

# Prepp

## 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



BPS



UP TET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

# SSC GD Constable 2022 (English) Prev. Year Paper (12-Jan-2023) (Shift 3)

Total Time: 1 Hour

Total Marks: 160

## Instructions

Sl No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	General Intelligence and Reasoning	20	40	0.5	2
2	General Knowledge and General Awareness	20	40	0.5	2
3	Elementary Mathematics	20	40	0.5	2
4	English	20	40	0.5	2

- 1.) A total of 60 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 Intelligence and Reasoning

1. Seven people D, E, F, G, H, I and J are sitting in a straight row, facing north. (+2, -0.5)  
Only three people sit between D and H. E sits fourth to the left of J. Only D is between E and I. J sits third to the right of F. Who sits at the second position from the right end of the row?
- a. E
- b. I
- c. H
- d. D
- 
2. Which of the following numbers will replace the question mark (?) in the given series? (+2, -0.5)  
6, 10, 19, 35, ?, 96
- a. 70
- b. 68
- c. 60
- d. 74
- 
3. Three statements are given followed by three conclusions numbered 1, 2 and 3. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements. (+2, -0.5)

**Statements:**

Some shoes are slippers.

Some slippers are socks.

All socks are sandals.

**Conclusions:**

1. Some sandals are shoes.

2. Some sandals are slippers.

3. Some socks are shoes.

a. Only conclusion 2 follows

b. Only conclusions 1 and 2 follow

c. Only conclusions 2 and 3 follow

d. Only conclusion 3 follows

- 
4. Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number. (+2, -0.5)

18 : 4 :: 36 : 16 :: 27 : ?

a. 8

b. 9

c. 7

d. 10

---

5. Six friends (Aman, Biplab, Chirantan, Divya, Elizabeth and Firoz) are sitting around a circular table facing the centre. Aman sits third to the left of Biplab. Chirantan is an immediate neighbour of Aman. Elizabeth sits second to the right of Divya. Chirantan is not an immediate neighbour of Divya. Who sits between Aman and Elizabeth? (+2, -0.5)

- a. Firoz
- b. Divya
- c. Chirantan
- d. Biplab

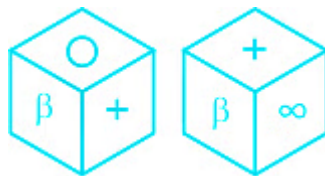
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6. In a certain code language, 'fruit hat string' is coded as 'worm bee wheel', 'hat fruit' is coded as 'bee worm', and 'string hat' is coded as 'wheel bee'. What is the code word for 'fruit'? (+2, -0.5)

- a. bee
- b. worm
- c. wheel
- d. hat

---

7. Two different positions of the same dice are shown having symbols- +, @, O, ∞, €, and β. Find the symbol on the face opposite the face showing 'O'. (+2, -0.5)



- a. €

- b. @
- c. +
- d. ∞

8. Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.) (+2, -0.5)

Virology : Viruses :: Cardiology : ?

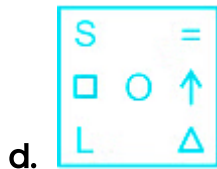
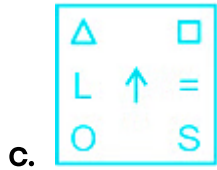
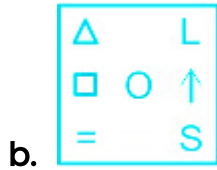
- a. Skull
- b. Head
- c. Lungs
- d. Heart

9. Which figure should replace the question mark (?) if the series were to be continued? (+2, -0.5)



- a. 

△	L
□	↑
=	S



10. Which two signs should be interchanged to make the below equation mathematically correct? (+2, -0.5)

$$120 + 18 \times 40 - 10 \div 20 = 172$$

- a. - and +
- b. + and ×
- c. + and ÷
- d. ÷ and -

11. Which of the following letter-clusters will replace the question mark (?) in the given series? (+2, -0.5)

GMPJ, HLOK, IKNL, JJMM, ?

- a. KKMN
- b. LKLN

c. LKLO

d. KILN

---

12. In a certain code language, 'PARENT' is written as '148' and 'WRANGLE' is written as '160'. How will 'GRANTED' be written in that language? (+2, -0.5)

a. 134

b. 67

c. 138

d. 69

---

13. Which of the following numbers will replace the question mark (?) in the given series? (+2, -0.5)

20, 24, 33, ?, 107, 228, 397

a. 82

b. 86

c. 29

d. 58

---

14. Which letter-cluster will replace the question mark (?) to complete the given series? (+2, -0.5)

BDGF, ACFE, ?, YADC, XZCB

a. ZBED



b. YBED

c. ZAFE

d. YAFD

- 
15. Select the correct combination of mathematical signs to sequentially replace the \* signs and to balance the given equation. (+2, -0.5)

$$(120 * 15) * 9 * \sqrt[4]{81} * 17 * 28 * 95$$

a.  $\div, -, =, -, \div, \times$

b.  $\div, -, =, -, \times, -$

c.  $\times, =, -, \div, +, -$

d.  $\div, \times, +, \times, -, =$

- 
16. Which option represents the correct order of the given words as they would appear in the English dictionary? (+2, -0.5)

1 culture

2 cult

3 cultivate

4 cupid

5 cumin

a. 2, 3, 1, 5, 4

b. 3, 2, 1, 4, 5

c. 2, 3, 1, 4, 5

d. 2, 1, 3, 5, 4

17. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below. (+2, -0.5)



- a. TnəMəGbuL
- b. TnəMəGbuL
- c. TnəMəGbuL
- d. TnəMəGbuL

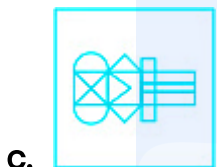
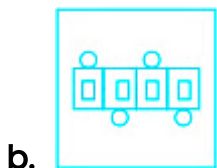
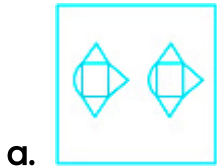
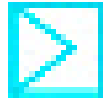
18. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster. (+2, -0.5)

IFHO : LCEK :: HIJK : KFGG :: QL GK : ?

- a. ITHD
- b. TIDG
- c. ITDH
- d. TIHD

19. Select the option figure in which the question figure is embedded (Rotation is NOT allowed).

(+2, -0.5)



20. A is married to Z. Z has 3 children L, M and N. Z is not the father of the children. P is the mother of A. L is the husband of D. M has 2 daughters H and J. How is Z related to P?

(+2, -0.5)

- a. Daughter
- b. Daughter in law
- c. Son
- d. Mother

## General Knowledge and General Awareness

21. Which is NOT the correct statement about the Governor? (+2, -0.5)

- a. He appoints the Chief Minister and other Ministers.
- b. He has the power to grant pardons, reprieves and forgive the death penalty of a person
- c. He may issue Ordinances under certain circumstances
- d. The state executive power is vested with the Governor.

22. Identify the country called 'The country of winds'. (+2, -0.5)

- a. Denmark
- b. Czech Republic
- c. Germany
- d. Poland

23. In which year did Congress and Muslim League signed the Lucknow pact? (+2, -0.5)

- a. 1914
- b. 1916
- c. 1910
- d. 1912

24. \_\_\_\_\_ can be visualized as a functional unit of nature, where living organisms interact among themselves and also with the surrounding physical environment. (+2, -0.5)

- a. A family
  - b. A universe
  - c. An ecosystem
  - d. A herd
- 

25. What is the Full Form of BCCI? (+2, -0.5)

- a. Board of Cricket Control
  - b. Board of Control of Cycling in India
  - c. Board of Control for Cricket in India
  - d. Basic Cricket Control Board
- 

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26. India's first five-year plan was launched in \_\_\_\_\_. (+2, -0.5)

- a. 1901
  - b. 1961
  - c. 1971
  - d. 1951
-

27. Apart from the Cash Reserve Ratio, banks are also required to keep some reserves in liquid form in the short term, referred as \_\_\_\_\_ (+2, -0.5)

- a. Statutory Liquidity Repo
  - b. State Liquidity Ratio
  - c. Statutory Liquidity Ratio
  - d. Statutory License Ratio
- 

28. In which year was the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) passed? (+2, -0.5)

- a. 1993
  - b. 2005
  - c. 1995
  - d. 2000
- 

29. President of India appointed senior advocate \_\_\_\_\_ as the next Attorney-General for India in September 2022. (+2, -0.5)

- a. Ram Jethmalani
  - b. R Venkataramani
  - c. Pravin Anand
  - d. Jasbina Ahluwalia
-

30. Who was the prime minister of India when the fundatmental duties were included in the Indian constitution? (+2, -0.5)

