You can take a lump sum in **lieu** of any unused vacation entitlement.
- e. She wasn't able to be present, so I signed the letter in her **lieu**.

74. Directions: In the following question, the word at the top is used in five different ways. Choose the option in which the usage of the word is incorrect or inappropriate. (+1, -0.25)

EVIDENCE

- a. The **evidence** against him was purely circumstantial.
- b. There is a lot of **evidence** that stress is partly responsible for disease.
- c. You can **evidence** with us to deliver your cargo.
- d. There is no shortage of circumstantial **evidence** to suggest the latter.
- e. To pursue an allegation of fraud without strong **evidence** was risky.

75. Directions: In the following question, the word at the top is used in five different ways. Choose the option in which the usage of the word is incorrect or inappropriate. (+1, -0.25)

JUBILANT

- a. There were no cheering and **jubilant** fans waiting for them.
- b. All the staff are really helpful and I feel **jubilant** afterwards.
- c. Thousands of students and teachers will be **jubilant** at the additional funding.
- d. There is nothing there to make anyone happy or **jubilant**.
- e. The cemetery is a **jubilant** place.

-
76. Direction: Read the passage and answer the questions that follow. Some words may be highlighted for you. Pay careful attention. (+1, -0.25)

Long ago, people knew very little. They knew nothing about farming, tools, or how to **weave** cloths. Nyame, the God of heaven had all the wisdom. He kept all the wisdom stored up in a clay pot. One day Nyame gave Ananse the spider a special gift; the pot, with all the wisdom in it. Ananse was excited. Every time he looked in the clay pot, he learned something new. Greedily, he decided to keep the pot away from the world. He did not want to share with anyone else. He tied a rope around his waist so he would be able to climb a tree. Also, he tied the rope around the pot of wisdom and it hung down in front of him. He began to climb the tree. Ananse tried tying the clay pot full of wisdom to his back, and it really was a lot easier. In no time he reached the top of the tree. But then he stopped and thought. "I'm supposed to be the one with all the wisdom, and here this little kid was smarter than me!" Ananse was so angry about this that he threw the clay pot down out of the tree. It smashed into pieces on the ground. Of course, all the wisdom got out and flew away all over the

world. That is how people learned to farm, and to make clothes, and to make iron, and all the other things that people know how to do.

What is the synonym of the word weave?

- a. untwine
- b. entwine
- c. uncoil
- d. disentangle
- e. None of these

77. **Direction: Read the passage and answer the questions that follow. Some words may be highlighted for you. Pay careful attention.** (+1, -0.25)

Long ago, people knew very little. They knew nothing about farming, tools, or how to **weave** cloths. Nyame, the God of heaven had all the wisdom. He kept all the wisdom stored up in a clay pot. One day Nyame gave Ananse the spider a special gift; the pot, with all the wisdom in it. Ananse was excited. Every time he looked in the clay pot, he learned something new. Greedily, he decided to keep the pot away from the world. He did not want to share with anyone else. He tied a rope around his waist so he would be able to climb a tree. Also, he tied the rope around the pot of wisdom and it hung down in front of him. He began to climb the tree. Ananse tried tying the clay pot full of wisdom to his back, and it really was a lot easier. In no time he reached the top of the tree. But then he stopped and thought. "I'm supposed to be the one with all the wisdom, and here this little kid was smarter than me!" Ananse was so angry about this that he threw the clay pot down out of the tree. It smashed into pieces on the ground. Of course, all the wisdom got out and flew away all over the world. That is how people learned to farm, and to make clothes, and to make iron, and all the other things that people know how to do.

How wisdom spread all over the world?

- a. By the efforts of human being.
- b. By the anger of spider.
- c. By the choice of God.
- d. By the betrayal of spider.
- e. All of these.

78. **Direction: Read the passage and answer the questions that follow. Some words may be highlighted for you. Pay careful attention.** (+1, -0.25)

Long ago, people knew very little. They knew nothing about farming, tools, or how to **weave** cloths. Nyame, the God of heaven had all the wisdom. He kept all the wisdom stored up in a clay pot. One day Nyame gave Ananse the spider a special gift; the pot, with all the wisdom in it. Ananse was excited. Every time he looked in the clay pot, he learned something new. Greedily, he decided to keep the pot away from the world. He did not want to share with anyone else. He tied a rope around his waist so he would be able to climb a tree. Also, he tied the rope around the pot of wisdom and it hung down in front of him. He began to climb the tree. Ananse tried tying the clay pot full of wisdom to his back, and it really was a lot easier. In no time he reached the top of the tree. But then he stopped and thought. "I'm supposed to be the one with all the wisdom, and here this little kid was smarter than me!" Ananse was so angry about this that he threw the clay pot down out of the tree. It smashed into pieces on the ground. Of course, all the wisdom got out and flew away all over the world. That is how people learned to farm, and to make clothes, and to make iron, and all the other things that people know how to do.

Give a suitable title to the passage.

- a. Ananse and the Pot of Wisdom

- b. Nyame: God of Heaven
- c. Importance of wisdom
- d. Human being's struggle
- e. Pot of wisdom.

79. **Direction: Read the passage and answer the questions that follow. Some words may be highlighted for you. Pay careful attention.** (+1, -0.25)

Long ago, people knew very little. They knew nothing about farming, tools, or how to **weave** cloths. Nyame, the God of heaven had all the wisdom. He kept all the wisdom stored up in a clay pot. One day Nyame gave Ananse the spider a special gift; the pot, with all the wisdom in it. Ananse was excited. Every time he looked in the clay pot, he learned something new. Greedily, he decided to keep the pot away from the world. He did not want to share with anyone else. He tied a rope around his waist so he would be able to climb a tree. Also, he tied the rope around the pot of wisdom and it hung down in front of him. He began to climb the tree. Ananse tried tying the clay pot full of wisdom to his back, and it really was a lot easier. In no time he reached the top of the tree. But then he stopped and thought. "I'm supposed to be the one with all the wisdom, and here this little kid was smarter than me!" Ananse was so angry about this that he threw the clay pot down out of the tree. It smashed into pieces on the ground. Of course, all the wisdom got out and flew away all over the world. That is how people learned to farm, and to make clothes, and to make iron, and all the other things that people know how to do.

Who is Nyame?

- a. God of thunder.
- b. God of mischief
- c. Goddess of Hell

- d. God of Heaven
- e. Goddess of Eutenheim.

80. Directions: Read the following passage and answer the questions accordingly.

(+1, -0.25)

Lunar water is water that is present on the Moon. It was first discovered by ISRO through its Chandrayaan mission. Diffuse water molecules can **persist** at the Moon's sunlit surface, as discovered by NASA's SOFIA observatory in 2020. Gradually water vapor is decomposed by sunlight, leaving hydrogen and oxygen lost to outer space. Scientists have found water ice in the cold, permanently shadowed craters at the Moon's poles. Water molecules are also in the extremely thin lunar atmosphere. Water (H_2O), and the chemically related hydroxyl group ($-OH$), exist in forms chemically bound as hydrates and hydroxides to lunar minerals (rather than free water), and evidence strongly suggests that this is the case in low concentrations as for much of the Moon's surface. In fact, of surface matter, adsorbed water is calculated to exist at trace concentrations of 10 to 1000 parts per million. Inconclusive evidence of free water ice at the lunar poles had accumulated during the second half of the 20th century from a variety of observations suggesting the presence of bound hydrogen. On 18 August 1976, the Soviet Luna 24 probe landed at Mare Crisium, took samples from the depths of 118, 143, and 184 cm of the lunar regolith, and then took them to Earth. In February 1978, it was published that laboratory analysis of these samples shown they contained 0.1% water by mass. Spectral measurements showed minima near 3, 5, and 6 μm , distinctive valence-vibration bands for water molecules, with intensities two or three times larger than the noise level. On 24 September 2009, it was reported that the NASA's Moon Mineralogy Mapper (M_3) spectrometer onboard India's ISRO Chandrayaan-1 probe had detected absorption features near 2.8–3.0 μm on the surface of the Moon. But about 10 months before, on 14 November 2008, India's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice. For silicate

bodies, such features are typically attributed to hydroxyl- and/or water-bearing materials. In August 2018, NASA confirmed that M₃ showed water ice is present on the surface at the Moon poles. Water was confirmed to be on the sunlit surface of the Moon by ISRO on October 26, 2020. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals. The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of water's usefulness in rendering long-term lunar habitation feasible. The presence of large quantities of water on the Moon would be an important factor in rendering lunar habitation cost-effective since transporting water (or hydrogen and oxygen) from Earth would be prohibitively expensive. If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for drinking and plant propagation, and the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations or a nuclear generator, providing breathable oxygen as well as the components of rocket fuel. The hydrogen component of the water ice could also be used to draw out the oxides in the lunar soil and harvest even more oxygen.

According to the passage which of the following statements is correct?

- a. NASA's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice
- b. The search for the presence of Martian water has attracted considerable attention.
- c. In August 2018, ISRO confirmed that M3 showed water ice is present on the surface at the Moon poles.
- d. water vapor is decomposed by sunlight

e. None of the above

81. Directions: Read the following passage and answer the questions accordingly.

(+1, -0.25)

Lunar water is water that is present on the Moon. It was first discovered by ISRO through its Chandrayaan mission. Diffuse water molecules can **persist** at the Moon's sunlit surface, as discovered by NASA's SOFIA observatory in 2020. Gradually water vapor is decomposed by sunlight, leaving hydrogen and oxygen lost to outer space. Scientists have found water ice in the cold, permanently shadowed craters at the Moon's poles. Water molecules are also in the extremely thin lunar atmosphere. Water (H_2O), and the chemically related hydroxyl group ($-OH$), exist in forms chemically bound as hydrates and hydroxides to lunar minerals (rather than free water), and evidence strongly suggests that this is the case in low concentrations as for much of the Moon's surface. In fact, of surface matter, adsorbed water is calculated to exist at trace concentrations of 10 to 1000 parts per million. Inconclusive evidence of free water ice at the lunar poles had accumulated during the second half of the 20th century from a variety of observations suggesting the presence of bound hydrogen. On 18 August 1976, the Soviet Luna 24 probe landed at Mare Crisium, took samples from the depths of 118, 143, and 184 cm of the lunar regolith, and then took them to Earth. In February 1978, it was published that laboratory analysis of these samples shown they contained 0.1% water by mass. Spectral measurements showed minima near 3, 5, and 6 μm , distinctive valence-vibration bands for water molecules, with intensities two or three times larger than the noise level. On 24 September 2009, it was reported that the NASA's Moon Mineralogy Mapper (M_3) spectrometer onboard India's ISRO Chandrayaan-1 probe had detected absorption features near 2.8–3.0 μm on the surface of the Moon. But about 10 months before, on 14 November 2008, India's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice. For silicate bodies, such features are typically attributed to hydroxyl- and/or water-bearing materials. In August 2018, NASA confirmed that M_3 showed water ice is present on the

surface at the Moon poles. Water was confirmed to be on the sunlit surface of the Moon by ISRO on October 26, 2020. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals. The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of water's usefulness in rendering long-term lunar habitation feasible.

The presence of large quantities of water on the Moon would be an important factor in rendering lunar habitation cost-effective since transporting water (or hydrogen and oxygen) from Earth would be prohibitively expensive. If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for drinking and plant propagation, and the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations or a nuclear generator, providing breathable oxygen as well as the components of rocket fuel. The hydrogen component of the water ice could also be used to draw out the oxides in the lunar soil and harvest even more oxygen.

Which was the first mission to discover the lunar water?

- a. Chandrayaan mission
- b. NASA's SOFIA
- c. Luna 24
- d. Both A and B
- e. Both B and C

82. Directions: Read the following passage and answer the questions accordingly.

(+1, -0.25)

Lunar water is water that is present on the Moon. It was first discovered by ISRO through its Chandrayaan mission. Diffuse water molecules can **persist** at the Moon's sunlit surface, as discovered by NASA's SOFIA observatory in 2020. Gradually water vapor is decomposed by sunlight, leaving hydrogen and oxygen lost to outer space. Scientists have found water ice in the cold, permanently shadowed craters at the Moon's poles. Water molecules are also in the extremely thin lunar atmosphere. Water (H_2O), and the chemically related hydroxyl group ($-OH$), exist in forms chemically bound as hydrates and hydroxides to lunar minerals (rather than free water), and evidence strongly suggests that this is the case in low concentrations as for much of the Moon's surface. In fact, of surface matter, adsorbed water is calculated to exist at trace concentrations of 10 to 1000 parts per million. Inconclusive evidence of free water ice at the lunar poles had accumulated during the second half of the 20th century from a variety of observations suggesting the presence of bound hydrogen. On 18 August 1976, the Soviet Luna 24 probe landed at Mare Crisium, took samples from the depths of 118, 143, and 184 cm of the lunar regolith, and then took them to Earth. In February 1978, it was published that laboratory analysis of these samples shown they contained 0.1% water by mass. Spectral measurements showed minima near 3, 5, and 6 μm , distinctive valence-vibration bands for water molecules, with intensities two or three times larger than the noise level. On 24 September 2009, it was reported that the NASA's Moon Mineralogy Mapper (M_3) spectrometer onboard India's ISRO Chandrayaan-1 probe had detected absorption features near 2.8–3.0 μm on the surface of the Moon. But about 10 months before, on 14 November 2008, India's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice. For silicate bodies, such features are typically attributed to hydroxyl- and/or water-bearing materials. In August 2018, NASA confirmed that M_3 showed water ice is present on the surface at the Moon poles. Water was confirmed to be on the sunlit surface of the Moon by ISRO on October 26, 2020. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions

(protons) of the solar wind impacting oxygen-bearing minerals. The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of water's usefulness in rendering long-term lunar habitation feasible. The presence of large quantities of water on the Moon would be an important factor in rendering lunar habitation cost-effective since transporting water (or hydrogen and oxygen) from Earth would be prohibitively expensive. If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for drinking and plant propagation, and the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations or a nuclear generator, providing breathable oxygen as well as the components of rocket fuel. The hydrogen component of the water ice could also be used to draw out the oxides in the lunar soil and harvest even more oxygen.

How water could also be split into hydrogen and oxygen?

- a. by mining
- b. by solar panel-equipped electric power stations
- c. by nuclear generator
- d. Both 2 and 3
- e. None of the above

83. Directions: Read the following passage and answer the questions accordingly.

(+1, -0.25)

Lunar water is water that is present on the Moon. It was first discovered by ISRO through its Chandrayaan mission. Diffuse water molecules can **persist** at the Moon's sunlit surface, as discovered by NASA's SOFIA observatory in 2020. Gradually water vapor is decomposed by sunlight, leaving hydrogen and oxygen lost to outer space. Scientists have found

water ice in the cold, permanently shadowed craters at the Moon's poles. Water molecules are also in the extremely thin lunar atmosphere. Water (H_2O), and the chemically related hydroxyl group ($-OH$), exist in forms chemically bound as hydrates and hydroxides to lunar minerals (rather than free water), and evidence strongly suggests that this is the case in low concentrations as for much of the Moon's surface. In fact, of surface matter, adsorbed water is calculated to exist at trace concentrations of 10 to 1000 parts per million. Inconclusive evidence of free water ice at the lunar poles had accumulated during the second half of the 20th century from a variety of observations suggesting the presence of bound hydrogen. On 18 August 1976, the Soviet Luna 24 probe landed at Mare Crisium, took samples from the depths of 118, 143, and 184 cm of the lunar regolith, and then took them to Earth. In February 1978, it was published that laboratory analysis of these samples shown they contained 0.1% water by mass. Spectral measurements showed minima near 3, 5, and 6 μm , distinctive valence-vibration bands for water molecules, with intensities two or three times larger than the noise level. On 24 September 2009, it was reported that the NASA's Moon Mineralogy Mapper (M_3) spectrometer onboard India's ISRO Chandrayaan-1 probe had detected absorption features near 2.8–3.0 μm on the surface of the Moon. But about 10 months before, on 14 November 2008, India's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice. For silicate bodies, such features are typically attributed to hydroxyl- and/or water-bearing materials. In August 2018, NASA confirmed that M_3 showed water ice is present on the surface at the Moon poles. Water was confirmed to be on the sunlit surface of the Moon by ISRO on October 26, 2020. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals. The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of water's usefulness in rendering long-term lunar habitation feasible. The presence of large quantities of water on the Moon would be an

important factor in rendering lunar habitation cost-effective since transporting water (or hydrogen and oxygen) from Earth would be prohibitively expensive. If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for drinking and plant propagation, and the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations or a nuclear generator, providing breathable oxygen as well as the components of rocket fuel. The hydrogen component of the water ice could also be used to draw out the oxides in the lunar soil and harvest even more oxygen.

Why is discovery of water important on the Moon's surface?

- a. in rendering long-term lunar habitation feasible
- b. to harvest the seeds
- c. in rendering lunar habitation cost-effective
- d. Both 1 and 3
- e. Both 1 and 2

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84. Directions: Read the following passage and answer the questions accordingly. (+1, -0.25)

Lunar water is water that is present on the Moon. It was first discovered by ISRO through its Chandrayaan mission. Diffuse water molecules can **persist** at the Moon's sunlit surface, as discovered by NASA's SOFIA observatory in 2020. Gradually water vapor is decomposed by sunlight, leaving hydrogen and oxygen lost to outer space. Scientists have found water ice in the cold, permanently shadowed craters at the Moon's poles. Water molecules are also in the extremely thin lunar atmosphere. Water (H_2O), and the chemically related hydroxyl group ($-OH$), exist in forms chemically bound as hydrates and hydroxides to lunar minerals (rather

than free water), and evidence strongly suggests that this is the case in low concentrations as for much of the Moon's surface. In fact, of surface matter, adsorbed water is calculated to exist at trace concentrations of 10 to 1000 parts per million. Inconclusive evidence of free water ice at the lunar poles had accumulated during the second half of the 20th century from a variety of observations suggesting the presence of bound hydrogen. On 18 August 1976, the Soviet Luna 24 probe landed at Mare Crisium, took samples from the depths of 118, 143, and 184 cm of the lunar regolith, and then took them to Earth. In February 1978, it was published that laboratory analysis of these samples shown they contained 0.1% water by mass. Spectral measurements showed minima near 3, 5, and 6 μm , distinctive valence-vibration bands for water molecules, with intensities two or three times larger than the noise level. On 24 September 2009, it was reported that the NASA's Moon Mineralogy Mapper (M_3) spectrometer onboard India's ISRO Chandrayaan-1 probe had detected absorption features near 2.8–3.0 μm on the surface of the Moon. But about 10 months before, on 14 November 2008, India's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice. For silicate bodies, such features are typically attributed to hydroxyl- and/or water-bearing materials. In August 2018, NASA confirmed that M_3 showed water ice is present on the surface at the Moon poles. Water was confirmed to be on the sunlit surface of the Moon by ISRO on October 26, 2020. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals. The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of water's usefulness in rendering long-term lunar habitation feasible. The presence of large quantities of water on the Moon would be an important factor in rendering lunar habitation cost-effective since transporting water (or hydrogen and oxygen) from Earth would be prohibitively expensive. If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for

drinking and plant propagation, and the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations or a nuclear generator, providing breathable oxygen as well as the components of rocket fuel. The hydrogen component of the water ice could also be used to draw out the oxides in the lunar soil and harvest even more oxygen.

According to the passage, what is theory behind the presence of water on the moon's surface?

- a. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids
- b. Water may have been delivered to the Moon over geological timescales by the regular bombardment of planets
- c. Water may have been delivered to the Moon over geological timescales by the regular bombardment of spaceships
- d. Water is stored within glasses or in voids between grains sheltered from the harsh lunar environment, thus allowing the water to remain on the lunar surface.
- e. The surface of that crater is covered in glacier

85. Directions: Read the following passage and answer the questions accordingly.

(+1, -0.25)

Lunar water is water that is present on the Moon. It was first discovered by ISRO through its Chandrayaan mission. Diffuse water molecules can **persist** at the Moon's sunlit surface, as discovered by NASA's SOFIA observatory in 2020. Gradually water vapor is decomposed by sunlight, leaving hydrogen and oxygen lost to outer space. Scientists have found water ice in the cold, permanently shadowed craters at the Moon's poles. Water molecules are also in the extremely thin lunar atmosphere. Water

(H_2O), and the chemically related hydroxyl group ($-OH$), exist in forms chemically bound as hydrates and hydroxides to lunar minerals (rather than free water), and evidence strongly suggests that this is the case in low concentrations as for much of the Moon's surface. In fact, of surface matter, adsorbed water is calculated to exist at trace concentrations of 10 to 1000 parts per million. Inconclusive evidence of free water ice at the lunar poles had accumulated during the second half of the 20th century from a variety of observations suggesting the presence of bound hydrogen. On 18 August 1976, the Soviet Luna 24 probe landed at Mare Crisium, took samples from the depths of 118, 143, and 184 cm of the lunar regolith, and then took them to Earth. In February 1978, it was published that laboratory analysis of these samples shown they contained 0.1% water by mass. Spectral measurements showed minima near 3, 5, and 6 μm , distinctive valence-vibration bands for water molecules, with intensities two or three times larger than the noise level. On 24 September 2009, it was reported that the NASA's Moon Mineralogy Mapper (M_3) spectrometer onboard India's ISRO Chandrayaan-1 probe had detected absorption features near 2.8–3.0 μm on the surface of the Moon. But about 10 months before, on 14 November 2008, India's made Moon Impact Probe onboard Chandrayaan-1 orbiter landed into Shackleton crater and confirmed the presence of water ice. For silicate bodies, such features are typically attributed to hydroxyl- and/or water-bearing materials. In August 2018, NASA confirmed that M_3 showed water ice is present on the surface at the Moon poles. Water was confirmed to be on the sunlit surface of the Moon by ISRO on October 26, 2020. Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals. The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of water's usefulness in rendering long-term lunar habitation feasible. The presence of large quantities of water on the Moon would be an important factor in rendering lunar habitation cost-effective since transporting water (or hydrogen and oxygen) from Earth would be

prohibitively expensive. If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for drinking and plant propagation, and the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations or a nuclear generator, providing breathable oxygen as well as the components of rocket fuel. The hydrogen component of the water ice could also be used to draw out the oxides in the lunar soil and harvest even more oxygen.

What is the meaning of 'in situ' ?

- a. generosity in bestowing money or gifts upon others
- b. in the original place.
- c. though
- d. seize the day
- e. for example

86. Direction: The following sentences form a paragraph. The sentences are - (+1, -0.25)
A, B, C, D, E and F. Sentence E is fixed and its position cannot be changed.
The rest of the sentences are not given in their proper order. Read the sentences and answer the following questions.

- A. It is essentially the gradual increase in the proportion of people living in urban areas.
- B. Furthermore, urbanization is quite a popular trend in the contemporary world.
- C. Moreover, people mostly undertake urbanization due to more work opportunities and a better standard of living.
- D. A fully urbanized world looks like the ultimate destiny of our world.

E. According to the expert prediction, by 2050, 64% of the developing world and 86% of the developed world will be urbanized.

F. Urbanization refers to the movement of the population from rural areas to urban areas.

Which sentence should be the first sentence in the paragraph?

- a. A
- b. B
- c. C
- d. D
- e. F

87. Direction: The following sentences form a paragraph. The sentences are – A, B, C, D, E and F. Sentence E is fixed and its position cannot be changed. The rest of the sentences are not given in their proper order. Read the sentences and answer the following questions. (+1, -0.25)

A. It is essentially the gradual increase in the proportion of people living in urban areas.

B. Furthermore, urbanization is quite a popular trend in the contemporary world.

C. Moreover, people mostly undertake urbanization due to more work opportunities and a better standard of living.

D. A fully urbanized world looks like the ultimate destiny of our world.

E. According to the expert prediction, by 2050, 64% of the developing world and 86% of the developed world will be urbanized.

F. Urbanization refers to the movement of the population from rural areas to urban areas.

Which sentence should be the second sentence in the paragraph?

- a. B
- b. A
- c. C
- d. F
- e. D

88. Direction: The following sentences form a paragraph. The sentences are - **(+1, -0.25)**
A, B, C, D, E and F. Sentence E is fixed and its position cannot be changed.
The rest of the sentences are not given in their proper order. Read the sentences and answer the following questions.

A. It is essentially the gradual increase in the proportion of people living in urban areas.

B. Furthermore, urbanization is quite a popular trend in the contemporary world.

C. Moreover, people mostly undertake urbanization due to more work opportunities and a better standard of living.

D. A fully urbanized world looks like the ultimate destiny of our world.

E. According to the expert prediction, by 2050, 64% of the developing world and 86% of the developed world will be urbanized.

F. Urbanization refers to the movement of the population from rural areas to urban areas.

Which sentence should be the third sentence in the paragraph?

- a. A
- b. C
- c. D
- d. B
- e. F

89. Direction: The following sentences form a paragraph. The sentences are - (+1, -0.25)
A, B, C, D, E and F. Sentence E is fixed and its position cannot be changed.
The rest of the sentences are not given in their proper order. Read the sentences and answer the following questions.

A. It is essentially the gradual increase in the proportion of people living in urban areas.

B. Furthermore, urbanization is quite a popular trend in the contemporary world.

C. Moreover, people mostly undertake urbanization due to more work opportunities and a better standard of living.

D. A fully urbanized world looks like the ultimate destiny of our world.

E. According to the expert prediction, by 2050, 64% of the developing world and 86% of the developed world will be urbanized.

F. Urbanization refers to the movement of the population from rural areas to urban areas.

Which sentence should be the fourth sentence in the paragraph?

- a. F
- b. D
- c. B

d. A

e. C

90. Direction: The following sentences form a paragraph. The sentences are – (+1, -0.25)
A, B, C, D, E and F. Sentence E is fixed and its position cannot be changed.
The rest of the sentences are not given in their proper order. Read the
sentences and answer the following questions.

A. It is essentially the gradual increase in the proportion of people living in urban areas.

B. Furthermore, urbanization is quite a popular trend in the contemporary world.

C. Moreover, people mostly undertake urbanization due to more work opportunities and a better standard of living.

D. A fully urbanized world looks like the ultimate destiny of our world.

E. According to the expert prediction, by 2050, 64% of the developing world and 86% of the developed world will be urbanized.

F. Urbanization refers to the movement of the population from rural areas to urban areas.

Which sentence should be the sixth sentence in the paragraph?

a. D

b. A

c. B

d. C

e. F

Quantitative Aptitude

91. **Direction:** In a factory, the attendance of all the workers was 100% but all the workers were not punctual to the factory nor did all the workers stayed till the end. One day, all the workers who arrived early at the office, 20% of them left early but 40% of them left late and rest of them left on time. Of the workers who arrived late at the factory, 50% of them left late but 25% of them left on time and rest of them left early. Of the workers who arrived on time, 37.5% of them left early and an equal number of them left late but rest of them left on time. The number of workers who arrived early was equal to the number of workers who left on time and the number of workers who left early was 39 more than the number of workers who arrived late at the office. The number of workers who didn't leave on time was 144. (+1, -0.25)
- What is the difference between the total number of workers who left early and the total number of workers who left late?
- a. 12
 - b. 15
 - c. 18
 - d. 21
 - e. None of these

92. **Direction:** In a factory, the attendance of all the workers was 100% but all the workers were not punctual to the factory nor did all the workers stayed till the end. One day, all the workers who arrived early at the office, 20% of them left early but 40% of them left late and rest of them left on time. Of the workers who arrived late at the factory, 50% of them left late but 25% of them left on time and rest of them left early. Of the workers who arrived on time, 37.5% of them left early and an equal number of (+1, -0.25)

them left late but rest of them left on time. The number of workers who arrived early was equal to the number of workers who left on time and the number of workers who left early was 39 more than the number of workers who arrived late at the office. The number of workers who didn't leave on time was 144.

What is the total number of workers working?

- a. 204
- b. 208
- c. 210
- d. 202
- e. None of these

93. Direction: In a factory, the attendance of all the workers was 100% but all the workers were not punctual to the factory nor did all the workers stayed till the end. One day, all the workers who arrived early at the office, 20% of them left early but 40% of them left late and rest of them left on time. Of the workers who arrived late at the factory, 50% of them left late but 25% of them left on time and rest of them left early. Of the workers who arrived on time, 37.5% of them left early and an equal number of them left late but rest of them left on time. The number of workers who arrived early was equal to the number of workers who left on time and the number of workers who left early was 39 more than the number of workers who arrived late at the office. The number of workers who didn't leave on time was 144. (+1, -0.25)

Find the respective ratio of the number of workers who arrived early, the number of workers who arrived on time, and the number of workers who arrived late.

- a. 7 : 10 : 2

- b. 5 : 6 : 2
- c. 5 : 10 : 4
- d. 5 : 10 : 2
- e. None of these

94. **Direction:** In a factory, the attendance of all the workers was 100% but all the workers were not punctual to the factory nor did all the workers stayed till the end. One day, all the workers who arrived early at the office, 20% of them left early but 40% of them left late and rest of them left on time. Of the workers who arrived late at the factory, 50% of them left late but 25% of them left on time and rest of them left early. Of the workers who arrived on time, 37.5% of them left early and an equal number of them left late but rest of them left on time. The number of workers who arrived early was equal to the number of workers who left on time and the number of workers who left early was 39 more than the number of workers who arrived late at the office. The number of workers who didn't leave on time was 144. (+1, -0.25)

Suppose on the day before yesterday of that day 25% of the total number of workers was on leave on the medical ground and 33.33% of the remaining was on leave for personal reason then how many workers was present on the day before yesterday of that day?

- a. 102
- b. 105
- c. 153
- d. 51
- e. None of these

95. **Direction:** In a factory, the attendance of all the workers was 100% but all the workers were not punctual to the factory nor did all the workers stayed till the end. One day, all the workers who arrived early at the office, 20% of them left early but 40% of them left late and rest of them left on time. Of the workers who arrived late at the factory, 50% of them left late but 25% of them left on time and rest of them left early. Of the workers who arrived on time, 37.5% of them left early and an equal number of them left late but rest of them left on time. The number of workers who arrived early was equal to the number of workers who left on time and the number of workers who left early was 39 more than the number of workers who arrived late at the office. The number of workers who didn't leave on time was 144. (+1, -0.25)

The total number of workers who left on time was approximately how much percent more than/less than the total number of workers who didn't leave on time?

- a. 60%
 - b. 58%
 - c. 59%
 - d. 57%
 - e. None of these
-
96. What approximate will come in the place of the question mark '?' in the following question? (+1, -0.25)

$$(6.97)^3 + (? \times 12) - (5.03)^3 = [(17.98)^2 \times 5.94] + 2.08$$

- a. 144
- b. 154

- c. 134
- d. 14
- e. None of these

97. What approximate value will come in the place of the question mark '?' in (+1, -0.25) the following question?

$$9.999\% \text{ of } 330.01 + (100/6.99) \% \text{ of } 1/7.01 \text{ of } 343.01 = 50 - ?$$

- a. 5
- b. 6.5
- c. 3.5
- d. 10
- e. 11.5

98. What approximate value should come in the place of question mark (?) (+1, -0.25) in the following question?

$$44.98\% \text{ of } 399.99 + 24.97\% \text{ of } 499.99 = ?^3 + 39.99\% \text{ of } 449.99$$

- a. 7
- b. 8
- c. 12
- d. 5
- e. 3

99. In the given questions, two equations numbered I and II are given. You have to solve both the equations and mark the appropriate answer. (+1, -0.25)

I. $5x^2 + 33x + 40 = 0$

II. $2y^2 + 7y - 15 = 0$

- a. $x > y$
- b. $x \geq y$
- c. $x < y$
- d. $x \leq y$
- e. No relation in x and y or $x = y$

100. In solving a problem of a quadratic equation Amita makes a mistake only in the constant term of the equation and obtains 5 and 6 as the roots of the equation. Sonakshi makes a mistake only in the coefficient of the first degree term and obtains -3 and -8 as the roots of the equation. The correct equation is: (+1, -0.25)

a. $x^2 - 11x + 24 = 0$

b. $x^2 + 11x + 24 = 0$

c. $x^2 - 11x + 8 = 0$

d. $x^2 - 8x - 11 = 0$

e. None of these

101. In the given question, two equations numbered I and II are given. You have to solve both the equations and mark the appropriate answer. (+1, -0.25)

I. $x^2 - 1.1x + 0.18 = 0$

II. $y^2 - 3.5y + 2.5 = 0$

- a. $x > y$
- b. $x < y$
- c. $x \geq y$
- d. $x \leq y$
- e. $x = y$ or no relation can be obtained

102. **Directions:** Read the table and information carefully and answer the following questions. (+1, -0.25)

The following table represents the number of sixes hit by five players in three formats of cricket: t20, test match, and one day. The 5 players are Dhoni, Pollard, Gayle, Hardik, and Finch. The ratio of sixes hit by Finch in Test and One day match is 9 : 2, some of the data in the table is missing.

Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	-	10	-	270
Pollard	18	-	-	-	
Gayle	15	-	-	-	354
Hardik	20	10	-	-	
Finch	-	-	-	-	372
Total	-	81	75	-	1482

What is the ratio of sixes hit by Finch in T20, Test match, and one day match?

- a. 9 : 18 : 4
- b. 5 : 8 : 9
- c. 4 : 9 : 5
- d. 9 : 4 : 18
- e. 4 : 5 : 16

103. **Directions:** Read the table and information carefully and answer the following questions.

(+1, -0.25)

The following table represents the number of sixes hit by five players in three formats of cricket: t20, test match, and one day. The 5 players are Dhoni, Pollard, Gayle, Hardik, and Finch. The ratio of sixes hit by Finch in Test and One day match is 9 : 2, some of the data in the table is missing.

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Pollard	18	-	-	-	-
Gayle	15	-	-	-	354
Hardik	20	10	-	-	-
Finch	-	-	-	-	372
Total	-	81	75	-	1482

If Gayle hits 10 sixes in Test match. What is the ratio of sixes hit by Pollard in Test match to sixes hit by Gayle in One day match?

- a. 9 : 5
- b. 5 : 17

c. 4 : 9

d. 9 : 4

e. 4 : 5

104. Directions: Read the table and information carefully and answer the following questions. (+1, -0.25)

The following table represents the number of sixes hit by five players in three formats of cricket: t20, test match, and one day. The 5 players are Dhoni, Pollard, Gayle, Hardik, and Finch. The ratio of sixes hit by Finch in Test and One day match is 9 : 2, some of the data in the table is missing.

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Hardik	20	10	-	-	
Finch	-	-	-	-	372
Total	-	81	75	-	1482

If the ratio of total sixes hit by Pollard and Hardik is 4 : 5 respectively and Pollard hits 12 sixes in Test match, What is the difference between the runs scored only by sixes by Gayle in test match and Pollard in one day match?

- a. 90
- b. 54
- c. 12
- d. 36
- e. 48

105. Directions: Read the table and information carefully and answer the following questions. (+1, -0.25)

The following table represents the number of sixes hit by five players in three formats of cricket: t20, test match, and one day. The 5 players are Dhoni, Pollard, Gayle, Hardik, and Finch. The ratio of sixes hit by Finch in Test and One day match is 9 : 2, some of the data in the table is missing.

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Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
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Gayle	15	-	-	-	354
Hardik	20	10	-	-	
Finch	-	-	-	-	372
Total	-	81	75	-	1482

If Hardik hits 15 sixes in one day, What is the difference of runs scored by Gayle and by Pollard?

- a. 190
- b. 154
- c. 112
- d. 136
- e. 138

106. **Directions:** Read the table and information carefully and answer the following questions.

(+1, -0.25)

The following table represents the number of sixes hit by five players in three formats of cricket: t20, test match, and one day. The 5 players are Dhoni, Pollard, Gayle, Hardik, and Finch. The ratio of sixes hit by Finch in Test and One day match is 9 : 2, some of the data in the table is missing.

Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	-	10	-	270
Pollard	18	-	-	-	-
Gayle	15	-	-	-	354
Hardik	20	10	-	-	-
Finch	-	-	-	-	372
Total	-	81	75	-	1482

What is the ratio of the difference in the number of sixes hit by Dhoni in T20 match and One day match to the difference in the number of sixes hit by Finch for the same two formats?

a. 3 : 2

- b. 1 : 6
- c. 2 : 5
- d. 1 : 1
- e. 4 : 1

107. A bowl has syrup made for making cake contains flour syrup and sugar syrup in the ratio of 2 : 3 and another bowl has syrup containing flour syrup and sugar syrup in the ratio 3 : 2. x litres of syrup from second bowl mixed with 10 litres of the first, the ratio of flour syrup and sugar syrup in the resultant cocktail become 4 : 5. Find the value of x. (+1, -0.25)

- a. 1.48
- b. 2.46
- c. 1.96
- d. 2.86
- e. None of these



108. Mr. Abhishek's average monthly expenditure for the first four months of the year was Rs. 2600. For the next five months, the average monthly expenditure was Rs. 400 more than what it was during the first four months. If he spent Rs.5600 in all during the remaining three months of the year, find what percentage of his annual income of Rs. 50000 did he save in the year? (+1, -0.25)

- a. 42%
- b. 48%
- c. 38%

d. 24%

e. 32%

109. Amit, Sabir and Raju can complete a work in 15, 30 and 40 days respectively. All three started the work but after 4 days of working together due to a minor accident the efficiency of Amit and Sabir became $\frac{3}{4}$ times of their original efficiency and efficiency of Raju became $\frac{2}{3}$ times of his original efficiency . Find the time taken to complete the remaining work after accident. (+1, -0.25)

a. $\frac{50}{11}$ days

b. $\frac{55}{12}$ days

c. $\frac{60}{11}$ days

d. $\frac{65}{14}$ days

e. $\frac{70}{13}$ days

110. Some people went to a water park on 2 days i.e. Sunday and Monday. The ratio of men, women and children who went on Sunday is 8 : 7 : 5 and that on Monday is 2 : 2 : 1, if the difference of men who went to the park on Sunday and number of women who went to park on Monday is 1200 and the difference between children who went on Sunday to the children who went on Monday is 850. Calculate the number of people who went to the park on Sunday is how much percentage greater than or less than the number of people who went to the park on Monday. (+1, -0.25)

a. 75%

b. 45%

- c. 125%
- d. 150%
- e. None of these

111. A couple with average age 25 years bought a house. Three more members from the male's family came to live with them. Thus the average age of family got increased by 40%. If in the members who joined later only one is male with age 45 years. Find sum of the age of males is what percent of sum of ages of female members, if the ratio of ages of male to female earlier is 3 : 2. (+1, -0.25)

- a. 65%
- b. 75%
- c. 64%
- d. 72%
- e. None of these



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112. Given below are two quantities named I and II. Based on the given information, you have to determine the relationship between the two quantities. You should use the given data and your knowledge of Mathematics to choose among the possible answers. (+1, -0.25)

Quantity I: A task can be finished by B alone in 15 days. B started working together with C and after 5 days, B left the work and received Rs. 2520 as his wage, then determine the wage received by C if the rest of the work is finished by C.

Quantity II: 17^3

- a. Quantity I > Quantity II
- b. Quantity I < Quantity II
- c. Quantity I \geq Quantity II
- d. Quantity I \leq Quantity II
- e. Quantity I = Quantity II or No relation

113. In the following question, two statements are numbered as A and B. On solving these statements, we get quantities A and B respectively. Solve both quantities and choose the correct option. (+1, -0.25)

Quantity I: The marked price of an item is 25% above the cost price of an item. When selling price is Rs. 2750 there is a gain percentage of 10% for the same cost price of an item. If the shopkeeper decides to give a discount of 2%, find the profit percentage.

Quantity II: Radha invests Rs. 2500 and Rs. 3000 on simple interest at the rate of interest A% and B% per annum for 2 years. At the end of two years, he she noticed she had a profit of Rs. 2320 in both cases. If she would interchange the rate of interest in both cases, she would have the profit of Rs. 2300, Find the value of B.

- a. Quantity I \geq Quantity II
- b. Quantity I \leq Quantity II
- c. Quantity I < Quantity II
- d. Quantity I > Quantity II
- e. Quantity I = Quantity II or No relation

114. Directions: Two quantities A and B are given in the following questions. (+1, -0.25)
You have to find the value to both A and B by using your knowledge of mathematics and choose the most suitable relation between the magnitude of A and B from the given options.

X defeats Y by 50 m in a 500 m race while X defeats Z by 6.25 seconds or 100 m even after giving Z a head start of 100 m in a race of 1000 m. Now if the race is of 720 m then,

Quantity A - Distance by which X defeats Y (in m)

Quantity B - Distance by which Y defeats Z provided Z has been given a head start of 8 m.

- a. Quantity A \geq Quantity B
- b. Quantity A \leq Quantity B
- c. Quantity A = Quantity B or no relationship can be established
- d. Quantity A $>$ Quantity B
- e. Quantity A $<$ Quantity B

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115. In the following question, two statements are numbered as A and B. On (+1, -0.25)
solving these statements we get quantities A and B respectively. Solve for the both quantities and chose the correct option.

Quantity A: The ratio of speed of boat to speed of stream is 2 : 1, If the boat travels 162 km and come back to starting point in 36 hour. What is the difference between the time taken by the boat to go upstream and the time taken by the boat to go downstream?

Quantity B: The speed of the stream is 6 km/hr and the distance travelled by the boat is 60 km. If the boat covered half distance upstream with usual speed and other half with double its speed, then it takes 7.5 hours

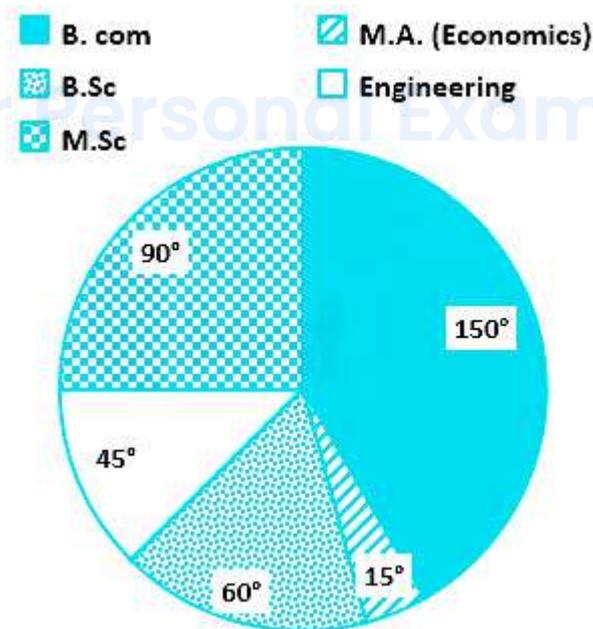
less time than usual time to go upstream. Find the total time taken by the boat to go upstream and downstream?

- a. Quantity A > Quantity B
- b. Quantity A < Quantity B
- c. Quantity A = Quantity B
- d. Quantity A ≤ Quantity B
- e. Quantity A ≥ Quantity B

116. **Direction:** Study the two pie – charts carefully and answers the given questions: (+1, -0.25)

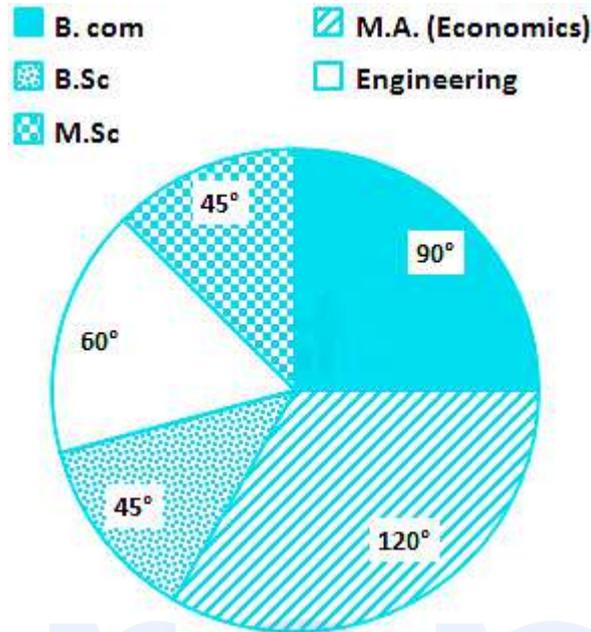
Total number of students who cleared the given courses = 21000

Each sector of Pie-chart 1 represents the students who cleared the given course out of the total number of students who cleared the courses.



The total number of students in all the courses = 45000.

Each sector of Pie-chart 2 represents the students in the given courses.



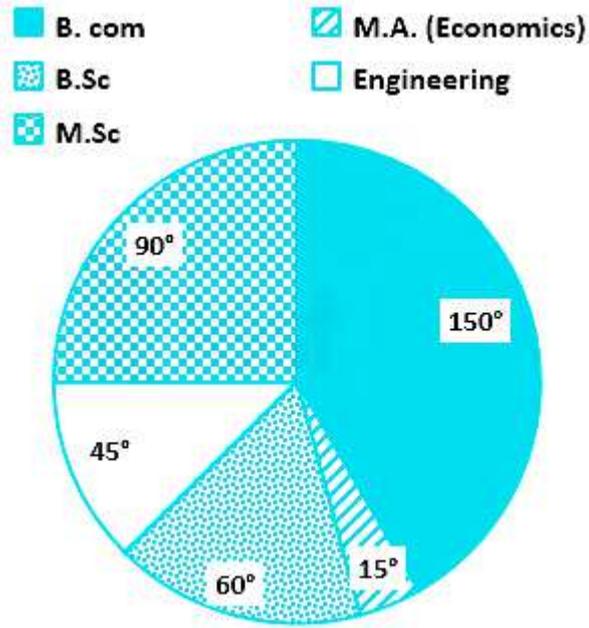
What is the total number of students in Engineering and M.A. (economics) course?

- a. 30,000
- b. 22,500
- c. 45,000
- d. 50,000
- e. 15,000

117. **Direction:** Study the two pie – charts carefully and answers the given questions: (+1, -0.25)

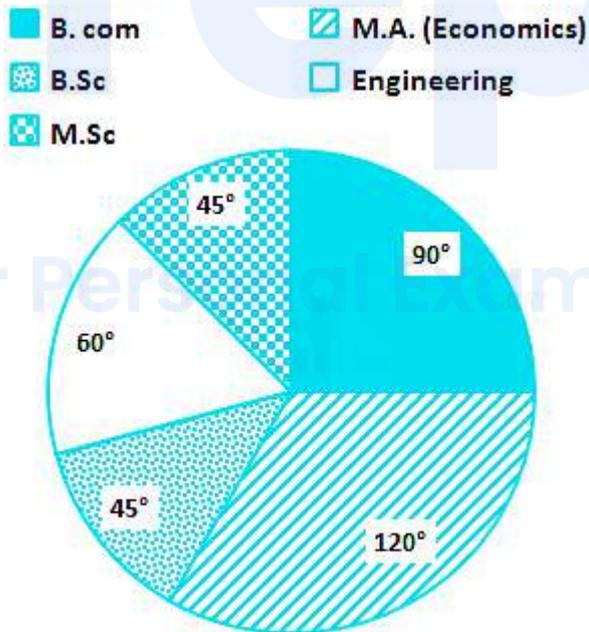
Total number of students who cleared the given courses = 21000

Each sector of Pie-chart 1 represents the students who cleared the given course out of the total number of students who cleared the courses.



The total number of students in all the courses = 45000.

Each sector of Pie-chart 2 represents the students in the given courses.



How many students completed the M.Sc course?