- a. Indira Gandhi
- b. Rajiv Gandhi
- c. Manmohan Singh
- d. Jawaharlal Nehru

31. Green Revolution mainly revolves around \_\_\_\_\_ . (+2, -0.5)

- a. Rain harvesting
- b. Natural Vegetation
- c. High Yield Variety Programme
- d. Use of Natural Fertilizers

32. Who was the coach of the U-19 Indian cricket team at the ICC U19 World Cup 2022? (+2, -0.5)

- a. Ajit Agarkar
- b. Mohammed Kaif
- c. Anil Kumble
- d. Hrishikesh Kanitkar

33. Thiruvathira festival is mainly celebrated in which of these states? (+2, -0.5)

- a. Odisha
  - b. Assam
  - c. Punjab
  - d. Kerala
- 

34. What is used for manufacturing synthetic fibers, synthetic rubber, plastics, dye-stuffs, drugs and pharmaceuticals? (+2, -0.5)

- a. sugar cane
  - b. petrochemicals
  - c. natural gas
  - d. coal
- 

35. Which of the following is NOT a sedimentary rock? (+2, -0.5)

- a. Granite
  - b. Sand stone
  - c. Loess
  - d. Shale
- 

36. Who has been appointed as the Revenue Secretary by the Indian government in October 2022? (+2, -0.5)

- a. S.S Nakul



- b. Sanjay Malhotra
  - c. Tarun Bajaj
  - d. Ajay Bhushan Pandey
- 

37. Who presented the Criminal Procedure (Identification) Bill, 2022 on March 28 in Lok Sabha? (+2, -0.5)

- a. Meenakshi Lekhi
  - b. Ajay Kumar Mishra
  - c. Krishan Pal
  - d. Rao Inderjit Singh
- 

38. According to Megasthenes, the guards of Chandragupta rode \_\_\_\_\_ decorated with gold and silver during royal processions. (+2, -0.5)

- a. elephants
  - b. unicorns
  - c. bulls
  - d. horses
- 

39. Kalbelia is a famous folk dance of which Indian state? (+2, -0.5)

- a. Rajasthan
- b. Odisha

- c. West Bengal
  - d. Bihar
- 

40. Which of the following festivals celebrates the harvest season in August – September? (+2, -0.5)

- a. Onam
- b. Makar Sankranti
- c. Lohri
- d. Baisakhi

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## Elementary Mathematics

41. The ratio of the third proportion of 5 and 12 with the fourth proportion of 5, 8 and 9 is: (+2, -0.5)
- a. 2 : 1
  - b. 2 : 3
  - c. 1 : 2
  - d. 3 : 2
- 
42. Anil started his journey in the morning. Till 10 a.m., he covered  $\frac{1}{2}$  of his journey, and on the same day till 1 a.m., he covered  $\frac{4}{5}$  of his journey. At what time did he start his journey? (+2, -0.5)
- a. 2.00 a.m.
  - b. 4.00 a.m.
  - c. 5.00 a.m.
  - d. 3.30 a.m.
- 
43. A cone of height 8 cm and base radius 4 cm is carved from a rectangular block of wood 8 cm  $\times$  6 cm  $\times$  4 cm. The percentage of wood wasted is approximately: (+2, -0.5)
- a. 56%
  - b. 30%
  - c. 58%

d. 48%

---

44. The Difference between compound interest, compounding annually and simple interest on an amount of ₹500 for 2 years is ₹1.25. What is the rate of interest per annum? (+2, -0.5)

a. 2%

b. 5%

c. 4%

d. 3%

---

45. An article is listed at ₹1,200. A customer pays ₹972 for it after getting two successive discounts. If the rate of the first discount is 10%, then the rate of the second discount is: (+2, -0.5)

a. 10%

b. 12%

c. 14%

d. 16%

---

46. The fourth proportional to 3, 12, 14 is: (+2, -0.5)

a. 35

b. 28

c. 56

---

d. 49

---

47. An iron ball of radius 21 cm is melted and recast into spherical balls of radius 7 cm. Find the number of spherical balls. (+2, -0.5)

a. 9

b. 21

c. 18

d. 27

---

48. Find the sum of the digits of the smallest 6-digit number divisible by 18, 24 and 25. (+2, -0.5)

a. 12

b. 10

c. 15

d. 9

---

49. The value of  $1 \div 2 + 3 - 5 \times \frac{1}{3}$  of  $15 - \{75 \div (28 - 3)\}$  is: (+2, -0.5)

a. -25

b.  $\frac{-49}{2}$

c.  $\frac{49}{2}$

d. 25

---

50. A vegetable vendor does his sales using a weight which is 12% less than the actual weight and earns a profit of 32% on the cost price. Find the total profit percentage? (+2, -0.5)

- a. 44%
  - b. 40%
  - c. 50%
  - d. 45%
- 

51. A and B can complete a work in 18 days and 36 days respectively. They work together for 8 days and then A leaves. How many days will B take to complete the rest of the work? (+2, -0.5)

- a. 15
  - b. 12
  - c. 18
  - d. 10
- 

52. What is the average of the first 10 multiples of 3? (+2, -0.5)

- a. 16.5
  - b. 14.5
  - c. 15.5
  - d. 11.5
-

53. If the price of potatoes increases by 10 percent, then by how much percent a user has to cut down on his consumption of potatoes, so that the expenditure on potatoes remains unchanged? (+2, -0.5)
- a. 16.4 percent
  - b. 15.8 percent
  - c. 12.5 percent
  - d. 9.1 percent
- 

54. The current value of a car is ₹8,50,000 and its value is depreciating at the rate of 10% per annum. What will be its value (in ₹) after 4 years? (+2, -0.5)
- a. 5,47,685
  - b. 5,57,685
  - c. 5,67,685
  - d. 5,57,865
- 

55. What is the faulty weight used by a dishonest shopkeeper instead of the original weight of 1 kg to get a profit of 25%? (+2, -0.5)
- a. 250 grams
  - b. 800 grams
  - c. 640 grams
  - d. 980 grams
-

56. A, B, and C can complete a work in 30, 60, and 120 days respectively. A left the work 10 days before the work was completed and B left 5 days before the completion of the work. Find the number of days required to complete the whole work. (+2, -0.5)
- a.  $170/7$  days
  - b.  $144/7$  days
  - c.  $89/7$  days
  - d.  $190/7$  days
- 

57. Mr. Sharma spends 15% of his total income on rent and 75% of the remaining part on other expenses and still saves Rs. 1,700 monthly. What is his monthly income? (+2, -0.5)
- a. Rs. 8,000
  - b. Rs. 7,000
  - c. Rs. 7,500
  - d. Rs. 8,500
- 

58. Aravind runs  $\frac{5}{4}$  times as fast as Bhanu. In a race, if Aravind gives a lead of 60 m to Bhanu, find the distance from the starting point where both of them will meet. (+2, -0.5)
- a. 320 m
  - b. 340 m
  - c. 360 m



d. 300 m

---

59. The marked price of a double bed is ₹42,000. The customer gets a cash discount of ₹1,000 and gets a scratch card promising a discount of 5% to 10%. Determine the difference between the least and the maximum selling price of the bed. (+2, -0.5)

a. ₹1,880

b. ₹2,050

c. ₹1,910

d. ₹1,940

---

60. Arjun rides his bike 10 km at an average speed of 30 km/h, and again travels 14 km at an average speed of 25 km/h. What is his average speed (approx.) for the entire trip? (+2, -0.5)

a. 27.68 km/h

b. 26.87 km/h

c. 29.81 km/h

d. 28.76 km/h

## English

61. Select the word segment that substitutes (replaces) the bracketed word segment correctly and completes the sentence meaningfully. (+2, -0.5)

When the last Tsar of Russia (were arrested by revolutionaries), he and his family were hiding at a palace near St. Petersburg; now that palace is open to tourists.

- a. is arresting from revolutionaries
- b. was arrested by revolutionaries
- c. were arrest by revolutionaries
- d. is arrested by revolutionaries

- 
62. Select the correct word for the blanks in the given sentence. (+2, -0.5)

Sushant is a very \_\_\_\_\_ person and the \_\_\_\_\_ of first ten natural numbers is 5.5.

- a. clever
- b. mean
- c. honest
- d. shrewd

- 
63. Select the most appropriate synonym of the given word. (+2, -0.5)

Consistent

- a. Evolve

- b. Change
  - c. Constant
  - d. Alter
- 

64. Select the correct word for the blanks in the given sentence. (+2, -0.5)

The tree has a brown \_\_\_\_\_ and the dogs \_\_\_\_\_ at the stranger.

- a. tail
  - b. sound
  - c. trunk
  - d. bark
- 

65. Select the most appropriate synonym of the word given below to fill in the blank in the following sentence. (+2, -0.5)

Pamper

My grandmother said, "Don't \_\_\_\_\_ the kid. He will get spoiled".