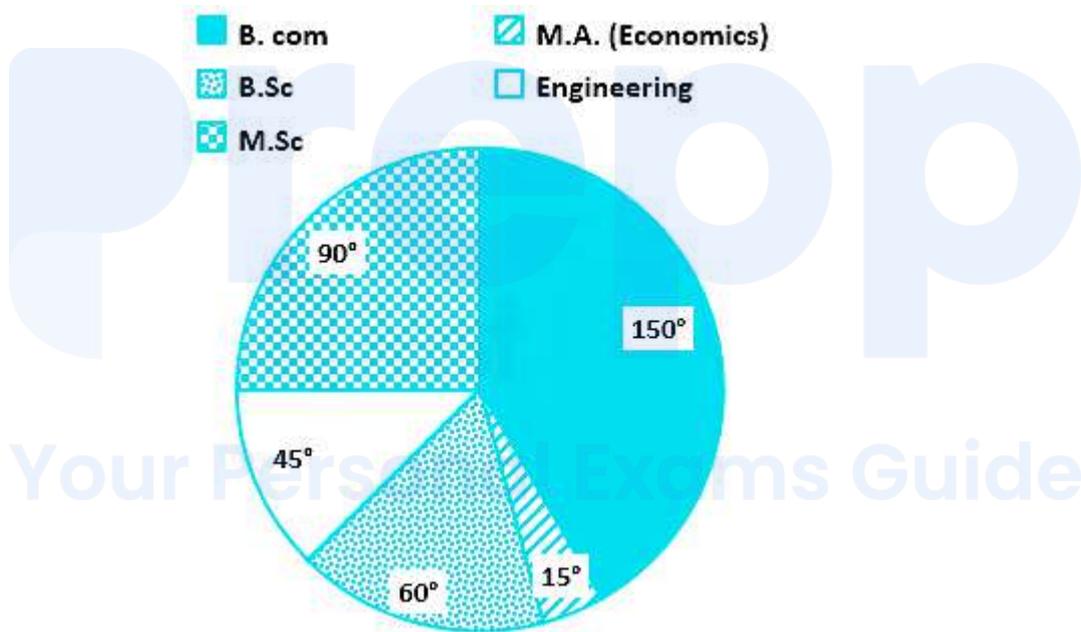
- a. 4000
- b. 3000

- c. 5250
- d. 5000
- e. 8000

118. **Direction:** Study the two pie – charts carefully and answers the given questions: (+1, -0.25)

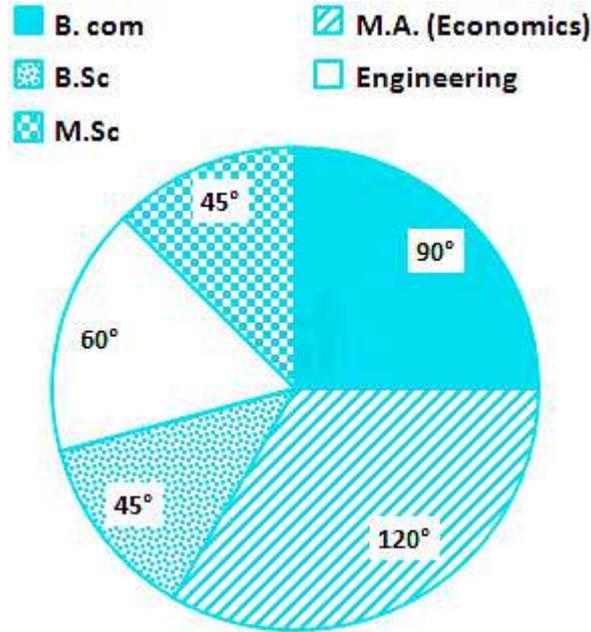
Total number of students who cleared the given courses = 21000

Each sector of Pie-chart 1 represents the students who cleared the given course out of the total number of students who cleared the courses.



The total number of students in all the courses = 45000.

Each sector of Pie-chart 2 represents the students in the given courses.



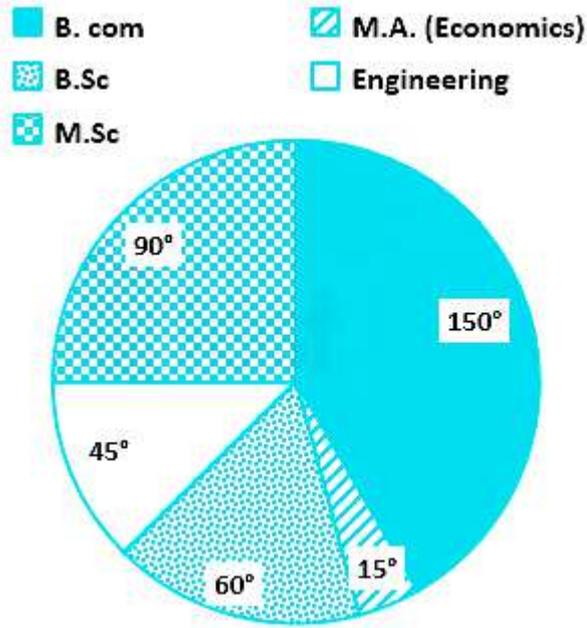
What is the ratio of the total number of students to the total number of students who did not complete the course?

- a. 33 : 23
- b. 15 : 8
- c. 11 : 67
- d. 23 : 35
- e. 20 : 17

119. **Direction:** Study the two pie – charts carefully and answers the given questions: (+1, -0.25)

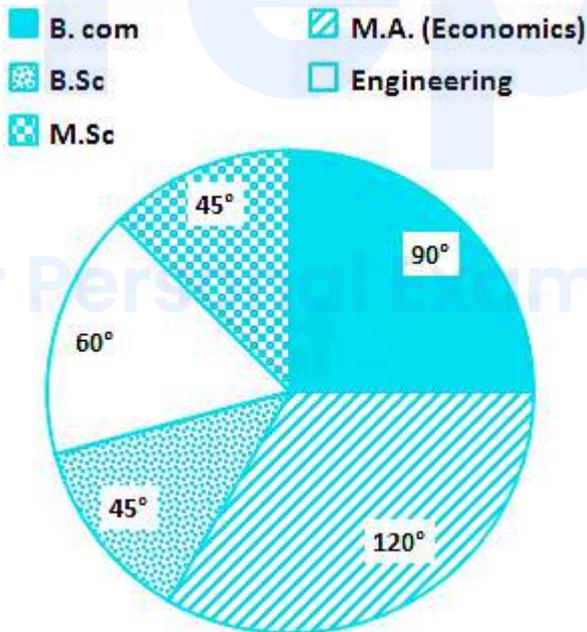
Total number of students who cleared the given courses = 21000

Each sector of Pie-chart 1 represents the students who cleared the given course out of the total number of students who cleared the courses.



The total number of students in all the courses = 45000.

Each sector of Pie-chart 2 represents the students in the given courses.



What is the ratio of students who completed the course of M.A. (Economics) to students completed the B.Com course?

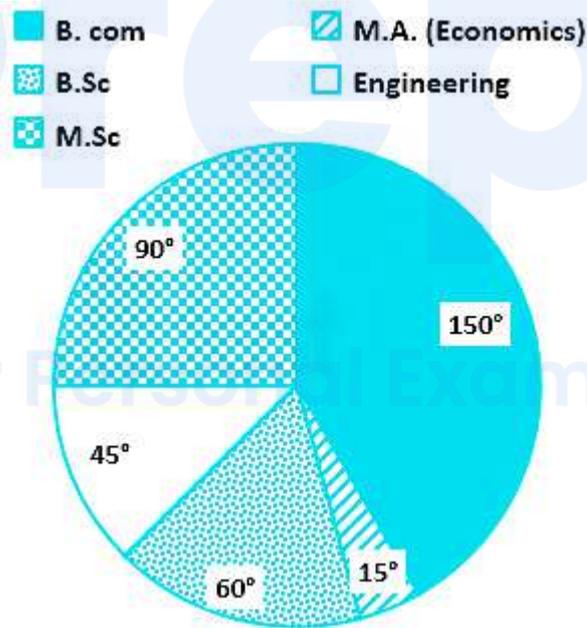
a. 1:10

- b. 2 : 9
- c. 3 : 4
- d. 5 : 6
- e. 7 : 9

120. **Direction:** Study the two pie – charts carefully and answers the given questions: (+1, -0.25)

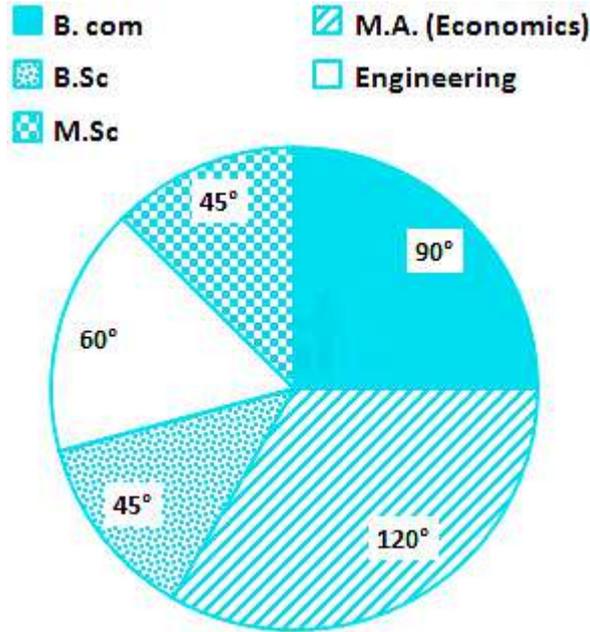
Total number of students who cleared the given courses = 21000

Each sector of Pie-chart 1 represents the students who cleared the given course out of the total number of students who cleared the courses.



The total number of students in all the courses = 45000.

Each sector of Pie-chart 2 represents the students in the given courses.



Find the average of students who cleared B.Com and M.Sc course.

- a. 7000
- b. 1400
- c. 1600
- d. 1800
- e. 2000

121. In a zoo, there are 65 animals in sector I, 40 animals in sector II and 45 animals in sector III. Out of this, 19 animal graze in both sector I and sector II, 21 animals graze in both sector II and Sector III and 15 animals graze in both sector I and sector III. These figure also include ten animals grazing in all the three sectors. Then, find the total number of animals in the zoo? (+1, -0.25)
- a. 95
 - b. 121

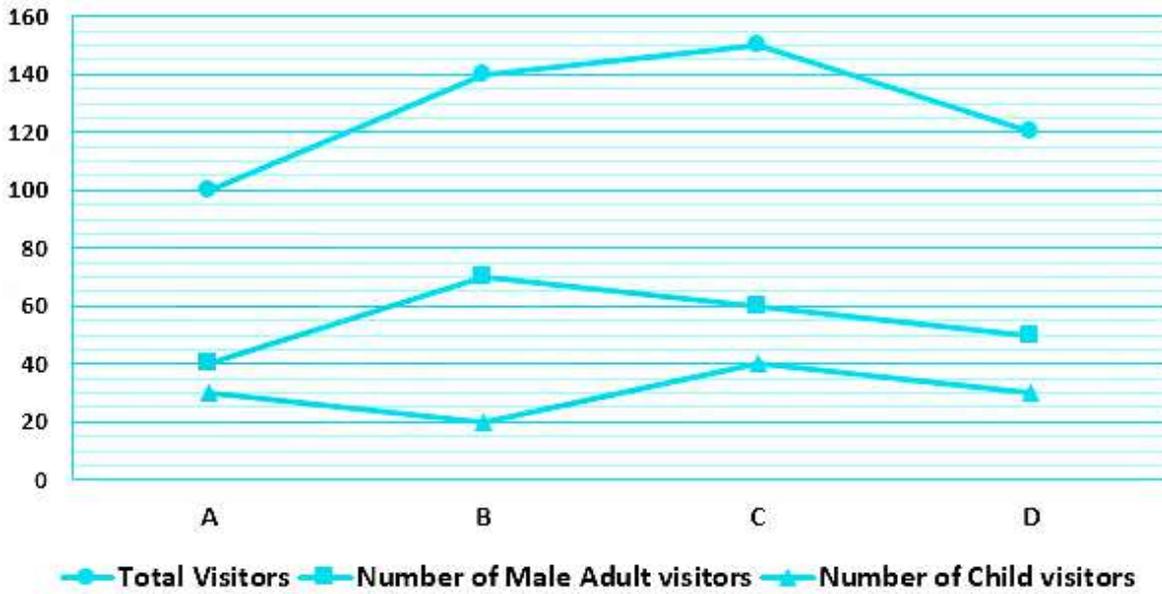
- c. 105
 - d. 100
 - e. 110
-

122. Ravish has a monthly income of Rs. 25000. He plans to save 20% of his income. Of the total monthly income, he spends 20% on food, 15% on travelling, 35% on rent, and the remaining amount on the school fees of his children. Find out the average amount he spends on the school fees of his one child, if he has two children – one boy and one girl. (+1, -0.25)

- a. Rs. 1000
 - b. Rs. 1250
 - c. Rs. 2000
 - d. Rs. 1750
 - e. Rs. 2500
-

123. **Direction:** Read the line graph carefully and answer the following questions. (+1, -0.25)

The graph shows the number of visitors, the number of child visitors and the number of male adult visitors to 4 parks.



NOTE: Total number of visitors = Number of male visitors + Number of female visitors + Number of child visitors

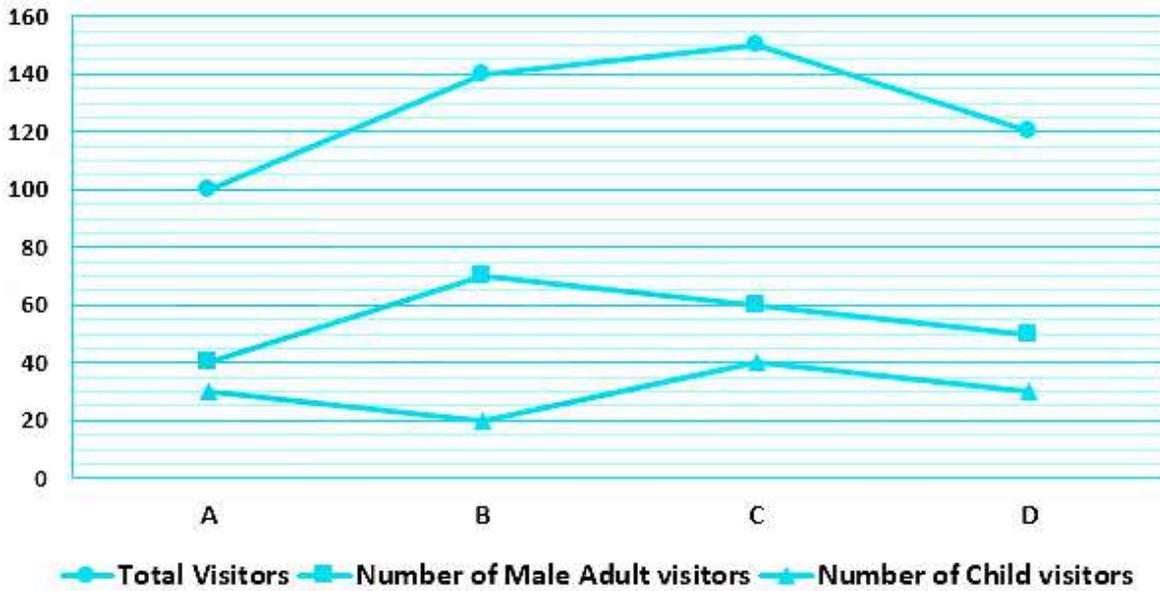
Total Female adult visitors in parks A, and C are what percent of total visitors in the same parks?

- a. 36%
- b. 26%
- c. 40%
- d. 32%
- e. None of these

124. **Direction:** Read the line graph carefully and answer the following questions.

(+1, -0.25)

The graph shows the number of visitors, the number of child visitors and the number of male adult visitors to 4 parks.



NOTE: Total number of visitors = Number of male visitors + Number of female visitors + Number of child visitors

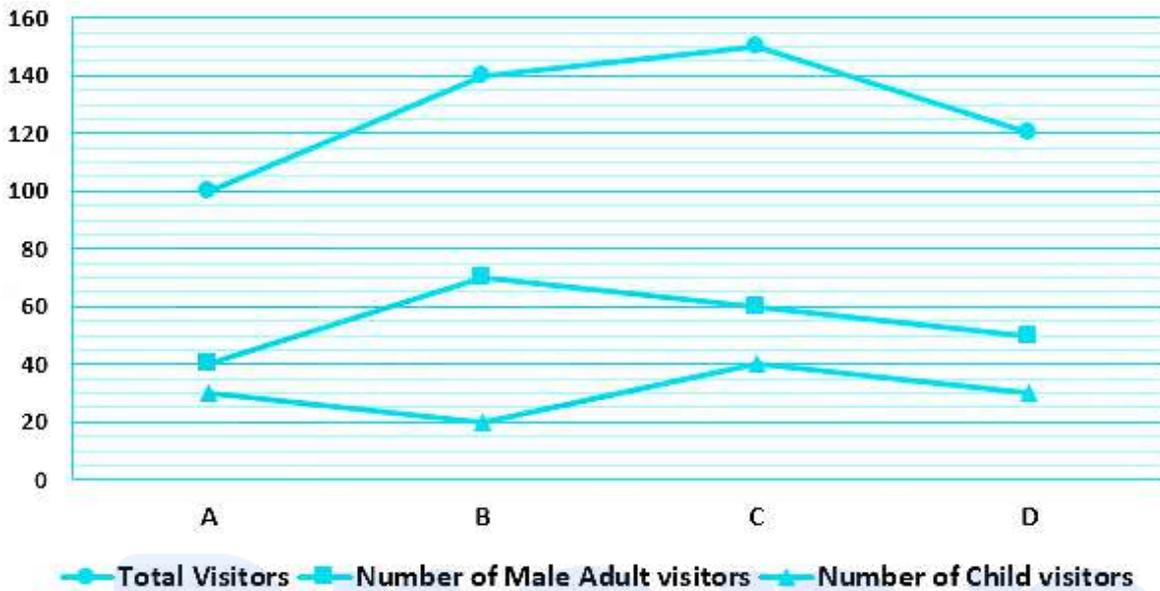
If each female adult visiting park B is married and each couple has one child then what is the difference between the number of unmarried male adult visitors and the number of couple visitors having no children if it is known that each couple is visiting with their child to park B?

- a. 40
- b. 20
- c. 30
- d. Cannot be determined
- e. 10

125. **Direction:** Read the line graph carefully and answer the following questions.

(+1, -0.25)

The graph shows the number of visitors, the number of child visitors and the number of male adult visitors to 4 parks.



NOTE: Total number of visitors = Number of male visitors + Number of female visitors + Number of child visitors

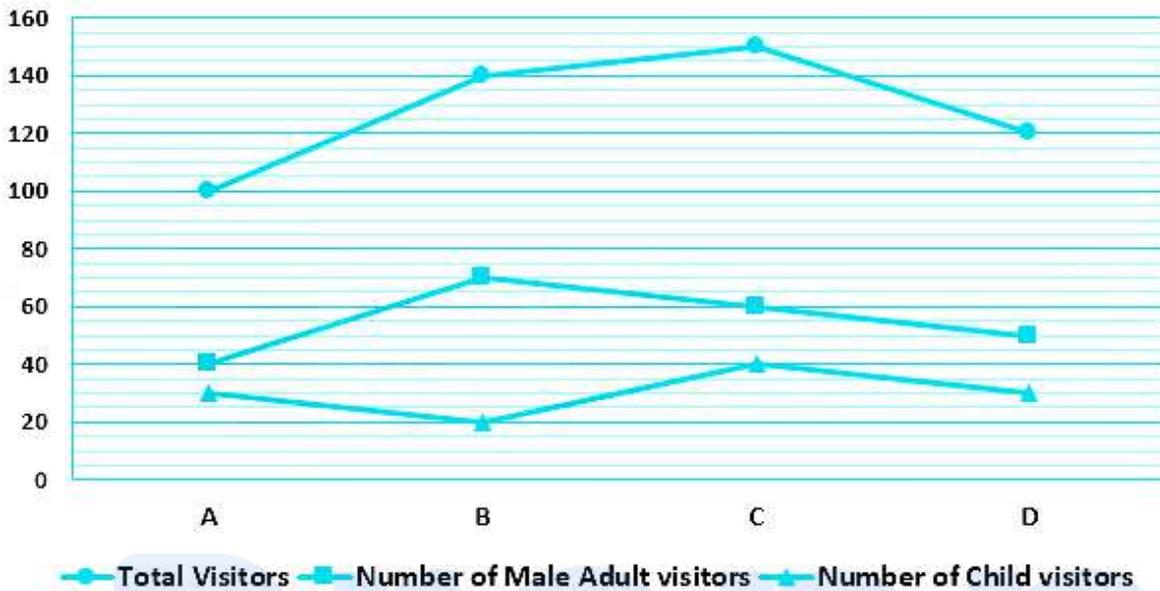
What is the ratio of the number of male adult visitors in parks A, C and D to the number of female adult visitors in all the parks?

- a. 10 : 17
- b. 12 : 17
- c. 15 : 17
- d. 9 : 17
- e. 1 : 1

126. **Direction:** Read the line graph carefully and answer the following questions.

(+1, -0.25)

The graph shows the number of visitors, the number of child visitors and the number of male adult visitors to 4 parks.



NOTE: Total number of visitors = Number of male visitors + Number of female visitors + Number of child visitors

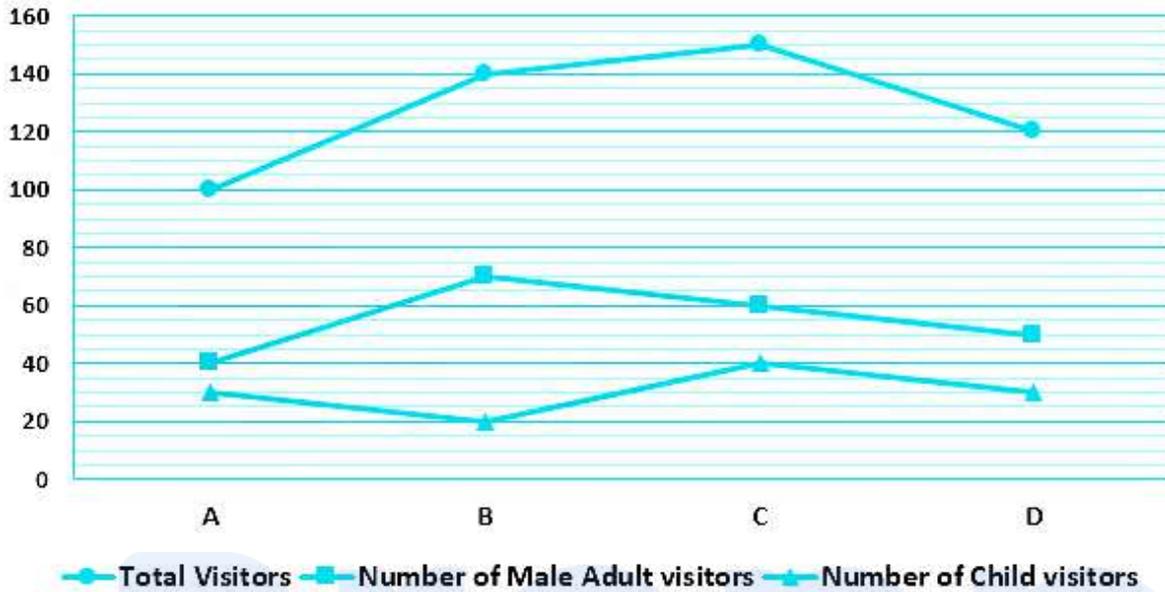
The number of child visitors in park A and D is what percent more/less than the number of female adult visitors in park B and C?

- a. 40%
- b. 20%
- c. 10%
- d. 30%
- e. 50%

127. **Direction:** Read the line graph carefully and answer the following questions.

(+1, -0.25)

The graph shows the number of visitors, the number of child visitors and the number of male adult visitors to 4 parks.



NOTE: Total number of visitors = Number of male visitors + Number of female visitors + Number of child visitors

What is the average number of child visitors visiting all the parks?

- a. 24
- b. 32
- c. 28
- d. 30
- e. None of the above

128. In a caroms competition involving some boys and ladies, every player must play exactly one game with every other player. It was found that in 105 games both the players were ladies and in 300 games both players were boys. What is the amount of games during which one person was a boy and another person was a lady? (+1, -0.25)

- a. 200
- b. 180
- c. 160
- d. 375
- e. 120

129. Bank lent out some amount to P on compound interest calculated half-yearly at the rate of interest 10% for a year. P lent out same money on compound interest calculated annually to his friend at the same rate of interest for the same time period. He has Rs. 10 loss in this transaction. At what rate of interest he should lend out money on compound interest calculated annually for a year to earn Rs. 190 as a profit? (+1, -0.25)

- a. 15%
- b. 19%
- c. 21%
- d. 17%
- e. 16%

130. At the time of the Coronavirus pandemic a worker decided to go home from Mumbai to his village in Uttar Pradesh. So he covers $\frac{3}{17}$ th part of his journey by bus, $\frac{4}{15}$ th part of his journey from car, 26.67% of his journey by train, 20% of his journey by truck, and remaining 115 km by foot then finds the distance of Mumbai from his village. (+1, -0.25)

- a. 1575 km

- b. 1125 km
- c. 1300 km
- d. 1275 km
- e. 1500 km

131. P invests Rs.1100 and Q invests Rs.900 into a partnership. After 5 months, P adds Rs.400 and Q removes Rs.200. After 4 more months, P adds Rs.500 and Q adds Rs.300 to their investment. R invests Rs.800 for 4 months and adds Rs.200 after some time period. The total profit earned by them is Rs.7400. The profit share of Q is Rs.2060. Find the profit share of R. (+1, -0.25)

- a. Rs. 2130
- b. Rs. 1770
- c. Rs. 1910
- d. Rs. 1840
- e. Rs. 1560

132. If the cost price of calculator is Rs $(x + 120)$ and the selling price of a watch be Rs $5x$. The watch has been sold at 25% profit. The calculator is marked up by 25% above its cost price and sold at Rs 500 after giving some discount, If the cost price of watch is 48 times the discount offered on calculator, Then find the marked price of the calculator? (+1, -0.25)

- a. 590
- b. 640
- c. 320

d. 525

e. 715

133. Directions: Read the information carefully and answer the following questions. (+1, -0.25)

In an engineering college, 1200 students are studying engineering in any one of the branches out of the five different branches i.e. Mechanical, Electrical, Automobile, Chemical, and Electronics. The ratio between boys and girls in college is 9 : 7 respectively. $\frac{23}{105}$ of the total girls are in Mechanical branch and $\frac{16}{105}$ of the total girls are in Electronics branch. The total number of students in Electrical branch is 325. The total number of students studying in Automobile branch is 210. Ratio between the number of boys and girls studying Electronics is 3 : 2. $\frac{8}{27}$ of the total number of boys studying in Electrical. The ratio between the number of boys and the number of girls in Automobile is 10 : 11. The difference between the number of boys and the number of girls in Chemical is 25 and the number of boys is more than the number of girls in Chemical branch.

Number of girls in Electronics is what percentage of the number of boys in Electrical?

a. 25%

b. 40%

c. 80%

d. 30%

e. 70%

134. **Directions:** Read the information carefully and answer the following questions. (+1, -0.25)

In an engineering college, 1200 students are studying engineering in any one of the branches out of the five different branches i.e. Mechanical, Electrical, Automobile, Chemical, and Electronics. The ratio between boys and girls in college is 9 : 7 respectively. $\frac{23}{105}$ of the total girls are in Mechanical branch and $\frac{16}{105}$ of the total girls are in Electronics branch. The total number of students in Electrical branch is 325. The total number of students studying in Automobile branch is 210. Ratio between the number of boys and girls studying Electronics is 3 : 2. $\frac{8}{27}$ of the total number of boys studying in Electrical. The ratio between the number of boys and the number of girls in Automobile is 10 : 11. The difference between the number of boys and the number of girls in Chemical is 25 and the number of boys is more than the number of girls in Chemical branch.

What is the respective ratio between the number of boys in Automobile to number of Girls in Electrical?

- a. 3 : 2
- b. 4 : 5
- c. 1 : 2
- d. 3 : 5
- e. 4 : 7

135. **Directions:** Read the information carefully and answer the following questions. (+1, -0.25)

In an engineering college, 1200 students are studying engineering in any one of the branches out of the five different branches i.e. Mechanical,

Electrical, Automobile, Chemical, and Electronics. The ratio between boys and girls in college is 9 : 7 respectively. $\frac{23}{105}$ of the total girls are in Mechanical branch and $\frac{16}{105}$ of the total girls are in Electronics branch. The total number of students in Electrical branch is 325. The total number of students studying in Automobile branch is 210. Ratio between the number of boys and girls studying Electronics is 3 : 2. $\frac{8}{27}$ of the total number of boys studying in Electrical. The ratio between the number of boys and the number of girls in Automobile is 10 : 11. The difference between the number of boys and the number of girls in Chemical is 25 and the number of boys is more than the number of girls in Chemical branch.

What is the difference between the number of boys in Electronics and the number of girls in Mechanical?

- a. 8
- b. 16
- c. 10
- d. 30
- e. 5

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136. Directions: Read the information carefully and answer the following questions.

(+1, -0.25)

In an engineering college, 1200 students are studying engineering in any one of the branches out of the five different branches i.e. Mechanical, Electrical, Automobile, Chemical, and Electronics. The ratio between boys and girls in college is 9 : 7 respectively. $\frac{23}{105}$ of the total girls are in Mechanical branch and $\frac{16}{105}$ of the total girls are in Electronics branch. The total number of students in Electrical branch is 325. The total number of students studying in Automobile branch is 210. Ratio between the number of boys and girls studying Electronics is 3 : 2. $\frac{8}{27}$ of the total

number of boys studying in Electrical. The ratio between the number of boys and the number of girls in Automobile is 10 : 11. The difference between the number of boys and the number of girls in Chemical is 25 and the number of boys is more than the number of girls in Chemical branch.

What is the total number of students studying in Mechanical and Chemical together?

- a. 320
- b. 160
- c. 465
- d. 300
- e. 480

137. Directions: Read the information carefully and answer the following questions. (+1, -0.25)

In an engineering college, 1200 students are studying engineering in any one of the branches out of the five different branches i.e. Mechanical, Electrical, Automobile, Chemical, and Electronics. The ratio between boys and girls in college is 9 : 7 respectively. $\frac{23}{105}$ of the total girls are in Mechanical branch and $\frac{16}{105}$ of the total girls are in Electronics branch. The total number of students in Electrical branch is 325. The total number of students studying in Automobile branch is 210. Ratio between the number of boys and girls studying Electronics is 3 : 2. $\frac{8}{27}$ of the total number of boys studying in Electrical. The ratio between the number of boys and the number of girls in Automobile is 10 : 11. The difference between the number of boys and the number of girls in Chemical is 25 and the number of boys is more than the number of girls in Chemical branch.

In which branch is the number of girls the highest and the number of boys the lowest respectively?

- a. Electrical and Automobile
- b. Mechanical and Electronics
- c. Electrical and electronics
- d. Chemical and mechanical
- e. Mechanical and Chemical

138. if the length of the cuboid is $\frac{1}{2}$ of the perimeter of square and breadth of the cuboid is $\frac{1}{4}$ of the perimeter of the square and height of the cuboid is $\frac{3}{2}$ of the side of the square if the side of the square is equal to $\frac{1}{2}$ of the length of the rectangle if the breadth of the rectangle is $\frac{1}{4}$ of the area of the rectangle which is 64cm^2 then find the lateral surface area of the cuboid. (+1, -0.25)

- a. 36cm^2
- b. 34cm^2
- c. 32cm^2
- d. 46cm^2
- e. None

139. The perimeter of an isosceles triangle is 34 cm. The difference between the unequal side and equal side of an isosceles triangle is 4. The ratio between the length of the unequal side of an isosceles triangle and (+1, -0.25)

radius of the cone is 2: 3. Find the curved surface area of the cone if the height of the cone is twice the equal side of an isosceles triangle.

- a. 619π sq.cm
- b. 609π sq.cm
- c. 634π sq.cm
- d. 647π sq.cm
- e. 603π sq.cm

140. A dishonest shopkeeper cheats the wholesaler as well as the buyers by 100 grams each while weighing sugar. He further marks the items at 20% over the price and then gives a discount of 10%. If he bought 1000 grams of sugar initially and sold all at once, find his profit percentage earned through this transaction. (+1, -0.25)

- a. 20%
- b. 25%
- c. 32%
- d. 37%
- e. 30%

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Reasoning Ability & Computer Aptitude

141. Directions: Study the given information and answer the following questions:

(+1, -0.25)

3 * D F 4 & N A 1 Y 6 8 R @ E 2 % T U \$ I P O W ! J

STEP-I- The numbers which are immediately preceded by a letter and immediately followed by a symbol are arranged at the end of the series in ascending order. (They are arranged just after J)

STEP-II- The letters which are immediately preceded by another letter and immediately followed by a symbol are arranged between ! and J in alphabetical order.

STEP-III- The numbers which are immediately followed by a letter interchange their positions with the elements just after them.

(STEP II is applied after STEP I and STEP III is applied after STEP II)

How many letters are there between 2 and 8 in the step-I of the series?

- a. Eight
- b. Six
- c. Four
- d. Five
- e. More than eight

142. Directions: Study the given information and answer the following questions:

(+1, -0.25)

3 * D F 4 & N A 1 Y 6 8 R @ E 2 % T U \$ I P O W ! J

STEP-I- The numbers which are immediately preceded by a letter and immediately followed by a symbol are arranged at the end of the series in ascending order. (They are arranged just after J)

STEP-II- The letters which are immediately preceded by another letter and immediately followed by a symbol are arranged between ! and J in alphabetical order.

STEP-III- The numbers which are immediately followed by a letter interchange their positions with the elements just after them.

(STEP II is applied after STEP I and STEP III is applied after STEP II)

Which among the following are the elements of the series which are at the second position from the left end and the fifth position from the right end in step-III respectively?

- a. 3J
- b. *U
- c. NW
- d. *J
- e. &U

143. Directions: Study the given information and answer the following questions: (+1, -0.25)

3 * D F 4 & N A 1 Y 6 8 R @ E 2 % T U \$ I P O W ! J

STEP-I- The numbers which are immediately preceded by a letter and immediately followed by a symbol are arranged at the end of the series in ascending order. (They are arranged just after J)

STEP-II- The letters which are immediately preceded by another letter and immediately followed by a symbol are arranged between ! and J in alphabetical order.

STEP-III- The numbers which are immediately followed by a letter interchange their positions with the elements just after them.

(STEP II is applied after STEP I and STEP III is applied after STEP II)

Which element is 13th from the left in the penultimate step?

- a. 6
- b. 8
- c. R
- d. E
- e. @

144. Directions: In the question below are given statements followed by conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. (+1, -0.25)

$A + B \rightarrow$ All A is B

$A - B \rightarrow$ Some A is B

$A * B \rightarrow$ No A is B

$A / B \rightarrow$ Some A are not B

$A \% B \rightarrow$ Only a few A are B

$A @ B \rightarrow$ Only A is B

! Possibility

Note: If '!' is placed after any of the symbols mentioned above then it will be considered as the possibility case of the symbol E.g. $A + !B \rightarrow$ All A being B is a possibility.

Statements:

I. Camp - Tent

II. Tent - Big

III. Big - Red

IV. Red - Blue

Conclusions:

I. Camp * Blue

II. Red * Tent

III. Camp - Blue

IV. Camp - Red

a. Both I and III follows

b. Both II and III follows

c. Both I and IV follows

d. Both II and IV follows

e. None of these

-
- 145.** Directions: In the question below are given statements followed by conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the (+1, -0.25)

conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

$A + B \rightarrow$ All A is B

$A - B \rightarrow$ Some A is B

$A * B \rightarrow$ No A is B

$A / B \rightarrow$ Some A are not B

$A \% B \rightarrow$ Only a few A are B

$A @ B \rightarrow$ Only A is B

! Possibility

Note: If '!' is placed after any of the symbols mentioned above then it will be considered as the possibility case of the symbol E.g. $A + ! B \rightarrow$ All A being B is a possibility.

Statements:

I. Pratika + Dumb

II. Dumb * Innocent

III. Innocent + Intelligent

Conclusions:

I. Intelligent * Pratika

II. Dumb / Intelligent

a. Only I follows

b. Only II follows

c. Both I and II follows

d. Either I or II follows

e. Neither I nor II follows

146. Directions: In the question below are given statements followed by conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. (+1, -0.25)

$A + B \rightarrow$ All A is B

$A - B \rightarrow$ Some A is B

$A * B \rightarrow$ No A is B

$A / B \rightarrow$ Some A are not B

$A \% B \rightarrow$ Only a few A are B

$A @ B \rightarrow$ Only A is B

! Possibility

Note: If '!' is placed after any of the symbols mentioned above then it will be considered as the possibility case of the symbol E.g. $A + ! B \rightarrow$ All A being B is a possibility.

Statements:

I. Red + Brown

II. Pink + Red

III. Brown + Green

Conclusions:

I. Pink + Brown

II. Green + Red

III. Pink / Brown

- a. Only I follows
- b. Only II follows
- c. Only III follows
- d. Both I and III follows
- e. None of these

147. Directions: Read the information carefully and answer the questions given below. (+1, -0.25)

There are four points A, B, C, and D such that A is in the north direction of C. D is in the west of B and north west of C. These points form a junction such that they are equidistant from the junction.

Eight persons P, Q, R, S, T, U, V, and W cross the junction by starting their journey from a point and ending at another. Only two persons start their journey from the same point, similarly only two persons end their journey from the same point.

R ends his journey at a point which is in the north east of his starting point. P starts from B and crosses the junction and reaches the point which is in the north west direction from B. S starts from D crosses straight through the junction. Ending point of V and starting point of S is same. V takes a right turn from the starting point. A person starts from C and ends at B. Ending point of S and T is same. Ending point of Q and U is same. Q starts from point A.

If T takes a left turn from its starting point then what would be his ending point?

- a. A

- b. B
- c. C
- d. D
- e. Can't be determined

148. Directions: Read the information carefully and answer the questions given below. (+1, -0.25)

There are four points A, B, C, and D such that A is in the north direction of C. D is in the west of B and north west of C. These points form a junction such that they are equidistant from the junction.

Eight persons P, Q, R, S, T, U, V, and W cross the junction by starting their journey from a point and ending at another. Only two persons start their journey from the same point, similarly only two persons end their journey from the same point.

R ends his journey at a point which is in the north east of his starting point. P starts from B and crosses the junction and reaches the point which is in the north west direction from B. S starts from D and crosses straight through the junction. Ending point of V and starting point of S is same. V takes a right turn from the starting point. A person starts from C and ends at B. Ending point of S and T is same. Ending point of Q and U is same. Q starts from point A.

Starting point of W is in which direction of point D?

- a. East
- b. Northeast
- c. Southeast
- d. Southwest

e. Northwest

149. Directions: Read the information carefully and answer the questions given below. **(+1, -0.25)**

There are four points A, B, C, and D such that A is in the north direction of C. D is in the west of B and north west of C. These points form a junction such that they are equidistant from the junction.

Eight persons P, Q, R, S, T, U, V, and W cross the junction by starting their journey from a point and ending at another. Only two persons start their journey from the same point, similarly only two persons end their journey from the same point.

R ends his journey at a point which is in the north east of his starting point. P starts from B and crosses the junction and reaches the point which is in the north west direction from B. S starts from D crosses straight through the junction. Ending point of V and starting point of S is same. V takes a right turn from the starting point. A person starts from C and ends at B. Ending point of S and T is same. Ending point of Q and U is same. Q starts from point A.

Which of the following following pair does not belong to a certain group?

- a. R-P
 - b. V-Q
 - c. Q-U
 - d. U-R
 - e. S-T
-

150. **Directions:** Study the following information carefully and answer the given questions: (+2, -0.5)

There are eight persons M, N, O, P, Q, R, S, and T are born in different years viz. 1964, 1972, 1980, 1987, 1995, 2000, 2005, and 2011, but not necessarily in the same order. They like different makeup products viz. Kajal, Liner, Mascara, Blush, Contour, Highlighter, Foundation, Lipstick, but not necessarily in the same order. Calculations are done with respect to the year 2017 and assuming months and dates to be same of the born of each individual.

The person who likes Kajal is the youngest. Two persons born between the person whose age is a prime number and T. Two persons born between M and the one who likes Kajal. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour. Two persons born between M and O. N is not the oldest. The person who likes Mascara born just after Blush. O doesn't like Mascara. P likes highlighter and is not born before R. The sixth oldest person doesn't like Lipstick.

Who among the following likes Lipstick?

- a. M
- b. S
- c. T
- d. O
- e. Q

151. **Directions:** Study the following information carefully and answer the given questions: (+2, -0.5)

There are eight persons M, N, O, P, Q, R, S, and T are born in different years viz. 1964, 1972, 1980, 1987, 1995, 2000, 2005, and 2011, but not necessarily in the same order. They like different makeup products viz. Kajal, Liner, Mascara, Blush, Contour, Highlighter, Foundation, Lipstick, but not necessarily in the same order. Calculations are done with respect to the year 2017 and assuming months and dates to be same of the born of each individual.

The person who likes Kajal is the youngest. Two persons born between the person whose age is a prime number and T. Two persons born between M and the one who likes Kajal. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour. Two persons born between M and O. N is not the oldest. The person who likes Mascara born just after Blush. O doesn't like Mascara. P likes highlighter and is not born before R. The sixth oldest person doesn't like Lipstick.

How many people born before S and after T?

- a. 3,6
- b. 2,7
- c. 6,3
- d. 5,4
- e. 4,5

152. **Directions:** Study the following information carefully and answer the given questions: (+2, -0.5)

There are eight persons M, N, O, P, Q, R, S, and T are born in different years viz. 1964, 1972, 1980, 1987, 1995, 2000, 2005, and 2011, but not necessarily in the same order. They like different makeup products viz. Kajal, Liner, Mascara, Blush, Contour, Highlighter, Foundation, Lipstick, but not

necessarily in the same order. Calculations are done with respect to the year 2017 and assuming months and dates to be same of the born of each individual.

The person who likes Kajal is the youngest. Two persons born between the person whose age is a prime number and T. Two persons born between M and the one who likes Kajal. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour. Two persons born between M and O. N is not the oldest. The person who likes Mascara born just after Blush. O doesn't like Mascara. P likes highlighter and is not born before R. The sixth oldest person doesn't like Lipstick.

Which of the following makeup product is liked by the third youngest person?

- a. Contour
- b. Liner
- c. Lipstick
- d. Foundation
- e. Blush

153. Directions: Study the following information carefully and answer the given questions: (+2, -0.5)

There are eight persons M, N, O, P, Q, R, S, and T are born in different years viz. 1964, 1972, 1980, 1987, 1995, 2000, 2005, and 2011, but not necessarily in the same order. They like different makeup products viz. Kajal, Liner, Mascara, Blush, Contour, Highlighter, Foundation, Lipstick, but not necessarily in the same order. Calculations are done with respect to the year 2017 and assuming months and dates to be same of the born of each individual.

The person who likes Kajal is the youngest. Two persons born between the person whose age is a prime number and T. Two persons born between M and the one who likes Kajal. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour. Two persons born between M and O. N is not the oldest. The person who likes Mascara born just after Blush. O doesn't like Mascara. P likes highlighter and is not born before R. The sixth oldest person doesn't like Lipstick.

Four of the five are alike in a certain way so form a group. Which of the following doesn't belong to that group?

- a. Q
- b. R
- c. N
- d. M
- e. S

154. Directions: Study the following information carefully and answer the given questions: (+2, -0.5)

There are eight persons M, N, O, P, Q, R, S, and T are born in different years viz. 1964, 1972, 1980, 1987, 1995, 2000, 2005, and 2011, but not necessarily in the same order. They like different makeup products viz. Kajal, Liner, Mascara, Blush, Contour, Highlighter, Foundation, Lipstick, but not necessarily in the same order. Calculations are done with respect to the year 2017 and assuming months and dates to be same of the born of each individual.

The person who likes Kajal is the youngest. Two persons born between the person whose age is a prime number and T. Two persons born between M and the one who likes Kajal. The sum of total ages of the

persons who likes Foundation and S is two years more than the age of R who likes Contour. Two persons born between M and O. N is not the oldest. The person who likes Mascara born just after Blush. O doesn't like Mascara. P likes highlighter and is not born before R. The sixth oldest person doesn't like Lipstick.

Choose the correct pair:

- a. Q-Kajal
- b. M-Liner
- c. R-Contour
- d. P-Lipstick
- e. N-Blush

155. Direction: In the following question, a given question is followed by information in three statements. You have to decide the data in which statement(s) is sufficient to answer the question and mark your answer accordingly. (+1, -0.25)

There are six persons P, Q, R, S, T and U, who likes different number of colors from 1 to 6 but not necessarily in the same order. Who is the tallest and how many colors does S like?

I. The one, who likes 5 color, is shorter than only one person. The one, who is the shortest, likes odd number of colors. P is not the shortest or tallest but taller than Q. Q, who likes 2 colors is taller than T and S.

II. The one, who likes 4 colors is taller than R. R likes odd number of colors, which is sum of number of colors U and P like. T likes 6 colors.

III. U likes one color more than that of S. T is not the shortest.

a. All the statements are required.

- b. Both I and II or I and III are sufficient.
- c. Only II is sufficient.
- d. Both I and II together are sufficient.
- e. Insufficient data.

156. Direction: In the following question, a given question is followed by information in three statements. You have to decide the data in which statement(s) is sufficient to answer the question and mark your answer accordingly. (+1, -0.25)

How is the word 'Dominate People' coded in the language?

I. In a code language "Dominate Over The Weak" is coded as "J#X D@U D#E Q#P", "Weak People Are Vulnerable" is coded as "D#Q J#X D#W D@B", "People Are The Dominate " is code as "D@U D#E D@B D#Q".

II. In a code language "Dream Big To Win" is coded as "M@X N#U L@E F@C", "Fast World Is Dormant" is coded as "C@X S@E S#G R#J", "Big Win Is Fast" is coded as "S#G M@X F@C R#J".

III. In a code language "Never Dominate Your Thoughts" is coded as "Q#Z R#U D#E Q@O", "Happy People Are Rare" is coded as "D@B X@I D#Q D#S", "Your Thoughts Are Magic" is coded as "B@N R#U Q#Z D@B".

- a. Data in statement I alone or II and III together are sufficient to answer the question, while the data in statement III alone are not sufficient to answer the question.
- b. Data in statement I alone are sufficient to answer the question, while the data in statement III alone are not sufficient to answer the question.

- c. Data in statement I alone or statement II alone or statement III alone are sufficient to answer the question.
 - d. Data in statements I, II and III together are not sufficient to answer the question.
 - e. Data in statement I, II and III together are necessary to answer the question.
-

157. Direction: The following question is followed by information given in three statements. You have to decide the data in which statement (s) is/are sufficient to answer the question and mark your answer accordingly. **(+1, -0.25)**

A shopping mall has 5 floors (numbered as 1 to 5) with a different number of showrooms on each floor. Ground floor is numbered 1 and 5th floor is numbered 5. The number of showrooms is 11, 14, 17, 18 and 20 (not necessarily in the same order). How many showrooms are there on the floor 3?

- I. Floor number 3 has even number of showrooms.
- II. Even numbered floors have the odd number of showrooms.
- III. Floor number 4 has more showrooms than floor number 3.