- a. bend
  - b. comfortable
  - c. attend
  - d. coddle
-

66. Select the most appropriate option to substitute the underlined segment in the given sentence. (+2, -0.5)

This is an olden building of historical importance.

- a. ancient
- b. elder
- c. older
- d. very older

67. The following sentence has been split into four segments. Identify the segment that contains a grammatical error. (+2, -0.5)

The peon / was brought / a cup of / coffee for Naina.

- a. coffee for Naina
- b. a cup of
- c. was brought
- d. The peon

68. Select the most appropriate synonym of the given word. (+2, -0.5)

Earn

- a. Receive
- b. Lose
- c. Accord

d. Surrender

---

69. Select the most appropriate meaning of the given idiom. (+2, -0.5)

Fit as a fiddle

- a. In good health
  - b. Limited in scope
  - c. Emergency situation
  - d. To be of perfect size
- 

70. The sentence given below has one misspelt word. Spot the INCORRECTLY spelt word and select its correct spelling. (+2, -0.5)

Some diseases are due to neurological disorders.

- a. Newrologecal
  - b. Neurological
  - c. Neurologecal
  - d. Newrological
- 

71. Select the most appropriate option to fill in the blank. (+2, -0.5)

The private \_\_\_\_\_ has contributed immensely to the country's economy.

- a. division
- b. segment

- c. section
  - d. sector
- 

72. Select the most appropriate meaning of the given idiom. (+2, -0.5)

Take it with a grain of salt

- a. To calculate things with utmost precision
  - b. To misinterpret that the real situation is hidden
  - c. To understand that something is likely to be untrue
  - d. To imagine that someone is working against you
- 

73. Fill in the blank by selecting the meaningful and correctly spelt word from the given options. (+2, -0.5)

Nowadays, the police get a long \_\_\_\_\_ of drug peddlers every day.

- a. list
  - b. lest
  - c. leest
  - d. least
- 

74. Select the most appropriate ANTONYM of the given word. (+2, -0.5)

Hope

- a. Despair

- b. Promise
- c. Craving
- d. Fantasy

---

75. Select the most appropriate ANTONYM of the given word. (+2, -0.5)

Generous

- a. Liberal
- b. Free
- c. Selfish
- d. Selfless

---

76. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. (+2, -0.5)

An initiative has been (1) \_\_\_\_\_ in the educational reform sector in form of Social and Emotional Learning (SEL). This novel (2) \_\_\_\_\_ helps students to understand and manage their own emotions. The students (3) \_\_\_\_\_ and learn in a constructive manner. This concept (4) \_\_\_\_\_ momentum with the publication of the best seller by Daniel Goleman titled 'Emotional Intelligence: Why it can matter more than IQ'. It (5) \_\_\_\_\_ the enhancement of the given competencies: speaking and listening, cooperative skills and problem solving.

Select the most appropriate option to fill in blank no. 1.

- a. discovered

- b. started
- c. reckoned
- d. established

77. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. (+2, -0.5)

An initiative has been (1) \_\_\_\_\_ in the educational reform sector in form of Social and Emotional Learning (SEL). This novel (2) \_\_\_\_\_ helps students to understand and manage their own emotions. The students (3) \_\_\_\_\_ and learn in a constructive manner. This concept (4) \_\_\_\_\_ momentum with the publication of the best seller by Daniel Goleman titled 'Emotional Intelligence: Why it can matter more than IQ'. It (5) \_\_\_\_\_ the enhancement of the given competencies: speaking and listening, cooperative skills and problem solving.

Select the most appropriate option to fill in blank no. 2.

- a. intention
- b. application
- c. concept
- d. experiment

78. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. (+2, -0.5)

An initiative has been (1) \_\_\_\_\_ in the educational reform sector in form of Social and Emotional Learning (SEL). This novel (2) \_\_\_\_\_ helps students to understand and manage their own emotions. The



students (3) \_\_\_\_\_ and learn in a constructive manner. This concept (4) \_\_\_\_\_ momentum with the publication of the best seller by Daniel Goleman titled 'Emotional Intelligence: Why it can matter more than IQ'. It (5) \_\_\_\_\_ the enhancement of the given competencies: speaking and listening, cooperative skills and problem solving.

Select the most appropriate option to fill in blank no. 3.

- a. act
- b. affect
- c. mingle
- d. interact

---

79. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank. (+2, -0.5)

An initiative has been (1) \_\_\_\_\_ in the educational reform sector in form of Social and Emotional Learning (SEL). This novel (2) \_\_\_\_\_ helps students to understand and manage their own emotions. The students (3) \_\_\_\_\_ and learn in a constructive manner. This concept (4) \_\_\_\_\_ momentum with the publication of the best seller by Daniel Goleman titled 'Emotional Intelligence: Why it can matter more than IQ'. It (5) \_\_\_\_\_ the enhancement of the given competencies: speaking and listening, cooperative skills and problem solving.

Select the most appropriate option to fill in blank no. 4.

- a. gratified
- b. gained
- c. relieved

d. profited

80. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

(+2, -0.5)

An initiative has been (1) \_\_\_\_\_ in the educational reform sector in form of Social and Emotional Learning (SEL). This novel (2) \_\_\_\_\_ helps students to understand and manage their own emotions. The students (3) \_\_\_\_\_ and learn in a constructive manner. This concept (4) \_\_\_\_\_ momentum with the publication of the best seller by Daniel Goleman titled 'Emotional Intelligence: Why it can matter more than IQ'. It (5) \_\_\_\_\_ the enhancement of the given competencies: speaking and listening, cooperative skills and problem solving.

Select the most appropriate option to fill in blank no. 5.

- a. incorporates
- b. influences
- c. compares
- d. merges

## Answers

### 1. Answer: c

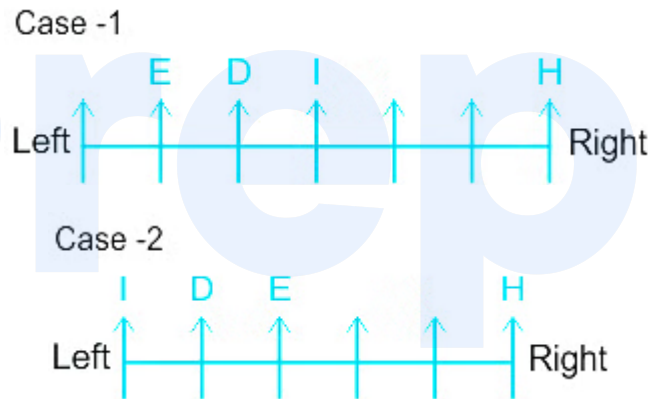
#### Explanation:

The pattern followed here is:

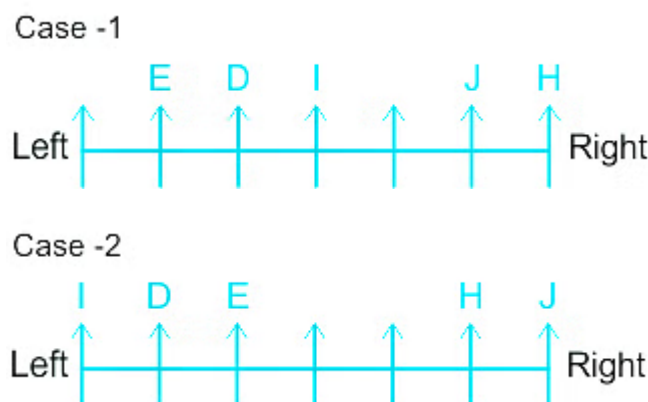
**Given:** Seven people D, E, F, G, H, I and J are sitting in a straight row, facing north.

1) Only three people sit between D and H. Only D is between E and I.

(There are two possibility)



2) E sits fourth to the left of J.



3) J sits third to the right of F. So, case 1 will be eliminated.

Case -2



5) G sits on the vacant place.

Case -2



Clearly, H is sitting second to the right end of the row.

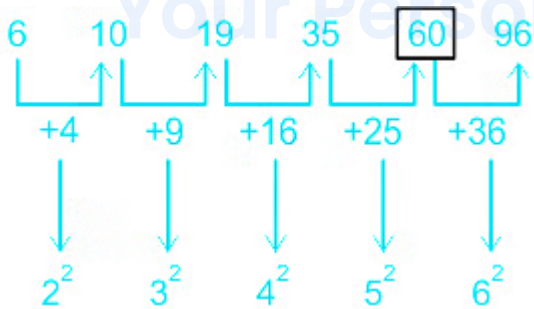
Hence, the correct answer is "H".