- a. Insufficient data
 - b. Only I is sufficient
 - c. Only II is sufficient
 - d. Only III is sufficient
 - e. Only II and III are sufficient
-

158. Directions: The question given below consists of a passage, followed by three arguments I, II and III. You have to decide which of the arguments is/are 'strong' arguments and which of the arguments are 'weak' arguments and accordingly choose your answer from the alternatives given below each question. (+1, -0.25)

Passage: Youth in India lack the virtue of patience nowadays. They behave recklessly, create a fuss for the most trivial of things, and behave unprofessionally in most situations. What is more shocking is that the vast majority of them are graduates.

Are the Educational Institutions responsible for the unrest among Youth?

Arguments:

- I. Yes. Educational Institutions completely lack discipline.
 - II. Yes. They do not teach patience and professionalism to students and focus mainly on teaching academic concepts from textbooks.
 - III. No. Moral Science is part of the school curriculum.
- a. Only I and II are strong
 - b. Only II and III are strong
 - c. Only I is strong.
 - d. Only II is strong.
 - e. All the arguments are strong.

-
159. Directions: The question given below consists of a passage, followed by three arguments I, II, and III. You have to decide which of the arguments is/are 'strong' arguments and which of the arguments are 'weak' (+1, -0.25)

arguments and accordingly choose your answer from the alternatives given below each question.

Passage: President Vladimir Putin said on Tuesday that Russia had become the first country to grant regulatory approval to a COVID-19 vaccine after less than two months of human testing, a move Moscow likened to its success in the Cold War-era space race. The vaccine, to be called 'Sputnik V' in homage to the world's first satellite launched by the Soviet Union, has, however, not yet completed its final trials. Moscow's decision to grant approval before then has raised concerns among some experts. Only about 10% of the clinical trials are successful, and some scientists fear Moscow may be putting national prestige before safety.

Should the World Health Organisation step up and ban the usage of the Sputnik-V vaccine?

Arguments:

I. Yes. COVID vaccine cannot be the item for a "Space-war" like race.

II. Yes. Ensuring good health of the world populace is the duty of the WHO.

III. No. Instead, WHO must caution the world against the usage of vaccines that have not completed final trials.

- a. Only I and III are strong
- b. Only II and III are strong
- c. Only III is strong.
- d. Only II is strong.
- e. All the arguments are strong.

160. **Directions** : The critical reasoning question is based on a short argument, (+1, -0.25)
a set of statements, or a plan of action. For each question, select the
best answer of the choices given and explain why the chosen answer is
the right fit.

Statement: There is an increasing amount of suspicion among the
masses that the recent death of a popular actor, which has been
deemed to be a suicide by the State Police, is actually a murder with
many politicians and top state police officials involved in the conspiracy.

Which of the following statements is/are a viable option for the
government in its approach to tackling the problem?

I. The Central government should immediately suspend the suspected
police officers.

II. The Central government should order a CBI inquiry.

III. The government should initiate film industry reforms to tackle the
problem of nepotism.

a. Only (I)

b. Only (II)

c. Only (I) and (II)

d. Only (II) and (III)

e. Only (I) and (III)

161. **Direction:** Read the following information carefully and answer the (+2, -0.5)
questions that follow:

Eight people – Abhi, Chaitu, Esha, Gori, Pari, Riya, Seema and Urvashi are
sitting around a square table (not necessarily in the same order) in such

a way that four of them sitting at the corners of the table while other four are sitting in the middle of the table. Two people who are facing the same direction (either inside or outside) are not sitting with each other. Riya is sitting second to the left of Esha. Esha sits at the corner. One person is sitting between Riya and Abhi. Chaitu is sitting third to the right of Urvashi. Neither Abhi nor Gori is an immediate neighbor of Chaitu. Seema is not facing inside but is sitting second to the left of Pari.

Condition for rearrangement:

- 1) If two persons are facing each other and having names start with vowels they interchange their position.
- 2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.
- 3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

Note: Each step will follow after the other (Apply step 1 then 2 and then 3)

All of them have different numbers of books 3, 4, 5, 6, 7, 8, 9 and 10. Immediate neighbors of Riya have a prime number of books. Urvashi does not have the least number of books. The one who sits opposite to the person having a name with the highest number of letters has the same number of books as the number of alphabets in his/her name. Riya is having 3 more books than Chaitu. Seema is having 2 more books than that of the person who sits immediate right of her. Pari is having 8 books. Abhi has more number of books than Gori.

Who among the following sits immediate right of Riya in final arrangement?

- a. Abhi

- b. Riya
- c. Urvashi
- d. Esha
- e. Pari

162. **Direction:** Read the following information carefully and answer the questions that follow:

(+2, -0.5)

Eight people – Abhi, Chaitu, Esha, Gori, Pari, Riya, Seema and Urvashi are sitting around a square table (not necessarily in the same order) in such a way that four of them sitting at the corners of the table while other four are sitting in the middle of the table. Two people who are facing the same direction (either inside or outside) are not sitting with each other. Riya is sitting second to the left of Esha. Esha sits at the corner. One person is sitting between Riya and Abhi. Chaitu is sitting third to the right of Urvashi. Neither Abhi nor Gori is an immediate neighbor of Chaitu. Seema is not facing inside but is sitting second to the left of Pari.

Condition for rearrangement:

- 1) If two persons are facing each other and having names start with vowels they interchange their position.
- 2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.
- 3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

Note: Each step will follow after the other (Apply step 1 then 2 and then 3)

All of them have different numbers of books 3, 4, 5, 6, 7, 8, 9 and 10. Immediate neighbors of Riya have a prime number of books. Urvashi does not have the least number of books. The one who sits opposite to the person having a name having the highest number of letters has the same number of books as the number of alphabets in his/her name. Riya is having 3 more books than Chaitu. Seema is having 2 more books than that of the person who sits immediately right of her. Pari is having 8 books. Abhi has more number of books than Gori.

Who sits second to the right of Riya in final arrangement?

- a. Abhi
- b. Gauri
- c. Seema
- d. Riya
- e. Esha

163. **Direction:** Read the following information carefully and answer the questions that follow: (+2, -0.5)

Eight people – Abhi, Chaitu, Esha, Gori, Pari, Riya, Seema and Urvashi are sitting around a square table (not necessarily in the same order) in such a way that four of them are sitting at the corners of the table while the other four are sitting in the middle of the table. Two people who are facing the same direction (either inside or outside) are not sitting with each other. Riya is sitting second to the left of Esha. Esha sits at the corner. One person is sitting between Riya and Abhi. Chaitu is sitting third to the right of Urvashi. Neither Abhi nor Gori is an immediate neighbor of Chaitu. Seema is not facing inside but is sitting second to the left of Pari.

Condition for rearrangement:

- 1) If two persons are facing each other and having names start with vowels they interchange their position.
- 2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.
- 3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

Note: Each step will follow after the other (Apply step 1 then 2 and then 3)

All of them have different numbers of books 3, 4, 5, 6, 7, 8, 9 and 10. Immediate neighbors or Riya have a prime number of books. Urvashi does not have the least number of books. The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name. Riya is having 3 more books than Chaitu. Seema is having 2 more books than that of the person who sits immediate right of her. Pari is having 8 books. Abhi has more number of books than Gori.

Who sits opposite to Riya?

- a. The one having 8 books.
- b. Abhi
- c. The one who sits immediate left of Chaitu
- d. Both 1) and 2)
- e. Both 1) and 3)

164. **Direction:** Read the following information carefully and answer the questions that follow:

(+2, -0.5)

Eight people – Abhi, Chaitu, Esha, Gori, Pari, Riya, Seema and Urvashi are sitting around a square table (not necessarily in the same order) in such a way that four of them sitting at the corners of the table while other four are sitting in the middle of the table. Two people who are facing the same direction (either inside or outside) are not sitting with each other. Riya is sitting second to the left of Esha. Esha sits at the corner. One person is sitting between Riya and Abhi. Chaitu is sitting third to the right of Urvashi. Neither Abhi nor Gori is an immediate neighbor of Chaitu. Seema is not facing inside but is sitting second to the left of Pari.

Condition for rearrangement:

- 1) If two persons are facing each other and having names start with vowels they interchange their position.
- 2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.
- 3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

Note: Each step will follow after the other (Apply step 1 then 2 and then 3)

All of them have different numbers of books 3, 4, 5, 6, 7, 8, 9 and 10. Immediate neighbors or Riya have a prime number of books. Urvashi does not have the least number of books. The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name. Riya is having 3 more books than Chaitu. Seema is having 2 more books than

that of the person who sits immediate right of her. Pari is having 8 books. Abhi has more number of books than Gori.

How many books does Seema has?

- a. 3
- b. 4
- c. 5
- d. 7
- e. 9

165. **Direction:** Read the following information carefully and answer the questions that follow: (+2, -0.5)

Eight people – Abhi, Chaitu, Esha, Gori, Pari, Riya, Seema and Urvashi are sitting around a square table (not necessarily in the same order) in such a way that four of them sitting at the corners of the table while other four are sitting in the middle of the table. Two people who are facing the same direction (either inside or outside) are not sitting with each other. Riya is sitting second to the left of Esha. Esha sits at the corner. One person is sitting between Riya and Abhi. Chaitu is sitting third to the right of Urvashi. Neither Abhi nor Gori is an immediate neighbor of Chaitu. Seema is not facing inside but is sitting second to the left of Pari.

Condition for rearrangement:

- 1) If two persons are facing each other and having names start with vowels they interchange their position.
- 2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.

3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

Note: Each step will follow after the other (Apply step 1 then 2 and then 3)

All of them have different numbers of books 3, 4, 5, 6, 7, 8, 9 and 10. Immediate neighbors of Riya have a prime number of books. Urvashi does not have the least number of books. The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name. Riya is having 3 more books than Chaitu. Seema is having 2 more books than that of the person who sits immediate right of her. Pari is having 8 books. Abhi has more number of books than Gori.

Sum of the number of books Esha and Chaitu has?

- a. 8
- b. 9
- c. 10
- d. 11
- e. None of the above

166. Directions: Study the following information carefully and answer the given questions: (+1, -0.25)

There are fifteen places in a row. Twelve person K, L, M, N, O, P, Q, R, S, T, U and V are sitting in row facing north direction but not necessarily in the same order. Three places are vacant in row but two vacant place are not near to each other.

Three person are sitting between L and O, none of them sitting at the corner. Q sits fourth to the left of L. There are three places between T and S. One of the place near the S is vacant. No one is sitting between U and S. Two person are sitting between R and P who is just left of T. Q is sitting third to the left of R. K sits sixth to the right of P. M sits second to the left of L. V sits right of K but not near to K. N sits sixth from the one end.

Who is sitting third to the left of U ?

- a. R
- b. L
- c. N
- d. P
- e. T

167. Directions: Study the following information carefully and answer the given questions: (+1, -0.25)

There are fifteen places in a row. Twelve person K, L, M, N, O, P, Q, R, S, T, U and V are sitting in row facing north direction but not necessarily in the same order. Three places are vacant in row but two vacant place are not near to each other.

Three person are sitting between L and O, none of them sitting at the corner. Q sits fourth to the left of L. There are three places between T and S. One of the place near the S is vacant. No one is sitting between U and S. Two person are sitting between R and P who is just left of T. Q is sitting third to the left of R. K sits sixth to the right of P. M sits second to the left of L. V sits right of K but not near to K. N sits sixth from the one end.

Which of the follow pair is sitting at the corner ?

- a. M, Q
 - b. V, K
 - c. T, O
 - d. R, U
 - e. Q, V
-

168. Directions: Study the following information carefully and answer the given questions: (+1, -0.25)

There are fifteen places in a row. Twelve person K, L, M, N, O, P, Q, R, S, T, U and V are sitting in row facing north direction but not necessarily in the same order. Three places are vacant in row but two vacant place are not near to each other.

Three person are sitting between L and O, none of them sitting at the corner. Q sits fourth to the left of L. There are three places between T and S. One of the place near the S is vacant. No one is sitting between U and S. Two person are sitting between R and P who is just left of T. Q is sitting third to the left of R. K sits sixth to the right of P. M sits second to the left of L. V sits right of K but not near to K. N sits sixth from the one end.

How many persons are sitting between M and U ?

- a. Four
 - b. Five
 - c. Six
 - d. Seven
 - e. Eight
-

169. Directions: Study the following information carefully and answer the given questions: (+1, -0.25)

There are fifteen places in a row. Twelve person K, L, M, N, O, P, Q, R, S, T, U and V are sitting in row facing north direction but not necessarily in the same order. Three places are vacant in row but two vacant place are not near to each other.

Three person are sitting between L and O, none of them sitting at the corner. Q sits fourth to the left of L. There are three places between T and S. One of the place near the S is vacant. No one is sitting between U and S. Two person are sitting between R and P who is just left of T. Q is sitting third to the left of R. K sits sixth to the right of P. M sits second to the left of L. V sits right of K but not near to K. N sits sixth from the one end.

Who is sitting fourth to the left of N ?

- a. Q
- b. M
- c. R
- d. L
- e. None

-
170. Directions: Study the following information carefully and answer the given questions: (+1, -0.25)

There are fifteen places in a row. Twelve person K, L, M, N, O, P, Q, R, S, T, U and V are sitting in row facing north direction but not necessarily in the same order. Three places are vacant in row but two vacant place are not near to each other.

Three person are sitting between L and O, none of them sitting at the corner. Q sits fourth to the left of L. There are three places between T and S. One of the place near the S is vacant. No one is sitting between U and S. Two person are sitting between R and P who is just left of T. Q is sitting third to the left of R. K sits sixth to the right of P. M sits second to the left of L. V sits right of K but not near to K. N sits sixth from the one end.

How many places are there to the right of T ?

- a. Four
- b. Five
- c. Six
- d. Seven
- e. Eight

171. Direction: Study the following information carefully and answer the question given below. (+1, -0.25)

A, B, C, D, P, Q, and R are seven friends. Each of them has a different height. There are two friends who have height between Q and R as more than Q but less than R. Q is not the shortest among them. Only two friends have a height more than C. A is taller than D but shorter than B who is not the tallest one. Not more than four people are shorter than B. P is not the second tallest person among them.

Who is the tallest among the following?

- a. R
- b. B
- c. C

d. P

e. Q

172. Direction: Study the following information carefully and answer the question given below. (+1, -0.25)

A, B, C, D, P, Q, and R are seven friends. Each of them has a different height. There are two friends who have height between Q and R as more than Q but less than R. Q is not the shortest among them. Only two friends have a height more than C. A is taller than D but shorter than B who is not the tallest one. Not more than four people are shorter than B. P is not the second tallest person among them.

Who is the third shortest?

a. B

b. P

c. Q

d. A

e. R

173. Direction: Study the following information carefully and answer the question given below. (+1, -0.25)

A, B, C, D, P, Q, and R are seven friends. Each of them has a different height. There are two friends who have height between Q and R as more than Q but less than R. Q is not the shortest among them. Only two friends have a height more than C. A is taller than D but shorter than B who is not the tallest one. Not more than four people are shorter than B. P is not the second tallest person among them.

How many people taller than B?

- a. One
- b. Two
- c. Three
- d. Four
- e. More than four

174. Direction: Study the following information carefully to answer the questions given below- (+1, -0.25)

A, B, C, D, E, G, H and I are eight friends who study in three different streams namely IT, HR and Accounts such that not less than two friends study in the same Stream. Each friend also has a different favorite color namely Violet, Red, Blue, Marron, Black, Orange, Pink and Yellow but not necessarily in the same order.

A likes Orange and studies in the IT with two friends and one of the friends likes Marron. I study with two other friends. Both the friends who study with I like one of the colors amongst Black, Marron and Blue. D studies in HR with only one person and does not like Red. E studies with only one friend. The one who likes Violet does not study in IT or HR stream. C does not like Blue, Black or Red. H likes Yellow color and studied in IT.

Which of the following color does G like?

- a. Either Orange or Marron
- b. Either Black or Blue
- c. Either Black or Red

d. Either Black or Marron

e. Either Blue or Marron

175. Direction: Study the following information carefully to answer the questions given below- (+1, -0.25)

A, B, C, D, E, G, H and I are eight friends who study in three different streams namely IT, HR and Accounts such that not less than two friends study in the same Steam. Each friend also has a different favorite color namely Violet, Red, Blue, Marron, Black, Orange, Pink and Yellow but not necessarily in the same order.

A likes Orange and studies in the IT with two friends and one of the friends likes Marron. I study with two other friends. Both the friends who study with I like one of the colors amongst Black, Marron and Blue. D studies in HR with only one person and does not like Red. E studies with only one friend. The one who likes Violet does not study in IT or HR stream. C does not like Blue, Black or Red. H likes Yellow color and studied in IT.

Which of the following is the favorite Color of I?

a. Violet

b. Red

c. Maroon

d. Either Blue or Maroon

e. Pink

176. Direction: Study the following information carefully to answer the questions given below- (+1, -0.25)

A, B, C, D, E, G, H and I are eight friends who study in three different streams namely IT, HR and Accounts such that not less than two friends study in the same Stream. Each friend also has a different favorite color namely Violet, Red, Blue, Marron, Black, Orange, Pink and Yellow but not necessarily in the same order.

A likes Orange and studies in the IT with two friends and one of the friends likes Marron. I study with two other friends. Both the friends who study with I like one of the colors amongst Black, Marron and Blue. D studies in HR with only one person and does not like Red. E studies with only one friend. The one who likes Violet does not study in IT or HR stream. C does not like Blue, Black or Red. H likes Yellow color and studied in IT.

Who among the following studies in the Accounts Stream?

- a. G
- b. C
- c. D
- d. E
- e. A

177. **Directions:** These questions are based on the following information.

(+1, -0.25)

There are 9 members in a three generation family i.e. Anjali, Ram, Shyam, Piyush, Ragini, Himanshu, Neha, Shubham and Aditi. There are three married couples in the family. There are five male and four female in the family. Shyam is the brother-in-law of Shubham, who is the daughter in law of Himanshu. Aditi and Shyam are unmarried members. Ragini is the grandmother of Shyam. Ram is the paternal uncle of Neha. Piyush is the maternal grandfather of Neha and father of Aditi. Himanshu is the brother in law of Aditi.

Who is Mother-in-law of Shubham ?

- a. Ragini
 - b. Anjali
 - c. Himanshu
 - d. Aditi
 - e. None of these
-

178. Directions: These questions are based on the following information. (+1, -0.25)

There are 9 members in a three generation family i.e. Anjali, Ram, Shyam, Piyush, Ragini, Himanshu, Neha, Shubham and Aditi. There are three married couples in the family. There are five male and four female in the family. Shyam is the brother-in-law of Shubham, who is the daughter in law of Himanshu. Aditi and Shyam are unmarried members. Ragini is the grandmother of Shyam. Ram is the paternal uncle of Neha. Piyush is the maternal grandfather of Neha and father of Aditi. Himanshu is the brother in law of Aditi.

How Anjali is related to Shyam?

- a. Father
 - b. Sister
 - c. Mother
 - d. Grandmother
 - e. None of these
-

179. **Direction:** The following question is followed by information given in three statements. You have to decide the data in which statement (s) is/are sufficient to answer the question and mark your answer accordingly. **(+1, -0.25)**

Seven people: Nimesh, Hitesh, Anu, Ciya, Deepak, Tilak and Shilpa have their weekly offs on seven different days of the week – started from Monday to Sunday (not necessarily in the same order). On which day does Deepak get a weekly off?

I. Deepak gets a weekly off immediate after Shilpa but three days before Nimesh.

II. Deepak does not get a weekly off on Thursday.

III. Shilpa neither gets a weekly off on Monday nor on Wednesday.

- a. Only I is sufficient
- b. Only II is sufficient
- c. Only I and II are sufficient
- d. Only I and III are sufficient
- e. Only II and III are sufficient

180. **Direction:** In the following question, a given questions is followed by information in three statements. You have to decide the data in which statement (s) is/are sufficient to answer the question and mark your answer accordingly. **(+1, -0.25)**

Seven students – Nisha, Dia, Rakesh, Dimple, Kavita, Aarav and Ishaan have been appeared for scholarship exam. Out of these, two students who have got sixth and seventh rank are not selected for scholarship. Which of the two students among these have not been selected?

- I. Dimple has got the least marks among all. Kavita has got one rank more than Dia.
- II. Aarav has got the 2nd rank. Dia has neither got the 4th rank nor 5th.
- III. Nisha has got two ranks more than Kavita but neither the 1st rank nor 2nd.
- a. Only I is sufficient
 - b. Only II is sufficient
 - c. Either II or III along with I are sufficient
 - d. Either I or III along with II are sufficient
 - e. Insufficient data

181. **Direction:** In the following questions, a given question is followed by information in three statements. You have to decide the data in which statement(s) is sufficient to answer the question and mark your answer accordingly. (+1, -0.25)

Eight persons L, M, N, O, P, Q, R and S are sitting in a circular arrangement facing the centre not necessarily in the same order. L is sitting opposite to Q and second to the left of R. S and O are the neighbours. Find out what is the position of M with respect to N.

Statement I: O is sitting second to the right of N. N and S are the neighbours.

Statement II: M is sitting second to the right of P who is sitting to the immediate right of L.

Statement III: N is sitting opposite to P.

- a. Any two statements are sufficient to answer the question.

- b. All the statements together are required to answer the question.
- c. Statement I and II together are sufficient to answer the question.
- d. Statement II and III together are sufficient to answer the question.
- e. Statement I and III together are required to answer the question.

182. **Direction:** In the following questions, the symbols \$, # , @ , % and & are used with the following meaning as illustrated below: (+1, -0.25)

'X # Y' means 'X is neither greater than nor equal to Y'.

'X & Y' means 'X is neither smaller than nor greater than Y'.

'X % Y' means 'X is not greater than Y'.

'X \$ Y' means 'X is greater than Y'.

'X @ Y' means 'X is either greater than or equal to Y'.

Now in each of the following questions assuming the given statements to be true, find which of the conclusion/s given below them is/are definitely true?

Statements: E @ F, G # F, H % G

Conclusions:

I. E \$ G

II. F \$ H

- a. Only I is true.
- b. Only II is true.
- c. Either I or II is true

d. Neither I nor II is true.

e. Both I and II are true.

183. **Direction:** In the following questions, the symbols \$, # , @ , % and & are used with the following meaning as illustrated below: (+1, -0.25)

'X # Y' means 'X is neither greater than nor equal to Y'.

'X & Y' means 'X is neither smaller than nor greater than Y'.

'X % Y' means 'X is not greater than Y'.

'X \$ Y' means 'X is greater than Y'.

'X @ Y' means 'X is either greater than or equal to Y'.

Now in each of the following questions assuming the given statements to be true, find which of the conclusion/s given below them is/are definitely true?

Statements : P # Q , R @ Q , R \$ S

Conclusions :

I. P # R

II. Q % S

a. Only I is true.

b. Only II is true.

c. Either I or II is true.

d. Neither I or II is true.

e. Both I and II are true.

184. Direction: Read the following information carefully to answer the questions given below. A word and number arrangement machine when given an input line of words and numbers, it rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement. (+1, -0.25)

Input: P \$ 7 J E T @ 4 5 H A 6 # K L U 2 7 > M O 6

Step 1: R \$ 8 L D V @ 5 6 J Z 7 # M N T 3 8 > O N 7

Step 2: Q \$ 9 K C U @ 4 7 I Y 6 # L M S 2 9 > N M 6

Step 3: Q 8 9 K C U 3 4 7 I Y 6 # L M S 2 9 > N M 6

As per the rules followed in the above steps, find out the appropriate steps for the given input and answer the questions given below.

Input: U B & 8 6 # J ? 6 O P C 5 F \$ 4 L E 7 < M H

How many such numbers are there in step I which are immediately preceded by a symbol?

- a. One
- b. Two
- c. Three
- d. Four
- e. None

185. Direction: Read the following information carefully to answer the questions given below. A word and number arrangement machine when given an input line of words and numbers, it rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement. (+1, -0.25)

Input: P \$ 7 J E T @ 4 5 H A 6 # K L U 2 7 > M O 6

Step 1: R \$ 8 L D V @ 5 6 J Z 7 # M N T 3 8 > O N 7

Step 2: Q \$ 9 K C U @ 4 7 I Y 6 # L M S 2 9 > N M 6

Step 3: Q 8 9 K C U 3 4 7 I Y 6 # L M S 2 9 > N M 6

As per the hides followed in the above steps, find out the appropriate steps for the given input and answer the questions given below.

Input: U B & 8 6 # J ? 6 O P C 5 F \$ 4 L E 7 < M H

Number of elements to the right of 3 in step III is equal to the number of elements to the left of _____ in step II.

- a. ?
- b. 7
- c. L
- d. %
- e. K



186. Direction: Read the following information carefully to answer the questions given below. A word and number arrangement machine when given an input line of words and numbers, it rearranges them following a particular hide in each step. The following is an illustration of input and rearrangement. (+1, -0.25)

Input: P \$ 7 J E T @ 4 5 H A 6 # K L U 2 7 > M O 6

Step 1: R \$ 8 L D V @ 5 6 J Z 7 # M N T 3 8 > O N 7

Step 2: Q \$ 9 K C U @ 4 7 I Y 6 # L M S 2 9 > N M 6

Step 3: Q 8 9 K C U 3 4 7 I Y 6 # L M S 2 9 > N M 6

As per the hides followed in the above steps, find out the appropriate steps for the given input and answer the questions given below.

Input: U B & 8 6 # J ? 6 O P C 5 F \$ 4 L E 7 < M H

Which of the following is third to the right of seventh element from the left end of the step II?

- a. N
- b. M
- c. 8
- d. Q
- e. \$

187. Direction : The critical reasoning question is based on short arguments, a set of statements, or a plan of action. For each question, select the best answer of the choices given and explain why the chosen answer is the right fit. (+1, -0.25)

Statement : Being a country with significant volumes of licit and illicit drug cultivation, a transit route as well as a consumer market, India's drug policy dilemmas span 'demand' and 'supply' control. The government has imposed strict laws to prosecute the dealers, in an effort to curb drug abuse. However, such an initiative is unlikely to be effective. Prosecuting dealers will lead to a shortage of drugs. At the same time, because no efforts are being taken to curb demand, drugs will be sold at a premium, attracting more people to the very remunerative job of drug dealing. Therefore, to effectively reduce drug abuse, the government will have to prosecute drug users and not dealers.

Which of the following is the most relevant information in evaluating the credibility of the argument?

- a. Whether efforts have been successfully taken in any other country to regulate drug users.
- b. Whether the payoffs from selling drugs outweighs the severity of the punishment.
- c. Whether drugs will continue to be sold at a premium when there are dealers in the market again
- d. Whether the majority of the users will be willing to pay a premium to continue to use the drugs.
- e. Only 1 and 2.

188. Direction: In the question below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. (+1, -0.25)

Statements:

1. The CEO of a company producing cricket bats said that we will see more manufacturing units of cricket bats by the end of this quarter.
2. She also stated that this would bring down the cost needed to manufacture the bats.

Conclusions:

- I. The demand for cricket bats in the market will rise.

II. The bats produced by the above company would sell at a competitive price on the retail market.

- a. Only Conclusion I follows
- b. Only Conclusion II follows
- c. Both the Conclusions I and II follow
- d. Neither Conclusion I nor II follows
- e. Either Conclusion I or II follows

189. **Direction:** In the question, a statement is given, followed by two arguments, I, II, and III. You have to consider the statement to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given arguments, if any, is a strong argument. (+1, -0.25)

Passage: Nobel Prizes are considered the most prestigious honor in their respective fields, and they generate significant public interest worldwide. Among them, the peace prize stands out tall – for speculations and controversies, for jubilation and heartbreaks, and debates and criticisms. The announcement of a Nobel Peace laureate is often followed by waves of disapproval and disputes. Closer scrutiny shows merit in such criticisms. Has the Nobel committee been influenced by politics, populism, or prejudice played a role in some of their decisions? Is the NoblePeace Prize relevant?

Arguments:

I. Yes, people receiving it become celebrities overnight.

II. Yes, it motivates people to perform exceptional work in establishing brotherhood among nations, and promotion of peace.

III. No, unlike the Nobel awards in other domains, where the criteria is defined in specific terms but here a lot is left to interpretation which

results in controversies.

- a. Only II is strong.
- b. Only I and II are strong.
- c. Only II and III are strong.
- d. Only III is strong.
- e. None of the arguments is strong.

190. **Directions:** The critical reasoning question given below consists of passage followed by three statements and a question. You must read the passage and statements carefully and choose the correct answer from the alternatives given below. (+1, -0.25)

Passage:The Union government rolled out what most of us believe to be the long-overdue reform of the Indian bureaucracy named "Mission Karmayogi". On the face of it, the idea is to kill red tape. But that would be very simplistic. Instead, the idea is to develop domain knowledge besides administrative capacity in the bureaucracy - right from recruitment to the end of their careers.

Statements:

- (A) As the Indian economy grows, it will get more complex to govern and will require specific sector skills.
- (B) A lot of the bureaucratic work is of a clerical nature and only less than 2% of the bureaucrats are involved in real decision making.
- (C) Multiple reforms of similar nature undertaken over recent years in the bureaucracy haven't arrested Red Tapism at all.

Question: Which of the above arguments, if true, strengthens the Government's decision?

- a.** Only (A)
- b.** Both (B) and (C)
- c.** Only (C)
- d.** Both (A) and (B)
- e.** Both (A) and (C)

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Answers

1. Answer: d

Explanation:

The Correct Answer is Rs. 1 lakh crores.

★ Key Points

- **Atma Nirbhar Bharat Abhiyan:** The Economic Survey observes that the major announcements for agriculture and food management under the AtmaNirbhar Bharat Abhiyan have been **Rs. 1 lakh crores Agriculture infrastructure fund**.
- **Rs. 10,000 crores scheme for Formalisation of Micro Food Enterprises (MFE)**
- **Rs. 20,000 crores for fisherman through Pradhan MantriMatsya Sampada Yojana (PMMSY)**
- **National Animal Disease Control Programme; Animal Husbandry Infrastructure Development Fund- Rs. 15,000 crores**
- **Reforms in Essential Commodities Act, Agriculture Marketing and Agriculture Produce Pricing and Quality Assurance; PM Garib Kalyan Ann Yojana; One Nation One Ration Card.**

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2. Answer: e

Explanation:

A limited liability partnership (LLP) is a partnership in which some or all partners (depending on the jurisdiction) have limited liabilities. It therefore exhibits elements of partnerships and corporations. In an LLP, one partner is not responsible or liable for another partner's misconduct or negligence.

3. Answer: a

Explanation:

The correct answer is NPCI.

- **SBI Payments** has partnered with **Hitachi Payment Services** to develop the capability to acquire **e-RUPI transactions** on the **Yono SBI Merchant app**.
- Merchants can now use the 'UPI Voucher' feature on the Yono SBI Merchant App to accept prepaid UPI e-vouchers.
- Developed by the National Payments Corporation of India (NPCI), the **e-RUPI platform** was launched on 2 August 2021.

4. Answer: a

Explanation:

The correct answer is Narendra Modi.

- PM Modi will launch **e-RUPI**, a person and purpose-specific digital payment solution on 2 August 2021.
- It is a cashless and contactless instrument for digital payment.
- It is a **QR code or SMS string-based e-voucher**, which is delivered to the mobile of the beneficiaries.
- The users will be able to redeem the voucher without a card, digital payments app, or internet banking access.

5. Answer: b

Explanation:

The correct answer is A Night of Knowing Nothing.

- The Mumbai-based filmmaker and director **Payal Kapadia**'s "A Night of Knowing Nothing" won the **Oeil d'or (Golden Eye)** award for best documentary at the **74th**

Cannes Film Festival on 17 July 2021 .

- Kapadia, an alumna of the **Film and Television Institute of India (FTII)** , also has films such as the documentary "**And What is the Summer Saying**" (2018) and "**Last Mango Before the Monsoon**", to her credit.
- In 2016, the Indian film "**The Cinema Travellers**" , directed by Shirley Abraham and Amit Madheshiya, earned an Oeil d'or Special Mention.

6. Answer: e

Explanation:

The correct answer is All of the above.

- In News:
 - PM Modi will launch e-RUPI, a person and purpose-specific digital payment solution on 2nd August 2021.

★ Key Points

- e-RUPI:
 - e-RUPI is a cashless and contactless instrument for digital payment. Hence, statement 1 is correct.
 - It is a QR code or SMS string-based e-Voucher, which is delivered to the mobile of the beneficiaries. Hence, statement 2 is correct.
 - The users of this seamless one-time payment mechanism will be able to redeem the voucher without a card, digital payments app or internet banking access, at the service provider.
 - It has been developed by the **National Payments Corporation of India on its UPI platform**, in collaboration with the Department of Financial Services, **Ministry of Health & Family Welfare and National Health Authority**. Hence, statement 3 is correct.
 - e-RUPI connects the sponsors of the services with the beneficiaries and service providers in a digital manner without any physical interface.

7. Answer: a

Explanation:

The correct answer is GP Samanta:

- The Indian government appointed Dr. G P Samanta as the new **Chief Statistician of India (CSI)** on March 10, 2021.
- Dr. Samanta was currently deputed as an advisor in the RBI's Department of Statistics and Information Management.
- **Samanta**, as part of the new deputation, would also hold the post of **Secretary in the Ministry of Statistics and Programme Implementation**.
- His tenure would initially be of **two years**.
- Samanta will replace 1986-batch **IAS officer Dr. Kshatrapati Shivaji** who was holding additional charge of the post since September 2020.

8. Answer: c

Explanation:

The National Bank Limited is a scheduled commercial bank founded by Mr Govind ballabh pant and Shah community in the year 1922

9. Answer: d

Explanation:

- Sandeep Bakshi has been appointed as the CEO & MD of the ICICI bank for a period of five years till October 2023.
- He was earlier working the Chief Operating Officer (COO) of the bank.

10. Answer: c

Explanation:

The correct answer is 800 grams.

- Javelin throw, athletics (track-and-field) sport of throwing a spear for distance, included in the ancient Greek Olympic Games as one of five events of the pentathlon competition.
- The javelin that is used in modern international men's competition is a spear of wood or metal with a sharp metal point. It is constructed in accordance with a detailed set of specifications published by the International Association of Athletics Federations (IAAF). Its overall length must be at least 260 cm (102.4 inches) and its weight at least 800 grams (1.8 pounds). The women's javelin is somewhat shorter and lighter—a minimum 220 cm (86.6 inches) long and 600 grams (1.3 pounds) in weight.

11. Answer: e

Explanation:

The correct answer is All of the above.

In News:

- **Department of Heavy Industry (DHI)** has recently modified the **FAME II scheme**.
- The union government has announced a decision to extend the second phase of the Faster Adoption and Manufacturing of Hybrid and Electric vehicle (FAME) scheme by two years to March 31, 2024.
- The FAME II scheme, started in 2019 for promoting sales of electric vehicles, was supposed to end by 2022.
- The Fame scheme was announced in 2019 with an outlay of ₹10,000 crores.

★ Key Points

- **Changes:**
 - Introduction of a demand incentive of Rs. 15,000 per kWh for electric two-wheelers with a maximum cap at 40% of the vehicles' cost.
 - Launch of aggregate demand for 300,000 electric three-wheelers by **Energy Efficiency Services Limited**.
- **FAME scheme:**
 - FAME India is a part of the **National Electric Mobility Mission Plan**.
 - The main thrust of FAME is to **encourage electric vehicles by providing subsidies**.
 - The FAME India Scheme is aimed at incentivising all vehicle segments.
- **Two phases of the scheme:**
 - **Phase I: started in 2015 and was completed on 31st March 2019**
 - **Phase II: started from April 2019, will be completed by 31st March 2022**
 - The scheme covers Hybrid & Electric technologies like Mild Hybrid, Strong Hybrid, Plug-in Hybrid & Battery Electric Vehicles.
 - Monitoring Authority: Department of Heavy Industries, the Ministry of Heavy Industries and Public Enterprises.
- **Fame India Scheme has four focus Areas:**
 - Technology development
 - Demand Creation
 - Pilot Projects
 - Charging Infrastructure
- **Objectives of FAME Scheme:**
 - Encourage faster adoption of **electric and hybrid vehicles** by way of offering upfront Incentive on the purchase of Electric vehicles.
 - Establish a necessary **charging Infrastructure for electric vehicles**.
 - To address the issue of environmental pollution and fuel security.

12. **Answer: c**

Explanation:

The correct answer is **Seville**.

★ **Key Points**

- Due to the raging COVID-19 pandemic, the 22nd Laureus World Sports Awards will be held in a **virtual ceremony in Seville, Spain**.
- The awards show, which will include presentations and related news reports, will be **broadcast live on Laureus social media sites** and will be open to the world's media.
- A jury of **69 members of the Laureus World Sports Academy** chooses the winners of the Laureus World Sports Awards. The most recent was in Barcelona in 2007, which was quite some time ago.
- Among the many big names who have had a year to remember and who will be in contention for the awards are **Lewis Hamilton, Rafael Nadal, LeBron James, Naomi Osaka, Federica Brignone (Sportswoman) and Robert Lewandowski (Sportsman)**.

★ Important Points

- Spain:
 - Capital and largest city: Madrid
 - King: Felipe VI
 - Prime Minister (President of the Government): Pedro Sánchez (as of March 2021)
 - President of the Senate: Pilar Llop (as of March 2021)
 - President of the Congress of Deputies: Meritxell Batet (as of March 2021)
 - Currency: Euro

13. Answer: d

Explanation:

The correct answer is 23° 30'N.

- **23° 30'N latitude** divides India into two equal halves.

★ Key Points

- The **Equator** is located at **zero degrees latitude**.
- **Tropic of Cancer** divides India into almost two equal parts.

- The **Equator** divides Earth into **Northern and Southern** Hemispheres, it is the Prime Meridian.
- **Greenwich** is considered the **Prime Meridian**.
- **Tropic of Cancer** is the northerly circle of the latitude on the Earth at an angle of 23.43 degrees north of the equator.
- At which the Sun appears to be directly overhead at its culmination.
- It is also called the Northern Tropic.
- The tropic of cancer and Tropic of Capricorn each lie at 23.5 degrees latitude.

★ Important Points

- Important facts about the Tropic of cancer:
 - It is present above the Equator.
 - 23.5-degree latitude is known as the Tropic of Cancer .
 - It is also referred to as the Northern Tropic.
 - At this place, the midday sun rays are vertical on 21 June .
 - Tropic of Cancer passes through 16 countries.
 - Mahi river is the only river in India that cuts the tropic of Cancer twice.
 - Tropic of Cancer passes through eight Indian states including (west-east):
 - (i) Gujarat (ii) Rajasthan (iii) Madhya Pradesh (iv) Chhattisgarh (v) Jharkhand (vi) West Bengal (vii) Tripura (viii) Mizoram.

★ Additional Information

Equator	The Equator or 0 degrees latitude divides the Earth into the Northern and Southern Hemispheres.
Tropic of Capricorn	The Tropic of Capricorn is the southernmost latitude where the sun can be seen directly overhead.
Prime Meridian	<p>The Prime Meridian is the line of 0-degree longitude.</p> <p>It is the starting point for measuring the distance both east and west around the Earth.</p> <p>Greenwich(Denmark) is the Prime Meridian.</p>

14. Answer: b

Explanation:

The correct answer is Maruti Suzuki India.

- Maruti Suzuki India has partnered with **Savitribai Phule Pune University, Maharashtra**, to train the youth in automobile retail.
- A customized **three-year 'Bachelor of Vocational Studies in Retail Management'** course will be offered to students by the university with support from the company.
- The curriculum will comprise one-year classroom training followed by **two-year on-the-job training**.

15. Answer: c

Explanation:

The correct answer is Jamaica.

★ Key Points

- After 33 years, **Florence Griffith Joyner's 100 meters Olympic record** has finally fallen. **Jamaican sprinter Elaine Thompson-Herah** ran the women's 100 meters final in **10.61 seconds**, securing the gold medal and **breaking Griffith Joyner's Olympic record of 10.62 seconds** — a record that dates back to **1988 Seoul Games**.
- **Fraser-Pryce** won gold in **2008 and 2012**, while **Thompson-Herah** took home gold in **2016**.
- Jamaica is known for having some of the best track athletes to ever run in the Olympics, with **Usain Bolt** still holding the title of **fastest man in the world**.

★ Additional Information

Country	Capital	Currency
Ghana	Acra	Cedi
Venezuela	Caracas	Bolivar Fuerte
Jamaica	Kingston	Jamaican Dollar
Sudan	Khartoum	Sudanese Pound

16. Answer: d

Explanation:

The correct answer is **Rs. 290**.

Cabinet approves an increase in Fair and Remunerative Price on sugarcane to Rs. 290 per quintal

- The Union Cabinet approved an increase in the **Fair and Remunerative Price (FRP)** on sugarcane to Rs. 290 per quintal based on a 10 per cent recovery.
- When the recovery increases beyond 10 per cent, then on every point 1 per cent rise, additional Rs. 2.90 is paid per quintal. Even if a farmer has **less than 9.5 per cent recovery**, their Fair and Remunerative Price (FRP) will be Rs. 275 per quintal."
- The Centre had in August 2020 increased the **FRP by Rs. 10** , bringing the amount to Rs. 285 per quintal. In 2019-2020, the government had fixed Sugarcane FRP at Rs. 275 per quintal.
- Many farmers across the country have increased their recovery by using modern technology, implementing new practices on a large scale.
- "Also last year, export was also at a record high. Our country has entered contracts of exporting 70 lakh tonnes of sugarcane, out of which 55 lakh tonnes has already been exported and the remaining 15 lakh tonnes is in the pipeline,"
- In order to ensure that higher sugar recoveries are adequately rewarded and considering variations amongst sugar mills, the FRP is linked to a basic recovery

rate of sugar, with a premium payable to farmers for higher recoveries of sugar from sugarcane.

17. Answer: a

Explanation:

Correct Answer-Option 1- **Narinder Dhruv Batra**

- The International Hockey Federation has extended the terms of its president and Executive Board.
 - President- **Narinder Dhruv Batra**
 - Executive Board Members- Tayyab Ikram, Danae Andrada, Hazel Kennedy and Erik Cornelissen.
 - The 47th International Hockey Federation Congress was scheduled to take place in October 2020. However, the congress has been postponed to May 2021.
 - This decision made is based on the Article 12.1 of the FIH Statutes that covers cases of force majeure.
 - **FIH HQ- Lausanne, Switzerland**
 - **CEO- Thierry Weil**
-

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18. Answer: a

Explanation:

India's indigenous payment network RuPay has cornered a significant market share in the domestic card market since its launch. As of November 30, 2020, RuPay's market share has increased to more than 60 per cent of total cards issued, from merely 17-per cent market share in 2017, revealed the data released by the Reserve Bank of India (RBI) in its booklet on Payment Systems in India (2010-20).

As of November 2020, around 603.6-million RuPay cards have been issued by nearly 1,158 banks. But a majority of these are debit cards and only 970,000 are credit cards.

19. Answer: a

Explanation:

- Vistara is a joint venture of **Tata Sons Private Limited and Singapore Airlines Limited (SIA)**, wherein Tata Sons holds 51% stake in partnership and Singapore Airlines owns 49% stake. The company is registered as **TATA SIA Airlines Limited**.
- In 2013, two legendary brands, Tata Sons and Singapore Airlines, decided to fulfil a long-cherished shared dream to bring forth a distinguished flying experience to air travellers in India. With its strong historical ties with aviation, the Tata group had long wished to re-enter the aviation sector, after Tata Airlines was renamed Air India and eventually, nationalised.
- The brand name 'Vistara' is derived from the Sanskrit word 'Vistaar' that means 'a limitless expanse'. The name Vistara draws inspiration from the world that Vistara inhabits, viz. the 'limitless' sky. The brand also draws stimulus from the image that passengers most associate with a smooth and enjoyable flight – the endless, blue horizon they see through the windows of an aircraft. As it aims to transform the flying experience of travellers in India, Vistara christens its brand tagline as 'fly the new feeling'.

20. Answer: b

Explanation:

The correct answer is Bangladesh:

- Bangladeshi Nobel Peace Prize winner **Muhammad Yunus** will receive the Olympic Laurel award at the 2020 Tokyo Games.
- He will be given the award at the Tokyo 2020 opening ceremony on July 23, 2021..
- The 81-year-old economist turned globe-trotting celebrity speaker won the **Nobel in 2006 for "creating economic and social development from below"**
- He will become the second recipient of the Olympic Laurel award.

- The Olympic Laurel was created in 2016 to recognise endeavours in culture, education, peace and development through sport.
- It was given for the first time at the **2016 Rio Games to Kenyan former Olympian Kip Keino** , who opened a children's home, a school and an athletes' training centre in his home country.

21. Answer: e

Explanation:

The correct answer is 18-40 years

APY is applicable to all citizen of India aged between **18-40 years**

- On **09-05-2015** , the **Atal Pension Yojana (APY)** was launched to establish a universal system of social security for all Indians, especially the aged, the underprivileged, and poor workers.
- This scheme basically focuses on the workers of the **unorganized sector**
- A minimum monthly pension for subscribers ranging between **Rs. 1000 and Rs. 5000** per month is guaranteed under the **APY**.
- On attaining the age of 60 years beneficiaries get a 100% pension amount.
- It is administered by **Pension Fund Regulatory and Development Authority**

22. Answer: c

Explanation:

The correct answer is International Olympic Committee:

- **Thomas Bach** was re-elected as president of the **International Olympic Committee** on 10 March 2021.
- His second term as IOC President will start immediately after, and will conclude in 2025.

- The 67-year-old German received 93 yes and 1 no votes from the 94 valid votes.
- Bach was chosen as the IOC President for the first time on an eight-year term in 2013.
- He served as IOC Vice-President from 2000 to 2004, 2006 to 2010 and from 2010 until his election as IOC President in September 2013.

23. Answer: a

Explanation:

- The government on Thursday permitted 100 per cent foreign investment under the automatic route in oil and gas PSUs which have received in-principle approval for strategic disinvestment.
- The move would facilitate privatisation of India's second biggest oil refiner Bharat Petroleum Corp Ltd (BPCL).
- The government is privatising BPCL and selling its entire 52.98 per cent stake in the company.
- According to a press note of the Department for Promotion of Industry and Internal Trade (DPIIT), a new clause has been added to the FDI policy for oil and natural gas sector.
- "Foreign investment up to 100 per cent under the automatic route is allowed in case an 'in-principle' approval for strategic disinvestment of a PSU has been granted by the government," it said.
- The decision regarding this was taken by the Union Cabinet last week.
- Two out of the three companies that have put in an initial expression of interest (EoI) for buying out the government's entire 52.98 per cent stake in BPCL are foreign entities.
- The FDI limit in PSU-promoted oil refineries will continue at 49 per cent -- a limit that was set in March 2008.
- As of now, the government is selling the stake in only BPCL. Indian Oil Corporation (IOC), the nation's largest, is the only other oil refining and marketing company under direct government control.

- Hindustan Petroleum Corporation Ltd (HPCL) is now a subsidiary of state-owned Oil and Natural Gas Corporation (ONGC).
- The government had in March 2008 raised the FDI limit in oil refineries promoted by public sector companies from 26 per cent to 49 per cent.
- The firm acquiring the government's 52.98 per cent stake in BPCL will also have to make an open offer to buy an additional 26 per cent stake from other stakeholders at the same price, as per the takeover rules.

24. Answer: a

Explanation:

The global United Nations University system is coordinated by UNU Headquarters (also called UNU Centre) in Tokyo, Japan.

The UNU Headquarters Building in Tokyo houses the Office of the Rector as well as global administrative, academic services, and technical services units.

The UNU Centre administrative services unit also has an adjunct office in Putrajaya, Malaysia.