2. Answer: c

Explanation:

The pattern followed here is:

Given:- 6, 10, 19, 35, ?, 96

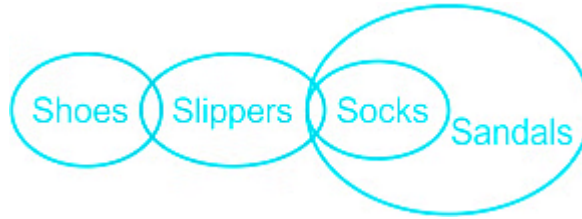


Hence, the correct answer is "60".

3. Answer: a

**Explanation:**

The least possible Venn diagram is given below according to the given information.



Conclusion:

1. Some sandals are shoes → **Does not follow** → As, some shoes are slippers, some slippers are socks, and all socks are sandals. So, some sandals are shoes is possible but not definitely followed.
2. Some sandals are slippers → **Follow** → As, some slippers are socks and all socks are sandals. So some sandals are slippers is definitely followed.
3. Some socks are shoes → **Does not follow** → As, some shoes are slippers, some slippers are socks, and all socks are sandals. So, some socks are shoes is possible but not definitely followed.

**Only conclusion II follows.**

Hence, the correct answer is "Option 1".

**4. Answer: b**

**Explanation:**

The pattern followed here is:

**Logic:-**  $\sqrt{\text{Second number}} \times 9 = \text{First number.}$

1) 18 : 4

$\Rightarrow \sqrt{4} \times 9$

$$\Rightarrow 2 \times 9 = 18$$

And,

$$2) 36 : 16$$

$$\Rightarrow \sqrt{16} \times 9$$

$$\Rightarrow 4 \times 9 = 36$$

Similarly,

$$3) 27 : ?$$

$$\Rightarrow \sqrt{x} \times 9 = 27$$

$$\Rightarrow \sqrt{x} = 27 \div 9$$

$$\Rightarrow \sqrt{x} = 3$$

$$\Rightarrow 9$$

Hence, the correct answer is "9"

## 5. Answer: c

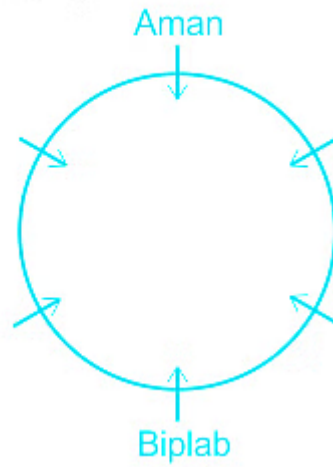
### Explanation:

The pattern followed here is:

**Given:-** Six friends (Aman, Biplab, Chirantan, Divya, Elizabeth and Firoz) are sitting around a circular table facing the centre.

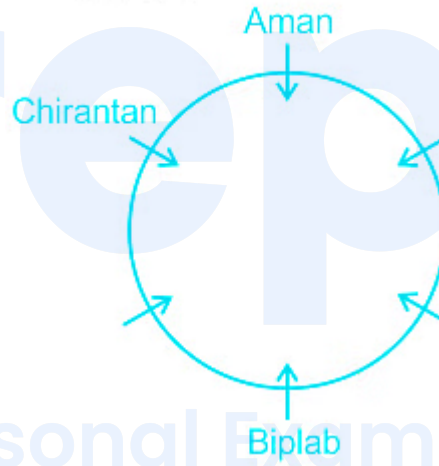
1) Aman sits third to the left of Bipal.

Case:- 1

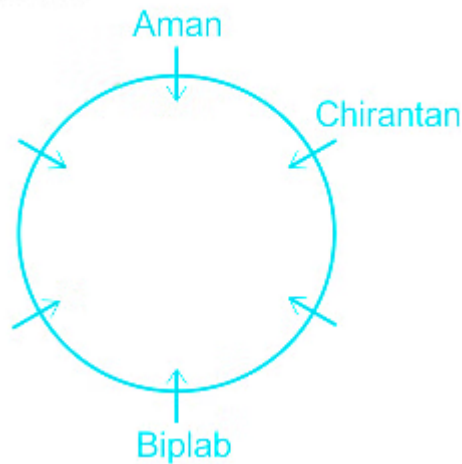


2) Chirantan is an immediate neighbour of Aman.

Case:- 1



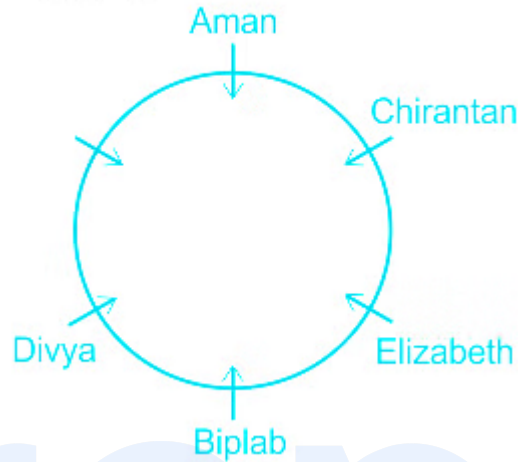
Case:- 2



3) Elizabeth sits second to the right of Divya. Chirantan is not an immediate neighbour of Divya.

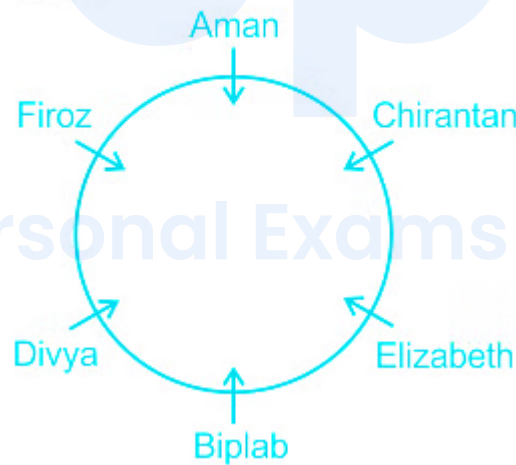
(It means case:-1 is not followed here)

Case:- 2



4) Firoz sits on the vacant place

Case:- 2



Clearly, Chirantan is sitting between Elizabeth and Aman.

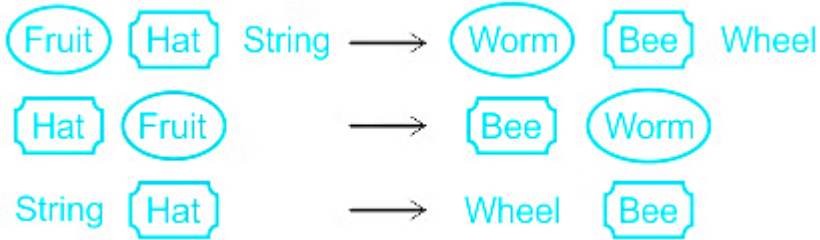
Hence, the correct answer is "Elizabeth".

6. Answer: b

Explanation:



The pattern followed here is:



Hence, the codes are

Word	Code
Hat	Bee
Fruit	Worm

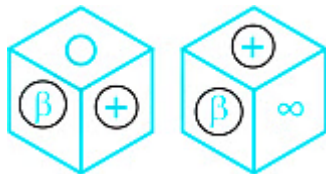
Clearly, the code of 'Fruit' is 'Worm'

Hence, the correct answer is "Worm".

7. Answer: d

Explanation:

The pattern followed here is:



Here, 'β' and + are common in both the dice.

Clearly, '∞' is the face opposite to 'O'

Hence, the correct answer is "∞".

8. Answer: d

**Explanation:**

The logic followed here is:

Logic: The second word is the subject or focus of the study field represented by the first word.

Here, Virology : Viruses → Viruses are the subject of study in Virology.

Similarly, Cardiology : ? → Heart is the subject of study in Cardiology.

Hence, the correct answer is "Heart".

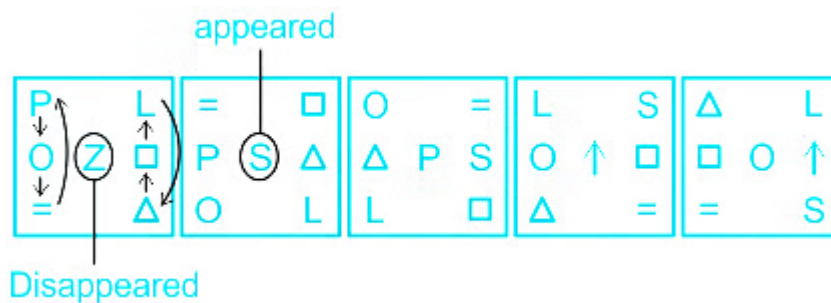
9. Answer: b

**Explanation:**

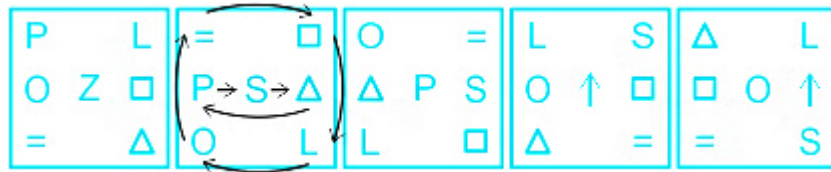
The pattern followed here is:

Two type of pattern is followed in this series.