One vice-rectorate (the UNU Vice-Rectorate in Europe) is located in Bonn, Germany.

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25. Answer: a

Explanation:

The correct answer is Assam.

★ Key Points

- **Assam** continued to top the Indian production of tea with **642.18 million kg with an increase of 2%**.
- **West Bengal** stood second with 357.47 million kg with an increase of 10%.
- Darjeeling, the famous place for the production of tea posted a decline of 7%.

- In 2016, India has recorded the highest production of tea with **1239.15 million kg** which marked the growth of 2.45% against 2015.
- **Assam**
 - Capital: Dispur
 - Chief Minister: Sri Himanta Biswa Sarma
 - Governor: Jagdish Mukhi
 - National Park: Kaziranga National Park
 - State Animal: Gor
 - State Bird: Deo haah
 - State Tree: Hollong
 - State Flower: Kopou phul

★ **Additional Information**

States	Capitals	Chief Ministers	Governor
Maharashtra	Mumbai	Eknath Shinde	Bhagat Singh Koshiyari
Andhra Pradesh	Hyderabad	Y.S. Jaganmohan Reddy	Biswa Bhusan Harichandan
Jharkhand	Ranchi	Hemant Soren	Ramesh Bais

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26. Answer: d

Explanation:

- The correct answer is **Option 4** i.e **Amartya Sen**.
- The book generally deals with the importance of public debate in Indian traditions.
- Amartya Sen is a **Nobel Prize-winning Indian economist** .

Author	Famous Books
Arundhati Roy	The God of Small Things, The Ministry of Utmost Happiness, The Cost of Living, Listening to Grasshoppers: Field Notes on Democracy, etc.
Jhumpa Lahiri	The Namesake, The Lowland, Interpreter of Maladies, Unaccustomed Earth, In Other Words, etc.
Amitav Ghosh	Sea of Poppies, The Hungry Tide, River of Smoke, Flood of Fire, The Shadow Lines, The Circle of Reason, etc.
Amartya Sen	The Argumentative Indian , Development as reason, The Idea of Justice, Inequality Reexamined, On Ethics and Economics, etc.

27. Answer: a

Explanation:

Canada had the largest renewable water resources per capita worldwide as of 2017, at roughly 79,000 cubic meters per inhabitant. This was considerably higher than the renewable water resources available per capita in the United States, which was 9,441 cubic meters.

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28. Answer: c

Explanation:

The correct answer is Telecom.

★ Key Points

- The Union Cabinet approved a Rs 12,195-crore Production Linked Incentive (PLI) scheme for **domestic manufacturing of telecom and networking products** such as switches, routers, radio access networks, wireless equipment, and another internet of things (IoT) access devices.

- The Production Linked Incentive scheme aims to give companies incentives on incremental sales from products manufactured in domestic units .
- Currently, India imports over 80 percent of its telecom and wireless networking equipment.
- With the inclusion of telecom equipment manufacturing under the ambit of PLI schemes, the total number of sectors under such programs stands at 13.
- In November, the PLI scheme was expanded to include 12 more sectors such as automobile and automobile components, pharmaceutical drugs, textile products, food products, high efficiency solar photovoltaic modules, white goods such as air conditioners and LED bulbs, and specialty steel products.
- The Union Finance Minister–Nirmala Sitharaman informed in the Budget for 2021-22 that the total outlay on PLI schemes in these 13 sectors over the next five years would be Rs 1.97 lakh crore.

★ Additional Information

- Eligible Micro, Small and Medium Enterprises (MSMEs) will get an incentive of 7 percent for the first and the second year, followed by an incentive of 6, 5, and 4 percent in the third, fourth and fifth year, respectively.
- Other companies, which do not fall under the MSME category but are eligible, will receive an incentive of 6 percent for the first two years, 5 percent for the next two years, and 4 percent in the fifth and final year.

29. Answer: b

Explanation:

The correct answer is East Sikkim.

- The first edition of the North Eastern Region District SDG Index Report and Dashboard 2021-22 was released in New Delhi on 26 August 2021.
- It is a collaborative effort by NITI Aayog and the Ministry of Development of North Eastern Region DoNER with technical support from UNDP.
- NITI Aayog Vice Chairperson Dr Rajiv Kumar, Union Minister of Development of North Eastern Region G.Kishan Reddy and Minister of State for Development of

North Eastern Region **B L Verma** launched the report.

- The Index measures the performance of districts from all the **eight States of NER** – Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
- **East Sikkim**, with a score of 75.87, ranks first in the region followed by districts **Gomati and North Tripura** (score 75.73) in the second position.
- **Nagaland's Kiphire** was featured at the bottom with a score of 53.
- Out of the 103 districts considered for ranking, **64** districts belonged to the Front Runner category while 39 districts were in the Performer category in the composite score and ranking of districts.
- All districts in **Sikkim and Tripura** fall in the Front Runner category and there are no districts in the Aspirant or Achiever categories.

30. Answer: d

Explanation:

The correct answer is Gandhinagar:

- **Gift-City regulator IFSCA** has set up an expert committee to recommend an approach towards development of the **Longevity Finance Hub** in the Gift-City in Gandhinagar, Gujarat.
- The expert committee is being co-chaired by **Kaku Nakhate**, President and Country Head (India), Bank of America, and **Gopalan Srinivasan**, Ex-CMD, New India Assurance Company Limited.
- The committee members comprise of leaders from the entire longevity finance ecosystem including from areas such as banking, insurance, wealth management, FinTech, legal, compliance and management consultancy.
- Global estimates suggest that there are one billion people **aged 60 years** and above with a combined spending power of **15 trillion dollars** and the size is ever expanding.
- Development in medicinal science and technology will support extending the lifespan and longevity of the **silver generation**.
- It is estimated that **by 2040**, there will be more members of the silver generation than people under 20.

- This demographic change will throw open new challenges and opportunities especially in the areas of wealth management, health, insurance, and other investment products.
- This has prompted the International Financial Services Centre Authority to set up an expert committee.
- The **International Financial Services Centres Authority (IFSCA)** was established on **April 27, 2020** under the International Financial Services Centres Authority Act, 2019.
- It is headquartered at GIFT City, **Gandhinagar in Gujarat**.

31. Answer: d

Explanation:

The correct answer is Rs 6,865 crore.

- **Govt promoting Agri sector by reforming laws**
- Agriculture Minister Narendra Singh Tomar told the government is promoting the agriculture sector through reforms in the laws which seek **to bring revolutionary changes**. The government is focusing on the growth and strengthening of India's farming and rural sector, the minister told at an event organized by **Asia Pacific Rural and Agricultural Credit Association and NABARD**.
- Tomar also highlighted various steps taken by his government during the last six-and-half years to boost the agriculture sector and enhance farmers' income, according to a release issued by his ministry.
- The government transferred **Rs 1.15 lakh crore directly into the bank accounts** of nearly 10.75 crore farmers under the flagship **PM KISAN program**.
- The government was setting up **10,000 farmer producer organizations (FPO) with an outlay of Rs 6,865 crore**.
- The agricultural sector is being promoted through reforms in-laws. This is expected to bring revolutionary changes.
- He also stressed that the government was making continuous efforts for the progress of **India's rural and agriculture sector**, which forms the basis of the economy.

32. Answer: a

Explanation:

- Bajaj Finserv has launched its public awareness campaign, ' **Savdhan Rahein. Safe Rahein**', across digital and social media platforms, to educate customers and public at large on financial fraud risks and how to stay protected.
- Through this awareness initiative, Bajaj Finserv aims to convey a very important message to its customers and prospects to strictly avoid making any refundable advance payments in the name of loan processing fee, bank charges, GST, verifications etc., and verifying all loan offers at the Bajaj Finance's official website, only. Also, it's essential for customers opting for Life insurance or Health insurance or Motor insurance policies to check policy documents carefully and verify the details on the insurers' websites only.

33. Answer: a

Explanation:

- New York Road Runners, the nonprofit that operates marathon races, renewed its title sponsor slot for the New York Marathon with India-based tech company Tata Consultancy Services.
- The deal gives the race's title rights to TCS through 2029. The company plans to spend up to \$40 million per year on global race sponsorships in that time frame, according to a person familiar with the terms of this agreement who asked to remain anonymous because they were not authorized to speak on the record.
- TCS is a business-to-business IT firm owned by conglomerate Tata Group. Clients include firms like Microsoft and AstraZeneca. TCS is traded on the National Stock Exchange of India and has a market cap of roughly \$159 billion.
- In an interview with CNBC on Tuesday, Michelle Taylor, TCS' head of global sponsorships, said aligning with the races helps the firm "humanize our brand" and educate participants and spectators about its services.

- TCS also sponsors other top marathons, including in Boston, Chicago, Europe and events in Australia. In June, the firm also became the new title sponsor of the London Marathon, taking over rights from financial firm Virgin Money. The new agreement runs through 2027.

34. Answer: d

Explanation:

The correct answer is USA.

★ Key Points

- The **US** replaced **Mauritius** as the second-largest origin of **foreign direct investment (FDI)** in India during **2020-21**.
- **Singapore** is the top source of **foreign direct investment(FDI)** in India.

★ Additional Information

- Foreign Direct Investment(FDI) is the investment by a non-resident person resident outside Indian the capital of an Indian company under Foreign Exchange Management.
- Foreign Direct Investment (FDI) is a long-term investment.
- It is also nondebt creating capital flow.
- Benefits of Foreign Direct Investment(FDI):
 - Market diversification.
 - Tax incentives.
 - Lower Labour cost.
 - Subsidies.
 - Parental tariffs.

<u>Debt Flow</u>	<u>Non Debt Flow</u>
A debt flow is a type of foreign capital, it is an obligation for residents to repay it.	A non-debt flow is one where are no direct repayment obligation for residents.
The indirect method of cash flow uses net income as the base. It makes the adjustments needed, i.e., adding and subtracting the variables to convert the total net income to cash amount from operations.	The direct method of cash flow starts with cash transactions such as cash received and cash paid while ignoring the non-cash transactions.

35. Answer: c

Explanation:

- ICICI Prudential Life Insurance Company Ltd ., a life insurance company is based in India.
- ING Vysya is a privately owned multinational bank also deals in the insurance sector.
- New India Assurance Company is a public sector insurance company in India and it is the *largest* general insurance company based on the gross premium in India.
- National Securities Depository Limited is an Indian central securities depository based in Mumbai.
- The **first** electronic securities depository in India with national coverage.

36. Answer: c

Explanation:

The correct answer is 1938.

- The Parliament has passed the **Insurance (Amendment) Bill, 2021** with the Lok Sabha approving it on 22 March 2021.
- It seeks to amend the Insurance Act, **1938** which will increase the limit of foreign investment allowed in Indian insurance companies.
- The bill provides to increase of FDI limit from the existing **49% to 74%**.
- It also removes restrictions on ownership & control of insurance companies.

37. Answer: a

Explanation:

- Goa Carnival is usually celebrated during the months of either February or March before the onset of Lent. Goa Carnival goes for four days and nights finishing on Shrove Tuesday, the day before Lent. Lent characterizes fasting or abstinence from meat for the 40 days prior to Easter and is a significant event for the Catholics.
- Goa Carnival Dates for 2021 begin on Saturday the Saturday 13th February 2021 and finish on Shrove Tuesday which is 16th February 2021.
- Carnival is the most anticipated event in Goa and all the preparations for the carnival celebrations begin early on in December when the streets are beautifully decorated with attractive lighting and luxurious grand balls are held

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38. Answer: b

Explanation:

The correct answer is Uttarakhand.

- Uttarakhand Chief Minister Pushkar Singh Dhami has named Indian women's hockey team player **Vandana Kataria** as the state's **Department of Women Empowerment and Child Development** brand ambassador.
- Earlier, Pushkar Singh Dhami had announced a cash reward of **Rs 25 lakh** to **Vandana Katariya**.

- Vandana Katariya made history as she became the first Indian woman to score a hat-trick at Tokyo Olympics.
 - **Uttarakhand:**
 - **Chief Minister** – Pushkar Singh Dhami.
 - **Governor** – Baby Rani Maurya.
 - **Registered GI** – Uttarakhand Tejpat.
-

39. **Answer: a**

Explanation:

The correct answer is **5 km**.

While targeting the delivery of financial services to so far inaccessible areas, the strategy makes the following goals:

- **Accessibility in remote areas** : The first objective is to provide accessibility to formal financial services to every village within a 5 km radius/hamlet of 500 households in hilly areas by March 2020.
 - **Less cash society**: To create the necessary infrastructure in all Tier II to Tier VI centres to move towards a less-cash society by March 2022.
 - **Every individual should use financial services through mobile devices**: Encouraging financial service providers to provide virtual modes including mobile apps so that every adult can access financial service provider through a mobile device by March 2024.
-

40. **Answer: c**

Explanation:

The correct answer is **2032**.

- **Brisbane** has been formally awarded hosting rights for the **2032 Olympic Games**.

- The Olympic Games will be held in **Australia** for a third time, before this **Melbourne** held the Games in **1956** and **Sydney** hosted them in **2000**.
 - **Paris** will host the event in **2024** and **Los Angeles** will host the tournament in **2028**.
-

41. **Answer: a**

Explanation:

- The West Central Railways has become the first fully electrified railway zone in India on March 30, 2021, after the CCRS inspection and the commissioning of electrification of the Kota–Chittaurgarh railway station (Srinagar–Jalindri) in Rajasthan.
 - As per Railway Minister Piyush Goyal, trains that will be passing through this railway section can now be operated at a faster speed. The west zonal railway now boasts a 3012 route km electrified network.
 - Earlier in 2021, with the electrification of the Nimmita–New Farakka railway section in West Bengal, the Eastern Railway Zone of India had also become a fully electrified rail network.
-

42. **Answer: b**

Explanation:

The correct answer is General.

- The **Union Cabinet** has approved amendments to the General Insurance Business (Nationalisation) Act (GIBNA) to facilitate the privatization of public sector general insurance firms.
- The Bill seeks to enable greater private participation in the public sector insurance companies.
- The GIBNA Act provides for the acquisition and transfer of shares of **Indian insurance companies**.

43. Answer: b

Explanation:

The correct answer is \$250 million.

★ Key Points

- HDFC Ltd has received a **\$250 million loan from the International Finance Corporation (IFC)**, the World Bank Group's investment arm, to be used for green housing by India's largest housing finance firm.
- The greenhouse is considered a high-end sector in the country, yet it provides environmental benefits.
- Its collaboration with HDFC will assist to shift market perceptions. **Green affordable housing receives at least 25% of the funds.**

★ Important Points

- HDFC Ltd will benefit from IFC's **\$250 million loans** as it expands its affordable housing and growing green affordable housing portfolio, making such housing more accessible to those on lower incomes.
- The financing will also help create jobs, in line with the Indian government's goal of providing **"Housing for All."**
- Green affordable housing can assist India in meeting its **Paris Agreement objectives to lower a third of its carbon emissions by 2030 from 2005 levels.**
- Residential housing accounts for around 24% of the nation's electricity usage, therefore green and energy-efficient buildings can help reduce emissions.

44. Answer: a

Explanation:

The correct answer is China.

★ Key Points

- China has unveiled a maglev train capable of a top speed of 600 kmph .
- The maximum speed would make the train , self-developed by China and manufactured in the coastal city of Qingdao , the fastest ground vehicle globally.
- Using electromagnetic force , the maglev train "levitates" above the track with no contact between body and rail.
- China has been using the technology for almost two decades on a very limited scale. Shanghai has a short maglev line running from one of its airports to town.
- At 600 kmph, it would only take 2.5 hours to travel from Beijing to Shanghai by train - a journey of more than 1,000 km (620 miles).

★ Additional Information

- In India, At present Mumbai-Ahmedabad High-Speed Rail (MAHSR) is the only sanctioned project of High-speed rail in the country which is under execution with financial and technical assistance from the government of Japan.
- A special Purpose Vehicle (SPV) , namely National High-Speed Rail Corporation Limited (NHSRCL) has been formed to implement the project.

45. Answer: b

Explanation:

The correct answer is UGC:

- Prime Minister Narendra Modi unveiled several initiatives related to the education sector in India to mark the first anniversary of **National Education Policy (NEP) 2020** on 29 July 2021.
- He launched the **Academic Bank of Credit (ABC)** for UG/PG Students under NEP 2020.
- Set-up by the University Grants Commission (UGC), it is one of the biggest and most awaited reforms suggested under the National Education Policy (NEP) 2020.

- The Academic Bank of Credit is an initiative to provide multiple entries and exit options to the students in higher education.
- This enables students to leave a degree or course and get a corresponding certification and rejoin studies after a certain time and be able to start from where they had left.
- Through this, Higher Educational Institutes would be able to award degrees, taking into account the credits earned by the students.
- Apart from the ABC reform, PM Modi also launched the first-year engineering curriculum in **11 regional languages** .
- He also introduced guidelines for internationalization of higher education as well as launched the **National Digital Education Architecture (NDEAR)** and **National Education Technology Forum (NETF)** .
- He also launched **Vidya Pravesh** , a three-month play based school preparation module for Class 1 students.
- **Indian Sign language** has also been designated as a subject now.

46. **Answer: b**

Explanation:

The correct answer is **Kotak Mahindra Bank Ltd.**

★ **Key Points**

- **Kotak Mahindra Bank Ltd** and the Indian Institute of Science have announced a partnership to set up an **Artificial Intelligence and Machine Learning (AI-ML)** centre at the IISc campus.
- Spread across approximately **1,40,000 square feet** , the Kotak-IISc AI-ML centre will offer **Bachelor's, Master's and short-term courses**.
- The Centre has been established under **Kotak's CSR project** .

★ **Important Points**

- The Centre will also promote research and innovation in **AI and ML** and develop the talent pool from across the country to **provide cutting-edge solutions** to meet industry's emerging and future requirements.

- **Kotak Karma** is the Corporate Social Responsibility (CSR) identity of Kotak Mahindra Group.
-

47. Answer: e

Explanation:

The correct answer is Mera Ration.

★ Key Points

- 'Mera Ration' is the name of the mobile application launched by the Department of Food and Public Distribution under the ONORC plan.
 - **ONORC- One Nation-One Ration Card .**
 - This app will benefit especially those ration card holders who move to new areas for livelihoods.
 - The **app is developed by the government in association with NIC** "to facilitate various ONORC related services among National Food Security Act (NFSA) beneficiaries, particularly migrant beneficiaries, FPS dealers, and other relevant stakeholders.
 - Implementation of the One Nation-One Ration Card system ensures availability of ration to beneficiaries under the National Food Security Act (NFSA) and other welfare schemes, especially the migrant workers and their families, at any fair price shop (FPS) across the country.
 - The new mobile app aims to facilitate the ONORC-related services among beneficiaries of the NFSA, particularly migrant beneficiaries, fair price shop (FPS) or ration shop dealers, and other stakeholders.
 - The system covers nearly 69 Crore NFSA beneficiaries (about 86% NFSA population) in the country and a monthly average of about 1.5~1.6 Crore portability transactions are being recorded under ONORC.
-

48. Answer: c

Explanation:

The correct answer is European Union Aviation Safety Agency.

★ Key Points

- Aviation regulators European Union Aviation Safety Agency (EASA) and the Directorate General of Civil Aviation of India (DGCA) have entered into a working arrangement to achieve common safety and environmental protection standards.
- Through the agreement, the aviation regulators of India and Europe hope to reduce the economic burden imposed on the aviation industry.
- Both DGCA and EASE intend to develop closer collaboration in rule-making cooperation, including through sharing of information and best practices, facilitate issuance or acceptance of certificates for products parts and appliances, and share safety information.

49. **Answer: c**

Explanation:

The correct answer is Punjab.

- With a view to further promote sports in the state, the Punjab government has increased the cash award money for the **Olympic medalists**.
- Neeraj Chopra would be honoured with an increased amount of **₹2.51 crore instead of ₹2 crore** which was announced earlier.
- **11 state players**, who were part of the **Indian hockey team** will get **₹2.51 crore** each from the earlier **Rs 1 crore**.
- **Punjab:**
 - Chief Minister – Bhagwant Mann
 - Governor – Banwarilal Purohit
 - **Lok Sabha seats** – 13.
 - **Rajya Sabha seats** – 7.
 - **Number of Districts** – 22.

50. Answer: d

Explanation:

- Finance minister Nirmala Sitharaman, on June 28, 2021, announced that the tenure of the **Production-Linked Incentive (PLI) scheme** for large scale **electronics manufacturing** had been extended by one year.
- Under this programme, eligible players in the air-conditioner and LED manufacturing space will be offered incentives worth Rs 6,238 crore over a period of five years.
- The scheme for laptops and IT hardware has a total size approximately Rs 7,350 crore.
- This scheme was to begin in 2020-21 and continue for a period of five years.
- This scheme will now continue till 2025-26.
- Participating companies will get any five years for meeting their production targets under the scheme.
- The incentives were applicable taking the base year of 2019-20.
- In November 2020, the Union Cabinet approved the PLI scheme for 10 sectors.

51. Answer: d

Explanation:

The correct answer is Both (2) and (3).

★ Key Points

The given statements can be inferred from the passage:

- Option 2 - Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy than help provide the widely expected demand fillip :
 - ' Heavy rains in areas that faced flooding last year or with crops standing in the fields ready for harvest can do more damage to the rural economy

than help provide the widely expected demand fillip'.

- Option 3 - Different statistics offer different perspectives, and some of the other data released by the CSO paint a more modest picture of the economy :
 - 'But then, different statistics offer different perspectives, and some of the other data released by the CSO paint a more modest picture of the economy'.

★ Important Points

- Option 1: RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on June end
 - In the line, there is a different date than that mentioned in the passage- *RBI Governor Raghuram Rajan also has his task cut out as he is to present the bi-monthly monetary policy statement on **June 7** (which is clearly not the June end, rather it is June starting.)*

★ Additional Information

- Modest: unassuming in the estimation of one's abilities or achievements
 - *He's very **modest** about his achievements.*
- Fillip: something that causes a sudden improvement
 - *The news gave the stock market a big **fillip**.*

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52. Answer: c

Explanation:

The correct answer is **Growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15 .**

★ Key Points

- The given statements can be inferred from this line given in the passage- *'The result of the strong fiscal fourth-quarter performance is that **growth for the full year was lifted to 7.6 per cent, from 7.2 per cent in 2014-15 .***

Thus, it can be concluded that as a result of strong fiscal fourth-quarter performance, growth was lifted to 7.6 per cent, from 7.2 per cent in 2014-15.

★ Additional Information

- Inflation: to increase the value or price of something, or to become more valuable or expensive
 - *People who bought homes years ago have seen the values **inflate** and property taxes rise with the inflation.*
- Pace: the speed at which someone or something moves, or with which something happens or changes
 - *I don't like the **pace** of modern life.*

53. Answer: d

Explanation:

The correct answer is **Because it strips the impact that taxes and subsidies have on the overall GDP number.**

★ Key Points

- The given statements can be inferred from the last lines of the first paragraph- '*The GVA figure is significant **because it strips the impact that taxes and subsidies have on the overall GDP number.***'

★ Important Points

All the other options are stated in the passage but they do not tell us about the significance of GVA.

★ Additional Information

- Barely: by the smallest amount; only just
 - *There was **barely** enough room for the two of them.*
- Strip: to remove, pull, or tear the covering or outer layer from something
 - *We need to **strip** the wallpaper off the walls first.*

54. Answer: d

Explanation:

The correct answer is **That this growth has been achieved despite a prolonged and widespread drought, which would not certainly have dampened rural demand, is noteworthy.**

★ Key Points

- *The given statement cannot be inferred from anywhere in the passage and is in contrast with the discussion in the beginning of the first paragraph.*
- Thus, it fits best as the answer.

★ Important Points

All the other options are stated in the passage.

★ Additional Information

- **Dampened:** make less strong or intense
 - *The **dampened** mood was still in her voice.*
- **Noteworthy:** worth paying attention to; interesting or significant
 - *The town-house is also a **noteworthy** building and contains large and important archives.*

55. Answer: e

Explanation:

The correct answer is **Brief.**

★ Key Points

- Let us see the meaning of "Prolonged".

- Prolonged: *continuing for a long time or longer than usual; lengthy*
- Let us see the meaning of "Brief".
 - Brief: *marked by the use of few words to convey much information or meaning*
- Hence, the antonym for "**Prolonged**" is "Brief".
- Let's see the meaning of other given options.

Words	Meanings
Lengthy	continuing for a long time
Timid	shy and nervous; without much confidence
Prominent	very well known and important
Moderate	average in amount, intensity, quality, or degree

★ **Additional Information**

- The words *lengthy, overlong, protracted and everlasting* are synonyms or near-synonyms of the word 'Prolonged'.
- Example of 'Lengthy' in a sentence:
 - *Many airline passengers face **lengthy** delays because of the strike.*
- Example of 'Overlong' in a sentence:
 - *The last song on the album is brilliantly performed but **overlong**.*
- Example of 'Protracted' in a sentence:
 - *Their **protracted** legal battle may soon be resolved.*
- Example of 'Everlasting' in a sentence:
 - *Their contributions to science have earned them an **everlasting** place in history.*

56. Answer: c

Explanation:

The correct answer is **Vigorous**.

★ Key Points

- Let us see the meaning of "Robust".
 - Robust: *strong and healthy*
- Let us see the meaning of "Vigorous".
 - Vigorous: *strong, healthy, and full of energy*
- Hence, the synonym for "**Robust**" is "Vigorous" .
- Let's see the meaning of other given options.

Words	Meanings
Quick	happening or done with great speed, or lasting only a short time
Sleek	smooth, usually curved and shiny, and therefore looking healthy and attractive
Nasty	bad or very unpleasant
Offensive	causing someone to feel resentful, upset, or annoyed

★ Additional Information

- The words *Weak and Frail* are **antonyms** or near- antonyms of the word 'Robust'.
- Example of 'Weak' in a sentence:
 - *It's not surprising you feel **weak** if you haven't eaten properly for days.*
- Example of 'Frail' in a sentence:
 - *He's always in **frail** health.*

57. Answer: d

Explanation:

The correct answer is **A-E**

★ Key Points

- Let's see the meanings of the given words-
 - **Toil** → is a verb that means 'work extremely hard or incessantly or move slowly and with difficulty'
 - **Malign** → is an adjective that means 'evil in nature or effect.'
 - **Kinglet** → is a noun that means a minor king'
 - **Industrial** → is an adjective that means 'of, used in, or characterized by industry'
 - **Sloth** → is a noun that means 'reluctance to work or make an effort; laziness.'
 - **Vulnerable** → is an adjective that means 'exposed to the risk of being attacked or harmed, either physically or emotionally.'
- So according to the meaning of the given words, we can say that '**A-E** is the **antonym pair**.'
- So the correct answer is '**Option 4**.'

58. Answer: c

Explanation:

The correct answer is **B-E**.

★ Key Points

- Let's see the meaning of the given words-
 - **Solitude** → is a noun that means 'the state of being alone'
 - **Obstreperous** → is an adjective that means 'noisy and difficult to control'
 - **Whim** → is a noun that means a sudden desire or change of mind.'
 - **Repel** → is a verb that means 'drive or force back or away.'
 - **Noisy** → is an that means 'full of or making a lot of noise.'
 - **Desire** → is a noun that means a strong feeling of wanting to have something or wishing for something to happen.'
- According to the meaning of the given words, **B-E is the synonyms**.
- So the correct answer is '**B-E**'

59. Answer: a

Explanation:

The correct answer is **A-F**.

★ Key Points

- Let's see the meaning of the given words-
 - **Cite** → is a verb that means 'quote as evidence for an argument'
 - **Distinction** → a marked difference or contrast.
 - **Assent** → is a noun that means 'the expression of approval or agreement.'
 - **Disagreement** → is a noun that means 'have a different opinion'
 - **Excited** → is a noun that means 'cause to feel very enthusiastic and eager.'
 - **Quote** → is a verb that means 'repeat or copy out (a passage from text or speech by another).'
- According to the meaning of the given words, it is clear that **A-F is the synonyms.**
- So the correct answer is '**Option I**'

60. Answer: e

Explanation:

The correct answer is '**No change required .**'

★ Key Points

- Let's see the meaning of the marked words :-
 - 'Toppling' means **to cause a leader of a country, etc. to lose his or her position of power or authority .**
 - 'Seeking' means **to try to find or get something .**
 - 'Abroad' means **in or to another country or countries .**
 - 'Impact' means **an effect or impression .**

- All the marked words are used correctly.

Hence, the correct answer is option 5 .

Correct Sentence: *The U.S. has a rich history of shaping or toppling foreign governments and seeking to influence forces made abroad that had an impact on American shores .*

61. Answer: e

Explanation:

The correct answer is **Option 5) i.e. No correction required .**

★ Key Points

- The sentence is correct in its present form and there is no requirement of any replacement to be carried out in this statement. All the bold words are in the right place and no interchanging of the words is required.
- **Appreciation** (noun) means to be happy for some or to show recognition and enjoyment of the good qualities of someone or something.
 - **Example** : *I smiled in **appreciation**.*
- In the given sentence, ' *appreciation* ' has been used correctly with the subject ' *Chelsea's Eden Hazard* '.
- The appreciation or recognition is directed at Jose Mourinho, who is the 'manager' of manchester United. So ' **manager** ' has been used correctly.
- The other words 'said' and 'work' is used correctly in order to depict the subject's desire to work with *Manchester United* .
- 'Said' here denotes that the original speech has been repeated or retold by another person.
- Hence **Option 5** is **correct** .□

Correct Sentence: *Chelsea's Eden Hazard has revealed his **appreciation** for Manchester United **manager** Jose Mourinho and **said** the Portuguese is the one coach he would like to **work** with again .□*

62. Answer: b

Explanation:

The correct answer is **Option 2)** i.e. **Both B-C and A-D**.

★ Key Points

- The statement is not correct in its present form and it is clear from the first bold word. Therefore, **option E** can be ruled out easily. □
 - **Appreciation** (noun) means an increase in the value of an asset over time. Currency appreciation refers to the increase in the value of one currency relative to another in the foreign exchange markets.
 - **Example** : *Appreciating assets can be real estate, stocks, bonds, and currency.*
 - **Depreciation** (noun) means a reduction in the value of an asset over time, due in particular to wear and tear, a decrease in the value of a currency relative to other currencies.
 - **Example** : *Depreciation leads to losses for non-dollar-based investors.*
- Now, coming to the given options, if we carry out the **interchanging of the pair A-D**, this will imply something but the statement will not completely make sense with this.
- But we are certain that our choice should contain the **pair A-D**. We have to find out another option with this pair and that **option is B**. And if we also **interchange B-C**, we shall find the correct sentence, along with **interchanging A-D**. □
- So, there is no requirement to check the remaining options.
- This makes option B the correct choice among the given options. □

Correct sentence : *There is a view among the public that the **depreciation** of the rupee has been the **result** of a general **appreciation** of the dollar across all currencies.* □

63. Answer: d

Explanation:

The correct answer is **option 4 i.e. B-D**.

'Forecasts' is the **incorrect form of verb** because the sentence starts by 'with running' which means we need to use the **continuous form of the verb**. Also, 'surging' is **contextually incorrect**. We need to interchange both these words to make the sentence grammatically correct and meaningful.

All the other words are correctly placed.

Thus, the answer is B-D.

Correct sentence-

*With the virus running **riot** across the Americas and **surging** in Africa the downside risks outweigh the others. The treasury **forecasts** **eschew** the traditional approach of **charting** a middle path through upside and downside risks.*

64. Answer: b

Explanation:

The correct answer is **B - D**.

★ Key Points

Let us look at the given sentence in the following manner:

- During the _____ (A), the rope had been _____ (B) on the neck of the _____ (C) "witch" and she _____ (D) to death.
- From the below-given table, we get to know the meanings of the words in bold.

- In (B) *strangled on the neck* and in (D) *placed to death* both are incorrect phrases.
- The sentence tells us the hanging rope constricted the supposed witch's neck and she died.
- So, **B** and **D** should be interchanged to make the sentence correct.

Therefore the correct sentence is, *During the hanging, the rope had been placed on the neck of the supposed "witch" and she strangled to death.*

★ Additional Information

To understand which word belongs to which blank we need to know its meaning as enlisted below:

Words	Meanings
hanging	to suspend or be suspended from above with the lower part dangling free
placed	put in a particular position
supposed	generally assumed or believed to be the case, but not necessarily so
strangled	to squeeze or constrict the neck of (a person or animal), especially so as to cause death

65. Answer: b

Explanation:

Correct option: 2) *would have become impossible for the visitors*, is the most suitable option.

The if-clause uses the **past perfect tense** then the **main clause uses would, could, or might + have + the past participle of a main verb.**

If + past perfect, Subject + would + have + V 3

Let's see the examples given below:

- *We could have had a longer holiday, if we hadn't spent so much money on the house.*
- *If I had known about the exam, I would have paid more attention in class.*

Hence, the correct sentence will be- *Virat Kohli described his 137- run stand with Rohit Sharma in the third ODI as "probably one of the most calculated partnerships, he further said that if dew factor came into play it would have become impossible for the visitors to win the game from there.*

66. Answer: b

Explanation:

The correct answer is 'has come up'.

★ Key Points

- Present Perfect Tense is used to represent an action or situation that started in the past and continues in the present.
- The structure of Present Perfect Tense is 'subject + have/has + V3 form of the verb + object'.
- Examples,
 - Alex has completed the book thoroughly.
 - She has forgotten her folder.
- In the given sentence, the use of 'has' is correct as the subject is singular(minister's name).
- The third form of the verb 'come' is 'come' itself.
- 'Came' is the second form of the verb 'come'.
- In the present perfect tense, the third form of the verb needs to be used.
- According to the given explanation, 'has come up' is the correct usage.
- Therefore, option 2 is the correct answer.

★ Alternate Method

- In the given sentence, the use of ' has ' is correct as the subject is singular (minister's name).
- 'Come up' is a phrase that means '(of an issue, situation, or problem) occur or present itself, especially unexpectedly.'
 - Eg. "The subject has not yet come up".

★ Hinglish

- प्रेजेंट परफेक्ट टेंस का उपयोग किसी क्रिया या स्थिति का प्रतिनिधित्व करने के लिए किया जाता है जो अतीत में शुरू हुई और वर्तमान में जारी है।
- Present Perfect Tense की संरचना 'subject + have/has + V3 form of verb + object' है।
- उदाहरण,
 - Alex has completed the book thoroughly.
 - She has forgotten her folder.
- दिए गए वाक्य में ' has ' का प्रयोग सही है क्योंकि विषय एकवचन(minister's name) है।
- ' Come ' क्रिया का तीसरा रूप ' come ' ही है।
- ' Came ' क्रिया का दूसरा रूप है।
- वर्तमान पूर्ण काल (present perfect tense) में, क्रिया के तीसरे रूप का उपयोग करने की आवश्यकता होती है।
- दी गई व्याख्या के अनुसार, 'has come up' सही प्रयोग है।
- अतः विकल्प 2 सही उत्तर है।

★ Alternate Method

- दिए गए वाक्य में ' has ' का प्रयोग सही है क्योंकि विषय एकवचन (minister's name) है।
- 'Come up' एक मुहावरा है जिसका अर्थ है '(किसी मुद्दे, स्थिति, या समस्या का) घटित होना या स्वयं उपस्थित होना, विशेष रूप से अप्रत्याशित रूप से।'
 - उदा. "The subject has not yet come up".

67. **Answer: a**

Explanation:

The correct answer is ' **roared** '.

★ Key Points

- The given sentence is describing **a person's extreme pain, which causes tears to flow from his eyes.**
- The use of the word '**roared**' that means '**(of a person or crowd) utter a loud, deep, prolonged sound**' is wrong in the given sentence as tears cannot make a loud sound.
- '**roared**' should be replaced by the word '**gushed**' which means '**(of a liquid) flow out of something in a rapid and plentiful stream**'.
 - Eg. water **gushed** out of the washing machine.
- Thus, the given sentence means that **tears came from the person's eyes and a piercing pain reached up to his throat like a spider.**
- Therefore, **option 1** is the correct answer.

Correct Sentence: *Tears **gushed** from my eyes and a piercing pain crept up my throat like a spider.*

★ Additional Information

- Let's learn the meanings of the important words in the given sentence:
 - **piercing** : (of a feeling) intense, typically in a distressing way.
 - **crept** : (of a thing) move very slowly and inexorably.

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68. **Answer: d**

Explanation:

The correct answer is **panache to everything from special** .

★ Key Points

The part '**panache to everything from special**' Is grammatically correct.

The corrected form of the other given parts are:

A: In part A "In modern time, they were made fashionable" is grammatically incorrect. Here the word **time** should be replaced with **times** to rectify the

agreement mistake. Thus, the correct part will be " In modern times , they were made fashionable".

B: In part B "from Hillary Clinton, who displayed a" is grammatically incorrect. Here the preposition " by " should be used instead of " from ".Thus, the correct part will be " by Hillary Clinton, who displayed a".

C: In part C "penchant for having wearing them with" is grammatically incorrect. Here ' having' should be removed to make the sentence grammatically correct. Thus, the correct part will be " penchant for wearing them with".

Therefore, option 4) is the correct answer.

Thus, the correct sentence is: *In modern **times** , they were made fashionable **by** Hillary Clinton, who displayed a penchant for wearing them with panache to everything from special occasions to low-key affairs.*

★ Additional Information

Word	Meaning
penchant	a strong or habitual liking for something or tendency to do something
panache	flamboyant confidence of style or manner

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69. Answer: b

Explanation:

The correct answer is **Only 2**

★ Key Points

- A connector is a thing that connects 2 parts of a sentence.
- In the given sentences, a **weather forecast predicts heavy snowfall whereas the day ends up being sunny and warm.**

- So, the **connector which can connect these 2 will be 'however'** which is used to *introduce a statement that is in contrast to the previous statement.*
- The **first sentence** sets us up to think that the weather will be damp and gloomy while the **second sentence contradicts this expectation.**
- So, the **correct answer** is ' **however** '.

Thus, the **correct sentence** will be: *'The weather forecast predicted heavy snowfall however, the whole day was rather sunny and hot.'*

★ Additional Information

- The different types of connectors in English are: **coordinating, correlative, subordinating, causative, conjunctive adverbs and prepositional phrases, etc.**
- ' **However** ' is a conjunctive connector.
- ' **Consequently** ' is a causative connector.
 - **Example:***The food was spoilt due to the lack of electricity, **consequently** it had to be thrown away.*
- ' **Moreover** ' is an additive connector.
 - **Example:***The house was in the right locality, **moreover** the price was in Ashley's budget.*

70. **Answer: c**

Explanation:

The correct answer is '**A-ii-G.**'

★ Key Points

- Let's see the usages of the given connectors-
 - **Yet** → used with negative verbs or in questions for talking about something that has not happened but that you expect to happen.
 - **Example-**
 - *He is my worst enemy, and **yet**, I admire him as the wisest man in the world.*
 - **Because** → for the reason that.

- **Example -**
 - *The journey was quite quick **because** the road was clear.*
- **For** → as a conjunction is used to connect two clauses.
- **Example -**
 - *I told her to leave, **for** I was very tired.*
- **So the correct sentence is** → *"I didn't tell her that he was late because I didn't want to cause her any alarm."*

71. **Answer: b**

Explanation:

The correct answer is 'A-ii-F.'

★ **Key Points**

- Let's see the meaning of the given connectors-
 - **So** → It is a conjunction which means 'with the result that; therefore; with the purpose that in order to.'
 - **Example -**
 - *She felt very tired **so** she went to bed early.*
 - **Although** → in spite of the fact that.
 - **Example -**
 - *The wood appeared to be cherry, and **although** it could use a coat of wax, it still had a deep luster.*
 - **Still** → It is a conjunction that used to show the opposite result.
 - **Example -**
 - *She was facing some technical issue with her laptop **still** she managed to complete all her assignments.*
- So according to the meaning of the connectors, the correct sentence is: *"It was recognized as the flu, **although** records describe conditions which were highly likely to have been polio."*

72. Answer: e

Explanation:

The correct answer is 'Will you help me wave this table to the back room?'

★ Key Points

- The meaning of the word 'wave' is 'move one's hand to and fro in greeting or as a signal'.
 - For example, "He waved to me from the train".
- In sentence 5, the given word is incorrectly used as the table cannot be waved.
- The table can be moved from one place to another place.
- Therefore, option 5 is the correct answer.

73. Answer: e

Explanation:

The correct answer is 'She wasn't able to be present, so I signed the letter in her lieu.'

★ Key Points

- The meaning of the word 'lieu' is 'instead (of)'.
 - For example, They gave me some books in lieu of payment for the work I did.
- In sentence 5, the given word doesn't fit correctly as it is talking about doing something on behalf of someone.
- Also, the word 'lieu' is always preceded by 'in' and followed by 'of'.
- From the given explanation, we can understand that the given word is incorrectly used in sentence 5.
- Therefore, option 5 is the correct answer.

74. Answer: c

Explanation:

The correct answer is '3' i.e. this sentence is incorrect.

★ Key Points

- The meaning of the given word '**evidence**' is- *anything that you see, experience, read, or are told that causes you to believe that something is true or has really happened.*
- *In Sentence 3, the usage of '**evidence**' as a verb is incorrect we need a main verb after the auxiliary verb instead, '**evidence**' we can use '**contract**' that means 'you legally agree to do it for them or for them to do it for you.'*
- So the correct answer is **Option 3.**

75. Answer: e

Explanation:

The correct answer is '5' i.e. this sentence is incorrect.

★ Key Points

- The meaning of the word '**JUBILANT**' is- **Feel extremely happy because of success.**
- The first four sentences are written in a positive way hence '**jubilant**' meaning is contextually correct.
- The fifth sentence is contextually incorrect because '**cemetery**' is a place where a large burial grounds. Hence, It is not a jubilant place instead it is a gloomy place.
- So the correct answer is **Option 5.**

76. Answer: b

Explanation:

The correct answer is **option 2 i.e. entwine.**

★ Key Points

- Let's check the meaning of the given words-
 - weave- to make cloth by repeatedly crossing a single thread through two sets of long threads on a loom (= special frame)
 - untwine- to separate the various strands of something
 - *entwine*- to twist something together or around something
 - uncoil- straighten or cause to straighten from a coiled or curled position
 - disentangle- to separate things that have become joined
- According to the given meanings, only the *entwine* word shows the same sense.

77. Answer: b

Explanation:

The correct answer is **option 2.**

★ Key Points

- According to the line of the passage, "I'm supposed to be the one with all the wisdom, and here this little kid was smarter than me!" **Ananse was so angry about this that he threw the clay pot down out of the tree.** It smashed into pieces on the ground. Of course, all the wisdom got out and flew away all over the world.
- By the above-mentioned bold line, we can get our right answer i.e. By the anger of the spider.

78. Answer: a

Explanation:

The correct answer is **option 1**.

★ Key Points

- The whole story roams around the spider Ananse that he got a clay pot of wisdom. And what he does with the pot is the story. So the main part of the story is the spider and the pot.
- So **option 1** will be the right choice to give it a suitable title.

79. Answer: d

Explanation:

The correct answer is **option 4 i.e. God of thunder**.

★ Key Points

- According to the line of the passage, Nyame, the God of heaven had all the wisdom.
- By the bold line, the right answer is clear.

80. Answer: d

Explanation:

The correct answer is '**water vapor is decomposed by sunlight**.'

★ Key Points

- The fourth sentence of the first paragraph says " *Gradually **water vapor is decomposed by sunlight**, leaving hydrogen and oxygen lost to outer space*".
- From the above sentence, we can say that the statement "water vapor is decomposed by sunlight" is correct.

Hence, the only possible answer is option 4 .

81. Answer: a

Explanation:

The correct answer is '**Chandrayaan mission** .'

★ Key Points

- The first sentence of the first paragraph says "***Lunar water** is water that is present on the Moon*" and the second sentence of the first paragraph says "***It was first discovered by ISRO through its Chandrayaan mission.***"
- From the above sentences, we can say that the first mission to discover the lunar water was the Chandrayaan mission.

Hence, the only possible answer is option 1 .

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82. Answer: d

Explanation:

The correct answer is ' Both 2 and 3 .'

★ Key Points

- The second sentence of the second paragraph says " *If future investigations find the quantities to be particularly large, water ice could be mined to provide liquid water for drinking and plant propagation, and **the water could also be split into hydrogen and oxygen by solar panel-equipped electric power***

stations or a nuclear generator , providing breathable oxygen as well as the components of rocket fuel."

- From the above sentence, we can say that the water could also be split into hydrogen and oxygen by solar panel-equipped electric power stations and by the nuclear generator.

Hence, the only possible answer is option 4 .

83. Answer: d

Explanation:

The correct answer is '**Both 1 and 3** .'

★ Key Points

- The last sentence of the first paragraph says " *The search for the presence of lunar water has attracted considerable attention and motivated several recent lunar missions, largely because of **water's usefulness in rendering long-term lunar habitation feasible***" and the first sentence of the second paragraph says " *The **presence of large quantities of water on the Moon would be an important factor in rendering lunar habitation cost-effective** since transporting water (or hydrogen and oxygen) from Earth would be prohibitively expensive ."*
- From the above sentences, we can say that the discovery of water is important on the Moon's surface in rendering long-term lunar habitation feasible and in rendering lunar habitation cost-effective.

Hence, the only possible answer is option 4 .

84. Answer: a

Explanation:

The correct answer is 'Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids.'

★ Key Points

- The second last sentence of the first paragraph says "*Water may have been delivered to the moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced in situ by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals*".
- From the above sentence, we can say that the theory behind the presence of water on the moon's surface is given in the first option.

Hence, the only possible answer is option 1.

85. Answer: b

Explanation:

The correct answer is 'in the original place.'

★ Key Points

- The second last sentence of the first paragraph says "*Water may have been delivered to the Moon over geological timescales by the regular bombardment of water-bearing comets, asteroids, and meteoroids or continuously produced **in situ** by the hydrogen ions (protons) of the solar wind impacting oxygen-bearing minerals*".
- The word '**in situ**' means **in the natural or original position or place**.
 - **For example,** *The archaeologists were able to date the vase because it was found **in situ**.*
- From the given options, we can say that the meaning of '**in situ**' is **in its original place**.

Hence, the only possible answer is option 2.

★ Important Points

- Given below are the points, we should keep in mind while solving questions of reading comprehension-
 - Identify the purpose of reading . Try to go through the question first then the passage so that you can just focus on the things you need to look at in the passage .
 - Anticipate what may lie ahead. Look out for specific information in the passage.
 - Read the passage quickly to get a general idea of meaning or to find specific information , e.g. figures or names .

86. Answer: e

Explanation:

The correct answer is F.

★ Key Points

- The given paragraph is about **Urbanization**.
- Sentence **F** talks about the meaning of the word urbanization and introduces the topic of the paragraph.
- Sentence **A** is a continuation of sentence F as it talks more about the meaning of urbanization as it is also an increase in the proportion of people living in urban areas.
- Sentence **B** starts with **furthermore** that is used to continue the previous sentence i.e **A**.
- Sentence **C** is a continuation of sentence **B** as it starts with **moreover** that is also used to continue the previous sentence. Both sentence B and C are related as they explain that urban areas have become a popular trend because they provide a better standard of living.
- Sentence **E** is at the correct place so it follows sentence C.
- After explaining the developing and developed world will be urbanized, sentence **D** talks about how a fully urbanized world would look.

- So, sentence F should be the first sentence after rearranging the paragraph as it introduces the topic of the paragraph i.e., urbanization.
- The correct sequence is **FABCED**.