1. Letters of left hand side are rotation anticlockwise direction and letters of right hand side are rotation clockwise direction. S appears instead of Z.



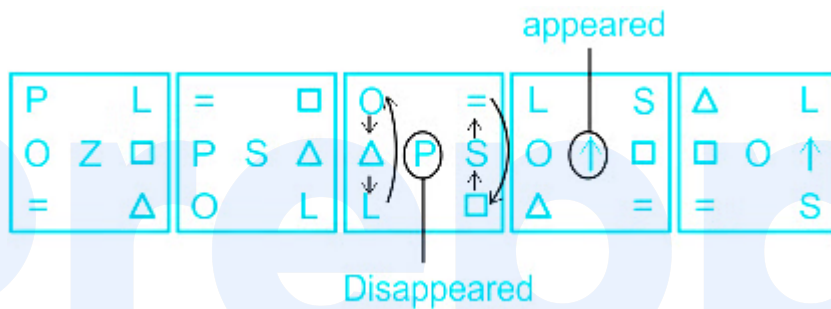
2. Outer most letters are rotating in clockwise direction and inner most letters are rotating in cyclic order.



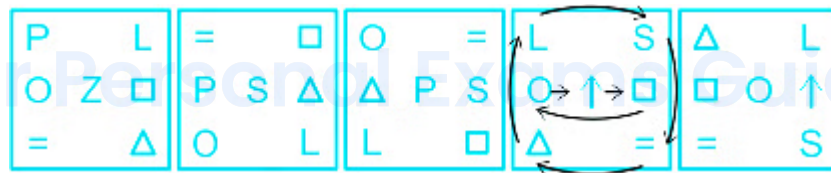
3. Letters of left hand side are rotation anticlockwise direction and letters of right hand side are rotation clockwise direction.



appears instead of Z.



4. Outer most letters are rotating in clockwise direction and inner most letters are rotating in cyclic order.



Hence, the correct answer is "Option 2".

10. Answer: d

Explanation:

The pattern followed here is:

We have to interchange the signs in the given equations to make it correct.

Let's check each option one by one.

**Option 1)** - and +

**Given:**  $120 + 18 \times 40 - 10 \div 20 = 172$

After interchanging the sign we get the;

$$\Rightarrow 120 - 18 \times 40 + \underline{10 \div 20} = 172$$

$$\Rightarrow 120 - \underline{18 \times 40} + 0.5 = 172$$

$$\Rightarrow \underline{120} - 720 + \underline{0.5} = 172$$

$$\Rightarrow \underline{120.5 - 720} = 172$$

$$\Rightarrow - 599.5 \neq 720$$

$$\Rightarrow \text{LHS} \neq \text{RHS}$$

**Option 2)** + and  $\times$

**Given:**  $120 + 18 \times 40 - 10 \div 20 = 172$

After interchanging the sign we get the;

$$\Rightarrow 120 \times 18 + 40 - \underline{10 \div 20} = 172$$

$$\Rightarrow \underline{120 \times 18} + 40 - 0.5 = 172$$

$$\Rightarrow \underline{2160 + 40} - 0.5 = 172$$

$$\Rightarrow \underline{2200 - 0.5} = 172$$

$$\Rightarrow 2199.5 \neq 172$$

$$\Rightarrow \text{LHS} \neq \text{RHS}$$

**Option 3)** + and  $\div$

**Given:**  $120 + 18 \times 40 - 10 \div 20 = 172$

After interchanging the sign we get the;

$$\Rightarrow \underline{120 \div 18} \times 40 - 10 + 20 = 172$$

$$\Rightarrow \underline{6.66 \times 40} - 10 + 20 = 172$$

$$\Rightarrow \underline{266.66} - 10 + \underline{20} = 172$$

$$\Rightarrow 286.66 - 10 = 172$$

$$\Rightarrow 276.6 \neq 172$$

$$\Rightarrow \text{LHS} \neq \text{RHS}$$

**Option 4)  $\div$  and  $-$**

$$\text{Given: } 120 + 18 \times 40 - 10 \div 20 = 172$$

After interchanging the sign we get the;

$$\Rightarrow 120 + 18 \times \underline{40 \div 10} - 20 = 172$$

$$\Rightarrow 120 + \underline{18 \times 4} - 20 = 172$$

$$\Rightarrow \underline{120 + 72} - 20 = 172$$

$$\Rightarrow \underline{192} - 20 = 172$$

$$\Rightarrow 172 = 172$$

$$\Rightarrow \text{LHS} = \text{RHS}$$

Hence, the correct answer is "Option 4".

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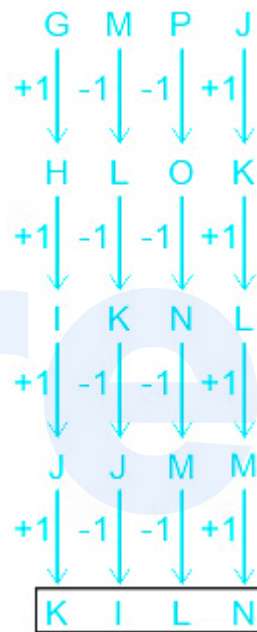
## 11. Answer: d

### Explanation:

The logic followed here is:

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

Given: GMPJ, HLOK, IKNL, JJMM, ?



Hence, the correct answer is 'KILN'.

12. Answer: c

**Explanation:**

The pattern followed here is:

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

Logic:- (Addition of the place value of alphabet)  $\times 2 =$  code

1) 'PARENT' is written as "148"

$$\begin{array}{cccccc}
 P & A & R & E & N & T \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 16 & + & 1 & + & 18 & + & 5 & + & 14 & + & 20 & = & 74 & \times 2 & = & 148
 \end{array}$$

and,

2) 'WRANGLE' is written as '160'

$$\begin{array}{cccccc}
 W & R & A & N & G & L & E \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 23 & + & 18 & + & 1 & + & 14 & + & 7 & + & 12 & + & 5 & = & 80 & \times 2 & = & 160
 \end{array}$$

Similarly,

3) 'GRANTED' is written as (?)

$$\begin{array}{cccccc}
 G & R & A & N & T & E & D \\
 \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
 7 & + & 18 & + & 1 & + & 14 & + & 20 & + & 5 & + & 4 & = & 69 & \times 2 & = & 138
 \end{array}$$

Hence, the correct answer is "138"

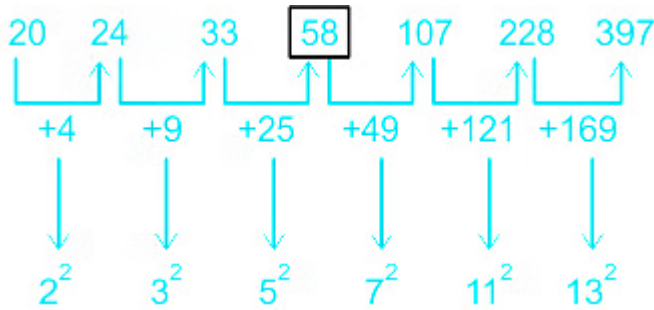
13. Answer: d

**Explanation:**

The pattern followed here is:

**Given:** 20, 24, 33, ?, 107, 228, 397

**Logic:** Addition of the square of prime number.



Hence, the correct answer is "58"

14. **Answer: a**

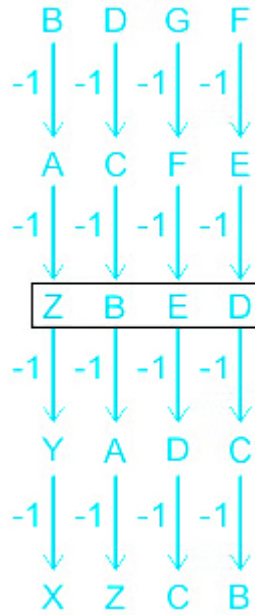
**Explanation:**

The logic followed here is:

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

Given: BDGF, ACFE, ?, YADC, XZCB





Hence, the correct answer is 'ZBED'

15. Answer: d

**Explanation:**

The pattern followed here is:

We have to interchange the signs in the given equations to make it correct.

Let's check each option one by one.

**Option 1)**  $\div, -, =, -, \div, \times$

**Given:**  $(120 * 15) * 9 * \sqrt[4]{81} * 17 * 28 * 95$

After putting the sign we get the;

$$\Rightarrow (120 \div 15) - 9 = \sqrt[4]{81} - 17 \div 28 \times 95$$

$$\Rightarrow 8 - 9 = \sqrt[4]{81} - 17 \div 28 \times 95$$

$$\Rightarrow 8 - 9 = 3 - 17 \div 28 \times 95$$

$$\Rightarrow -1 = 3 - \underline{0.60 \times 95}$$

$$\Rightarrow -1 = \underline{3 - 57}$$

$$\Rightarrow -1 \neq -54$$

$$\Rightarrow \text{LHS} \neq \text{RHS}$$

Option 2)  $\div, -, =, -, \times, -$

$$\text{Given: } (120 * 15) * 9 * \sqrt[4]{81} * 17 * 28 * 95$$

After putting the sign we get the;

$$\Rightarrow \underline{(120 \div 15)} - 9 = \sqrt[4]{81} - 17 \times 28 - 95$$

$$\Rightarrow \underline{8 - 9} = 3 - \underline{17 \times 28} - 95$$

$$\Rightarrow -1 = \underline{3 - 476 - 95}$$

$$\Rightarrow -1 \neq -568$$

$$\Rightarrow \text{LHS} \neq \text{RHS}$$

Option 3)  $\times, =, -, \div, +, -$

$$\text{Given: } (120 * 15) * 9 * \sqrt[4]{81} * 17 * 28 * 95$$

After putting the sign we get the;

$$\Rightarrow \underline{(120 \times 15)} = 9 - \sqrt[4]{81} \div 17 + 28 - 95$$

$$\Rightarrow 1800 = 9 - \underline{3 \div 17} + 28 - 95$$

$$\Rightarrow 1800 = \underline{9 - 0.176 + 28 - 95}$$

$$\Rightarrow 1800 \neq -58.176$$

$$\Rightarrow \text{LHS} \neq \text{RHS}$$

Option 4)  $\div, \times, +, \times, -, =$

$$\text{Given: } (120 * 15) * 9 * \sqrt[4]{81} * 17 * 28 * 95$$

After putting the sign we get the;

$$\Rightarrow (120 \div 15) \times 9 + \sqrt[4]{81} \times 17 - 28 = 95$$

$$\Rightarrow 8 \times 9 + \sqrt[4]{81} \times 17 - 28 = 95$$

$$\Rightarrow 72 + 3 \times 17 - 28 = 95$$

$$\Rightarrow 72 + 51 - 28 = 95$$

$$\Rightarrow 123 - 28 = 95$$

$$\Rightarrow 95 = 95$$

$$\Rightarrow \text{LHS} = \text{RHS}$$

Hence, the correct answer is "Option 4".

---

16. Answer: a

Explanation:

The correct order as per the dictionary is:

2 cult

3 cultivate

1 culture

5 cumin

4 cup'id

Hence, the correct answer is "2, 3, 1, 5, 4".

---

17. Answer: a

**Explanation:**

The mirror image will be



Hence, the correct answer will be "Option 1".

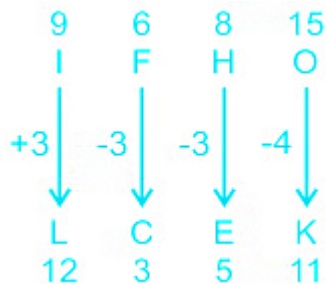
**18. Answer: b**

**Explanation:**

The pattern followed here is:

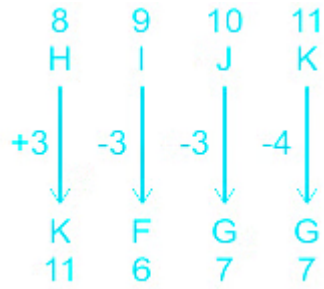
Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

1) IFHO : LCEK



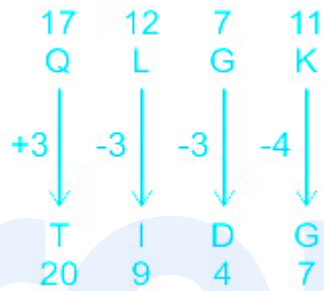
and,

2) HIJK : KFGG



Similarly,

3) QL GK : ?

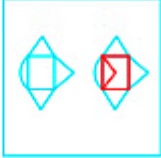





Hence, the correct answer is "TIDG"

19. Answer: c

**Explanation:**

The pattern followed here is:

No.	Option	Question	Answer
1.	<input type="checkbox"/>		Not Embedded
2.	<input type="checkbox"/>		Not Embedded
3.	<input type="checkbox"/>		Embedded
4.	<input type="checkbox"/>		Not Embedded

Hence, the correct answer is " Option 3".

20. Answer: b

Explanation:

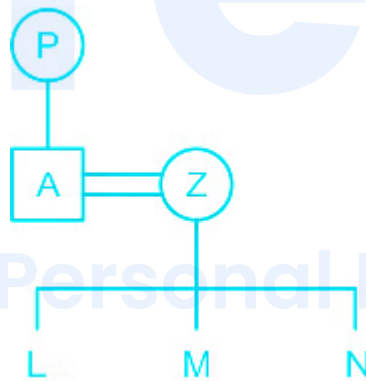
The pattern followed here is:

Symbol in Diagram	Meaning
○	Female
□	Male
==	Married couple
—	Siblings
	Difference of a generation

1) A is married to Z.

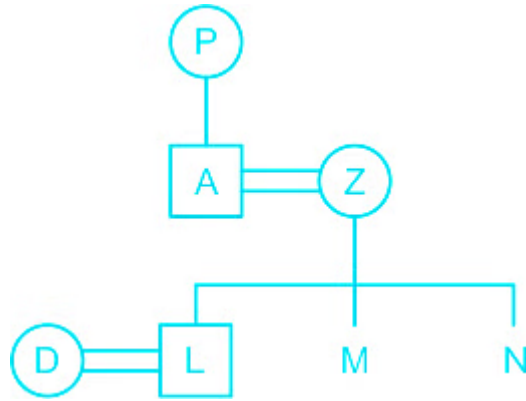
2) Z has 3 children L, M and N. Z is not the father of the children

(It means Z is the mother of L, M and N)

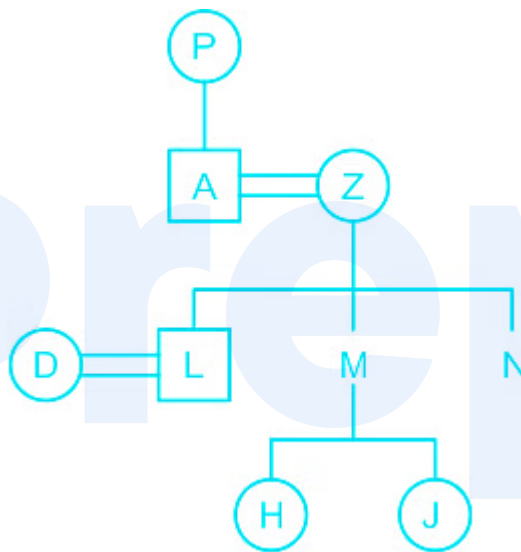


3) P is the mother of A.

4) L is the husband of D.



5) M has 2 daughters H and J.



Clearly, Z is the daughter-in-law of P.

Hence, the correct answer is "Daughter in law".

21. Answer: b

**Explanation:**

The correct answer is He has the power to grant pardons, reprieves and forgive the death penalty of a person.

★ Key Points

- Statement 1:



- The Governor has the power to appoint the Chief Minister.
- Other ministers are also formally **designated** by the Governor on the advice of the Chief Minister.

*Hence statement 1 is correct.*

- **Statement 2:**

- The power to **grant pardons, reprieves, respites, or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence is vested in the President of India according to **Article 72** of the Indian Constitution.**
- The Governor of an Indian state does **not** have the power to pardon death sentences.
- However, they do have the power to **grant pardons, reprieves, respites, or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offense against any law relating to a matter to which the executive power of the state extends, but not in cases of death sentences.**

*Hence statement 2 is incorrect.*

- **Statement 3:**

- The Governor can promulgate Ordinances when the state legislative assembly (or both houses in states with bicameral legislatures) is not in session if immediate action is needed.
- Such Ordinances have the **same force and effect as laws passed by the legislature, but they must be approved by the legislature once it returns to session.**

*Hence statement 3 is correct.*

- **Statement 4:**

- The executive power of the state is vested in the Governor.
- The Governor exercises this **power directly or through officers subordinate to him or her in accordance with the Constitution.**

*Hence statement 4 is correct.*

22. Answer: a

**Explanation:**

The correct answer is Denmark.