★ Additional Information

- The word furthermore means in addition to what preceded. **Furthermore** is used when there is a need only to add one more reason to those before-mentioned.
 - For example, *It was also a highly desirable political end. **Furthermore**, it gave the English a door into France.*

87. Answer: b

Explanation:

The correct answer is **A**.

★ Key Points

- The given paragraph is about Urbanization .
- Sentence F talks about the meaning of the word urbanization and introduces the topic of the paragraph.
- Sentence A is a continuation of sentence F as it talks more about the meaning of urbanization as it is also an increase in the proportion of people living in urban areas.
- Sentence B starts with furthermore that is used to continue the previous sentence i.e A.
- Sentence C is a continuation of sentence B as it starts with moreover that is also used to continue the previous sentence. Both sentence B and C are related as they explain that urban areas have become a popular trend because they provide a better standard of living.
- Sentence E is at the correct place so it follows sentence C.
- After explaining the developing and developed world will be urbanized, sentence D talks about how a fully urbanized world would look.

- So, sentence A should be the second sentence after rearranging the paragraph as it continues sentence F.
- The correct sequence is FABCED .

★ Additional Information

- The word **moreover** means as a further matter; besides. **Moreover** is used to introduce a piece of information that adds to or supports the previous statement.
 - For example, *There was a man immediately behind her. **Moreover**, he was observing her strangely.*

88. Answer: d

Explanation:

The correct answer is B.

★ Key Points

- The given paragraph is about Urbanization .
- Sentence F talks about the meaning of the word urbanization and introduces the topic of the paragraph.
- Sentence A is a continuation of sentence F as it talks more about the meaning of urbanization as it is also an increase in the proportion of people living in urban areas.
- Sentence B starts with **furthermore** that is used to continue the previous sentence i.e A.
- Sentence C is a continuation of sentence B as it starts with **moreover** that is also used to continue the previous sentence. Both sentence B and C are related as they explain that urban areas have become a popular trend because they provide a better standard of living.
- Sentence E is at the correct place so it follows sentence C.
- After explaining the developing and developed world will be urbanized, sentence D talks about how a fully urbanized world would look.

- So, sentence B should be the third sentence after rearranging the paragraph as it further adds on why people living in urban areas have increased that is because it has become a popular trend.
- The correct sequence is FABCED .

★ Additional Information

- The word **contemporary** means living or occurring at the same time; modern or present-day.
 - For example, *The event was recorded by a **contemporary** historian.*

89. Answer: e

Explanation:

The correct answer is C.

★ Key Points

- The given paragraph is about Urbanization .
- Sentence F talks about the meaning of the word urbanization and introduces the topic of the paragraph.
- Sentence A is a continuation of sentence F as it talks more about the meaning of urbanization as it is also an increase in the proportion of people living in urban areas.
- Sentence B starts with furthermore that is used to continue the previous sentence i.e A.
- Sentence C is a continuation of sentence B as it starts with moreover that is also used to continue the previous sentence. Both sentence B and C are related as they explain that urban areas have become a popular trend because they provide a better standard of living.
- Sentence E is at the correct place so it follows sentence C.
- After explaining the developing and developed world will be urbanized, sentence D talks about how a fully urbanized world would look.
- So, sentence C should be the fourth sentence after rearranging the paragraph as it adds more to the reason why urbanization has become a

popular trend that is due to it having better living standards.

- The correct sequence is FABCED .

★ Additional Information

- **Standard of living** is often referred to as the level of wealth, comfort, material goods and necessities available to a certain class or area. All these services improve the level of comfort for residents.

90. Answer: a

Explanation:

The correct answer is D.

★ Key Points

- The given paragraph is about Urbanization .
- Sentence F talks about the meaning of the word urbanization and introduces the topic of the paragraph.
- Sentence A is a continuation of sentence F as it talks more about the meaning of urbanization as it is also an increase in the proportion of people living in urban areas.
- Sentence B starts with furthermore that is used to continue the previous sentence i.e A.
- Sentence C is a continuation of sentence B as it starts with moreover that is also used to continue the previous sentence. Both sentence B and C are related as they explain that urban areas have become a popular trend because they provide a better standard of living.
- Sentence E is at the correct place so it follows sentence C.
- After explaining the developing and developed world will be urbanized, sentence D talks about how a fully urbanized world would look.
- So, sentence D should be the sixth sentence after rearranging the paragraph as it continues sentence E.
- The correct sequence is FABCED .

★ Additional Information

- The word trend means a general direction in which something is developing or changing. A popular trend is a trend that is hip or popular at a certain point in time.

91. Answer: c

Explanation:

Let the number of workers who arrived early = $5x$

The number of workers who left early = 20% of $5x = x$

The number of workers who left late = 40% of $5x = 2x$

The number of workers who left on time = $5x - 3x = 2x$

Let the number of workers who arrived late at the office = $4z$

The number of workers who left late = 50% of $4z = 2z$

The number of workers who left on time = 25% of $4z = z$

The number of workers who left early = $4z - 3z = z$

Let the number of workers who arrived on time = $8y$

The number of workers who left early = 37.5% of $8y = 3y$ = The number of workers who left late

The number of workers who left on time = $8y - 6y = 2y$

	Arrived	Left
Early	$5x$	$x + 3y + z$
On time	$8y$	$2x + 2y + z$
Late	$4z$	$2x + 3y + 2z$

Workers arrived early and left on time, $5x = 2x + 2y + z$

$$3x = 2y + z$$

Number of workers who didn't arrive on time = $x + 3y + z + 2x + 2z + 3y = 144$

$$3x + 6y + 3z = 144$$

$$3x + 3(z + 2y) = 144$$

Substituting $3(3x) = 3(2y + z)$

$$3x + 9x = 144$$

$$12x = 144$$

$$x = 12$$

$$x + 3y + z = 4z + 39$$

Subs $x = 12$ in $x + 3y + z = 4z + 39$ and rearrange it

$$3y - 3z = 27$$

$$\text{Subs } 3z = 3(3x - 2y)$$

$$3y - 9x + 6y = 27$$

$$y - x = 3$$

$$y = 15$$

$$3y - 3z = 27$$

$$y - z = 9$$

Subs $y = 15$ in $y - z = 9$

$$z = 6$$

	Arrived	Left
Early	60	63
On time	120	60
Late	24	81

The total number of workers who left early = $x + 3y + z = 12 + 45 + 6 = 63$

The total number of workers who left late = $2x + 3y + 2z = 24 + 45 + 12 = 81$

The required difference = $81 - 63 = 18$

92. Answer: a

Explanation:

Let the number of workers who arrived early = $5x$

The number of workers who left early = 20% of $5x = x$

The number of workers who left late = 40% of $5x = 2x$

The number of workers who left on time = $5x - 3x = 2x$

Let the number of workers who arrived late at the office = $4z$

The number of workers who left late = 50% of $4z = 2z$

The number of workers who left on time = 25% of $4z = z$

The number of workers who left early = $4z - 3z = z$

Let the number of workers who arrived on time = $8y$

The number of workers who left early = 37.5% of $8y = 3y =$ The number of workers who left late

The number of workers who left on time = $8y - 6y = 2y$

	Arrived	Left
Early	$5x$	$x + 3y + z$
On time	$8y$	$2x + 2y + z$
Late	$4z$	$2x + 3y + 2z$

Workers arrived early and left on time, $5x = 2x + 2y + z$

$$3x = 2y + z$$

Number of workers who didn't arrive on time = $x + 3y + z + 2x + 2z + 3y = 144$

$$3x + 6y + 3z = 144$$

$$3x + 3(z + 2y) = 144$$

Substituting $3(3x) = 3(2y + z)$

$$3x + 9x = 144$$

$$12x = 144$$

$$x = 12$$

$$x + 3y + z = 4z + 39$$

Subs $x = 12$ in $x + 3y + z = 4z + 39$ and rearrange it

$$3y - 3z = 27$$

Subs $3z = 3(3x - 2y)$

$$3y - 9x + 6y = 27$$

$$y - x = 3$$

$$y = 15$$

$$3y - 3z = 27$$

$$y - z = 9$$

Subs $y = 15$ in $y - z = 9$

$$z = 6$$

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	Arrived	Left
Early	60	63
On time	120	60
Late	24	81

The total number of workers working = $5x + 8y + 4z = 60 + 120 + 24 = 204$

93. Answer: d

Explanation:

Let the number of workers who arrived early = $5x$

The number of workers who left early = 20% of $5x = x$

The number of workers who left late = 40% of $5x = 2x$

The number of workers who left on time = $5x - 3x = 2x$

Let the number of workers who arrived late at the office = $4z$

The number of workers who left late = 50% of $4z = 2z$

The number of workers who left on time = 25% of $4z = z$

The number of workers who left early = $4z - 3z = z$

Let the number of workers who arrived on time = $8y$

The number of workers who left early = 37.5% of $8y = 3y$ = The number of workers who left late

The number of workers who left on time = $8y - 6y = 2y$

	Arrived	Left
Early	$5x$	$x + 3y + z$
On time	$8y$	$2x + 2y + z$
Late	$4z$	$2x + 3y + 2z$

Workers arrived early and left on time, $5x = 2x + 2y + z$

$$3x = 2y + z$$

Number of workers who didn't arrive on time = $x + 3y + z + 2x + 2z + 3y = 144$

$$3x + 6y + 3z = 144$$

$$3x + 3(z + 2y) = 144$$

Substituting $3(3x) = 3(2y + z)$

$$3x + 9x = 144$$

$$12x = 144$$

$$x = 12$$

$$x + 3y + z = 4z + 39$$

Subs $x = 12$ in $x + 3y + z = 4z + 39$ and rearrange it

$$3y - 3z = 27$$

$$\text{Subs } 3z = 3(3x - 2y)$$

$$3y - 9x + 6y = 27$$

$$y - x = 3$$

$$y = 15$$

$$3y - 3z = 27$$

$$y - z = 9$$

$$\text{Subs } y = 15 \text{ in } y - z = 9$$

$$z = 6$$

	Arrived	Left
Early	60	63
On time	120	60
Late	24	81

The respective ratio = $60 : 120 : 24 = 5 : 10 : 2$

94. Answer: a

Explanation:

Let the number of workers who arrived early = $5x$

The number of workers who left early = 20% of $5x = x$

The number of workers who left late = 40% of $5x = 2x$

The number of workers who left on time = $5x - 3x = 2x$

Let the number of workers who arrived late at the office = $4z$

The number of workers who left late = 50% of $4z = 2z$

The number of workers who left on time 25% of $4z = z$

The number of workers who left early = $4z - 3z = z$

Let the number of workers who arrived on time = $8y$

The number of workers who left early = 37.5% of $8y = 3y$ = The number of workers who left late

The number of workers who left on time = $8y - 6y = 2y$

	Arrived	Left
Early	$5x$	$x + 3y + z$
On time	$8y$	$2x + 2y + z$
Late	$4z$	$2x + 3y + 2z$

Workers arrived early and left on time, $5x = 2x + 2y + z$

$$3x = 2y + z$$

Number of workers who didn't arrive on time = $x + 3y + z + 2x + 2z + 3y = 144$

$$3x + 6y + 3z = 144$$

$$3x + 3(z + 2y) = 144$$

$$\text{Subs } 3(3x) = 3(2y + z)$$

$$3x + 9x = 144$$

$$12x = 144$$

$$x = 12$$

$$x + 3y + z = 4z + 39$$

Subs $x = 12$ in $x + 3y + z = 4z + 39$ and rearrange it

$$3y - 3z = 27$$

$$\text{Subs } 3z = 3(3x - 2y)$$

$$3y - 9x + 6y = 27$$

$$y - x = 3$$

$$y = 15$$

$$3y - 3z = 27$$

$$y - z = 9$$

Subs $y = 15$ in $y - z = 9$

$$z = 6$$

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	Arrived	Left
Early	60	63
On time	120	60
Late	24	81

Total workers = 204

Total number of workers was on leave on the medical ground = 25% of 204 = 51

Remaining = $204 - 51 = 153$

Total number of workers was on leave for personal reason = 33.33% of 153 = 51

Number of employees present on that day = $153 - 51 = 102$

95. Answer: b

Explanation:

Let the number of workers who arrived early = $5x$

The number of workers who left early = 20% of $5x = x$

The number of workers who left late = 40% of $5x = 2x$

The number of workers who left on time = $5x - 3x = 2x$

Let the number of workers who arrived late at the office = $4z$

The number of workers who left late = 50% of $4z = 2z$

The number of workers who left on time 25% of $4z = z$

The number of workers who left early = $4z - 3z = z$

Let the number of workers who arrived on time = $8y$

The number of workers who left early = 37.5% of $8y = 3y$ = The number of workers who left late

The number of workers who left on time = $8y - 6y = 2y$

	Arrived	Left
Early	$5x$	$x + 3y + z$
On time	$8y$	$2x + 2y + z$
Late	$4z$	$2x + 3y + 2z$

Workers arrived early and left on time, $5x = 2x + 2y + z$

$$3x = 2y + z$$

Number of workers who didn't arrive on time = $x + 3y + z + 2x + 2z + 3y = 144$

$$3x + 6y + 3z = 144$$

$$3x + 3(z + 2y) = 144$$

$$\text{Subs } 3(3x) = 3(2y + z)$$

$$3x + 9x = 144$$

$$12x = 144$$

$$x = 12$$

$$x + 3y + z = 4z + 39$$

Subs $x = 12$ in $x + 3y + z = 4z + 39$ and rearrange it

$$3y - 3z = 27$$

$$\text{Subs } 3z = 3(3x - 2y)$$

$$3y - 9x + 6y = 27$$

$$y - x = 3$$

$$y = 15$$

$$3y - 3z = 27$$

$$y - z = 9$$

$$\text{Subs } y = 15 \text{ in } y - z = 9$$

$$z = 6$$

	Arrived	Left
Early	60	63
On time	120	60
Late	24	81

Number of workers who left on time = 60

Number of employees who didn't leave on time = $204 - 60 = 144$

$$\text{Required \%} = 84 \times \frac{100}{144} = 58.33$$

96. Answer: a

Explanation:

Rules of Approximation:

1. If a number has digits to the right of the decimal less than 5, then just drop the digits to the right of the decimal. The number so obtained will be the approximated value.

2. If a number has digits to the right of the decimal more than 5, then just drop the digits to the right of the decimal and raise the remaining number by '1'. The number so obtained will be the approximated value.

Concept Used:

Follow BODMAS rule to solve this question, as per the order given below,

B	Brackets in order {}, (), []	ब्रैकेट {}, (), [] क्रम में
O	of	का
D	Division (÷)	विभाजन (÷)
M	Multiplication (×)	गुणा (×)
A	Addition (+)	जोड़ (+)
S	Subtraction (-)	घटाव (-)

Calculation:

$$\Rightarrow (6.97)^3 + (? \times 12) - (5.03)^3 = [(17.98)^2 \times 5.94] + 2.08$$

$$\Rightarrow (7)^3 + (? \times 12) - 5^3 = [(18)^2 \times 6] + 2$$

$$\Rightarrow (7)^3 + (? \times 12) - 5^3 = [324 \times 6] + 2$$

$$\Rightarrow (7)^3 + (? \times 12) - 5^3 = 1944 + 2$$

$$\Rightarrow 343 + (? \times 12) - 125 = 1944 + 2$$

$$\Rightarrow (? \times 12) = 1944 + 2 + 125 - 343$$

$$\Rightarrow (? \times 12) = 2071 - 343$$

$$\Rightarrow (? \times 12) = 1728$$

$$\Rightarrow ? = 1728/12$$

$$\Rightarrow ? = 144$$

\therefore The value of ? is 144

97. Answer: d

Explanation:

Follow BODMAS rule to solve this question, as per the order given below.

Step-1: Parts of an equation enclosed in 'Brackets' must be solved first, and following BODMAS rule in the bracket -

Step-2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step-3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step-4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, we can write these values to their nearest integers.

Given expression is

$$9.999\% \text{ of } 330.01 + (100/6.99) \% \text{ of } 1/7.01 \text{ of } 343.01 = 50 - ?$$

$$\Rightarrow 10\% \text{ of } 330 + (100 / 7) \% \text{ of } 1 / 7 \text{ of } 343 = 50 - ?$$

$$\Rightarrow 33 + 1 / 49 \text{ of } 343 = 50 - ?$$

$$\Rightarrow 33 + 7 = 50 - ?$$

$$\Rightarrow 40 = 50 - ?$$

$$\therefore ? = 10$$

98. Answer: d

Explanation:

Follow BODMAS rule to solve this question, as per the order given below.

Step - 1: Parts of an equation enclosed in 'Brackets' must be solved first, and following BODMAS rule in the bracket -

Step - 2: Any mathematical 'Of' or 'Exponent' must be solved next.

Step - 3: Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated.

Step - 4: Last but not the least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

Since, we need to find out the approximate value, we can write these values to their nearest integers.

Given expression is

$$44.98\% \text{ of } 399.99 + 24.97\% \text{ of } 499.99 = ?^3 + 39.99\% \text{ of } 449.99$$

$$\Rightarrow 45\% \text{ of } 400 + 25\% \text{ of } 500 = ?^3 + 40\% \text{ of } 450$$

$$\Rightarrow 180 + 125 = ?^3 + 180$$

$$\Rightarrow 125 = ?^3$$

$$\Rightarrow 5 = ?$$

99. Answer: e

Explanation:

Calculations:

From I,

$$5x^2 + 33x + 40 = 0$$

$$\Rightarrow 5x^2 + 25x + 8x + 40 = 0$$

$$\Rightarrow 5x(x + 5) + 8(x + 5) = 0$$

$$\Rightarrow (5x + 8)(x + 5) = 0$$

Taking,

$$\Rightarrow 5x + 8 = 0 \text{ or } x + 5 = 0$$

$$\Rightarrow x = -8/5 \text{ or } x = -5$$

From II,

$$2y^2 + 7y - 15 = 0$$

$$\Rightarrow 2y^2 + 10y - 3y - 15 = 0$$

$$\Rightarrow 2y(y + 5) - 3(y + 5) = 0$$

$$\Rightarrow (2y - 3)(y + 5) = 0$$

Taking,

$$\Rightarrow 2y - 3 = 0 \text{ or } y + 5 = 0$$

$$\Rightarrow y = 3/2 \text{ or } y = -5$$

Comparison between x and y (via Tabulation):

x	Y	Relation
$-8/5$	$3/2$	$x < y$
-5	$3/2$	$x < y$
$-8/5$	-5	$x > y$
-5	-5	$x = y$

∴ No relation in x and y or $x = y$.

100. Answer: a

Explanation:

Amita makes a mistake in constant term and gets the product of roots incorrect but sum of roots is correct

$$\therefore \text{Sum, } s = 5 + 6 = 11$$

Sonakshi makes a mistake in the coefficient of the first degree term and gets the sum of roots incorrect but product of roots correct

$$\therefore \text{Product, } p = (-3)(-8) = 24$$

$$\therefore \text{Required equation is } x^2 - sx + p = 0$$

$$\text{i.e. } x^2 - 11x + 24 = 0$$

101. Answer: b

Explanation:

$$I. x^2 - 1.1x + 0.18 = 0$$

$$\Rightarrow x^2 - 0.2x - 0.9x + 0.18 = 0$$

$$\Rightarrow x(x - 0.2) - 0.9(x - 0.2) = 0$$

$$\Rightarrow (x - 0.2)(x - 0.9) = 0$$

$$\Rightarrow x = 0.2 \text{ and } 0.9 \quad \text{----- (1)}$$

$$II. y^2 - 3.5y + 2.5 = 0$$

$$\Rightarrow y^2 - y - 2.5y + 2.5 = 0$$

$$\Rightarrow y(y - 1) - 2.5(y - 1) = 0$$

$$\Rightarrow (y - 1)(y - 2.5) = 0$$

$$\Rightarrow y = 1 \text{ and } 2.5 \quad \text{----- (2)}$$

From (1) and (2)

$$\therefore x < y$$

102. Answer: a

Explanation:

$$\text{Total sixes hit by all players across all format} = 1482/6 = 247$$

$$\text{Sixes hit in T20 match} = 247 - 81 - 75 = 91$$

$$\text{Sixes hit by Finch in T20} = 91 - (20 + 18 + 15 + 20) = 18$$

Sixes hit by Finch in all format = $372/6 = 62$

Ratio of sixes hit by Finch in Test and one day match = 9 : 2

Sixes hit by Finch in Test = $(62 - 18) \times 9/11 = 36$

Sixes hit by Finch in One day = $62 - (18 + 36) = 8$

Total sixes hit by Gayle across all format = $354/6 = 59$

Total sixes hit by Dhoni across all format = $270/6 = 45$

Sixes hit by Dhoni in Test match = $45 - 20 - 10 = 15$

Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	15	10	45	270
Pollard	18	-	-	-	-
Gayle	15	-	-	59	354
Hardik	20	10		-	-
Finch	18	36	8	62	372
Total	91	81	75	247	1482

Required Ratio = 18 : 36 : 8

$$= 9 : 18 : 4$$

103. Answer: b

Explanation:

$$\text{Total sixes hit by all players across all format} = 1482/6 = 247$$

$$\text{Sixes hit in T20 match} = 247 - 81 - 75 = 91$$

$$\text{Sixes hit by Finch in T20} = 91 - (20 + 18 + 15 + 20) = 18$$

$$\text{Sixes hit by Finch in all format} = 372/6 = 62$$

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$$\text{Sixes hit by Dhoni in Test match} = 45 - 20 - 10 = 15$$

Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	15	10	45	270
Pollard	18	-	-	-	-
Gayle	15	-	-	59	354
Hardik	20	10	-	-	-
Finch	18	36	8	62	372
Total	91	81	75	247	1482

Sixes hit by Gayle in Test match = 10

Sixes hit by Gayle in One day match = $59 - 15 - 10 = 34$

Sixes hit by Pollard in Test match = $81 - 15 - 10 - 10 - 36 = 10$

Required ratio = 10 : 34

= 5 : 17

104. Answer: c

Explanation:

Total sixes hit by all players across all format = $1482/6 = 247$

Sixes hit in T20 match = $247 - 81 - 75 = 91$

Sixes hit by Finch in T20 = $91 - (20 + 18 + 15 + 20) = 18$

Sixes hit by Finch in all format = $372/6 = 62$

Ratio of sixes hit by Finch in Test and one day match = $9 : 2$

Sixes hit by Finch in Test = $(62 - 18) \times 9/11 = 36$

Sixes hit by Finch in One day = $62 - (18 + 36) = 8$

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Total sixes hit by Dhoni across all format = $270/6 = 45$

Sixes hit by Dhoni in Test match = $45 - 20 - 10 = 15$

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Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	15	10	45	270
Pollard	18	-	-	-	-
Gayle	15	-	-	59	354
Hardik	20	10	-	-	-
Finch	18	36	8	62	372
Total	91	81	75	247	1482

Let the total sixes hit by Pollard and Hardik be $4x$ and $5x$ respectively

$$\Rightarrow 45 + 4x + 59 + 5x + 62 = 247$$

$$\Rightarrow 9x = 81$$

$$\Rightarrow x = 9$$

Total sixes hit by Pollard and Hardik is 36 and 45 respectively

Pollard hits 12 sixes in Test match

$$\Rightarrow \text{Sixes hit by Pollard in One day match} = 36 - 18 - 12 = 6$$

$$\Rightarrow \text{Sixes hit by Gayle in Test match} = 81 - 15 - 12 - 10 - 36 = 8$$

\therefore Difference of runs scored only in sixes = $(8 - 6) \times 6 = 12$

105. **Answer: e**

Explanation:

Total sixes hit by all players across all format = $1482/6 = 247$

Sixes hit in T20 match = $247 - 81 - 75 = 91$

Sixes hit by Finch in T20 = $91 - (20 + 18 + 15 + 20) = 18$

Sixes hit by Finch in all format = $372/6 = 62$

Ratio of sixes hit by Finch in Test and one day match = $9 : 2$

Sixes hit by Finch in Test = $(62 - 18) \times 9/11 = 36$

Sixes hit by Finch in One day = $62 - (18 + 36) = 8$

Total sixes hit by Gayle across all format = $354/6 = 59$

Total sixes hit by Dhoni across all format = $270/6 = 45$

Sixes hit by Dhoni in Test match = $45 - 20 - 10 = 15$

Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	15	10	45	270
Pollard	18	-	-	-	-
Gayle	15	-	-	59	354
Hardik	20	10	-	-	-
Finch	18	36	8	62	372
Total	91	81	75	247	1482

Hardik hits 15 sixes in One day,

$$\Rightarrow \text{Runs scored by Hardik} = (20 + 10 + 15) \times 6 = 270$$

$$\Rightarrow \text{Runs scored by Pollard} = 1482 - 270 - 354 - 270 - 372 = 216$$

$$\therefore \text{Required difference} = 354 - 216 = 138$$

106. Answer: d

Explanation:

$$\text{Total sixes hit by all players across all format} = 1482/6 = 247$$

Sixes hit in T20 match = $247 - 81 - 75 = 91$

Sixes hit by Finch in T20 = $91 - (20 + 18 + 15 + 20) = 18$

Sixes hit by Finch in all format = $372/6 = 62$

Ratio of sixes hit by Finch in Test and one day match = $9 : 2$

Sixes hit by Finch in Test = $(62 - 18) \times 9/11 = 36$

Sixes hit by Finch in One day = $62 - (18 + 36) = 8$

Total sixes hit by Gayle across all format = $354/6 = 59$

Total sixes hit by Dhoni across all format = $270/6 = 45$

Sixes hit by Dhoni in Test match = $45 - 20 - 10 = 15$

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Players	T20 match	Test match	One day match	Total sixes	Runs scored in sixes
Dhoni	20	15	10	45	270
Pollard	18	-	-	-	-
Gayle	15	-	-	59	354
Hardik	20	10	-	-	-
Finch	18	36	8	62	372
Total	91	81	75	247	1482

Difference in number of sixes hit by Dhoni in T20 and One day match = $20 - 10 = 10$

Difference in number of sixes hit by Finch in T20 and One day match = $18 - 8 = 10$

Required ratio = $10 : 10 = 1 : 1$

107. Answer: d

Explanation:

GIVEN :

Flour syrup and Sugar syrup in Bowl 1 = $2 : 3$

Another bowl has syrup containing flour syrup and sugar syrup in the ratio 3 : 2

The ratio of flour syrup and sugar syrup in the resultant cocktail become 4 : 5

CONCEPT :

Mixture & Ratio

CALCULATION :

Amount of mixture taken = 10 litres

Amount of Flour syrup = $\frac{2}{5} \times 10 = 4$ litres

Amount of Sugar syrup = $\frac{3}{5} \times 10 = 6$ litres

Ratio of Flour syrup and Sugar syrup in Bowl 2 = 3 : 2

Amount of mixture taken = x litres

Amount of Flour syrup = $\frac{3}{5} \times x = \frac{3x}{5}$ litres

Amount of Sugar syrup = $\frac{2}{5} \times x = \frac{2x}{5}$ litres

Ratio Flour syrup and Sugar syrup in resultant mixture = 4 : 5

Now,

$$(4 + \frac{3x}{5}) / (6 + \frac{2x}{5}) = \frac{4}{5}$$

$$\Rightarrow \frac{(20+3x)}{(30+2x)} = \frac{4}{5}$$

$$\Rightarrow 100 + 15x = 120 + 8x$$

$$\Rightarrow 7x = 20$$

$$\therefore x = 2.86 \text{ litres}$$

108. Answer: c

Explanation:

Expenditure for the first four months of the year = $2600 \times 4 = \text{Rs. } 10,400$

For the next five months, the average monthly expenditure = $(2600 + 400)$ per month

In 5 months, he spent $3000 \times 5 = 15,000$

He spent Rs. 5600 in all during the remaining three months of the year

Total expenditure = $10400 + 15000 + 5600 = 31,000$

Savings = $50000 - 31000 = 19000$

Hence, savings percentage = $(19000/50000) \times 100 = 38\%$

109. Answer: c**Explanation:**

Given:

Amit can complete it in 15 days

Sabir can complete it in 30 days

Raju can complete it in 40 days

They work for 4 days

After accident the efficiency gets reduced

Amit's efficiency became $3/4$ times of its original efficiency

Sabir's efficiency became $3/4$ times of its original efficiency

Raju's efficiency became $2/3$ times of its original efficiency

Formula used:

$$\text{Total Work} = \text{Total Time taken} \times \text{Efficiency}$$

Calculation:

Let total work be x units

$$\text{Amit's efficiency} = x/15 \text{ units}$$

$$\text{Sabir's efficiency} = x/30 \text{ units}$$

$$\text{Raju's efficiency} = x/40 \text{ units}$$

$$\text{Total efficiency of Amit, Sabir and Raju} = (x/15 + x/30 + x/40)$$

$$\Rightarrow \text{Total efficiency of Amit, Sabir and Raju} = 15x/120 \text{ units}$$

They work for 4 days together

$$\text{So, work done in 4 days} = (15x/120) \times 4$$

$$\Rightarrow 15x/30 \text{ units}$$

$$\text{Work remaining} = (x - 15x/30) \text{ units}$$

$$\Rightarrow 15x/30 \text{ units}$$

Now, after accident their efficiency gets reduced

$$\text{So, Reduced efficiency of Amit} = x/15 \times (3/4) = 3x/60 \text{ units}$$

$$\text{Reduced efficiency of Sabir} = x/30 \times (3/4) = x/40 \text{ units}$$

$$\text{Reduced efficiency of Raju} = x/40 \times (2/3) = x/60 \text{ units}$$

$$\text{Total efficiency of Amit, Sabir and Raju} = (3x/60 + x/40 + x/60) \text{ units}$$

$$\Rightarrow 11x/120 \text{ units}$$

$$\text{Time taken to complete remaining work} = 15x/30 \div (11x/120)$$

$$\Rightarrow 60/11 \text{ days}$$

∴ The total time taken to complete the remaining work is 60/11 days

Alternate Solution:

Time taken by Amit = 15 days

Time taken by Sabir = 30 days

Time taken by Raju = 40 days

L.C.M of 15, 30 and 40 = 120 units

Efficiency of Amit = $120/15 = 8$ units

Efficiency of Sabir = $120/30 = 4$ units

Efficiency of Raju = $120/40 = 3$ units

Work done in 4 days = $(8 + 4 + 3) \times 4 = 60$ units

Work remaining = $(120 - 60) = 60$ units

New efficiency of Amit = $8 \times 3/4 = 6$ units

New efficiency of Sabir = $4 \times 3/4 = 3$ units

New efficiency of Raju = $3 \times 2/3 = 2$ units

Total efficiency of Amit, Sabir and Raju = $(6 + 3 + 2)$ units

⇒ 11 units

Time taken to complete remaining work = 60/11 days

∴ The total time taken to complete the remaining work is 60/11 days

110. Answer: d

Explanation:

Given:

Calculation:

Let the number of men, women and children who went on Sunday be $8x$, $7x$, $5x$ respectively.

Let the number of men, women and children who went on Monday be $2y$, $2y$, y respectively.

\therefore According to question

$$8x - 2y = 1200$$

$$\Rightarrow 4x - y = 600 \quad \text{----- (i)}$$

$$5x - y = 850 \quad \text{----- (ii)}$$

\therefore Solving (i) and (ii)

$$x = 250, y = 400$$

$$\text{Number of men, women and children who went on Sunday} = 8x + 7x + 5x = 20x = 20 \times 250 = 5000$$

$$\text{Number of men, women and children who went on Monday} = 2y + 2y + y = 5y = 5 \times 400 = 2000$$

$$\therefore \text{Required percentage} = \{(5000 - 2000)/2000\} \times 100 = 150\%$$

111. Answer: b

Explanation:

Average age of members in the family = 25

Total age = 2×25 (couple only)

= 50 years

According to the question,

$$3x + 2x = 50$$

$$\Rightarrow x = 10$$

Age of male = 30 and Female = 20 years

After entry of 3 more members.

$$\text{New average} = 25 \times 140/100$$

$$= 35 \text{ years}$$

$$\text{Total age of 5 members} = 35 \times 5 = 175 \text{ years}$$

$$\text{Age of New members} = 175 - 50 = 125 \text{ years}$$

According to the question,

Age of new man included is 45 years, hence the age of new female member = 80 years

$$\text{Sum of ages of men} = 30 + 45 = 75 \text{ years}$$

Required percentage,

$$\text{Sum of ages of women} = 20 + 80 = 100 \text{ years}$$

$$75 = 100 \times \frac{y}{100}$$

$$y = 75\%$$

112. Answer: a

Explanation:

Quantity 1:

B can do a work in 15 days.

Wage received by B = Rs.2520

B + C work together for 5 days

Calculation:

Portion of work done by B in 5 days = $5/15 = 1/3$

Remaining work = $1 - (1/3) = 2/3$.

Work done by C = $2/3$

B does $1/3$ work and receives wage = Rs.2520

Wage received by C = Double of B $2520 \times 2 = \text{Rs.}5040$

Quantity 2:

$17^3 = 4913$

\therefore Quantity I > Quantity II

113. Answer: d

Explanation:

Quantity I:

Selling price = Rs. 2750

Profit percentage = 10%

Cost price of an item = $2750 \times 100/110 = \text{Rs. } 2500$

Marked price of an item = $2500 \times 125/100 = \text{Rs. } 3125$

Discount percentage = 2%

Selling price after 2% discount = $3125 \times 98/100 = \text{Rs. } 3062.5$

$$\text{Profit percentage} = (3062.5 - 2500)/2500 \times 100$$

$$\text{Profit percentage} = 22.5\%$$

Quantity II:

Simple Interest earned by Rohan in 2 years =

$$= (2500 \times A \times 2/100) + (3000 \times 2 \times B/100)$$

$$= 50A + 60B$$

$$\text{Profit he had} = 2320$$

$$\Rightarrow 50A + 60B = 2320$$

$$\Rightarrow 5A + 6B = 232$$

Simple Interest earned by interchanging rates of interest =

$$= (2500 \times B \times 2/100) + (3000 \times 2 \times A/100)$$

$$= 50B + 60A$$

$$\text{Profit he had} = 2300$$

$$\Rightarrow 50B + 60A = 2300$$

$$\Rightarrow 6A + 5B = 230$$

Solving,

$$A = 20\% \text{ and } B = 22\%$$

So, we can observe Quantity I > Quantity II.

114. Answer: c

Explanation:

When X travels 500 m, Y can travel only 450 m (loses by 50 m)

Ratio (of speed) = 10 : 9

When X travels 1000 m, Z only travels 800 m (was given a head start and still loses by 100 m)

Ratio (of speed) = 10 : 8

Speed of Z = $100 / 6.25$ (loses by 6.25 or 100 m) = 16 m / s

Speed of X and Y will be 20 and 18 respectively (ratio of speed has been established)

Time for X to travel 720 m = $720 / 20 = 36$ seconds.

Y at 36 seconds = $36 \times 18 = 648$ m

Quantity A: $720 - 648 = 72$ m

Time for completion for Y = $720 / 18 = 40$ seconds.

Z at end of 40 second = $40 \times 16 = 640$

Quantity B: $(720 - 640 - 8) = 72$ m

Hence, Quantity A = Quantity B or no relationship can be established.

115. Answer: b

Explanation:

Quantity A:

Ratio of speed of boat to speed of stream = 2 : 1

Let Speed of Boat, $S_B = 2a$ and Speed of Stream, $S_S = a$

$T_U + T_D =$ Total time taken

$\Rightarrow \text{Distance/ (Speed of boat downstream)} + \text{Distance/ (Speed of boat upstream)} = \text{Total Time taken}$

$$\Rightarrow 162/ (2a + a) + 162/ (2a - a) = 36$$

$$\Rightarrow 162 \times [1/(2a + a) + 1/(2a - a)] = 36$$

$$\Rightarrow (2a - a + 2a + a)/((2a + a) \times (2a - a)) = 36/162$$

$$\Rightarrow 4a/3a^2 = 2/9$$

$$\Rightarrow 36a = 2 \times 3a^2$$

$$\Rightarrow a = 6 \text{ km/hr}$$

$S_S = 6 \text{ km/hr}$ and $S_B = 12 \text{ km/hr}$

Difference in time = $162/(12 - 6) - 162/(12 + 6) = 27 - 9 = 18 \text{ hours}$

Quantity B:

Let Speed of boat, $S_B = a \text{ km/hr}$

$$T - (T_D + T_U) = 7.5$$

$$\Rightarrow 60/(a - 6) - 30/(a - 6) - 30/(2a - 6) = 7.5$$

$$\Rightarrow 30/(a - 6) - 30/(2a - 6) = 7.5$$

$$\Rightarrow 30[1/(a - 6) - 1/(2a - 6)] = 7.5$$

$$\Rightarrow (2a - 6 - a + 6)/((a - 6)(2a - 6)) = 7.5/30$$

$$\Rightarrow a/((a - 6)(2a - 6)) = 1/4$$

$$\Rightarrow (a - 6)(2a - 6) = 4a$$

$$\Rightarrow 2a^2 - 6a - 12a + 36 = 4a$$

$$\Rightarrow 2a^2 - 22a + 36 = 0$$

$$\Rightarrow a^2 - 11a + 18 = 0$$

$$\Rightarrow a^2 - 2a - 9a + 18 = 0$$

$$\Rightarrow a(a - 2) - 9(a - 2) = 0$$

$$\Rightarrow (a - 2)(a - 9) = 0$$

$$\Rightarrow a = 9 \text{ km/hr and } 2 \text{ km/hr}$$

Speed of boat is always greater than the speed of stream so, $S_B = 9 \text{ km/hr}$

$$\text{Total time taken} = 60/(9 + 6) + 60/(9 - 6) = 4 + 20 = 24 \text{ hours}$$

\therefore Quantity A < Quantity B

116. **Answer: b**

Explanation:

Number of students in each course

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Courses	Number of students
Engineering	7500
M.A(Economics)	15000
B.Com	11250
B.SC	5625
M.SC	5625
Total	45000

Number of students completed the given course

Your Personal Exams Guide

Course	Number of students
Engineering	2625
M.A(Economics)	875
B.Com	8750
B.Sc	3500
M.Sc	5250
Total	21000

Number of students in engineering is $(60/360) \times 45000 = 7500$

Number of students in M.A.(Economics) is $(120/360) \times 45000 = 15000$

Total number of students in Engineering and M.A.(Economics) course together = $7500 + 15000$

$\Rightarrow 22,500$

\therefore The total number of students in Engineering and M.A.(economics) course is 22500.

117. **Answer: c**

Explanation:

Number of students in each course

Courses	Number of students
Engineering	7500
M.A(Economics)	15000
B.Com	11250
B.SC	5625
M.SC	5625
Total	45000

Number of students completed the given course

Course	Number of students
Engineering	2625
M.A(Economics)	875
B.Com	8750
B.Sc	3500
M.Sc	5250
Total	21000

The number of students who completed the M.Sc. course means the total number of students cleared the M.Sc. course.

Total number of students cleared all course together 21000

Number of students completed the M.SC course are $21,000 \times (90/360) = 5250$

\therefore 5250 students completed the M.Sc. course.

118. Answer: b

Explanation:

Number of students in each course

Courses	Number of students
Engineering	7500
M.A(Economics)	15000
B.Com	11250
B.SC	5625
M.SC	5625
Total	45000

Number of students completed the given course

Your Personal Exams Guide

Course	Number of students
Engineering	2625
M.A(Economics)	875
B.Com	8750
B.Sc	3500
M.Sc	5250
Total	21000

Total number of students = 45,000

Number of students who do not clear the courses = 45,000 – 21,000

⇒ 24,000

Required ratio = 45,000 : 24,000

⇒15 : 8

∴ The ratio of the total number of students to the total number of students who do not complete the course is 15 : 8.

119. Answer: a

Explanation:

Number of students in each course

Courses	Number of students
Engineering	7500
M.A(Economics)	15000
B.Com	11250
B.SC	5625
M.SC	5625
Total	45000

Number of students completed the given course

Course	Number of students
Engineering	2625
M.A(Economics)	875
B.Com	8750
B.Sc	3500
M.Sc	5250
Total	21000

Number of students cleared the M.A(Economics) is $(15/360) \times 21000$

⇒ 875

Number of students cleared the B.Com course is $(150/360) \times 21000$

⇒ 8750

Required ratio = 875 : 8750

⇒ 1 : 10

∴ The ratio of students completed the course of M.A(Economics) to students completed the B.Com course is 1 : 10

120. Answer: a

Explanation:

Number of students in each course

Courses	Number of students
Engineering	7500
M.A(Economics)	15000
B.Com	11250
B.SC	5625
M.SC	5625
Total	45000

Number of students completed the given course

Course	Number of students
Engineering	2625
M.A(Economics)	875
B.Com	8750
B.Sc	3500
M.Sc	5250
Total	21000

Number of students who cleared B.Com course is $(150/360) \times 21000$

$\Rightarrow 8750$

Number of students who cleared M.Sc course is $(90/360) \times 21000$

$\Rightarrow 5250$

Total number of students passed in these two courses is $(8750 + 5250)$

$\Rightarrow 14000$

Required average = $(14000)/2$

$\Rightarrow 7000$

\therefore The average of students who cleared B.Com and M.Sc course is 7000.

121. Answer: c

Explanation:

Given:

Total animals in sector I = 65

Total animals in sector II = 40

Total animals in sector III = 45

Animals graze in both sector I and sector II = 19

Animals graze in both sector II and sector III = 21

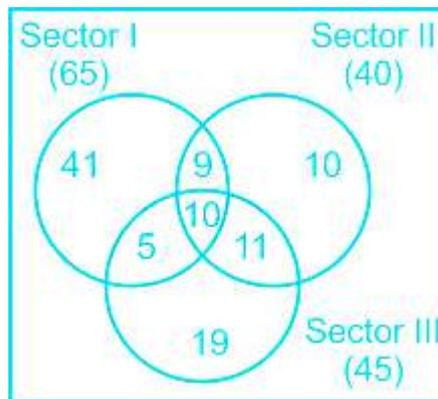
Animals graze in both sector I and sector III = 15

Animals graze in all three sector = 10

Concept:

Venn Diagram

Calculation:



From the Venn diagram it follows:

$$n(\text{sector I}) = 65$$

$$n(\text{sector II}) = 40$$

$$n(\text{sector III}) = 45$$

$$n(I \cap II) = 19$$

$$n(II \cap III) = 21$$

$$n(I \cap III) = 15$$

$$n(I \cap II \cap III) = 10 \quad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Now, we know that –

$$n(I \cup II \cup III) = n(I) + n(II) + n(III) - n(I \cap II) - n(II \cap III) - n(I \cap III) + n(I \cap II \cap III)$$

$$\Rightarrow n(I \cup II \cup III) = 65 + 40 + 45 - 19 - 21 - 15 + 10$$

$$\Rightarrow n(I \cup II \cup III) = 160 - 55$$

$$\Rightarrow n(I \cup II \cup III) = 105$$

\therefore The total number of animals in the zoo is 105.

122. Answer: b

Explanation:

Given:

Total monthly income = Rs. 25000

Percentage savings = 20%

Percentage of total monthly income spent on food = 20%

Percentage of total monthly income spent on travelling = 15%

Percentage of total monthly income spent on rent = 35%

Total number of children = 2

Formula Used:

Total income spent = (Percentage of income spent/100) × total income

Expenditure = Income – Savings

Average amount spent for one child = Total amount spent / Number of children

Calculation:

Total amount saved by Ravish every month = $(20/100) \times 25000 = \text{Rs. } 5000$

Total amount spent on food by Ravish every month = $(20/100) \times 25000 = \text{Rs. } 5000$

Total amount spent on travelling by Ravish every month = $(15/100) \times 25000 = \text{Rs. } 3750$

Total amount spent on rent by Ravish every month = $(35/100) \times 25000 = \text{Rs. } 8750$

Total amount spent on fees = $25000 - (5000 + 5000 + 3750 + 8750) = \text{Rs. } 2500$

Hence, the average amount he spends on the school fees of his one child is:

$$2500/2 = 1250$$

∴ The average amount he spends on the school fees of his one child is Rs. 1250

123. Answer: d

Explanation:

Given:

Total visitors in park A = 100

Total visitors in park C = 150

The number of male adult visitors in park A = 40

The number of male adult visitors in park C = 60

The number of child visitors in park A = 30

The number of child visitors in park C = 40

Calculation:

The number of female adult visitors in park A = $100 - (40 + 30) = 30$

The number of female adult visitors in park C = $150 - (60 + 40) = 50$

\therefore Required percent = $[(30 + 50) / (100 + 150)] \times 100 = (80/250) \times 100 = 32\%$

124. Answer: e

Explanation:

Given:

Number of the total, male adult, and child visitors in park B is 140, 70, and 20 respectively

Calculation:

Number of couple = Number of female adult visitors = $(140 - 70 - 20) = 50$

Number of unmarried male adult visitors = $70 - 50 = 20$

Number of couples having no children = $50 - 20 = 30$

\therefore Required difference = $30 - 20 = 10$

125. Answer: c

Explanation:

Given:

Number of the total, male adult, and child visitors in park A is 100, 40, and 30 respectively

Number of the total, male adult, and child visitors in park B is 140, 70, and 20 respectively

Number of the total, male adult, and child visitors in park C is 150, 60, and 40 respectively

Number of the total, male adult, and child visitors in park D is 120, 50, and 30 respectively

Calculation:

Number of female adult visitors in all parks = $(100 - 40 - 30) + (140 - 70 - 20) + (150 - 60 - 40) + (120 - 50 - 30) = 170$

\therefore Required ratio = $(40 + 60 + 50) : 170 = 150 : 170 = 15 : 17$

126. Answer: a

Explanation:

Given:

The number of child visitors in park A = 30

The number of child visitors in park D = 30

Number of the total, male adult, and child visitors in park B is 140, 70, and 20 respectively

Number of the total, male adult, and child visitors in park C is 150, 60, and 40 respectively

Calculation:

Number of child visitors in park A and D = $30 + 30 = 60$

Number of female adult visitors in park B and C = $(140 - 70 - 20) + (150 - 60 - 40) = 100$

\therefore Required percent = $[(100 - 60)/100] \times 100 = 40\%$

127. Answer: d

Explanation:

Given:

The number of child visitors in park A = 30

The number of child visitors in park B = 20

The number of child visitors in park C = 40

The number of child visitors in park D = 30

Formula based:

Average = (Sum of all terms)/(Number of terms)

Calculation:

\therefore Required average = $(30 + 20 + 40 + 30)/4 = 30$

128. Answer: d

Explanation:

Given:

In a caroms competition involving some boys and ladies, every player needs to play exactly one game with every other player

Concept used:

Permutations and Combinations

Formula used:

$${}^n C_r = \frac{n!}{r!(n-r)!}$$

Calculation:

Let the total number of ladies be w

Total number of boys be m

Number of games in which both players were ladies = 105

$$\Rightarrow {}^w C_2 = 105$$

$$\Rightarrow \frac{w(w-1)}{2} = 105$$

$$\Rightarrow w(w-1) = 210$$

$$\Rightarrow w^2 - w - 210 = 0$$

$$\Rightarrow w = 15$$

Number of games in which both players were boys = 300

$$\Rightarrow {}^m C_2 = 300$$

$$\Rightarrow \frac{m(m-1)}{2} = 300$$

$$\Rightarrow m(m-1) = 600$$

$$\Rightarrow m^2 - m - 600 = 0$$

$$\Rightarrow m = 25$$

\Rightarrow Total number of ladies = 15

\Rightarrow Total number of boys = 25

Required number of games in which one person was a boy and the other person was a lady

$$\Rightarrow {}^{25}C_1 \times {}^{15}C_1$$

$$\Rightarrow 25 \times 15$$

$$\Rightarrow 375$$

∴ The number of games in which one person was a boy and the other person was a lady is 375.

129. Answer: a

Explanation:

Given:

Bank lent out some money to P at 10% C.I calculated half yearly for 1 year

P lent out same money to his friend at 10% C.I calculated annually for 1 year

Loss in this translation to P = Rs. 10

Total profit to be after 1 year = Rs. 190

Formula used:

P = Principal, R = rate of interest and N = time

$$\text{Compound interest} = P(1 + R/100)^N - P$$

Calculation:

$$\text{Amount P has to return to Bank after a year} = P \times (1 + (10/2)/100)^2 = 1.1025P$$

$$\text{Amount P will get from his friend after a year} = P \times (1 + 10/100) = 1.1P$$

$$\Rightarrow 1.1025P - 1.1P = 10$$

$$\Rightarrow P = \text{Rs. } 4000$$

$$\text{Profit} = \text{Rs. } 190$$

$$\text{Amount he has to return to bank} = 1.1025 \times 4000 = \text{Rs. } 4410$$

$$\text{He have to earn} = 4410 + 190 = \text{Rs. } 4600$$

$$\Rightarrow 4600 = 4000 \times (1 + R/100)$$

$$\Rightarrow R = 15\%$$

\therefore Rate of interest should be 15% to earn Rs. 190 profit.

130. Answer: d

Explanation:

Given:

Worker traveled the $\frac{3}{17}$ th part by bus, $\frac{4}{15}$ th part by car, 26.67% by train and 20% by truck, and remaining 115 km by foot.

Concept: In this question consider the total distance as LCM of the denominator of each part and solve the question by ratio method.

Calculation:

As we know $26.67\% = \frac{4}{15}$ and $20\% = \frac{1}{5}$

So the LCM of denominator of all parts (17, 15, 15, 5) is 255

Let the total distance be 255 unit

Now distance travelled by bus, car, train and truck = $(\frac{3}{17}) \times 255 + (\frac{4}{15}) \times 255 + (\frac{4}{15}) \times 255 + (\frac{1}{5}) \times 255 = 45 + 68 + 68 + 51 = 232$ unit

So remaining distance = $255 - 232 = 23$ unit

And 23 unit = 115 km

⇒ 1 unit = 5 km

∴ Total distance = $255 \times 5 = 1275$ km

131. Answer: d

Explanation:

Given :

Total investment of P = $1100 \times 5 + 1500 \times 4 + 2000 \times 3 = \text{Rs. } 17500$

Total investment of Q = $900 \times 5 + 700 \times 4 + 1000 \times 3 = \text{Rs. } 10300$

Total investment of R = $800 \times 4 + 1000 \times ? = \text{Rs. } (3200 + 1000 \times ?)$

Total profit earned = Rs.7400

The profit share of Q = Rs. 2060

Formula used:

Ratio of profit shares = ratio of investment \times time period

Calculation :

Ratio of their profit shares = $17500 : 10300 : (3200 + 1000 \times ?)$

⇒ $2060/7400 = 10300/(17500 + 10300 + 3200 + 1000 \times ?)$

⇒ $31000 + 1000 \times ? = 37000$

⇒ $? = 6$

Total investment of R = $3200 + 1000 \times 6 = \text{Rs. } 9200$

Ratio of their profit shares = $17500 : 10300 : 9200$

= $175 : 103 : 92$

\therefore Profit share of R = $92/370 \times 7400 = \text{Rs. } 1840$

132. Answer: d

Explanation:

Given:

The cost price of calculator is Rs $(x + 120)$.

The selling price of a watch be Rs $5x$.

The watch sold at 25% profit.

The calculator is marked up by 25% above its cost price.

SP of the calculator = Rs 500

Formula Used:

$$CP = \frac{SP}{100 + \text{Gain}\%} \times 100$$

$$MP = CP \times \frac{100 + \text{Markup}\%}{100}$$

Discount = MP - SP

Calculation:

The selling price of a watch be Rs $5x$.

The profit percentage on the watch = 25%

$$\text{The CP of the watch} = \frac{5x}{100 + 25} \times 100 = 4x$$

The cost price of calculator is Rs $(x + 120)$.

The calculator is marked up by 25% above its cost price.

The MP of the calculator

$$MP = (x + 120) \times \frac{100+25}{100}$$

$$\Rightarrow MP = 1.25(x + 120) = 1.25x + 150$$

$$\text{Discount offered on the calculator} = 1.25x + 150 - 500 = 1.25x - 350$$

According to the question,

The cost price of watch is 48 times the discount offered on calculator.

$$\Rightarrow 4x = 48 \times (1.25x - 350)$$

$$\Rightarrow x = 12 \times (1.25x - 350)$$

$$\Rightarrow 14x = 4200$$

$$\Rightarrow x = 300$$

$$\text{Then, MP of the calculator} = 1.25 \times 300 + 150 = 525$$

Therefore, the marked price of the calculator is Rs 525.

133. Answer: b

Explanation:

Calculation:

$$\text{Number of boys} = (1200 \times 9)/16 = 675$$

$$\Rightarrow \text{Number of girls} = 1200 - 675 = 525$$

$$\text{Girls in mechanical} = 23/105 \times 525 = 115$$

$$\text{Girls in electronics} = 16/105 \times 525 = 80$$

$$\Rightarrow \text{Boys in electronics} = 3/2 \times 80 = 120$$

$$\text{Boys in electrical} = 8/27 \times 675 = 200$$

⇒ Girls in electrical = $325 - 200 = 125$

Boys in automobile = $10/21 \times 210 = 100$

⇒ Girls in automobile = $210 - 100 = 110$

Number of girls in Chemical = $525 - (115 + 125 + 110 + 80) = 95$

⇒ Boys in chemical = $95 + 25 = 120$

Number of boys in mechanical = $675 - (200 + 100 + 120 + 120) = 135$

Branch	Boys	Girls	Total
Mechanical	135	115	250
Electrical	200	125	325
Automobile	100	110	210
Chemical	120	95	215
Electronics	120	80	200
Total	675	525	1200

Individual Solution:

Number of girls in Electronics = 80

Number of boys in Electrical = 200

∴ Required percentage = $80/200 \times 100 = 40\%$

134. Answer: b

Explanation:

Calculation:

Number of boys = $(1200 \times 9)/16 = 675$

⇒ Number of girls = $1200 - 675 = 525$

Girls in mechanical = $23/105 \times 525 = 115$

Girls in electronics = $16/105 \times 525 = 80$

⇒ Boys in electronics = $3/2 \times 80 = 120$

Boys in electrical = $8/27 \times 675 = 200$

⇒ Girls in electrical = $325 - 200 = 125$

Boys in automobile = $10/21 \times 210 = 100$

⇒ Girls in automobile = $210 - 100 = 110$

Number of girls in Chemical = $525 - (115 + 125 + 110 + 80) = 95$

⇒ Boys in chemical = $95 + 25 = 120$

Number of boys in mechanical = $675 - (200 + 100 + 120 + 120) = 135$

Branch	Boys	Girls	Total
Mechanical	135	115	250
Electrical	200	125	325
Automobile	100	110	210
Chemical	120	95	215
Electronics	120	80	200
Total	675	525	1200

Individual Solution:

Number of boys in Automobile = 100

Number of girls in Electrical = 125

∴ Required ratio = 100 : 125 = 4 : 5

135. Answer: e

Explanation:

Calculation:

Number of boys = $(1200 \times 9)/16 = 675$

⇒ Number of girls = $1200 - 675 = 525$

Girls in mechanical = $23/105 \times 525 = 115$

Girls in electronics = $16/105 \times 525 = 80$

⇒ Boys in electronics = $3/2 \times 80 = 120$

Boys in electrical = $8/27 \times 675 = 200$

⇒ Girls in electrical = $325 - 200 = 125$

Boys in automobile = $10/21 \times 210 = 100$

⇒ Girls in automobile = $210 - 100 = 110$

Number of girls in Chemical = $525 - (115 + 125 + 110 + 80) = 95$

⇒ Boys in chemical = $95 + 25 = 120$

Number of boys in mechanical = $675 - (200 + 100 + 120 + 120) = 135$

Branch	Boys	Girls	Total
Mechanical	135	115	250
Electrical	200	125	325
Automobile	100	110	210
Chemical	120	95	215
Electronics	120	80	200
Total	675	525	1200

Individual Solution:

Number of boys in Electronics = 120

Number of girls in Mechanical = 115

∴ Required difference = $120 - 115 = 5$

136. Answer: c

Explanation:

Calculation:

Number of boys = $(1200 \times 9)/16 = 675$

⇒ Number of girls = $1200 - 675 = 525$

Girls in mechanical = $23/105 \times 525 = 115$

Girls in electronics = $16/105 \times 525 = 80$

⇒ Boys in electronics = $3/2 \times 80 = 120$

Boys in electrical = $8/27 \times 675 = 200$

⇒ Girls in electrical = $325 - 200 = 125$

Boys in automobile = $10/21 \times 210 = 100$

⇒ Girls in automobile = $210 - 100 = 110$

Number of girls in Chemical = $525 - (115 + 125 + 110 + 80) = 95$

⇒ Boys in chemical = $95 + 25 = 120$

Number of boys in mechanical = $675 - (200 + 100 + 120 + 120) = 135$

Total number of students in Mechanical = $135 + 115 = 250$

Total number of students in Chemical = $120 + 95 = 215$

Branch	Boys	Girls	Total
Mechanical	135	115	250
Electrical	200	125	325
Automobile	100	110	210
Chemical	120	95	215
Electronics	120	80	200
Total	675	525	1200

Individual Solution:

∴ Required number of students = $250 + 215 = 465$

137. Answer: a

Explanation:

Calculation:

Number of boys = $(1200 \times 9)/16 = 675$

⇒ Number of girls = $1200 - 675 = 525$

Girls in mechanical = $23/105 \times 525 = 115$

Girls in electronics = $16/105 \times 525 = 80$

⇒ Boys in electronics = $3/2 \times 80 = 120$

Boys in electrical = $8/27 \times 675 = 200$

⇒ Girls in electrical = $325 - 200 = 125$

Boys in automobile = $10/21 \times 210 = 100$

⇒ Girls in automobile = $210 - 100 = 110$

Number of girls in Chemical = $525 - (115 + 125 + 110 + 80) = 95$

⇒ Boys in chemical = $95 + 25 = 120$

Number of boys in mechanical = $675 - (200 + 100 + 120 + 120) = 135$

Branch	Boys	Girls	Total
Mechanical	135	115	250
Electrical	200	125	325
Automobile	100	110	210
Chemical	120	95	215
Electronics	120	80	200
Total	675	525	1200

Individual Solution:

The highest number of girls is in Electrical i.e. 125

The lowest number of boys is in Automobile i.e. 100

∴ The highest number of girls is in Electrical and the lowest number of boys is in Automobile.

138. Answer: a

Explanation:

Solution:

Concept:

Area of rectangle = length × breadth

Lateral surface area of cuboid = $2 \times (\text{length} + \text{breadth}) \times \text{height}$

Perimeter of square = $4 \times \text{side of the square}$

Given:

Length of rectangle = $(\text{area of rectangle}) / \text{breadth of rectangle}$

breadth = $1/4 \times (\text{area of rectangle})$

Breadth = $1/4 \times 64 = 16\text{cm}$

Length of rectangle = 4cm

side of square = $1/2 \times (\text{Length of rectangle})$

side of square = $1/2 \times 4 = 2\text{cm}$

perimeter of square = $4 \times \text{side of square}$

perimeter of square = $4 \times 2 = 8\text{cm}$

Length of cuboid = $1/2 \times (\text{perimeter of square})$

Length of cuboid = $1/2 \times 8 = 4\text{cm}$

$$\text{breadth of cuboid} = 1/4 \times (\text{perimeter of square})$$

$$\text{breadth of cuboid} = 1/4 \times 8 = 2\text{cm}$$

$$\text{height of cuboid} = 3/2 \times \text{side of square}$$

$$\text{height of cuboid} = 3/2 \times 2 = 3\text{cm}$$

$$\text{Lateral surface area of cuboid} = 2 \times (\text{length} + \text{breadth}) \times \text{height}$$

$$\text{Lateral surface area of cuboid} = 2 \times (4 + 2) \times 3$$

$$\text{Lateral surface area of cuboid} = 2 \times 6 \times 3 = 36\text{cm}^2$$

$$\therefore \text{Lateral surface area of cuboid} = 36\text{cm}^2$$

139. Answer: b

Explanation:

Let unequal side and equal side of an isosceles triangle be A cm and B cm respectively.

$$\Rightarrow A - B = 4$$

$$\Rightarrow A + 2B = 34$$

$$B = 10 \text{ cm and } A = 14 \text{ cm}$$

$$\text{Radius of cone} = (3/2) \times 14 = 21 \text{ cm}$$

$$\text{Height of cone} = 2 \times 10 = 20 \text{ cm}$$

Using Pythagoras theorem,

$$(\text{Slant height})^2 = 20^2 + 21^2$$

$$\text{Slant height of cone} = 29 \text{ cm}$$

$$\therefore \text{Curved surface area of cone} = (22/7) \times 21 \times 29 = 609\pi \text{ sq.cm}$$

140. Answer: c

Explanation:

Let, the unit price of each gram of sugar be Rs. 1

∴ Cost price of 1000 gram of sugar = Rs. 1000

Dishonest shopkeeper cheats the wholesaler,

∴ He buys 1100 gram in Rs. 1000

As he cheats at the time of sales also that is 900 gram in place of 1000 gram,

At the time of sales, marked price of 900 gram = Rs. 1200

Selling price of 900 gram = Rs. 1080

Selling price of 1100 gram = Rs. 1320

∴ Profit = 1320 - 1000 = Rs. 320

Profit percentage = $320 \times (100/1000) = 32\%$

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141. Answer: e

Explanation:

Step-I:

Alphabet → Number → Symbol

3 * D F 4 & N A 1 Y 6 8 R @ E 2 % T U \$ I P O W ! J

New arrangement: 3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

Step-II:

Alphabet → Alphabet → Symbol

3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

New arrangement: 3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

Step-III:

Number → Alphabet

3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

New arrangement: 3 * D & N A Y 1 6 R 8 @ E % T \$ I P O ! F U W J 2 4

This is the final arrangement.

Letters between 2 and 8 in step-I:

3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

Hence, there are more than 8 letters between 2 and 8 in step-I.

142. Answer: b

Explanation:

Step-I:

Alphabet → Number → Symbol

3 * D F 4 & N A 1 Y 6 8 R @ E 2 % T U \$ I P O W ! J

New arrangement: 3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

Step-II:

Alphabet → Alphabet → Symbol

3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

New arrangement: 3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

Step-III:

Number → Alphabet

3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

New arrangement: 3 * D & N A Y 1 6 R 8 @ E % T \$ I P O ! F U W J 2 4

This is the final arrangement.

Elements of the series which are at the second position from the left end and fifth position from the right end respectively in step-III:

3 * D & N A Y 1 6 R 8 @ E % T \$ I P O ! F U W J 2 4

Hence, 'U' is the required answer.

143. Answer: d

Explanation:

Step-I:

Alphabet → Number → Symbol

3 * D F 4 & N A 1 Y 6 8 R @ E 2 % T U \$ I P O W ! J

New arrangement: 3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

Step-II:

Alphabet → Alphabet → Symbol

3 * D F & N A 1 Y 6 8 R @ E % T U \$ I P O W ! J 2 4

New arrangement: 3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

Step-III:

Number → Alphabet

3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

New arrangement: 3 * D & N A Y 1 6 R 8 @ E % T \$ I P O ! F U W J 2 4

This is the final arrangement.

The element which is 13th from the left in the penultimate step (step-II):

3 * D & N A 1 Y 6 8 R @ E % T \$ I P O ! F U W J 2 4

Hence, E is the 13th element from the left in the penultimate step.

144. Answer: e

Explanation:

We know that.

Symbols	+	-	*	/	%	@	!
A to B							
Statements	All	Some	No	Some Not	Only a few	Only	Possibility
A to B							

Statements:

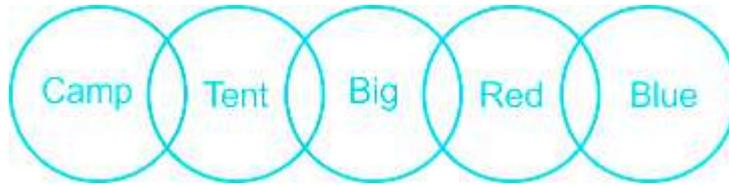
I. Camp - Tent → Some Camp is Tent.

II. Tent - Big → Some Tent is Big.

III. Big - Red → Some Big is Red.

IV. Red - Blue → Some Red is Blue.

The least possible Venn diagram for the given statements,



Conclusions:

I. $\text{Camp} * \text{Blue} \rightarrow \text{No Camp is Blue} \rightarrow \text{False}$ (No Camp is Blue is a possibility but not definite. Hence it is false.)

II. $\text{Red} * \text{Tent} \rightarrow \text{No Red is Tent} \rightarrow \text{False}$ (No definite relation between Red and Tent. Hence it is false.)

III. $\text{Camp} - \text{Blue} \rightarrow \text{Some Camp is Blue} \rightarrow \text{False}$ (Some Camp is Blue is a possibility but not definite as shown in the least possible diagram there is no Camp is Blue. Hence it is false.)

IV. $\text{Camp} - \text{Red} \rightarrow \text{Some Camp is Red} \rightarrow \text{False}$ (Some Camp is Red is a possibility but not definite as no relationship is given between them. Hence it is false.)

Here Conclusion I and III form complementary pairs as either of them should be true.

Hence, **None of these** is the correct answer.

★ Key Points

Conditions for Either - Or

1. Subject and predicate should be the same
2. Both the individual conclusions should be false
3. One conclusion should be positive and one conclusion should be negative
4. There should either one of the following pairs present in the conclusions
 - All + Some not
 - Some + No

145. Answer: e

Explanation:

We know that.

Symbols A to B	+	-	*	/	%	@	!
Statements A to B	All	Some	No	Some Not	Only a few	Only	Possibility

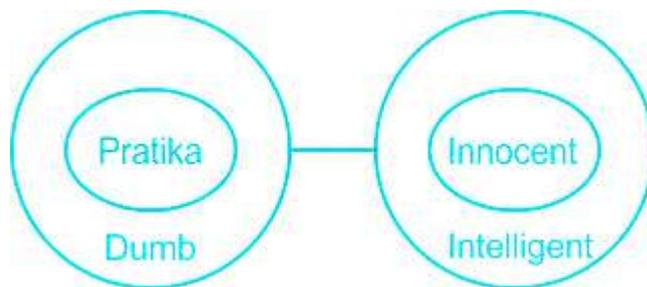
Statements:

I. Pratika + Dumb → All Pratika is Dumb.

II. Dumb * Innocent → No Dumb is Innocent.

III. Innocent + Intelligent → All Innocent is Intelligent.

The least possible Venn diagram for the given statements,



Conclusions:

I. Intelligent * Pratika → No Intelligent is Pratika → False (There is no direct relation between Intelligent and Pratika, thus some Intelligent being Pratika is a possibility. Hence it is false.)

II. Dumb / Intelligent \rightarrow Some Dumb are not Intelligent \rightarrow False (There is no direct relation between Dumb and Intelligent, thus No Dumb being Intelligent is a possibility. Hence it is false.)

Hence, Neither I nor II follows is the correct answer.

146. Answer: a

Explanation:

We know that.

Symbols A to B	+	-	*	/	%	@	!
Statements A to B	All	Some	No	Some Not	Only a few	Only	Possibility

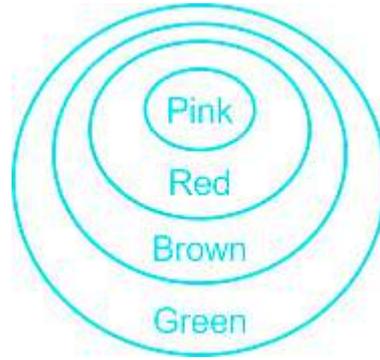
Statements: **Your Personal Exams Guide**

I. Red + Brown \rightarrow All Red is Brown.

II. Pink + Red \rightarrow All Pink is Red.

III. Brown + Green \rightarrow All Brown is Green.

The least possible Venn diagram for the given statements,



Conclusions:

I. Pink + Brown \rightarrow All Pink is Brown \rightarrow True (All Pink is Red and all Red is Brown as shown in the least possible diagram. Hence it is true.)

II. Green + Red \rightarrow All Green is Red \rightarrow False (All Green being Red is a possibility but not definite. Hence it is false.)

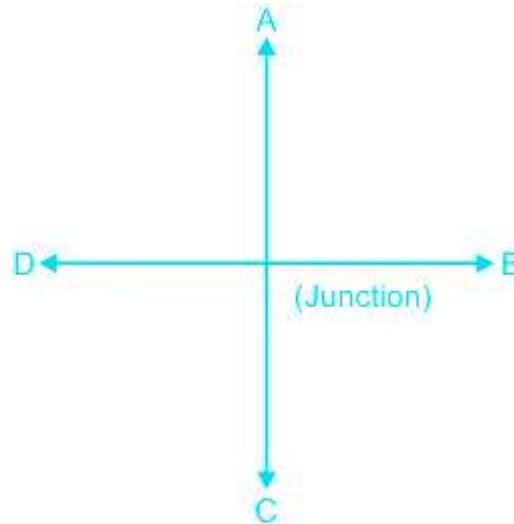
III. Pink / Brown \rightarrow Some Pink are not Brown \rightarrow False (All Pink is Red and all Red is Brown as shown in the least possible diagram. Hence it is false.)

Hence, Only I follows is the correct answer.

147. Answer: d

Explanation:

Points: A, B, C, and D. Such that, A in the north direction of C. D is in the west of B and north west of C. These points forms a junction such that they are equidistant from the junction as shown below:



Persons: P, Q, R, S, T, U, V, and W.

- (1) R ends his journey at a point which is in the north east of his starting point.
- (2) P starts from B and crosses the junction and reaches the point which is in the north west direction from B.
- (3) S starts from D crosses straight through the junction.
- (4) Ending point of V and starting point of S is same. V takes a right turn from the starting point, means V takes right turn from A such that he reaches D.

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	Case I		Case II	
Person	Starting Point	Ending Point	Starting Point	Ending Point
P	B	A	B	A
Q				
R	D	A	C	B
S	D	B	D	B
T				
U				
V	A	D	A	D
W				

(5) Ending point of S and T is same, i.e., B and a person starts from C and ends at B. We know that only two person end at same point so, case II eliminates here.

(6) Ending point of Q and U is same. Since, only the pair of point C is left for ending point, therefore,

	Case I	
Person	Starting Point	Ending Point
P	B	A
Q		C
R	D	A
S	D	B
T	C	B
U		C
V	A	D
W		D

(7) Q starts from point A. Thus, the final arrangement is as follows:

Person	Starting Point	Ending Point
P	B	A
Q	A	C
R	D	A
S	D	B
T	C	B
U	B	C
V	A	D
W	C	D

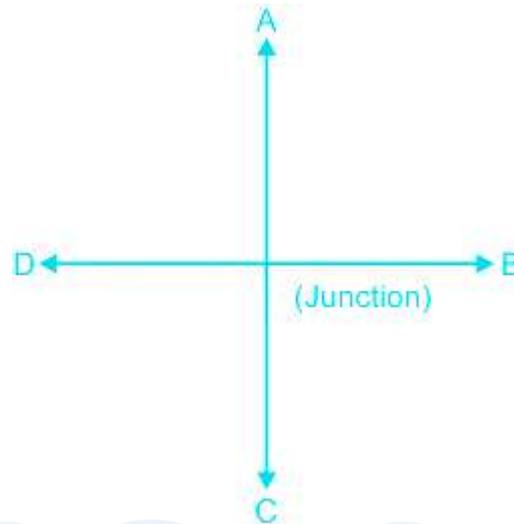
Starting point of T is point C and if he takes a left turn from C, he reaches point D.

Hence, **D** is the correct answer.

148. **Answer: c**

Explanation:

Points: A, B, C, and D. Such that, A in the north direction of C. D is in the west of B and north west of C. These points forms a junction such that they are equidistant from the junction as shown below:



Persons: P, Q, R, S, T, U, V, and W.

- (1) R ends his journey at a point which is in the north east of his starting point.
- (2) P starts from B and crosses the junction and reaches the point which is in the north west direction from B.
- (3) S starts from D crosses straight through the junction.
- (4) Ending point of V and starting point of S is same. V takes a right turn from the starting point, means V takes right turn from A such that he reaches D.

	Case I		Case II	
Person	Starting Point	Ending Point	Starting Point	Ending Point
P	B	A	B	A
Q				
R	D	A	C	B
S	D	B	D	B
T				
U				
V	A	D	A	D
W				

(5) Ending point of S and T is same, i.e., B and a person starts from C and ends at B. We know that only two person end at same point so, case II eliminates here.

(6) Ending point of Q and U is same. Since, only the pair of point C is left for ending point, therefore,

	Case I	
Person	Starting Point	Ending Point
P	B	A
Q		C
R	D	A
S	D	B
T	C	B
U		C
V	A	D
W		D

(7) Q starts from point A. Thus, the final arrangement is as follows:

Person	Starting Point	Ending Point
P	B	A
Q	A	C
R	D	A
S	D	B
T	C	B
U	B	C
V	A	D
W	C	D

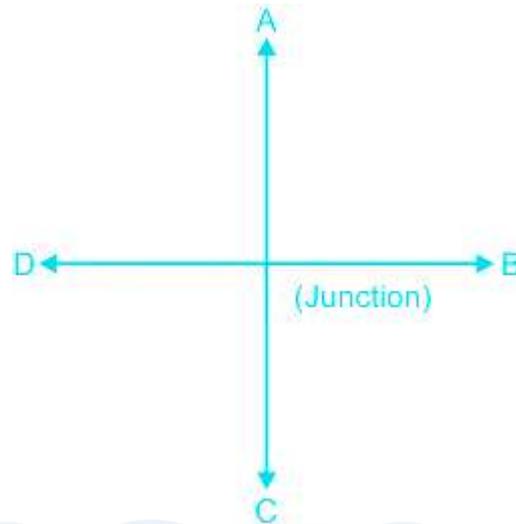
Starting point of W is point C which in southeast direction of point D.

Hence, **southeast** is the correct answer.

149. Answer: d

Explanation:

Points: A, B, C, and D. Such that, A in the north direction of C. D is in the west of B and north west of C. These points forms a junction such that they are equidistant from the junction as shown below:



Persons: P, Q, R, S, T, U, V, and W.

- (1) R ends his journey at a point which is in the north east of his starting point.
- (2) P starts from B and crosses the junction and reaches the point which in the north west direction from B.
- (3) S starts from D crosses straight through the junction.
- (4) Ending point of V and starting point of S is same. V takes a right turn from the starting point, means V takes right turn from A such that he reaches D.

	Case I		Case II	
Person	Starting Point	Ending Point	Starting Point	Ending Point
P	B	A	B	A
Q				
R	D	A	C	B
S	D	B	D	B
T				
U				
V	A	D	A	D
W				

(5) Ending point of S and T is same, i.e., B and a person starts from C and ends at B. We know that only two person end at same point so, case II eliminates here.

(6) Ending point of Q and U is same. Since, only the pair of point C is left for ending point, therefore,

	Case I	
Person	Starting Point	Ending Point
P	B	A
Q		C
R	D	A
S	D	B
T	C	B
U		C
V	A	D
W		D

(7) Q starts from point A. Thus, the final arrangement is as follows:

Person	Starting Point	Ending Point
P	B	A
Q	A	C
R	D	A
S	D	B
T	C	B
U	B	C
V	A	D
W	C	D

All pairs have either same ending point or same starting point except U-R.

Hence, **U-R** does not belong to the group.

150. Answer: c

Explanation:

1. The person who likes Kajal is the youngest.
2. Two persons born between the person whose age is a prime number and T.
3. Two persons born between M and the one who likes Kajal.

On combining these three sentences we get, three possible cases:

Case 1: When the person born in 1964 and his age is 53 years, then T born in 1987.

Case 2: When the person born in 1980 and his age is 37 years, then T born in 2000.

Case 3: When the person born in 2000 and his age is 17 years, then T born in 1980.

The person who likes Kajal is the youngest means that person born in 2011.



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		Case 1		Case 2		Case 3	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						
1972	(45)						
1980	(37)					T	
1987	(30)	T					
1995	(22)	M		M		M	
2000	(17)			T			
2005	(12)						
2011	(6)		Kajal		Kajal		Kajal

4. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour.

5. Two persons born between M and O.

On combining these two sentences we get,

The sum of 22 and 17 is 39 which is 2 years more than 37 years, so from this it is clear that R born in 1980 and S born in 2000 and M likes Foundation.

From this line our Case 2 and Case 3 is eliminated.

In Case 2, T is born just after M so, it is not possible for S to born in that year.

In Case 3, T is born in year 1980, so it is not possible for R to born in that year.

Now, again we have two possible cases for the birth year of O.

Case 1a: When O born before M in the year 1972.

Case 1b: When O born after M in the year 2011.

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		Case 1a		Case 1b	
Year	Age	Persons	Makeup Product	Persons	Makeup Product
1964	(53)				
1972	(45)	O			
1980	(37)	R	Contour	R	Contour
1987	(30)	T		T	
1995	(22)	M	Foundation	M	Foundation
2000	(17)	S		S	
2005	(12)				
2011	(6)		Kajal	O	Kajal

6. The person who likes Mascara born just after Blush.

7. O doesn't like Mascara.

On combining these two sentences we have three possible cases:

Case 1a: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b (1): When the person who likes Blush born in year 1966 and the person who likes Mascara born in 1972.

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		Case 1a		Case 1b		Case 1b (i)	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						Blush
1972	(45)	O					Mascara
1980	(37)	R	Contour	R	Contour	R	Contour
1987	(30)	T		T		T	
1995	(22)	M	Foundation	M	Foundation	M	Foundation
2000	(17)	S	Blush	S	Blush	S	
2005	(12)		Mascara		Mascara		
2011	(6)		Kajal	O	Kajal	O	Kajal

8.P likes highlighter and is not born before R.

9. The sixth oldest person doesn't like Lipstick.

10. N is not the oldest.

On combining these three sentences, our Case 1a and Case 1b is eliminated, as from the 8th statement it is clear that P born after R.

In Case 1a: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b (1): P born in 2005 after R.

Now, the sixth oldest person means the third youngest persons which is S, S doesn't like Lipstick means, S likes Liner as only Liner is left.

So, T likes Lipstick.

N is not the oldest, which means N born in year 1972.

Now, only Q is left so Q born in 1964.

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		Case 1b (1)	
Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

The final scheduling:

Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

Hence, Tlikes Lipstick.

151. Answer: d

Explanation:

1. The person who likes Kajal is the youngest.

2. Two persons born between the person whose age is a prime number and T.
3. Two persons born between M and the one who likes Kajal.

On combining these three sentences we get, three possible cases:

Case 1: When the person born in 1964 and his age is 53 years, then T born in 1987.

Case 2: When the person born in 1980 and his age is 37 years, then T born in 2000.

Case 3: When the person born in 2000 and his age is 17 years, then T born in 1980.

The person who likes Kajal is the youngest means that person born in 2011.

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		Case 1		Case 2		Case 3	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						
1972	(45)						
1980	(37)					T	
1987	(30)	T					
1995	(22)	M		M		M	
2000	(17)			T			
2005	(12)						
2011	(6)		Kajal		Kajal		Kajal

4. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour.

5. Two persons born between M and O.

On combining these two sentences we get,

The sum of 22 and 17 is 39 which is 2 years more than 37 years, so from this it is clear that R born in 1980 and S born in 2000 and M likes Foundation.

From this line our Case 2 and Case 3 is eliminated.

In Case 2, T is born just after M so, it is not possible for S to born in that year.

In Case 3, T is born in year 1980, so it is not possible for R to born in that year.

Now, again we have two possible cases for the birth year of O.

Case 1a: When O born before M in the year 1972.

Case 1b: When O born after M in the year 2011.

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		Case 1a		Case 1b	
Year	Age	Persons	Makeup Product	Persons	Makeup Product
1964	(53)				
1972	(45)	O			
1980	(37)	R	Contour	R	Contour
1987	(30)	T		T	
1995	(22)	M	Foundation	M	Foundation
2000	(17)	S		S	
2005	(12)				
2011	(6)		Kajal	O	Kajal

6. The person who likes Mascara born just after Blush.

7. O doesn't like Mascara.

On combining these two sentences we have three possible cases:

Case 1a: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b (1): When the person who likes Blush born in year 1966 and the person who likes Mascara born in 1972.

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		Case 1a		Case 1b		Case 1b (1)	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						Blush
1972	(45)	O					Mascara
1980	(37)	R	Contour	R	Contour	R	Contour
1987	(30)	T		T		T	
1995	(22)	M	Foundation	M	Foundation	M	Foundation
2000	(17)	S	Blush	S	Blush	S	
2005	(12)		Mascara		Mascara		
2011	(6)		Kajal	O	Kajal	O	Kajal

8.P likes highlighter and is not born before R.

9. The sixth oldest person doesn't like Lipstick.

10. N is not the oldest.

On combining these three sentences, our Case 1a and Case 1b is eliminated, as from the 8th statement it is clear that P born after R.

In Case 1a: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b (1): P born in 2005 after R.

Now, the sixth oldest person means the third youngest person which is S, S doesn't like Lipstick means, S likes Liner as the only Liner is left.

So, T likes Lipstick.

N is not the oldest, which means N born in year 1972.

Now, only Q is left so Q born in 1964.

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Case 1b (1)			
Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

The final scheduling:

Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

Hence, 5,4 is the correct answer.

152. Answer: b

Explanation:

1. The person who likes Kajal is the youngest.

2. Two persons born between the person whose age is a prime number and T.
3. Two persons born between M and the one who likes Kajal.

On combining these three sentences we get, three possible cases:

Case 1: When the person born in 1964 and his age is 53 years, then T born in 1987.

Case 2: When the person born in 1980 and his age is 37 years, then T born in 2000.

Case 3: When the person born in 2000 and his age is 17 years, then T born in 1980.

The person who likes Kajal is the youngest means that person born in 2011.

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		Case 1		Case 2		Case 3	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						
1972	(45)						
1980	(37)					T	
1987	(30)	T					
1995	(22)	M		M		M	
2000	(17)			T			
2005	(12)						
2011	(6)		Kajal		Kajal		Kajal

4. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour.

5. Two persons born between M and O.

On combining these two sentences we get,

The sum of 22 and 17 is 39 which is 2 years more than 37 years, so from this it is clear that R born in 1980 and S born in 2000 and M likes Foundation.

From this line our Case 2 and Case 3 is eliminated.

In Case 2, T is born just after M so, it is not possible for S to born in that year.

In Case 3, T is born in year 1980, so it is not possible for R to born in that year.

Now, again we have two possible cases for the birth year of O.

Case 1a: When O born before M in the year 1972.

Case 1b: When O born after M in the year 2011.

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		Case 1a		Case 1b	
Year	Age	Persons	Makeup Product	Persons	Makeup Product
1964	(53)				
1972	(45)	O			
1980	(37)	R	Contour	R	Contour
1987	(30)	T		T	
1995	(22)	M	Foundation	M	Foundation
2000	(17)	S		S	
2005	(12)				
2011	(6)		Kajal	O	Kajal

6. The person who likes Mascara born just after Blush.

7. O doesn't like Mascara.

On combining these two sentences we have three possible cases:

Case 1a: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b (1): When the person who likes Blush born in year 1966 and the person who likes Mascara born in 1972.

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		Case 1a		Case 1b		Case 1b (1)	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						Blush
1972	(45)	O					Mascara
1980	(37)	R	Contour	R	Contour	R	Contour
1987	(30)	T		T		T	
1995	(22)	M	Foundation	M	Foundation	M	Foundation
2000	(17)	S	Blush	S	Blush	S	
2005	(12)		Mascara		Mascara		
2011	(6)		Kajal	O	Kajal	O	Kajal

8.P likes highlighter and is not born before R.

9. The sixth oldest person doesn't like Lipstick.

10. N is not the oldest.

On combining these three sentences, our Case 1a and Case 1b is eliminated, as from the 8th statement it is clear that P born after R.

In Case 1a: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b (1): P born in 2005 after R.

Now, the sixth oldest person means the third youngest persons which is S, S doesn't like Lipstick means, S likes Liner as only Liner is left.

So, T likes Lipstick.

N is not the oldest, which means N born in year 1972.

Now, only Q is left so Q born in 1964.

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Case 1b (1)			
Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

The final scheduling:

Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

Third youngest person is S.

S likes Liner.

Hence, **Liner** liked by the third youngest person.

153. Answer: d

Explanation:

1. The person who likes Kajal is the youngest.
2. Two persons born between the person whose age is a prime number and T.
3. Two persons born between M and the one who likes Kajal.

On combining these three sentences we get, three possible cases:

Case 1: When the person born in 1964 and his age is 53 years, then T born in 1987.

Case 2: When the person born in 1980 and his age is 37 years, then T born in 2000.

Case 3: When the person born in 2000 and his age is 17 years, then T born in 1980.

The person who likes Kajal is the youngest means that person born in 2011.

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		Case 1		Case 2		Case 3	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						
1972	(45)						
1980	(37)					T	
1987	(30)	T					
1995	(22)	M		M		M	
2000	(17)			T			
2005	(12)						
2011	(6)		Kajal		Kajal		Kajal

4. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour.

5. Two persons born between M and O.

On combining these two sentences we get,

The sum of 22 and 17 is 39 which is 2 years more than 37 years, so from this it is clear that R born in 1980 and S born in 2000 and M likes Foundation.

From this line our Case 2 and Case 3 is eliminated.

In Case 2, T is born just after M so, it is not possible for S to born in that year.

In Case 3, T is born in year 1980, so it is not possible for R to born in that year.

Now, again we have two possible cases for the birth year of O.

Case 1a: When O born before M in the year 1972.

Case 1b: When O born after M in the year 2011.

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		Case 1a		Case 1b	
Year	Age	Persons	Makeup Product	Persons	Makeup Product
1964	(53)				
1972	(45)	O			
1980	(37)	R	Contour	R	Contour
1987	(30)	T		T	
1995	(22)	M	Foundation	M	Foundation
2000	(17)	S		S	
2005	(12)				
2011	(6)		Kajal	O	Kajal

6. The person who likes Mascara born just after Blush.

7. O doesn't like Mascara.

On combining these two sentences we have three possible cases:

Case 1a: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b (1): When the person who likes Blush born in year 1966 and the person who likes Mascara born in 1972.

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		Case 1a		Case 1b		Case 1b (1)	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						Blush
1972	(45)	O					Mascara
1980	(37)	R	Contour	R	Contour	R	Contour
1987	(30)	T		T		T	
1995	(22)	M	Foundation	M	Foundation	M	Foundation
2000	(17)	S	Blush	S	Blush	S	
2005	(12)		Mascara		Mascara		
2011	(6)		Kajal	O	Kajal	O	Kajal

8.P likes highlighter and is not born before R.

9. The sixth oldest person doesn't like Lipstick.

10. N is not the oldest.

On combining these three sentences, our Case 1a and Case 1b is eliminated, as from the 8th statement it is clear that P born after R.

In Case 1a: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b (1): P born in 2005 after R.

Now, the sixth oldest person means the third youngest persons which is S, S doesn't like Lipstick means, S likes Liner as only Liner is left.

So, T likes Lipstick.

N is not the oldest, which means N born in year 1972.

Now, only Q is left so Q born in 1964.

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Case 1b (1)			
Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

The final scheduling:

Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

Let's check each option:

Q: Q is 53 years old. (Odd Age)

R: R is 37 years old. (Odd Age)

N: N is 45 years old. (Odd Age)

M: M is 22 years old. (Even Age)

S: S is 17 years old. (Odd Age)

Hence, M doesn't belong to the group.

154. Answer: c

Explanation:

1. The person who likes Kajal is the youngest.
2. Two persons born between the person whose age is a prime number and T.
3. Two persons born between M and the one who likes Kajal.

On combining these three sentences we get, three possible cases:

Case 1: When the person born in 1964 and his age is 53 years, then T born in 1987.

Case 2: When the person born in 1980 and his age is 37 years, then T born in 2000.

Case 3: When the person born in 2000 and his age is 17 years, then T born in 1980.

The person who likes Kajal is the youngest means that person born in 2011.

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		Case 1		Case 2		Case 3	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						
1972	(45)						
1980	(37)					T	
1987	(30)	T					
1995	(22)	M		M		M	
2000	(17)			T			
2005	(12)						
2011	(6)		Kajal		Kajal		Kajal

4. The sum of total ages of the persons who likes Foundation and S is two years more than the age of R who likes Contour.

5. Two persons born between M and O.

On combining these two sentences we get,

The sum of 22 and 17 is 39 which is 2 years more than 37 years, so from this it is clear that R born in 1980 and S born in 2000 and M likes Foundation.

From this line our Case 2 and Case 3 is eliminated.

In Case 2, T is born just after M so, it is not possible for S to born in that year.

In Case 3, T is born in year 1980, so it is not possible for R to born in that year.

Now, again we have two possible cases for the birth year of O.

Case 1a: When O born before M in the year 1972.

Case 1b: When O born after M in the year 2011.

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		Case 1a		Case 1b	
Year	Age	Persons	Makeup Product	Persons	Makeup Product
1964	(53)				
1972	(45)	O			
1980	(37)	R	Contour	R	Contour
1987	(30)	T		T	
1995	(22)	M	Foundation	M	Foundation
2000	(17)	S		S	
2005	(12)				
2011	(6)		Kajal	O	Kajal

6. The person who likes Mascara born just after Blush.

7. O doesn't like Mascara.

On combining these two sentences we have three possible cases:

Case 1a: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b: When the person who likes Blush born in year 2000 and the person who likes Mascara born in 2005.

Case 1b (1): When the person who likes Blush born in year 1966 and the person who likes Mascara born in 1972.

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		Case 1a		Case 1b		Case 1b (1)	
Year	Age	Persons	Makeup Product	Persons	Makeup Product	Persons	Makeup Product
1964	(53)						Blush
1972	(45)	O					Mascara
1980	(37)	R	Contour	R	Contour	R	Contour
1987	(30)	T		T		T	
1995	(22)	M	Foundation	M	Foundation	M	Foundation
2000	(17)	S	Blush	S	Blush	S	
2005	(12)		Mascara		Mascara		
2011	(6)		Kajal	O	Kajal	O	Kajal

8.P likes highlighter and is not born before R.

9. The sixth oldest person doesn't like Lipstick.

10. N is not the oldest.

On combining these three sentences, our Case 1a and Case 1b is eliminated, as from the 8th statement it is clear that P born after R.

In Case 1a: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b: There is no year left for R to be born except before the years in which R born, so this case is eliminated.

In Case 1b (1): P born in 2005 after R.

Now, the sixth oldest person means the third youngest persons which is S, S doesn't like Lipstick means, S likes Liner as only Liner is left.

So, T likes Lipstick.

N is not the oldest, which means N born in year 1972.

Now, only Q is left so Q born in 1964.

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Case 1b (1)			
Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

The final scheduling:

Year	Age	Persons	Makeup Product
1964	(53)	Q	Blush
1972	(45)	N	Mascara
1980	(37)	R	Contour
1987	(30)	T	Lipstick
1995	(22)	M	Foundation
2000	(17)	S	Liner
2005	(12)	P	Highlighter
2011	(6)	O	Kajal

Hence, **R-Contour** is correct.

155. Answer: d

Explanation:

Six students: P, Q, R, S, T and U.

Different number of colors: 1, 2, 3, 4, 5 and 6.

From statement I: The one, who likes 5 color, is shorter than only one person. The one, who is the shortest, likes odd number of colors. P is not the shortest or tallest but taller than Q. Q, who likes 2 colors is taller than T and S.

From the given information,

We get two different possibilities:

$$(i) _() > _(5) > _() > _() > _() _ (1)$$

$$(ii) _() > _(5) > _() > _() > _() _ (3)$$

So, we cannot determine, who is the tallest.

Therefore, statement I alone is not sufficient.

From statement II: The one, who likes 4 colors is taller than R. R likes odd number of colors, which is sum of number of colors U and P like. T likes 6 colors.

From the given information,

We cannot determine, who is the tallest.

Therefore, statement II alone is not sufficient.

From statement III: U likes one color more than that of S. T is not the shortest.

From the given information,

We cannot determine, who is the tallest.

Therefore, statement III alone is not sufficient.

On combining I and II,

From the given information,

We get,

$$U(4) > R(5) > P(1) > Q(2) > T(6) > S(3)$$

So, U is the tallest and S likes 3 colors.

Therefore, statement I and II together are sufficient.

On combining I and III,

From the given information,

We get,

$$(i) _() > _(5) > _() > _() > _() _ (1)$$

$$(ii) _() > _(5) > _() > _() > _() _ (3)$$

We cannot determine, who is the tallest.

Therefore, statement I and III together are not sufficient.

On combining II and III,

From the given information,

We cannot determine, who is the tallest.

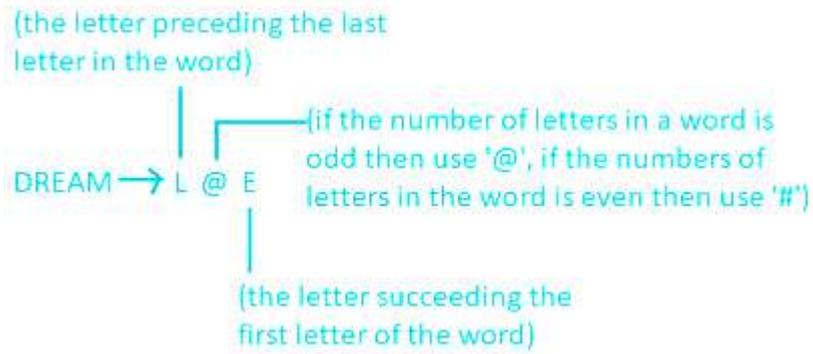
Therefore, statement II and III together are not sufficient.

Hence, the data in statement I and II together are required to answer the question.

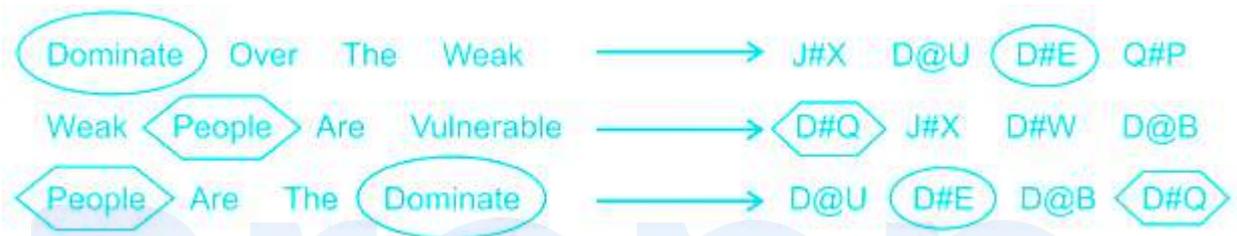
156. Answer: b

Explanation:

Given below is the pattern followed for coded language:



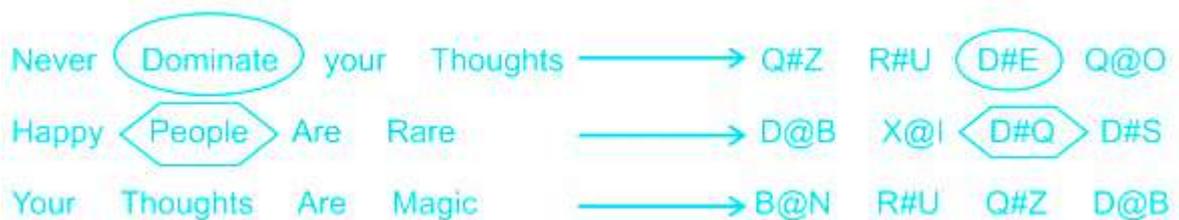
From statement I:



From statement II:



From statement III:



Clearly, by using statement I alone we can get the code of 'DOMINATE PEOPLE' as 'D#E D#Q'.