★ Key Points

- The country known as the 'Country of Winds' is Denmark.
- This title is due to the country's extensive use of wind energy and its pioneering efforts in wind technology.
- Denmark has a long coastline, providing plenty of opportunities for wind energy development, and the country has made significant investments in wind farms and other forms of renewable energy.

★ Additional Information

Prepp

Your Personal Exams Guide

Country	Sobriquet
Denmark	The Country of Winds
Netherlands	The Land of Windmills
Italy	The Boot
India	The Land of Spices
China	The Middle Kingdom
Japan	The Land of the Rising Sun
Australia	The Land Down Under
Brazil	The Coffee Pot of the World
Russia	The Land of the Tsars
New Zealand	The Land of the Long White Cloud
Egypt	The Gift of the Nile
United States	The Melting Pot

23. Answer: b

**Explanation:**

The correct answer is 1916.

★ Key Points

- The **Lucknow Pact** was an agreement reached between the **Indian National Congress** and the **Muslim League** at the joint session of both the parties held in **Lucknow** in **December 1916**.
- This pact represented a **significant forward step** in achieving national unity in **India**, as the **Congress** accepted the principle of separate electorates for

Muslims in provinces where they were a minority, a key demand of the Muslim League.

- **Increased Representation:**
  - The Lucknow Pact demanded increased representation for Indians in all legislative councils.
  - It sought a minimum of **50% representation for Indians in these bodies.**
- **Dual Vote:**
  - It proposed the introduction of a **system of 'dual vote'**.
  - This meant that Muslim electorates were given the right to vote in both general and separate Muslim electorates.
- **Repartition of Bengal and Punjab:**
  - The pact outlined a **re-distribution of seats in Bengal and Punjab** based on population and community composition.
  - This aimed to provide a more accurate representation of the communities living in these areas.
- **Decentralization:**
  - The Lucknow Pact called for the **decentralization of power, allowing provinces greater autonomy.**
  - **This meant a significant shift towards self-governance.**
- **Unity Among Leaders:**
  - The Lucknow Pact was a **landmark moment in Indian history, as it signified a rare moment of unity among Indian leaders.**
  - Both the Indian National Congress and the Muslim League came together **to make a joint demand for greater autonomy from British rule.**
  - **This set the tone for future collaborations and marked a pivotal moment in India's freedom struggle.**

★ Additional Information

Year	Place	President	Importance
1885	Bombay	Womesh Chunder Bonnerjee	First session of the Indian National Congress
1905	Banaras	Gopal Krishna Gokhale	Decision to support Swadeshi Movement
1907	Surat	Ras Behari Ghose	Surat Split (moderates vs extremists)
1916	Lucknow	Ambica Charan Mazumdar	Lucknow Pact signed, reunion of Congress
1920	Nagpur	C. Vijayaraghavachariar	Adoption of Non-cooperation Movement
1929	Lahore	Jawaharlal Nehru	Resolution of complete independence
1938	Haripura	Subhas Chandra Bose	Planning Committee set up
1942	Bombay	Abul Kalam Azad	'Quit India' resolution passed

24. Answer: c

## Your Personal Exams Guide

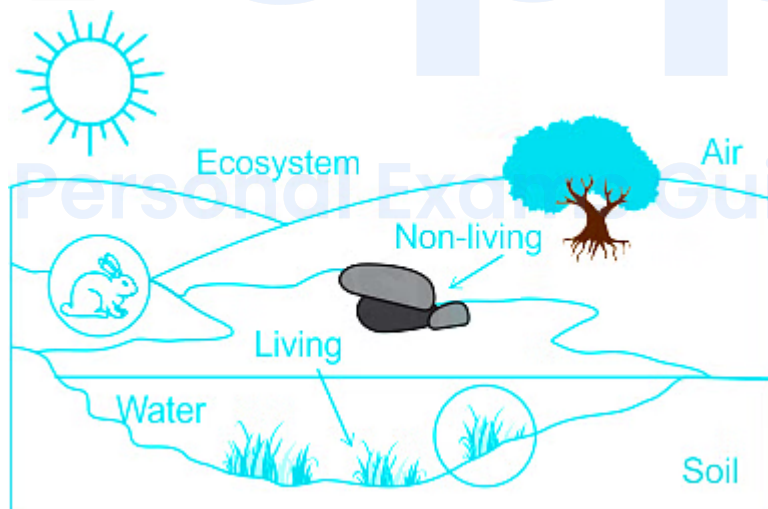
### Explanation:

The correct answer is An ecosystem.

#### ★ Key Points

- Here is a brief explanation about an ecosystem:
- **Interaction of Life and Non-Life:**
  - An ecosystem is a community of **living organisms** (plants, animals, microbes) interacting amongst themselves and with their non-living surroundings (atmosphere, earth, sun, soil, climate).
- **Energy Flow:**

- The ecosystem is characterized by the flow of energy and matter through food chains and food webs.
- It starts with the energy from the sun being captured by plants in the process of photosynthesis.
- **Nutrient Cycling:**
  - In an ecosystem, nutrients are cycled through various living and non-living components.
  - This involves processes like decomposition and nutrient absorption by plants.
- **Different Types:**
  - Ecosystems can vary widely in size and characteristics, from a small pond to a large forest or even an entire biome such as a desert or tundra.
- **Balance:**
  - Ecosystems inherently maintain a balance between different species and resources.
  - However, human intervention or natural disasters can disrupt this balance, affecting the entire ecosystem's functionality.
- **Here is a simple illustrating the structure of an ecosystem:**



25. Answer: c

Explanation:

The correct answer is **Board of Control for Cricket in India**.

★ Key Points

- Here are some details about BCCI:
  - The BCCI is the national governing body for cricket in India, responsible for all cricket activities in the country.
  - Founded in December 1928, it is affiliated to the International Cricket Council (ICC).
  - BCCI operates the Indian Premier League (IPL), a professional Twenty20 cricket league in India.
  - The board also conducts domestic tournaments like the Ranji Trophy, Duleep Trophy, and Vijay Hazare Trophy.

★ Additional Information

Organization	Full Form
FIFA	Federation Internationale de Football Association
ICC	International Cricket Council
NBA	National Basketball Association
NFL	National Football League
UEFA	Union of European Football Associations
FIA	Federation Internationale de l'Automobile
ATP	Association of Tennis Professionals
WTA	Women's Tennis Association
IOC	International Olympic Committee
FIBA	International Basketball Federation (From French: Fédération Internationale de Basketball)

26. Answer: d

### Explanation:

The correct answer is 1951.

#### ★ Key Points

- Here are some details about the first Five-Year Plan of India:
  - The first Five-Year Plan in India was launched in **1951** by the then Prime Minister, Jawaharlal Nehru.
  - This plan focused on agriculture, and its main objective was to improve the standard of living of people in the country.
  - The first plan also focused on improving public health and controlling diseases like **malaria, TB, and smallpox**.
  - **The total outlay of the first plan was Rs. 2069 crore, which aimed to achieve a 2.1% annual growth rate.**

#### ★ Additional Information

- Here's a table of some other Five-Year Plans of India and their years:

Your Personal Exams Guide



Five-Year Plan	Years
Second Five-Year Plan	1956-1961
Third Five-Year Plan	1961-1966
Fourth Five-Year Plan	1969-1974
Fifth Five-Year Plan	1974-1978
Sixth Five-Year Plan	1980-1985
Seventh Five-Year Plan	1985-1990
Eighth Five-Year Plan	1992-1997
Ninth Five-Year Plan	1997-2002
Tenth Five-Year Plan	2002-2007
Eleventh Five-Year Plan	2007-2012
Twelfth Five-Year Plan	2012-2017

★ Important Points

- After the end of the Twelfth Five-Year Plan in 2017, the Indian government has stopped the practice of formulating Five-Year Plans and replaced it with a three-year action plan, seven-year strategy, and a fifteen-year vision document under the NITI Aayog (National Institution for Transforming India).

27. Answer: c

**Explanation:**

The correct answer is Statutory Liquidity Ratio.

★ Key Points

- A commercial bank is required to maintain a **minimum amount of deposits** themselves in the form of **liquid cash, gold, or other securities**, known as the Statutory Liquidity Ratio, or SLR.
- Maintaining **liquidity** in the nation's operational financial institutions is the SLR rate's major goal.
- SLR means ensuring that commercial banks are solvent and that they invest in government securities.
- By sapping market liquidity, an **increase in the SLR** limits the **bank's ability to lend** while also aiding in the management of inflation.
- The Reserve Bank of India (RBI) utilizes the **statutory liquidity ratio** as a tool for its monetary policy to evaluate the liquidity available to banks.