157. Answer: e

Explanation:

From statement I:

Floor number 3 has even number of showrooms.

Floor	No. of Showrooms
5	
4	
3	14/18/20
2	
1	

Therefore, statement I alone is not sufficient to answer the question.

From statement II:

Even numbered floors have the odd number of showrooms.

Floor	No. of Showrooms
5	14/18/20
4	11/17
3	14/18/20
2	11/17
1	14/18/20

Therefore, statement II alone is not sufficient to answer the question.

From statement III:

Floor number 4 has more showrooms than floor number 3.

Floor	No. of Showrooms			
5				
4	14	17	18	20
3	11	14	17	18
2				
1				

Therefore, statement III alone is not sufficient to answer the question.

On combining II and III:

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Floor	No. of Showrooms
5	18/20
4	17
3	14
2	11
1	18/20

So, floor number 4 must have 17 showrooms and floor number 2 has 11 showrooms.

Thus, floor number 3 has 14 showrooms.

Hence, the statements II and III together are sufficient to answer the question.

158. Answer: d

Explanation:

Here, the problem is whether Educational Institutions are responsible for the unrest among Youth or not.

Argument I is not true. Many Educational Institutions have strict disciplinary codes.

Hence Argument I is not strong.

Argument II states that Educational Institutions focus mainly on teaching academical concepts from textbooks and not on ensuring that Students imbibe qualities of patience and professionalism, which comes more from practice and character traits than from textual learning. This is true with respect to our Educational system and Institutions.

Hence, Argument II is strong.

Argument III is not a strong one. Moral Science might be a part of the school curriculum, but how effectively our Educational Institutions teach it in letter and spirit is not discussed here in the argument. Hence it doesn't give an answer to our problem.

Hence, Argument III is not strong.

Hence, Only Argument II is strong.

159. Answer: c

Explanation:

Here, the problem is whether the World Health Organisation should step up and ban the usage of Sputnik-V vaccine which has not yet completed final trials.

Argument I is true in that COVID vaccine, upon which the health of the whole world is dependent, cannot be the item for a "Space-war" like race. But it cannot be a reason for banning the vaccine, which is an extreme step. Yes, if the vaccine is not effective and is dangerous to human health, it should be banned but a race among the nations alone cannot be the reason for banning the vaccine.

Hence Argument I is not strong.

While it is true that ensuring good health of the world populace is the duty of the WHO, the problem here is whether banning the usage of Sputnik-V vaccine is a necessity. Yes, if the vaccine is not effective and is dangerous to human health, it should be banned but there is no mention that the vaccine is indeed detrimental

and dangerous for health. So, banning it altogether will be like using a sword to kill a mosquito.

Hence, argument II is not properly related to the question and is not strong.

Argument III is a strong one. It is the duty of the WHO to caution the world against the usage of vaccines that have not completed final trials. This will enlighten the world against blindly trusting the regulatory approval of a country.

Hence, Argument III is strong.

Hence, Only Argument III is strong.

160. Answer: b

Explanation:

The main problem here is the mass level suspicion in the findings of the State Police that the recent death of a popular actor was a suicide. The masses suspect criminal conspiracy by highly influential people and the solution must focus on ways to eliminate such suspicions and arrive at the truth in a transparent manner.

It is not possible for the Central government to do as stated in I as the state government oversees the state police. Also, we do not know the truth behind the suspicions aimed at police officials. Hence, I is not able to achieve the government's goals.

II will ensure that the concerns of the masses are alleviated, and the investigation is fair and transparent. Hence it follows.

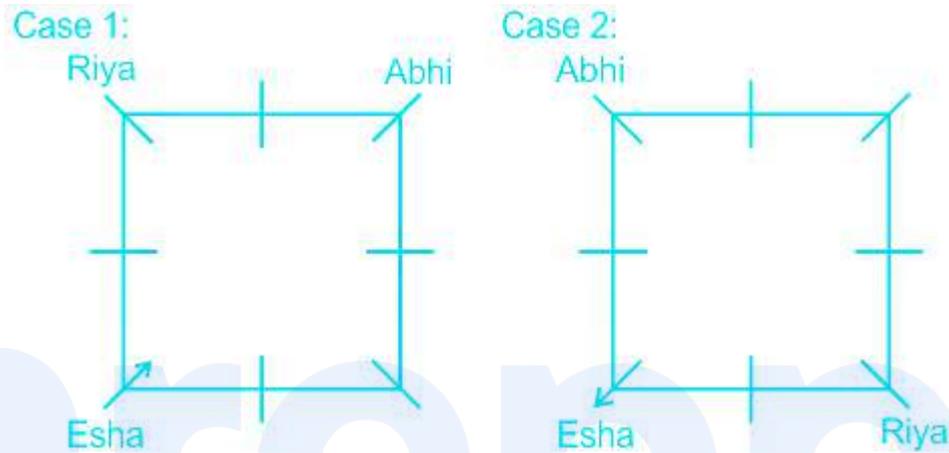
III is out of context as there is no mention of nepotism in the statement.

Hence, only II follows.

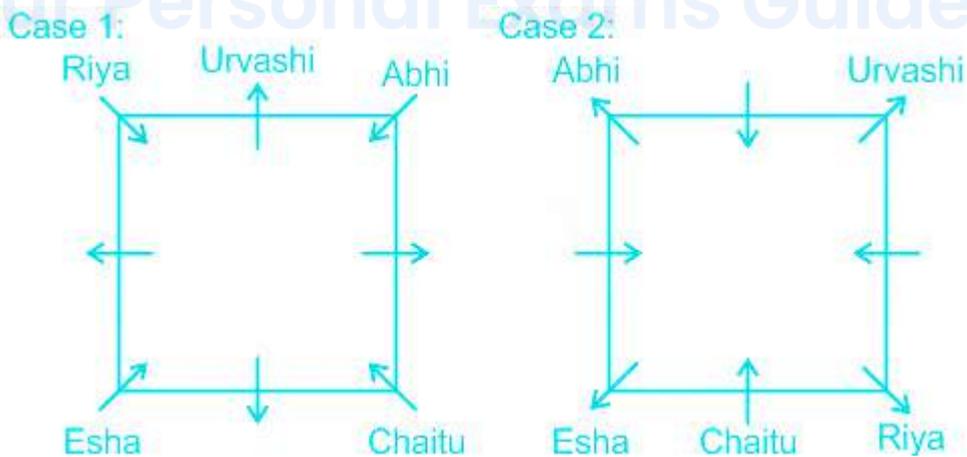
161. Answer: d

Explanation:

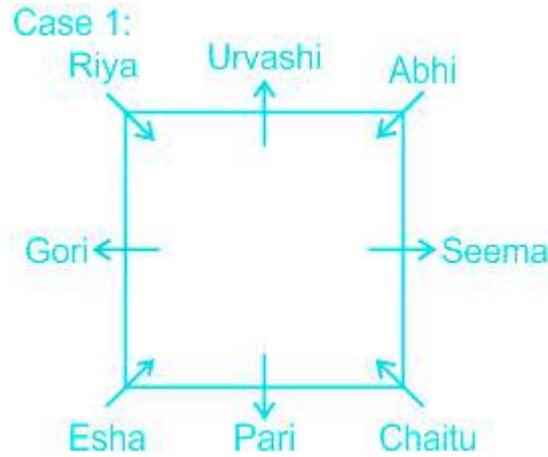
- 1) Esha sits at the corner.
- 2) Riya is sitting second to the left of Esha
- 3) One person is sitting between Riya and Abhi.



- 4) Two people who are facing the same direction (either inside or outside) are not sitting with each other.
- 5) Chaitu is sitting third to the right of Urvashi.
- 6) Neither Abhi nor Gori is an immediate neighbor of Chaitu,

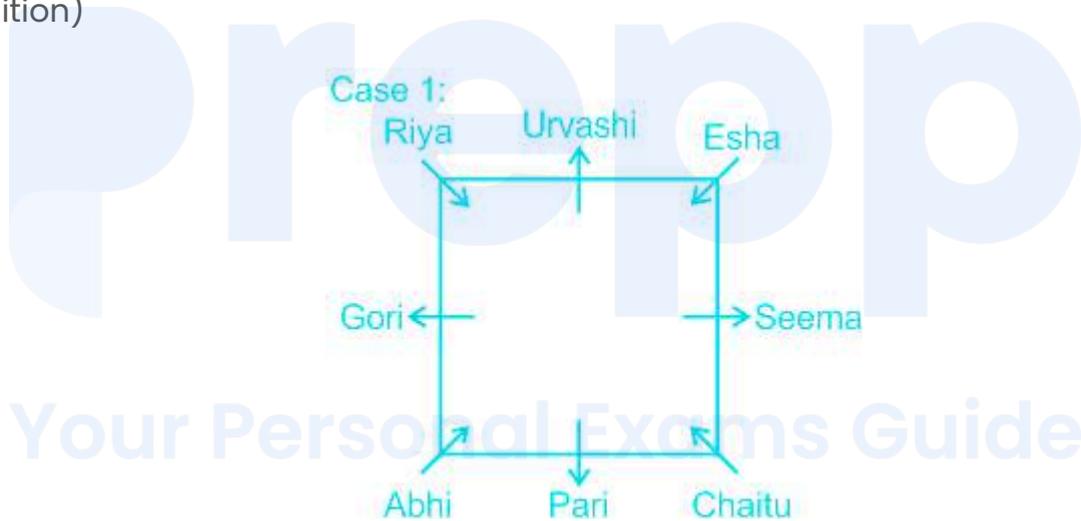


- 7) Seema is not facing inside but is sitting second to the left of Pari. (This eliminates case 2)



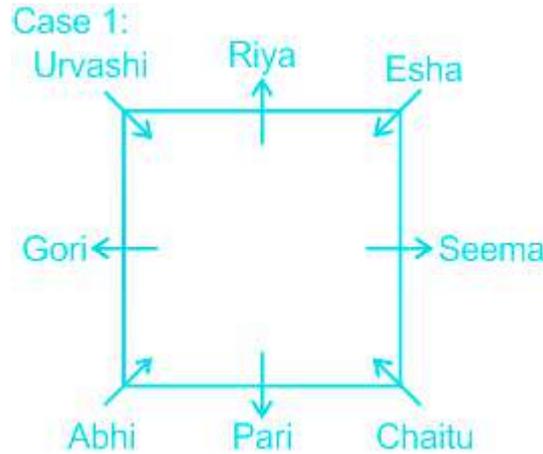
Condition for rearrangement:

1) If two persons are facing each other and having names start with vowels they interchange their position. (Abhi and Esha facing each other and satisfying this condition)



2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.

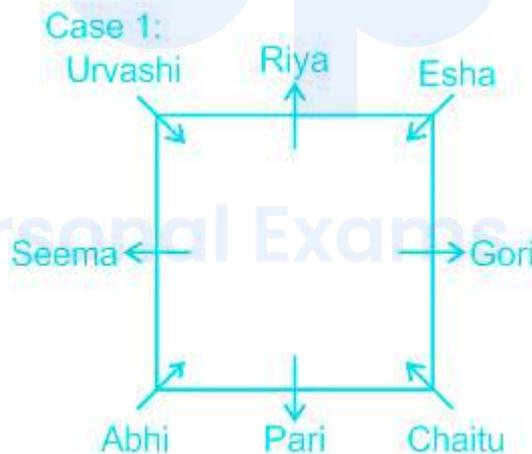
(Urvashi and Pari are such persons so Urvashi interchange its position with the person sits immediate left or her that is Riya)



3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

(Urvashi having name start with the vowel has the highest place value and Gori is immediate right of Urvashi Gori will interchange her position with Seema)

Final Sitting Arrangement:

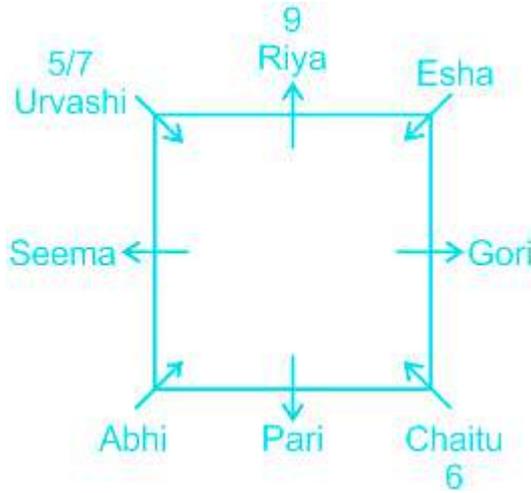


Now we need to arrange books.

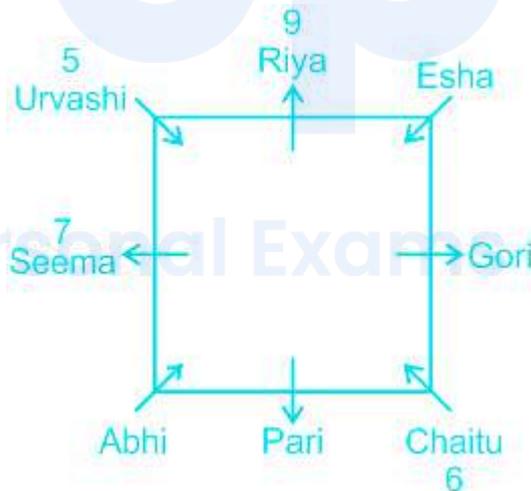
1) The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name.

The one having highest number of letter in the name is Urvashi and opposite to Urvashi is Chaitu who has 6 letters in her name so Chaitu has 6 books.

- 2) Riya is having 3 more books than Chaitu. She has $6 + 3 = 9$ books.
- 3) Urvashi does not have the least number of books. So she does not have 3 books.

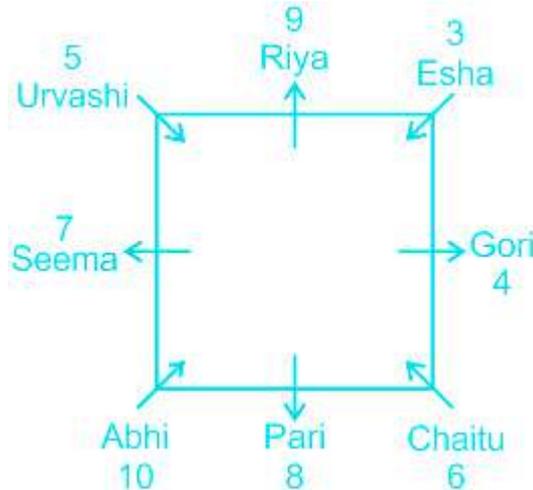


- 4) Seema is having 2 more books than that of the person who sits immediate right of her. (Urvashi is immediate right of Seema so she can have either 7 or 9 but Riya has already 9 books so Seema has 7 books)



- 5) Immediate neighbors of Riya have a prime number of books.
- 6) Pari is having 8 books. Abhi has more number of books than Gori.

Final Diagram



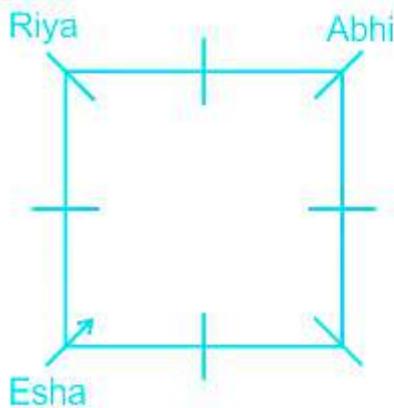
Hence, Esha sits immediate right of Riya in final arrangement.

162. Answer: b

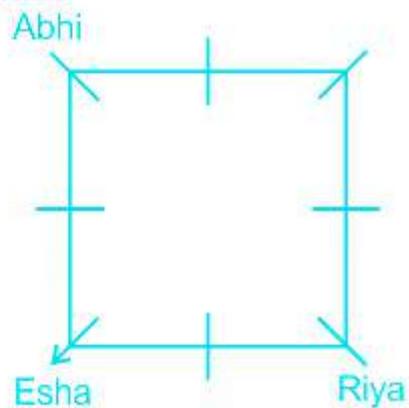
Explanation:

- 1) Esha sits at the corner.
- 2) Riya is sitting second to the left of Esha
- 3) One person is sitting between Riya and Abhi.

Case 1:

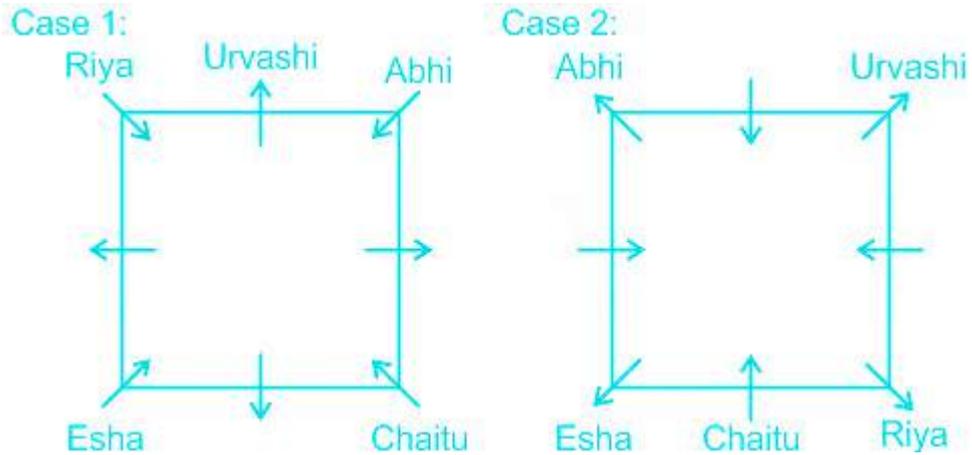


Case 2:

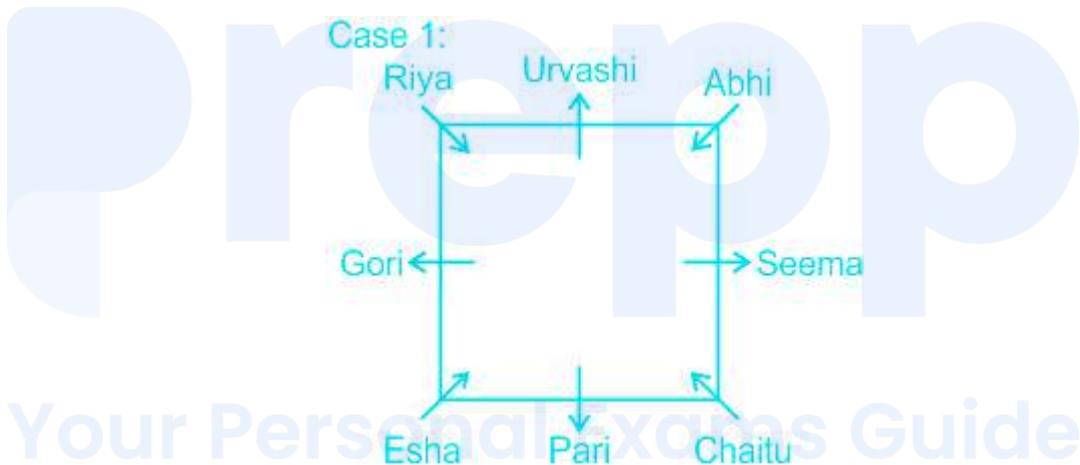


- 4) Two people who are facing the same direction (either inside or outside) are not sitting with each other.
- 5) Chaitu is sitting third to the right of Urvashi.

6) Neither Abhi nor Gori is an immediate neighbor of Chaitu,

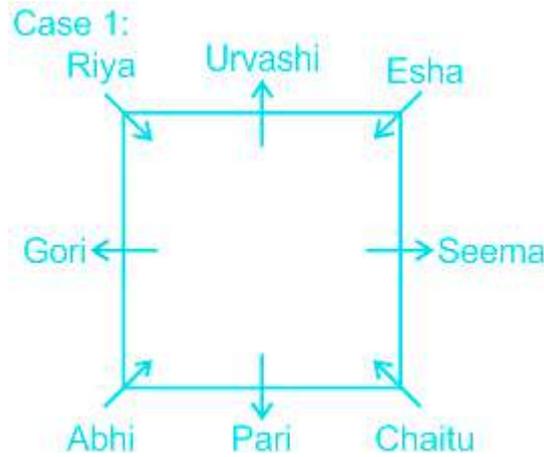


7) Seema is not facing inside but is sitting second to the left of Pari. (This eliminates case 2)



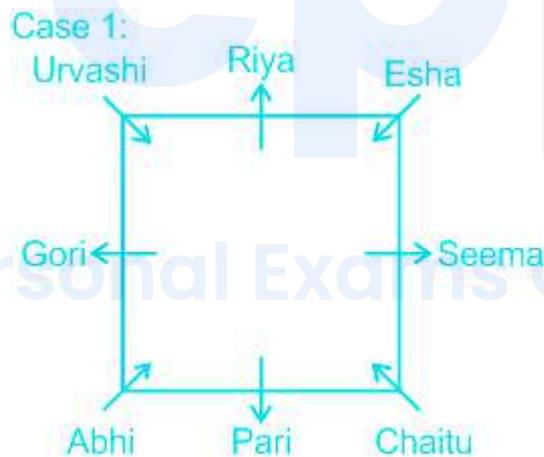
Condition for rearrangement:

1) If two persons are facing each other and having names start with vowels they interchange their position. (Abhi and Esha facing each other and satisfying this condition)



2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.

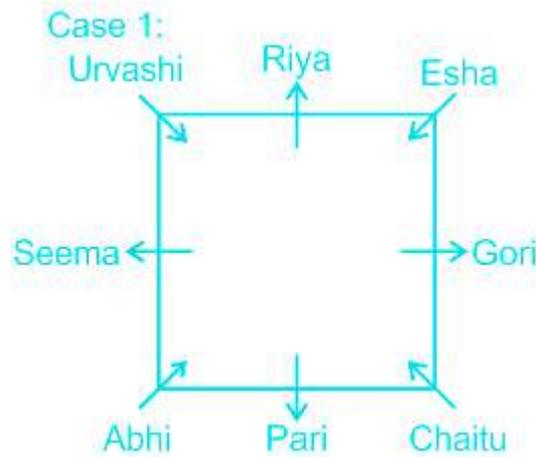
(Urvashi and Pari are such persons so Urvashi interchange its position with the person sits immediate left or her that is Riya)



3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

(Urvashi having name start with the vowel has the highest place value and Gori is immediate right of Urvashi Gori will interchange her position with Seema)

Final Sitting Arrangement:



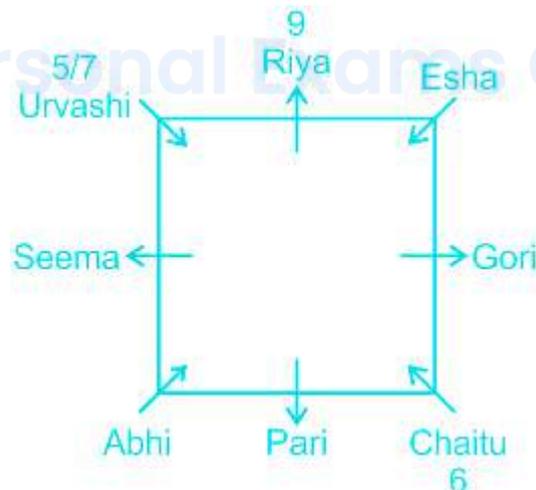
Now we need to arrange books.

1) The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name.

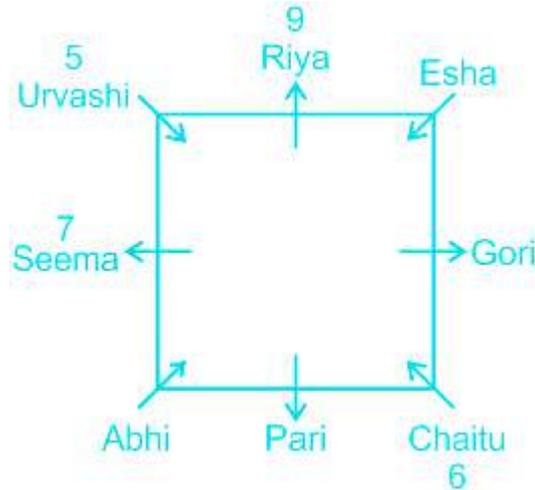
The one having highest number of letter in the name is Urvashi and opposite to Urvashi is Chaitu who has 6 letters in her name so Chaitu has 6 books.

2) Riya is having 3 more books than Chaitu. She has $6 + 3 = 9$ books.

3) Urvashi does not have the least number of books. So she does not have 3 books.



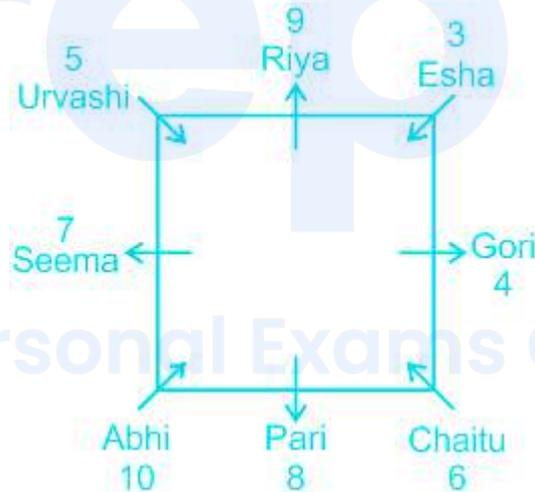
4) Seema is having 2 more books than that of the person who sits immediate right of her. (Urvashi is immediate right of Seema so she can have either 7 or 9 but Riya has already 9 books so Seema has 7 books)



5) Immediate neighbors of Riya have a prime number of books.

6) Pari is having 8 books. Abhi has more number of books than Gori.

Final Diagram



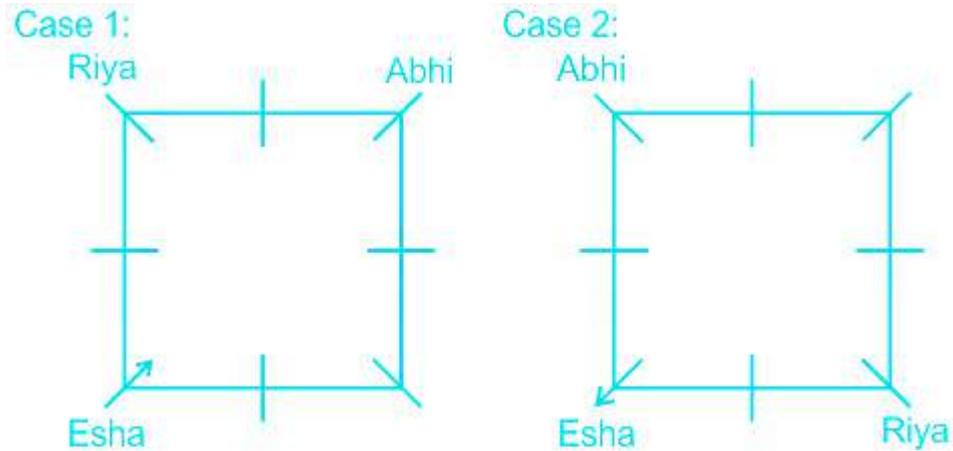
Hence, Gauri sits second to the right of riya in final arrangement

163. Answer: e

Explanation:

- 1) Esha sits at the corner.
- 2) Riya is sitting second to the left of Esha

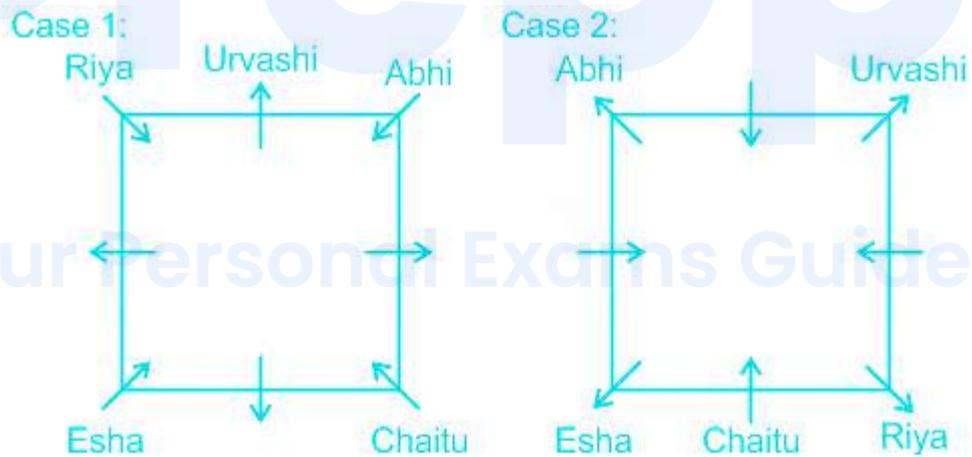
3) One person is sitting between Riya and Abhi.



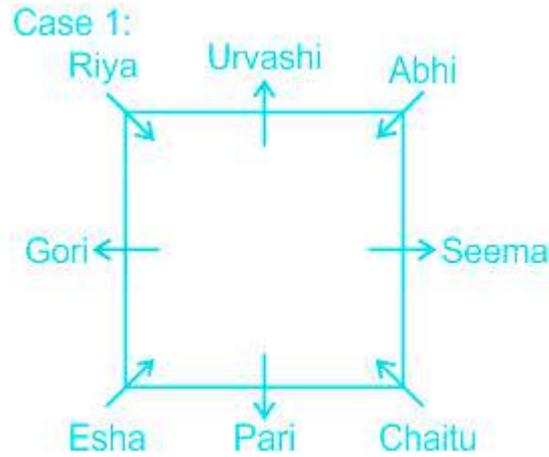
4) Two people who are facing the same direction (either inside or outside) are not sitting with each other.

5) Chaitu is sitting third to the right of Urvashi.

6) Neither Abhi nor Gori is an immediate neighbor of Chaitu,

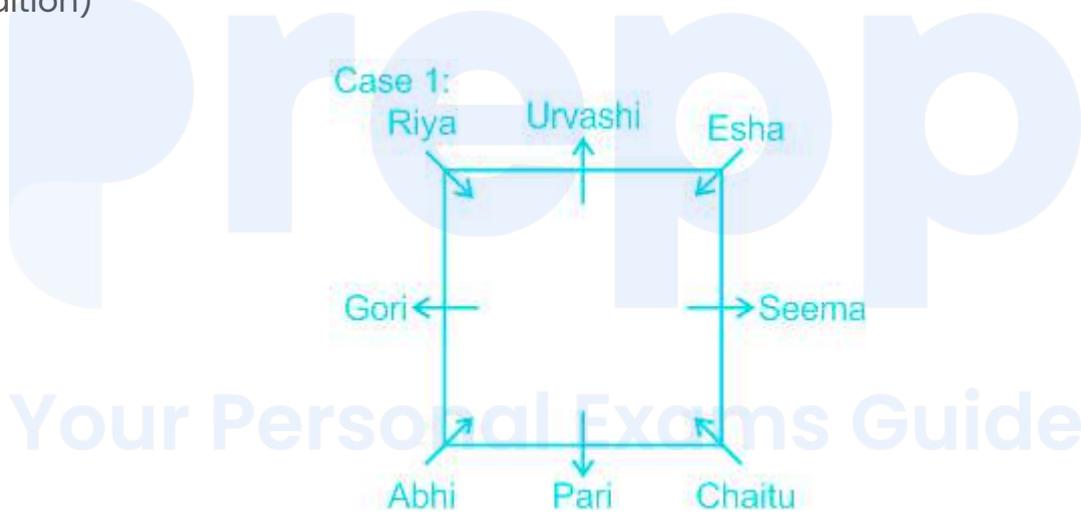


7) Seema is not facing inside but is sitting second to the left of Pari. (This eliminates case 2)



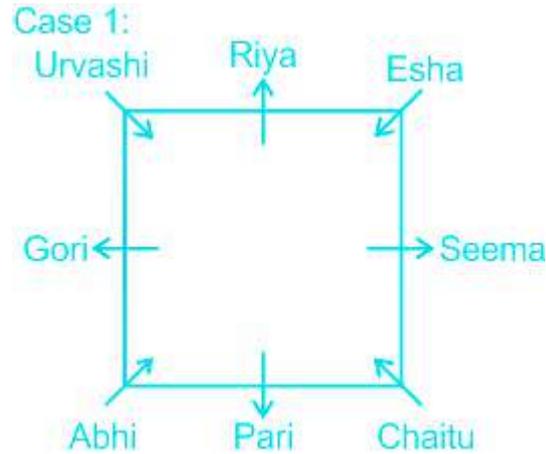
Condition for rearrangement:

1) If two persons are facing each other and having names start with vowels they interchange their position. (Abhi and Esha facing each other and satisfying this condition)



2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.

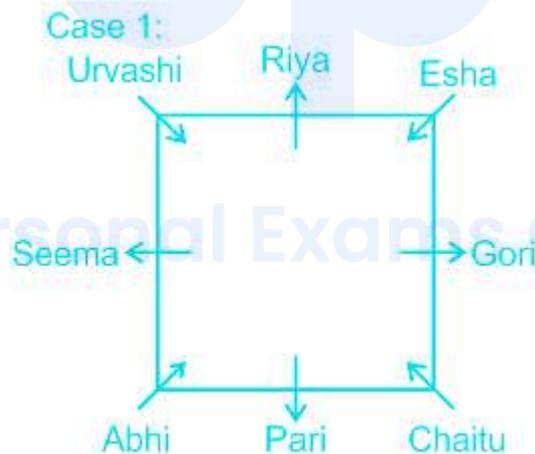
(Urvashi and Pari are such persons so Urvashi interchange its position with the person sits immediate left or her that is Riya)



3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

(Urvashi having name start with the vowel has the highest place value and Gori is immediate right of Urvashi Gori will interchange her position with Seema)

Final Sitting Arrangement:

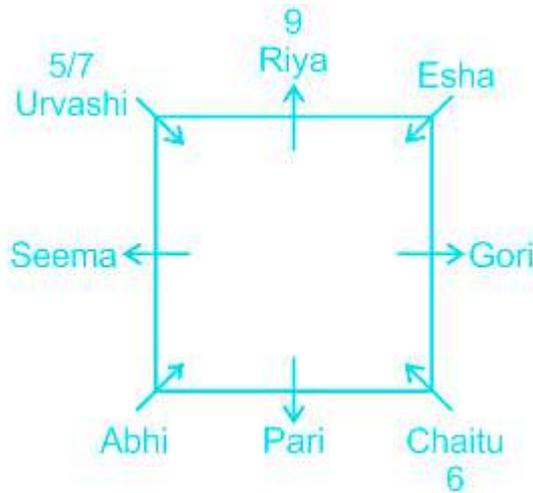


Now we need to arrange books.

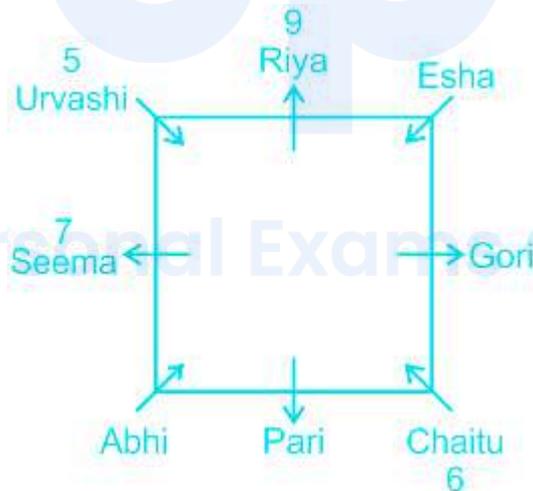
1) The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name.

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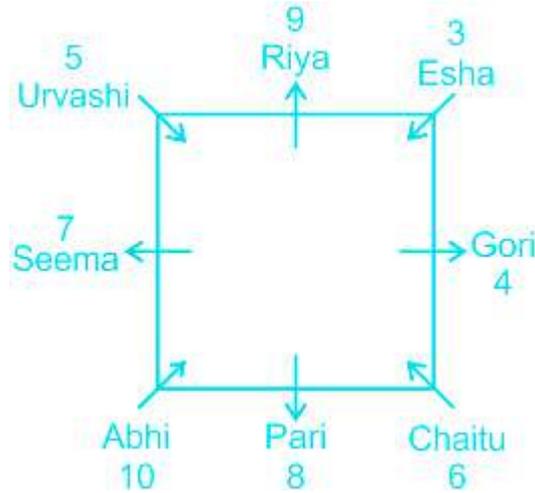


- 4) Seema is having 2 more books than that of the person who sits immediate right of her. (Urvashi is immediate right of Seema so she can have either 7 or 9 but Riya has already 9 books so Seema has 7 books)



- 5) Immediate neighbors of Riya have a prime number of books.
- 6) Pari is having 8 books. Abhi has more number of books than Gori.

Final Diagram



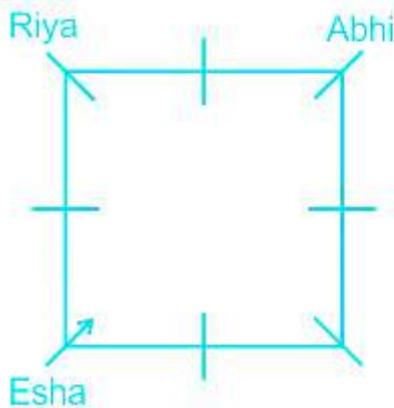
Hence, Both 1) and 3) is the correct answer.

164. Answer: d

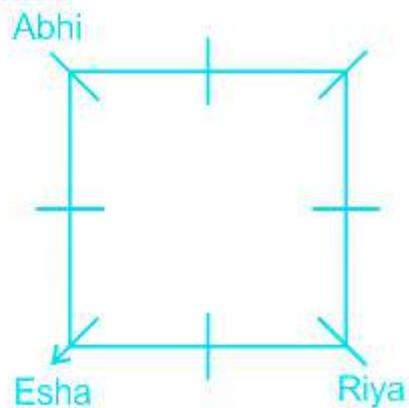
Explanation:

- 1) Esha sits at the corner.
- 2) Riya is sitting second to the left of Esha
- 3) One person is sitting between Riya and Abhi.

Case 1:

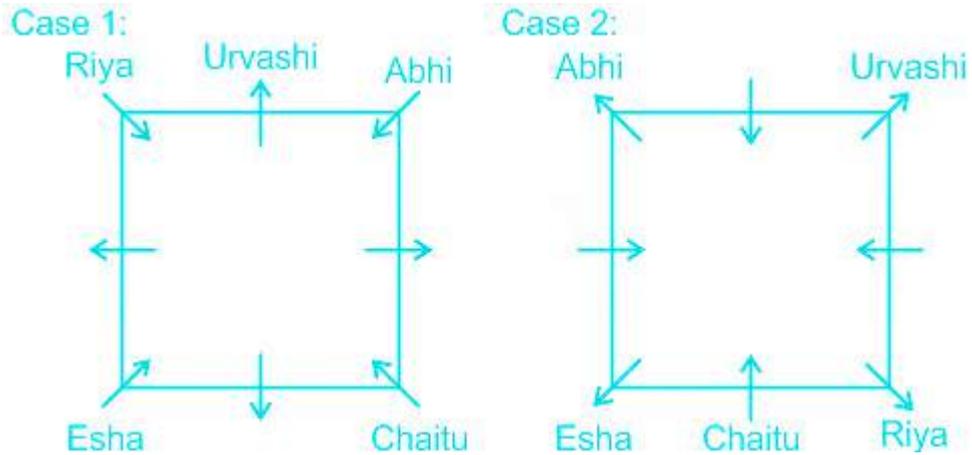


Case 2:

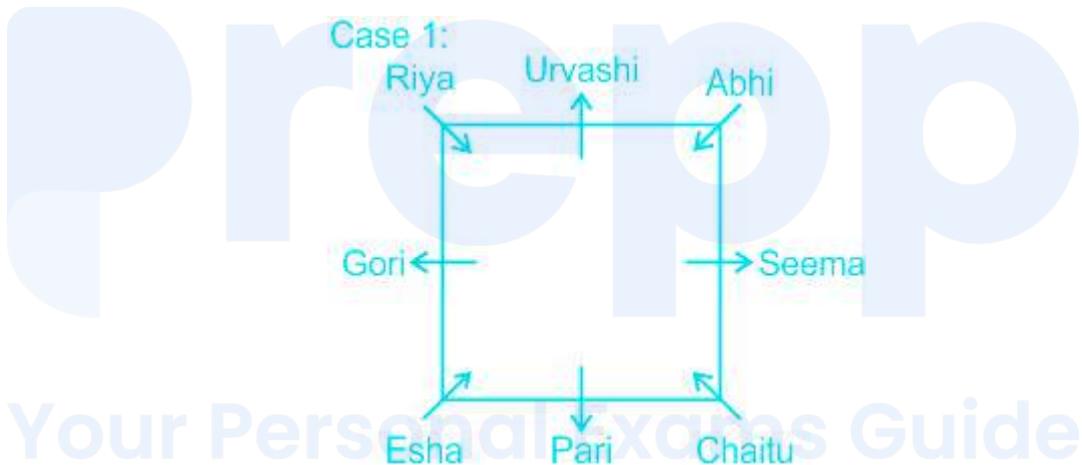


- 4) Two people who are facing the same direction (either inside or outside) are not sitting with each other.
- 5) Chaitu is sitting third to the right of Urvashi.

6) Neither Abhi nor Gori is an immediate neighbor of Chaitu,

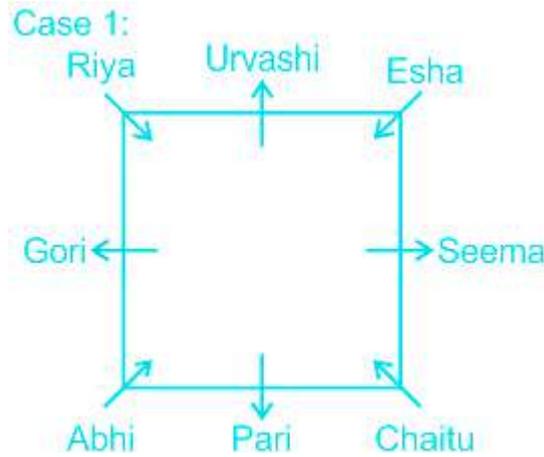


7) Seema is not facing inside but is sitting second to the left of Pari. (This eliminates case 2)



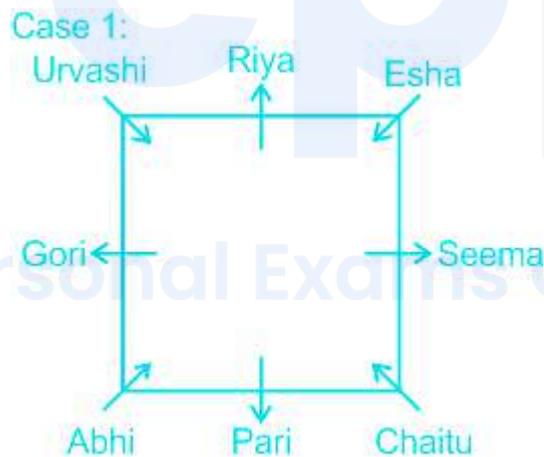
Condition for rearrangement:

1) If two persons are facing each other and having names start with vowels they interchange their position. (Abhi and Esha facing each other and satisfying this condition)



2) If two-person sit opposite to each other and one of them having a name starting with a vowel and the other having a name starting with a consonant then the one who has a name starts with a vowel interchange his/her seat with the person who sits immediate left or him/her.

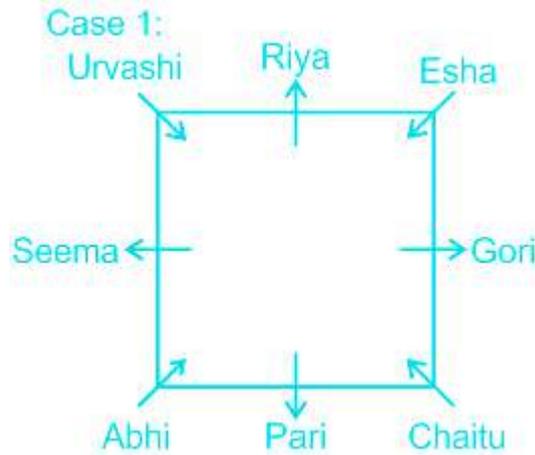
(Urvashi and Pari are such persons so Urvashi interchange its position with the person sits immediate left or her that is Riya)



3) The one who sits immediate right of the one having name start with the vowel has the highest place value interchange his/her position with the one who sits opposite to her/him.

(Urvashi having name start with the vowel has the highest place value and Gori is immediate right of Urvashi Gori will interchange her position with Seema)

Final Sitting Arrangement:



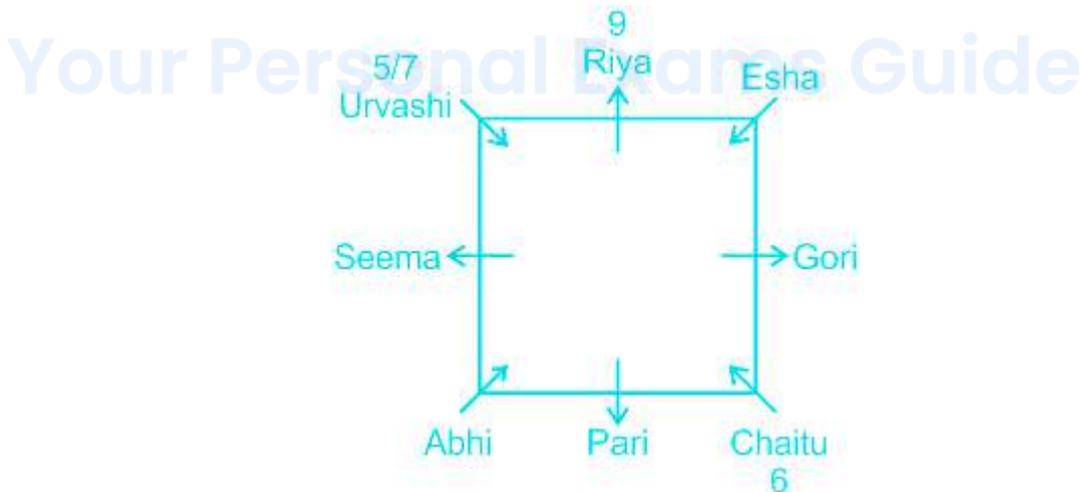
Now we need to arrange books.

1) The one who sits opposite to the person having a name have the highest number of letter has the same number of books as the number of alphabets in his/her name.

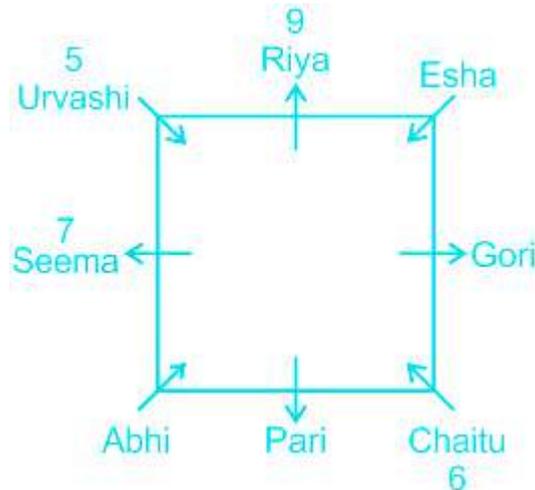
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3) Urvashi does not have the least number of books. So she does not have 3 books.



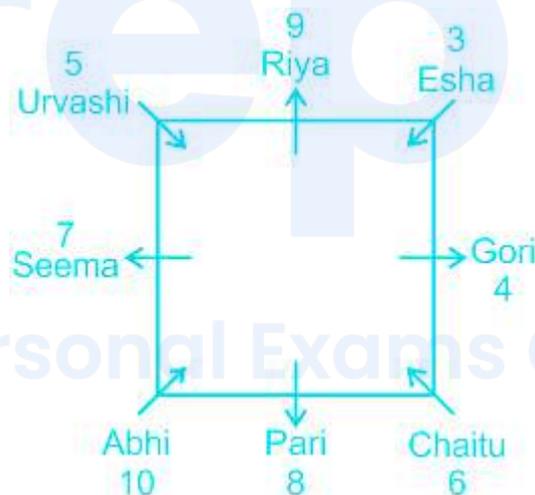
4) Seema is having 2 more books than that of the person who sits immediate right of her. (Urvashi is immediate right of Seema so she can have either 7 or 9 but Riya has already 9 books so Seema has 7 books)



5) Immediate neighbors of Riya have a prime number of books.

6) Pari is having 8 books. Abhi has more number of books than Gori.

Final Diagram



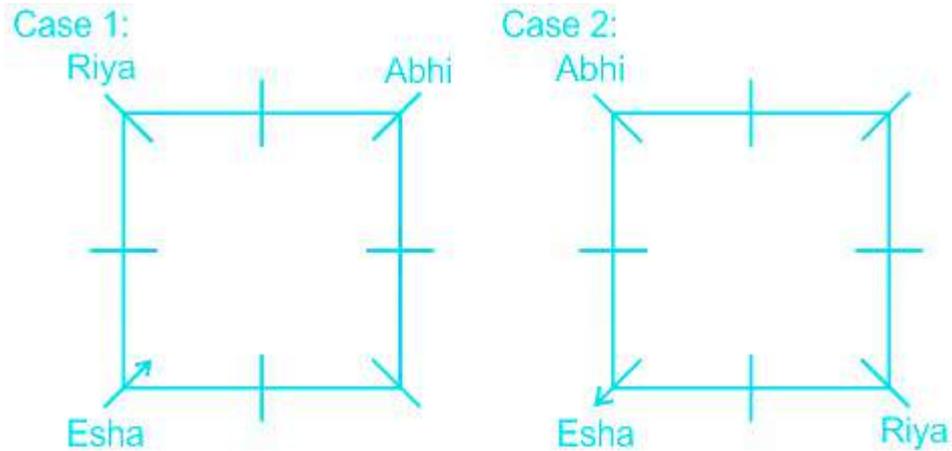
Hence, Seema has 7 books.

165. Answer: b

Explanation:

- 1) Esha sits at the corner.
- 2) Riya is sitting second to the left of Esha

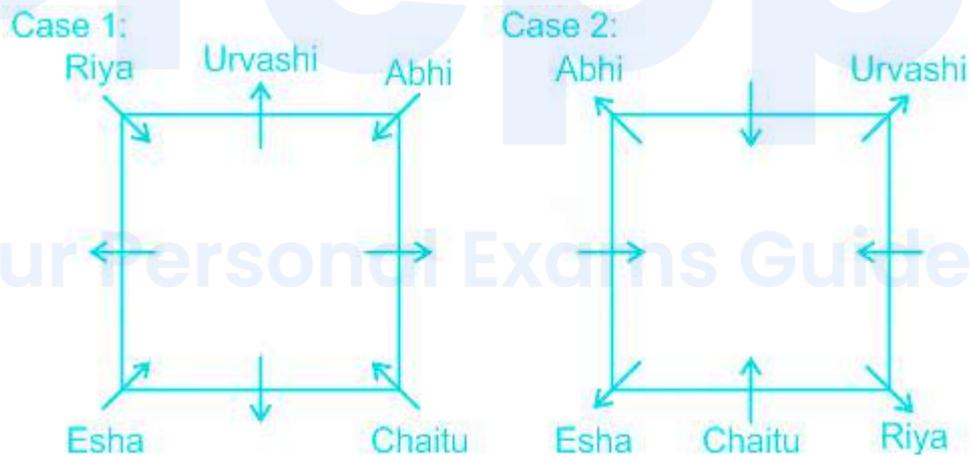
3) One person is sitting between Riya and Abhi.



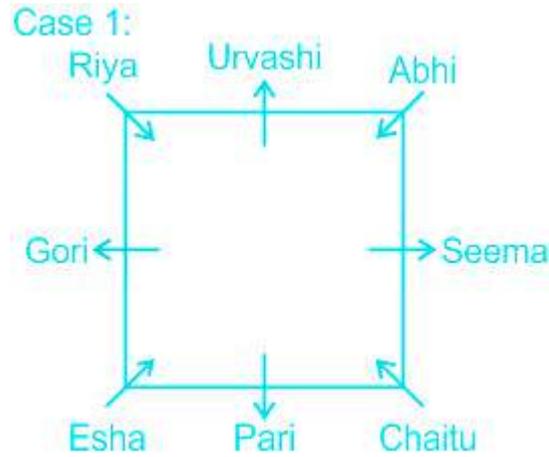
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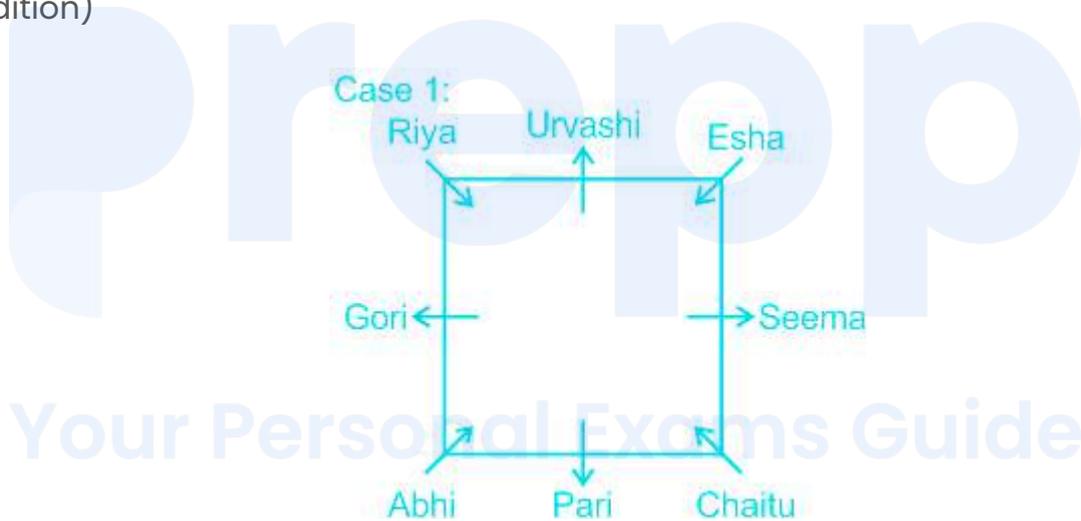


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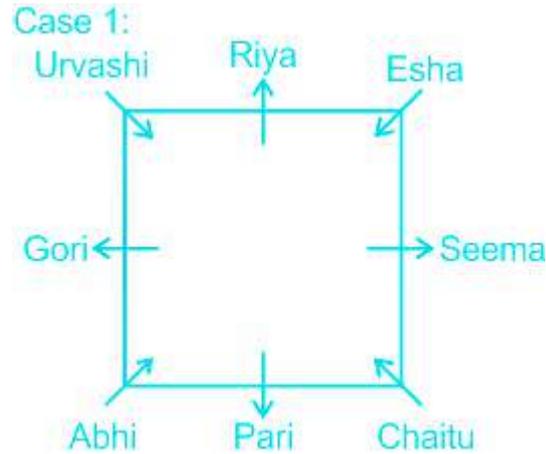
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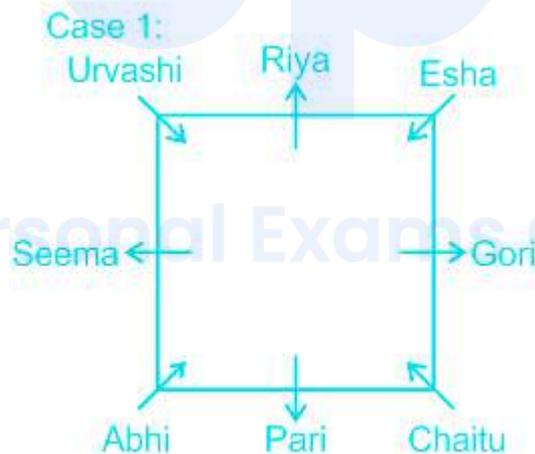
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Final Sitting Arrangement:

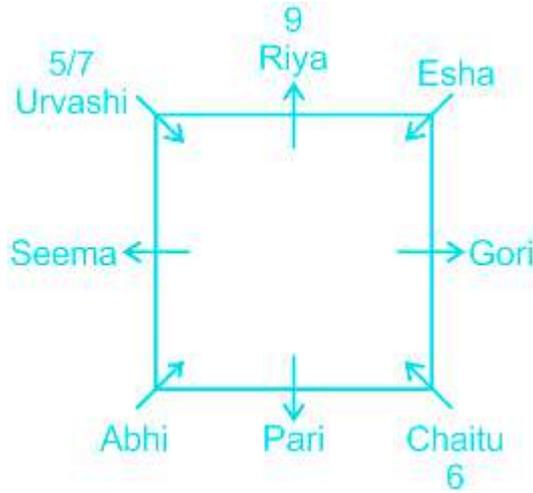


Now we need to arrange books.

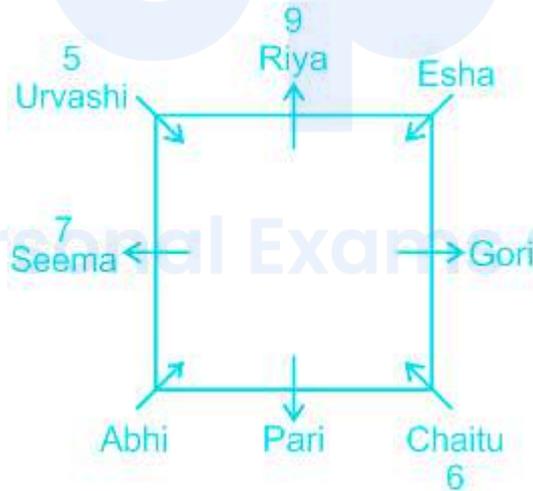
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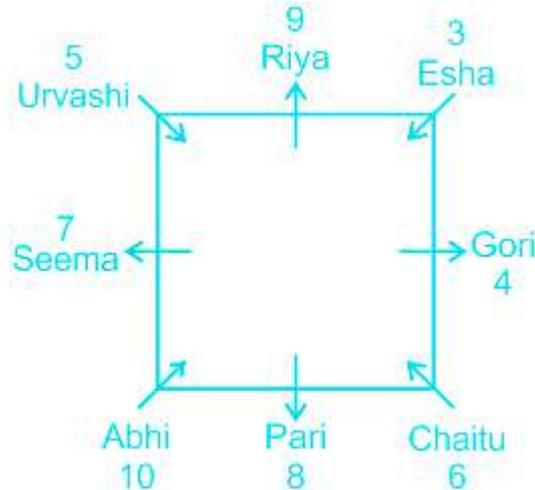


- 4) Seema is having 2 more books than that of the person who sits immediate right of her. (Urvashi is immediate right of Seema so she can have either 7 or 9 but Riya has already 9 books so Seema has 7 books)



- 5) Immediate neighbors of Riya have a prime number of books.
- 6) Pari is having 8 books. Abhi has more number of books than Gori.

Final Diagram



$Chaitu + Esha = 6 + 3 = 9$

Hence, Sum of the number of books Esha and Chaitu has is 9.

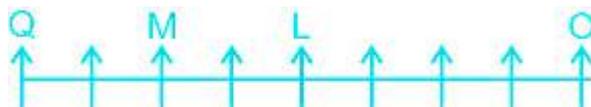
166. Answer: d

Explanation:

Total Place: Fifteen, Three Vacant

Person: K, L, M, N, O, P, Q, R, S, T, U and V

1. Three persons are sitting between L and O, none of them sitting at the corner.
2. Q sits fourth to the left of L.
3. M sits second to the left of L.



4. Q is sitting third to the left of R.
5. Two persons are sitting between R and P who is just left of T.



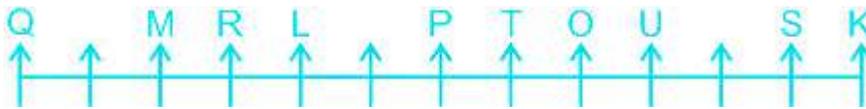
6. K sits sixth to the right of P.

7. There are three places between T and S.



8. One of the places near the S is vacant. So it will be just left of S only because in right K is there.

9. No one is sitting between U and S. As one place is vacant so in this case also no one sitting between U and S.



10. V sits right of K but not near to K.

11. N sits sixth from the one end.



Hence, P is sitting third to the left of U.

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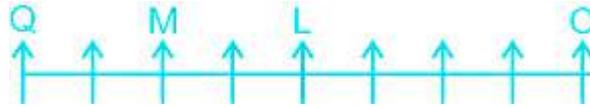
167. Answer: e

Explanation:

Total Place: Fifteen, Three Vacant

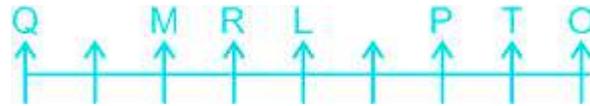
Person: K, L, M, N, O, P, Q, R, S, T, U and V

1. Three persons are sitting between L and O, none of them sitting at the corner.
2. Q sits fourth to the left of L.
3. M sits second to the left of L.



4. Q is sitting third to the left of R.

5. Two persons are sitting between R and P who is just left of T.



6. K sits sixth to the right of P.

7. There are three places between T and S.



8. One of the places near the S is vacant. So it will be just left of S only because in right K is there.

9. No one is sitting between U and S. As one place is vacant so in this case also no one sitting between U and S.



10. V sits right of K but not near to K.

11. N sits sixth from the one end.



Hence, Q and V are sitting at the corner.

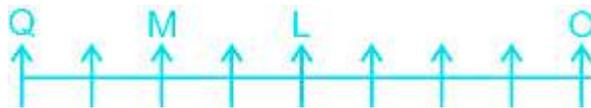
168. Answer: c

Explanation:

Total Place: Fifteen, Three Vacant

Person: K, L, M, N, O, P, Q, R, S, T, U and V

1. Three persons are sitting between L and O, none of them sitting at the corner.
2. Q sits fourth to the left of L.
3. M sits second to the left of L.



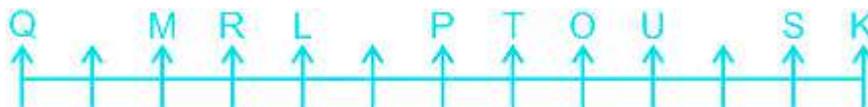
4. Q is sitting third to the left of R.
5. Two persons are sitting between R and P who is just left of T.



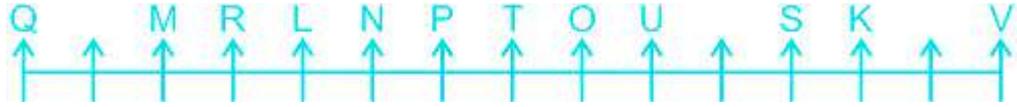
6. K sits sixth to the right of P.
7. There are three places between T and S.



8. One of the places near the S is vacant. So it will be just left of S only because in right K is there.
9. No one is sitting between U and S. As one place is vacant so in this case also no one sitting between U and S.



10. V sits right of K but not near to K.
11. N sits sixth from the one end.



Hence, There are **Six** persons sitting between M and U.

169. **Answer: e**

Explanation:

Total Place: Fifteen, Three Vacant

Person: K, L, M, N, O, P, Q, R, S, T, U and V

1. Three persons are sitting between L and O, none of them sitting at the corner.
2. Q sits fourth to the left of L.
3. M sits second to the left of L.



4. Q is sitting third to the left of R.
5. Two persons are sitting between R and P who is just left of T.

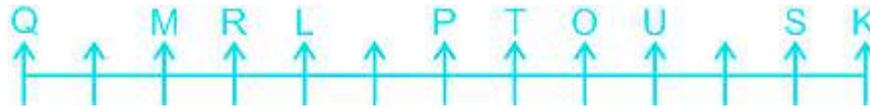


6. K sits sixth to the right of P.
7. There are three places between T and S.



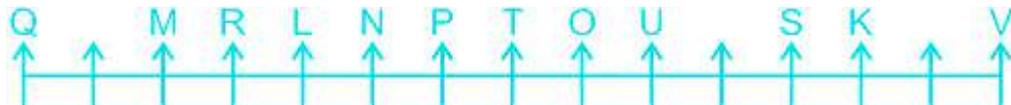
8. One of the places near the S is vacant. So it will be just left of S only because in right K is there.

9. No one is sitting between U and S. As one place is vacant so in this case also no one sitting between U and S.



10. V sits right of K but not near to K.

11. N sits sixth from the one end.



Hence, Fourth left of N is **vacant** so that **None** will be the answer.

170. Answer: d

Explanation:

Total Place: Fifteen, Three Vacant

Person: K, L, M, N, O, P, Q, R, S, T, U and V

1. Three persons are sitting between L and O, none of them sitting at the corner.

2. Q sits fourth to the left of L.

3. M sits second to the left of L.



4. Q is sitting third to the left of R.

5. Two persons are sitting between R and P who is just left of T.



6. K sits sixth to the right of P.

7. There are three places between T and S.



8. One of the places near the S is vacant. So it will be just left of S only because in right K is there.

9. No one is sitting between U and S. As one place is vacant so in this case also no one sitting between U and S.



10. V sits right of K but not near to K.

11. N sits sixth from the one end.



Hence, There are **seven** places to the right of T.

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171. Answer: d

Explanation:

(1) There are two friends who have height between Q and R as more than Q but less than R.

R > _____ > _____ > Q

(2) Q does not have the lowest height.

R > _____ > _____ > Q > _____

(3) Only two friends have a height more than C.

Case (I)

$R > \text{---} > C > Q > \text{---} > \text{---} > \text{---}$

Case (II)

$\text{---} > R > C > \text{---} > Q > \text{---} > \text{---}$

(4) A is taller than D but shorter than B who is not the tallest one.

(5) Not more than four people are shorter than B.

Case (I)

$R > \text{---} > C > Q > B > A > D$

Case (II)

$\text{---} > R > C > B > Q > A > D$

(6) P is not the second tallest person among them. Therefore, case (I) eliminates here.

Thus the final order is as follows:

Case (II)

$P > R > C > B > Q > A > D$

Hence, **P** is the tallest.

172. **Answer: c**

Explanation:

(1) There are two friends who have height between Q and R as more than Q but less than R.

$R > \text{---} > \text{---} > Q$

(2) Q does not have the lowest height.

$R > \text{---} > \text{---} > Q > \text{---}$

(3) Only two friends have a height more than C.

Case (I)

$R > \text{---} > C > Q > \text{---} > \text{---} > \text{---}$

Case (II)

$\text{---} > R > C > \text{---} > Q > \text{---} > \text{---}$

(4) A is taller than D but shorter than B who is not the tallest one.

(5) Not more than four people are shorter than B.

Case (I)

$R > \text{---} > C > Q > B > A > D$

Case (II)

$\text{---} > R > C > B > Q > A > D$

(6) P is not the second tallest person among them. Therefore, case (I) eliminates here.

Thus the final order is as follows:

Case (II)

$P > R > C > B > Q > A > D$

Hence, Q is the third shortest.

173. Answer: c

Explanation:

(1) There are two friends who have height between Q and R as more than Q but less than R.

$$R > \text{----} > \text{----} > Q$$

(2) Q does not have the lowest height.

$$R > \text{----} > \text{----} > Q > \text{----}$$

(3) Only two friends have a height more than C.

Case (I)

$$R > \text{----} > C > Q > \text{----} > \text{----} > \text{----}$$

Case (II)

$$\text{----} > R > C > \text{----} > Q > \text{----} > \text{----}$$

(4) A is taller than D but shorter than B who is not the tallest one.

(5) Not more than four people are shorter than B.

Case (I)

$$R > \text{----} > C > Q > B > A > D$$

Case (II)

$$\text{----} > R > C > B > Q > A > D$$

(6) P is not the second tallest person among them. Therefore, case (I) eliminates here.

Thus the final order is as follows:

Case (II)

$$P > R > C > B > Q > A > D$$

Hence, **three** people taller than B.

174. Answer: b

Explanation:

Eight friends:- A, B, C, D, E, G, H and I

Streams:- IT, HR and Account

Color:- Violet, Red, Blue, Marron, Black, Orange, Pink and Yellow

i) A likes Orange and studies in the IT with two friends and one of the friends likes Marron

ii) D studies in the HR Steam with only one person and does not like Red.

iii) The one who likes Violet does not study in IT or HR Steam.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D		No One
Accounts	(Violet)		

iv) The person I studies with two other friends.

v) Both the friends who study with I like one of the colors (Black, Marron and Blue).

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D		No One
Accounts	I (Violet)	(Black)	(Blue)

vi) E studies with only one friend.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D	E	No One
Accounts	I (Violet)	(Black)	(Blue)

vii) C does not like Blue, Black or Red.

So, C likes Marron. D likes Pink and E likes Red.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	C(Marron)	
HR	D (Pink)	E (Red)	No One
Accounts	I (Violet)	(Black)	(Blue)

Finally, B and G likes either Black or Blue.

Hence, only H left who likes Yellow and studied in IT.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	C(Marron)	H(Yellow)
HR	D (Pink)	E (Red)	No One
Accounts	I (Violet)	B/G (Black)	B/G (Blue)

Hence, G likes either Black or Blue.

175. Answer: a

Explanation:

Eight friends:- A, B, C, D, E, G, H and I

Streams:- IT, HR and Account

Color:- Violet, Red, Blue, Marron, Black, Orange, Pink and Yellow

- i) A likes Orange and studies in the IT with two friends and one of the friends likes Marron
- ii) D studies in the HR Steam with only one person and does not like Red.
- iii) The one who likes Violet does not study in IT or HR Steam.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D		No One
Accounts	(Violet)		

- iv) The person I studies with two other friends.
- v) Both the friends who study with I like one of the colors (Black, Marron and Blue).

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D		No One
Accounts	I (Violet)	(Black)	(Blue)

vi) E studies with only one friend.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D	E	No One
Accounts	I (Violet)	(Black)	(Blue)

vii) C does not like Blue, Black or Red.

So, C likes Marron. D likes Pink and E likes Red.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	C(Marron)	
HR	D (Pink)	E (Red)	No One
Accounts	I (Violet)	(Black)	(Blue)

Finally, B and G likes either Black or Blue.

Hence, only H left who likes Yellow and studied in IT.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	C(Marron)	H(Yellow)
HR	D (Pink)	E (Red)	No One
Accounts	I (Violet)	B/G (Black)	B/G (Blue)

Hence, I likes Violet color.

176. Answer: a

Explanation:

Eight friends:- A, B, C, D, E, G, H and I

Streams:- IT, HR and Account

Color:- Violet, Red, Blue, Marron, Black, Orange, Pink and Yellow

- i) A likes Orange and studies in the IT with two friends and one of the friends likes Marron
- ii) D studies in the HR Steam with only one person and does not like Red.
- iii) The one who likes Violet does not study in IT or HR Steam.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D		No One
Accounts	(Violet)		

- iv) The person I studies with two other friends.
- v) Both the friends who study with I like one of the colors (Black, Marron and Blue).

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D		No One
Accounts	I (Violet)	(Black)	(Blue)

vi) E studies with only one friend.

Steam	Student 1	Student 2	Student 3
IT	A (Orange)	(Marron)	
HR	D	E	No One
Accounts	I (Violet)	(Black)	(Blue)

vii) C does not like Blue, Black or Red.

So, C likes Marron. D likes Pink and E likes Red.

Stream	Student 1	Student 2	Student 3
IT	A (Orange)	C(Marron)	
HR	D (Pink)	E (Red)	No One
Accounts	I (Violet)	(Black)	(Blue)

Finally, B and G likes either Black or Blue.

Hence, only H left who likes Yellow and studied in IT.

Stream	Student 1	Student 2	Student 3
IT	A (Orange)	C(Marron)	H(Yellow)
HR	D (Pink)	E (Red)	No One
Accounts	I (Violet)	B/G (Black)	B/G (Blue)

Hence, I, B and G studied in Accounts Stream.

177. Answer: b

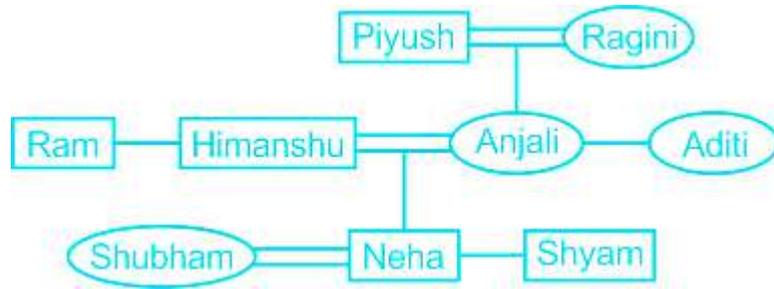
Explanation:

From the given information,

Symbol in Diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of A Generation

- 1) There are three married couples in the family.
 - 2) Shyam is the brother-in-law of Shubham, who is the daughter-in-law of Himanshu.
 - 3) Aditi and Shyam are unmarried members.
 - 4) Himanshu is the brother-in-law of Aditi.
- (from the above statements it is clear that brother of Shyam is married to Shubham because Shyam is an unmarried member and Shubham is daughter in law of Himanshu, which means Himanshu is the father of Shyam)
- 5) Himanshu is the brother-in-law of Aditi. (It means Himanshu is married to the sibling of Aditi because Aditi is an unmarried member)
 - 6) Piyush is the maternal grandfather of Neha and father of Aditi. (This means Neha belongs to the third generation)
 - 7) Ram is the paternal uncle of Neha and Ragini is the grandmother of Shyam. (This means Ragini belongs to first-generation and she is the wife of Piyush and Ram belongs to the second generation that means Himanshu is the father of Neha and brother of Ram)
 - 8) There are five males and four females in the family. (this implies that Aditi is a female member of the family).

The final arrangement



Hence, Anjali is the Mother-in-law of Shubham.

178. Answer: c

Explanation:

From the given information,

Symbol in Diagram	Meaning
○	Female
□	Male
══	Married Couple
—	Siblings
	Difference of A Generation

- 1) There are three married couples in the family.
- 2) Shyam is the brother-in-law of Shubham, who is the daughter-in-law of Himanshu.
- 3) Aditi and Shyam are unmarried members.
- 4) Himanshu is the brother-in-law of Aditi.

(from the above statements it is clear that brother of Shyam is married to Shubham because Shyam is an unmarried member and Shubham is daughter in law of Himanshu, which means Himanshu is the father of Shyam)

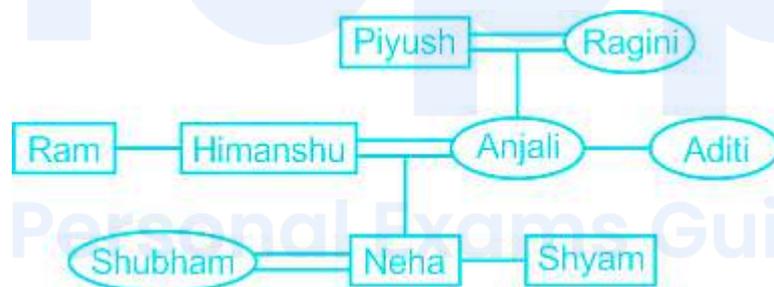
5) Himanshu is the brother-in-law of Aditi. (It means Himanshu is married to the sibling of Aditi because Aditi is an unmarried member)

6) Piyush is the maternal grandfather of Neha and father of Aditi. (This means Neha belongs to the third generation)

7) Ram is the paternal uncle of Neha and Ragini is the grandmother of Shyam. (This means Ragini belongs to first-generation and she is the wife of Piyush and Ram belongs to the second generation that means Himanshu is the father of Neha and brother of Ram)

8) There are five males and four females in the family. (this implies that Aditi is a female member of the family).

The final arrangement



Hence, **Anjali is the mother of Shyam.**

179. **Answer: d**

Explanation:

Seven People – Nimesh, Hitesh, Anu, Ciya, Deepak, Tilak and Shilpa.

Days of a week : Monday to Sunday (not necessarily in the same order).

From statement I:

Deepak gets a weekly off immediate after Shilpa but three days before Nimesh.

Deepak's weekly off could be on Tuesday, Wednesday or Thursday.

Therefore, statement I alone is not sufficient to answer the question.

From statement II:

Deepak does not get a weekly off on Thursday.

Deepak's weekly off could be on Monday, Tuesday, Wednesday, Friday, Saturday or Sunday.

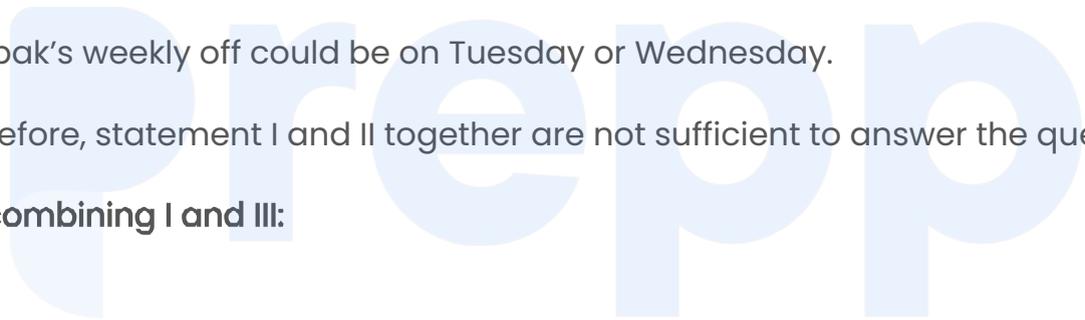
Therefore, statement II alone is sufficient to answer the question.

On combining I and II:

Deepak's weekly off could be on Tuesday or Wednesday.

Therefore, statement I and II together are not sufficient to answer the question.

On combining I and III:



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Days of a week	People	Constraints
Monday		
Tuesday	Shilpa	
Wednesday	Deepak	
Thursday		
Friday		
Saturday	Nimesh	
Sunday		

So, Deepak gets a weekly off on Wednesday.

Therefore, statement I and III together are sufficient to answer the question.

On combining II and III:

Deepak's weekly off could be on Monday, Tuesday, Wednesday, Friday, Saturday or Sunday.

Therefore, statement II and III together are not sufficient to answer the question.

Hence, statement I and III together are sufficient to answer the question.

180. Answer: c

Explanation:

Seven students – Nisha, Dia, Rakesh, Dimple, Kavita, Aarav and Ishaan.

From statement I:

Dimple has got the least marks among all. Kavita has got one rank more than Dia.

Rank	Students	Constraints
1		
2		
3		
4		
5		
6		
7	Dimple	

Therefore, statement I alone is not sufficient to answer the question.

From statement II:

Aarav has got the 2nd rank. Dia has neither got the 4th rank nor 5th.

Rank	Students	Constraints
1		
2	Aarav	
3		
4		Dia
5		Dia
6		
7		

Therefore, statement II alone is not sufficient to answer the question.

On combining I and II:

Rank	Students	Constraints
1		
2	Aarav	
3		
4		Dia
5	Kavita	Dia
6	Dia	
7	Dimple	

So, we get that Dia and Dimple are the two students who have not been selected for the scholarship.

Therefore, statement I and II together are sufficient to answer the question.

On combining I and III:

I. Dimple has got the least marks among all. Kavita has got one rank more than Dia.

III. Nisha has got two ranks more than Kavita but neither the 1st rank nor 2nd.

There is only one possible option for Nisha i.e. 3rd rank.

Rank	Students	Constraints
1		
2		
3	Nisha	
4		
5	Kavita	
6	Dia	
7	Dimple	

So, we get that Dia and Dimple are the two students who have not been selected for the scholarship.

Therefore, statement I and III together are sufficient to answer the question.

On combining II and III:

II. Aarav has got the 2nd rank. Dia has neither got the 4th rank nor 5th.

III. Nisha has got two ranks more than Kavita but neither the 1st rank nor 2nd.

Rank	Students	Constraints
1		Nisha
2	Aarav	Nisha
3		
4		Dia
5		Dia
6		
7		

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Therefore, statement II and III together are not sufficient to answer the question.

Hence, either II or III statement along with I are sufficient to answer the question.

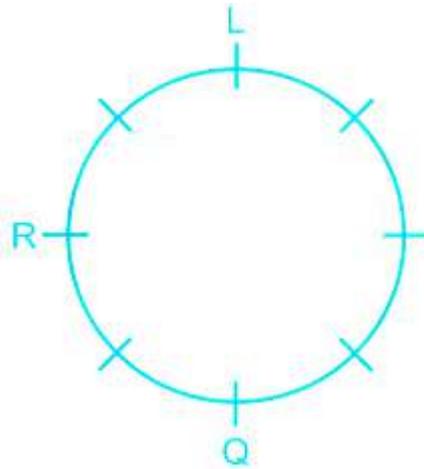
181. Answer: a

Explanation:

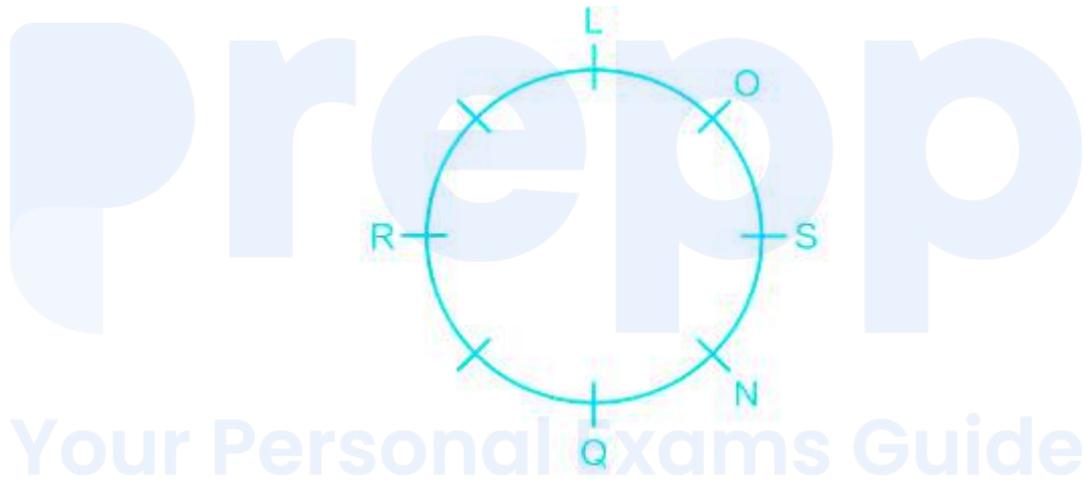
Eight persons: L, M, N, O, P, Q, R and S

1) L is sitting opposite to Q and second to the left of R.

2) S and O are the neighbours.

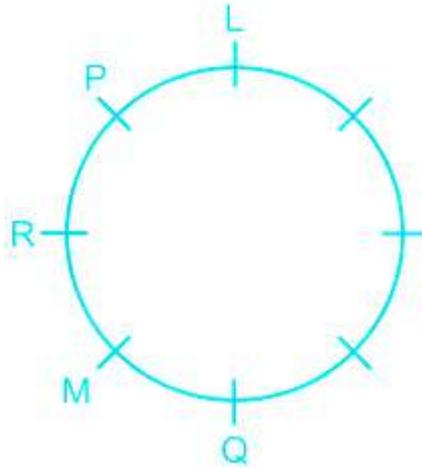


Statement I: O is sitting second to the right of N. N and S are the neighbours.



Hence, Statement I alone is not sufficient to answer the question.

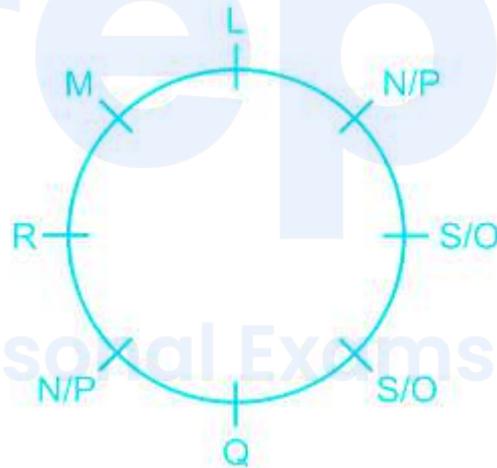
Statement II: M is sitting second to the right of P who is sitting to the immediate right of L.



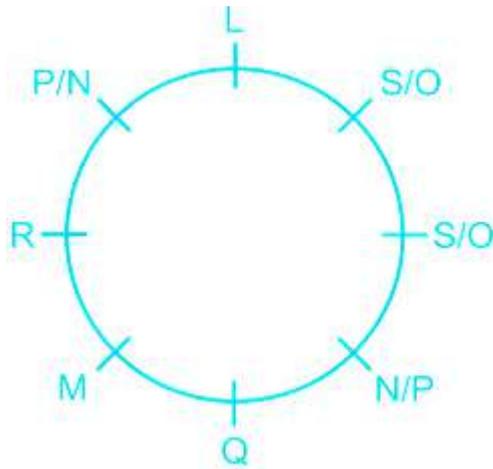
Hence, Statement II alone is not sufficient to answer the question.

Statement III: N is sitting opposite to P.

Case 1:

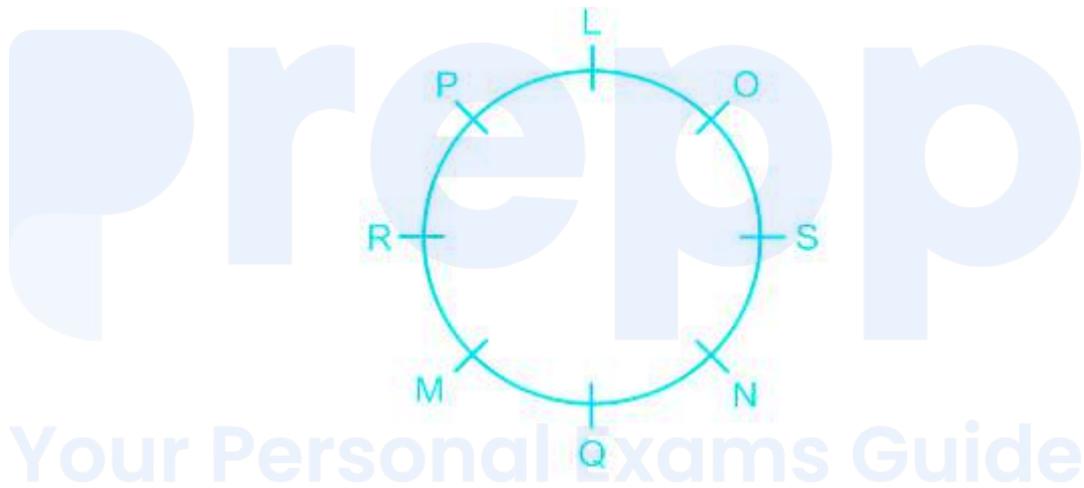


Case 2:



Hence, Statement III alone is not sufficient to answer the question.

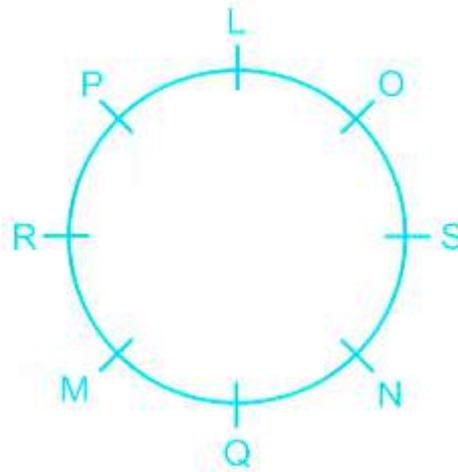
Combining statement I and II:



M is second to the left of N.

Hence, Statement I and II together are sufficient to answer the question.

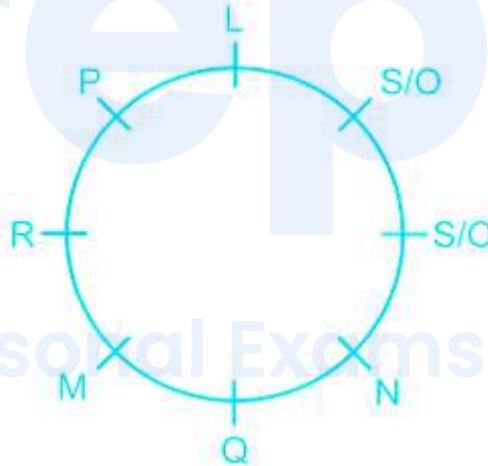
Combining statement I and III:



M is second to the left of N.

Hence, Statement I and III together are sufficient to answer the question.

Combining statement II and III:



M is second to the left of N.

Hence, Statement II and III together are sufficient to answer the question.

Hence, **any two statements together are sufficient** to answer the question.

182. Answer: e

Explanation:

According to the given information,

X is					
Symbol	#	&	%	\$	@
Meaning	<	=	≤	>	≥
to Y					

Given Statement : $E @ F, G \# F, H \% G$

On converting : $E \geq F, G < F, H \leq G$

On combining : $E \geq F > G \geq H$

conclusions :

I. $E \$ G \rightarrow E > G \rightarrow \text{True}$ (as $E \geq F > G \rightarrow E > G$)

II. $F \$ H \rightarrow F > H \rightarrow \text{True}$ (as $F > G \geq H \rightarrow F > H$)

Hence **Both I and II are True.**

183. Answer: a

Explanation:

According to the given information,

X is					
Symbol	#	&	%	\$	@
Meaning	<	=	≤	>	≥
to Y					

Given Statement : $P \# Q, R @ Q, R \$ S$

On converting : $P < Q, R \geq Q, R > S$

On combining : $P < Q \leq R > S$

Conclusions :

I. $P \# R \rightarrow P < R \rightarrow \text{True}$ (as $P < Q \leq R \rightarrow P < R$)

II. $Q \% S \rightarrow Q \leq S \rightarrow \text{False}$ (as $Q \leq R > S \rightarrow Q \leq S$)

Hence **Only I is true.**

184. Answer: c

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

Rules followed are as follows:

- (1) In step 1 → Consonants + 2, Vowels - 1, and Numbers + 1.
- (2) in step 2 → Letter - 1, Even number + 1, Odd number - 1.
- (3) In step 3 → Symbols which are immediately followed by number and immediately preceded by a letter are changed to the number which one less than the number which is to the immediate right of that symbol.

Similarly,

Input: U B & 8 6 # J ? 6 O P C 5 F \$ 4 L E 7 < M H

Step 1: T D & 9 7 # L ? 7 N R E 6 H \$ 5 N D 8 < O J

Step 2: S C & 8 6 # K ? 6 M Q D 7 G \$ 4 M C 9 < N I

Step 3: S C 7 8 6 # K 5 6 M Q D 7 G 3 4 M C 9 < N I

Numbers which are immediately preceded a symbol in step I are 9, 7, and 5 as shown below:

Step 1: T D & 97 # L ? 7N R E 6 H \$ 5N D 8 < L J

Hence, **three** is the correct answer.

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185. Answer: a

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

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Number of elements to the right of 3 in step III is **7 elements**, which is equal to the number of elements to the left of ? in step II.

Hence, ? is the correct answer.

186. Answer: b

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

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Similarly,

Input: U B & 8 6 # J ? 6 O P C 5 F \$ 4 L E 7 < M H

Step 1: T D & 9 7 # L ? 7 N R E 6 H \$ 5 N D 8 < O J

Step 2: S C & 8 6 # K ? 6 M Q D 7 G \$ 4 M C 9 < N I

Step 3: S C 7 8 6 # K 5 6 M Q D 7 G 3 4 M C 9 < N I

Seventh element from the left in step II is K, now third to the right of K is M.

Hence, **M** is the correct answer.

187. **Answer: d**

Explanation:

The argument in question is : the government should lay more emphasis on prosecuting drug users than drug dealers

Here we are trying to identify the option which supports the above-mentioned argument strongly.

Option A can be eliminated because what worked in other countries need not necessarily work in this one.

Option B can be eliminated because if the payoffs are outweighing the punishment, that would mean that there would be more dealers involved in drug dealing.

Option C does not evaluate whether drug abuse would reduce or increase. What needs to be evaluated is drug usage and not drug dealing. For similar

reasons, option E can also be eliminated. Keeping track of new dealers does not necessarily keep track of drug dealing or usage.

Option D evaluates the argument because the author's primary argument against the government's actions is that the current efforts will not curb drug usage, and that sale of drugs will continue happening at a premium. However, if most drug users do not wish to pay the premium charged, then the sale and usage of drugs will come down and the government's current measures will prove to be effective enough.

So, Option D is the correct answer.

188. Answer: b

Explanation:

The correct answer is (2) Only Conclusion II follows.

The first conclusion does not follow because the statements do not tell or hint about the current or future demand of cricket bats in the market. It may be an assumption but it cannot be qualified as a conclusion of the above statements. The second conclusion complies with both the given statements as bringing down the cost to manufacture would also bring down the MRP which will create a competition among other brands in the market on the basis of price. Hence, only conclusion II follows.

189. Answer: c

Explanation:

The passage talks about the public response that the Nobel Peace Prize generates. Besides, speculations, celebrations it also invites a lot of debate and criticism. So, the problem is relevance of the Peace prize under question.

Argument I states that is relevant because people receiving it become famous overnight. It fails to acknowledge years of effort and perseverance invested to earn the recognition. Therefore, argument I is not strong.

Argument II states that it keeps people motivated, as it is a way to honor the good work of people who indulge in noble tasks like establishment of fraternity, peace, etc. Therefore, argument II is strong.

Argument III states the limitations, as the Peace Prize does not have defined criteria, a lot of it gets decided by members of the selecting committee which may invite controversies. Therefore, argument III is strong.

Hence, Only II and III are strong.

190. Answer: a

Explanation:

Let's look at each statement one by one.

Statement A says that as the Indian economy grows, it will get more complex to govern and will require specific sector skills. If this is correct, then it is a valid reason why the government must undertake bureaucratic reforms to ensure specific skill focus. Hence, (A) follows.

Statement B says that a lot of the bureaucratic work is of a clerical nature and only less than 2% of the bureaucrats are involved in real decision making. If this is so, then it is a waste of resources to undertake such a big reform to overhaul bureaucracy to specific skills. Hence, (B) does not follow.

Statement C says that multiple reforms of similar nature undertaken over recent years in the bureaucracy haven't arrested Red Tapism at all. If this is so, then it is a waste of time, resources and energy to come up with similar reforms once again. Hence, (C) does not follow.

Hence, only (A) follows.