### ★ Additional Information

- Some important terms related to determining **National Income**:
- **Gross Domestic Product (GDP):**
  - The total market value of all final goods and services produced within a country in a specific period.
- **Net Domestic Product (NDP):**
  - It's the GDP minus depreciation on a country's capital assets.
- **Gross National Product (GNP):**
  - The total value of goods produced and services provided by a country during one year, plus its income from foreign investments.
- **Net National Product (NNP):**
  - It's the GNP minus depreciation.
- **Personal Income:**
  - The total income received by individuals in a country, from all sources before taxes.
- **Disposable Personal Income:**
  - The income available to an individual after taxes and social security charges have been deducted.
- **Per Capita Income:**
  - The average income earned per person in a certain area in a specified year.
- **National Disposable Income:**
  - It's the total income available for consumption and saving after taxation.

- **Real Income:**
    - Income adjusted for the effects of inflation.
  - **Nominal Income:**
    - Income measured in current prices, without adjusting for the effects of inflation.
- 

28. Answer: b

**Explanation:**

The correct answer is 2005.

★ Key Points

- The Mahatma Gandhi National Rural Employment Guarantee Act
    - The **Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA)** is an employment guarantee scheme implemented in India, **enacted by legislation on 7 September 2005**.
    - The scheme provides **100 days of employment** in every financial year to adult members of any rural household who are willing to do public work-related unskilled labour at a statutory minimum wage of Rs.220 per day.
    - This act was initiated with the **aim of increasing the purchasing power of rural people**, mainly for people living in rural India with semi-skilled or unskilled jobs, whether they are below the poverty line or not.
    - About **a third** of the fixed workforce is made up of **women**.
    - It was initially called the **National Rural Employment Guarantee Act (NREGA)** but was **renamed** on **2 October 2009**.
- 

29. Answer: b

**Explanation:**

The correct answer is R Venkataramani.

### ★ Key Points

- The President of India on 28 Sept 2022 appointed senior advocate R Venkataramani as the new Attorney General for India for a period of three years.
- Mr Venkataramani will replace current Attorney General (AG) K K Venugopal whose term ends on Sept 30, 2022.
- Earlier, Mukul Rohatgi had declined the Centre's offer to return as the AG.
- The AG acts as the chief legal advisor of the Indian govt.

### ★ Additional Information

- **Important Appointments:**
  - Nagesh Singh, an Indian Foreign Service officer of the 1995 batch, has been appointed as India's next ambassador to Thailand.
  - In August 2022, Vikram K. Doraiswami was also appointed as India's new High Commissioner to the United Kingdom.
  - Sanjay Arora, director general of the ITBP and a 1988-batch IPS officer, has been appointed as the new Delhi Police Commissioner.
  - IFS officer of the 1994 batch Pranay Kumar Verma has been appointed as India's next High Commissioner to Bangladesh.
  - Govt of Bangladesh has appointed Mustafizur Rahman as the next High Commissioner of Bangladesh to India.
  - The Public Enterprises Selection Board (PESB) panel has appointed Brajesh Kumar Upadhyay as Chairman & Managing Director (CMD) of Goa Shipyard Limited (GSL).
  - Retired IAS officer and former Drinking Water and Sanitation Secretary Parameswaran Iyer has been appointed as the new Chief Executive Officer of NITI Aayog

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30. Answer: a

#### Explanation:

The correct answer is Indira Gandhi.

★ Key Points

- Indira Gandhi served as Prime Minister during a critical period in India's history.
- She held office from 1966 to 1977 and then from 1980 to 1984.
- The Fundamental Duties were included in the Indian Constitution during the period of her leadership, specifically during the period known as the Emergency (1975–1977).
- Under her leadership, India achieved self-sufficiency in food grains due to the Green Revolution, which introduced high-yield crops and modern agricultural techniques.
- During her tenure, India won the 1971 war against Pakistan, leading to the creation of Bangladesh.
- She also implemented several significant reforms and policies in the economic and social sectors.

★ Additional Information

Prime Minister	Tenure
Rajiv Gandhi	1984–1989
Manmohan Singh	2004–2014
Jawaharlal Nehru	1947–1964

31. Answer: c

**Explanation:**

The correct answer is High Yield Variety Programme.

★ Key Points

- The Green Revolution, which took place during the 1960s and 1970s, primarily revolved around the High Yield Variety (HYV) Programme.
- This initiative involved the development and use of high-yielding varieties of cereal grains, expansion of irrigation infrastructure, and distribution of

hybridized seeds, synthetic fertilizers, and pesticides to farmers.

- The purpose of the **Green Revolution** was to significantly **increase agricultural productivity and thereby address food shortages in developing countries.**
- It had a significant impact, particularly in countries such as **India and Mexico.**

★ Additional Information

- **Rainwater harvesting** is a technique of collection and storage of rainwater into natural reservoirs or tanks, or the infiltration of surface water into subsurface aquifers (before it is lost as surface runoff).
- **Natural vegetation** refers to the plants and other flora that have not been significantly altered by humans, or which have been left to grow without human interference. This type of vegetation is a vital part of biodiversity as it forms habitat for several organisms.

---

32. Answer: d

Explanation:

The correct answer is Hrishikesh Kanitkar.

★ Key Points

- Hrishikesh Kanitkar was the coach of the U-19 Indian cricket team at the ICC U19 World Cup 2022.
- The 2022 ICC Under-19 Cricket World Cup was held in West Indies in January and February 2022.
- **Sixteen teams** took part in it.
- It was the fourteenth edition of the **Under-19 Cricket World Cup**, and the first that was held in the **West Indies**.

★ Additional Information

- **India** win the **2022 U19 World Cup** title, by beating **England** by **4 wickets**.
- India clinched record-extending **fifth U19 World Cup** title in **Antigua**.

- The ICC Under-19 Cricket World Cup is an international cricket tournament organised by the International Cricket Council (ICC) contested by national under-19 teams.
- It was first contested in 1988, as the Youth World Cup.
- India, the most successful team at U19 World Cups, has won titles in 2000, 2008, 2012 and 2018 previously.

33. Answer: d

### Explanation:

The correct answer is Kerala.

#### ★ Key Points

- Thiruvathira Festival, also known as Thiruvathirai, is primarily celebrated in the southern Indian state of Kerala.
- It's a Hindu festival dedicated to Lord Shiva, and it holds special significance for women.
- On this day, married women fast and pray for the well-being of their husbands, while unmarried women pray to get good husbands.

#### ★ Additional Information

- Odisha:
  - The state is known for its unique festivals like Raja Parba (celebrating womanhood and the onset of monsoons), Kalinga Mahotsav (a martial dance festival), and the famous Rath Yatra (chariot festival dedicated to Lord Jagannath).
- Assam:
  - This state is renowned for its Bihu festival, celebrated in three parts throughout the year – Rongali or Bohag Bihu in April (marking the Assamese New Year at the beginning of spring), Kongali or Kati Bihu in October (the time of harvest), and Bhogali or Magh Bihu in January (marking the end of the harvesting season).
- Punjab:

- The state is famous for **Baisakhi**, which marks the **Sikh New Year** and commemorates the formation of **Khalsa Panth** (the community of the initiated) under **Guru Gobind Singh** in 1699.
- It is also a spring harvest festival for the **Punjabi farmers**.
- Other notable festivals include **Lohri** (celebrating the end of winter and arrival of longer days) and **Karva Chauth** (fasting and praying for the well-being of husbands by married women).

### 34. Answer: b

#### Explanation:

The correct answer is **petrochemicals**.

#### ★ Key Points

- **Petrochemicals** are chemical products derived from **petroleum and natural gas**.
- They are used as raw materials in the manufacture of a wide variety of products, including **synthetic fibers, synthetic rubber, plastics, dye-stuffs, drugs, and pharmaceuticals**.

#### ★ Additional Information

- **Sugar cane:**
  - Sugar cane is a tropical grass that is processed to extract sugar.
  - The by-products of sugar production, such as molasses and bagasse (the fibrous residue after sugar extraction), can be used to produce a variety of products including rum, biofuel, and paper.
- **Natural gas:**
  - Natural gas is a fossil fuel used primarily for heating and electricity generation.
  - It can also be used as a feedstock for producing petrochemicals, but its use is less common than petroleum because it requires more processing to create useful petrochemicals.
- **Coal:**



- Coal is a combustible black or brownish-black sedimentary rock primarily used for electricity generation and steel production.
- Coal can also be used to produce certain types of petrochemicals through a process called coal gasification, but this is less common than using petroleum because it is more expensive and environmentally damaging.

35. Answer: a

Explanation:

The correct answer is Granite.

★ Key Points

- **Granite** is not a **sedimentary rock**; it is an **igneous rock**.
- **Igneous rocks** form from the **cooling and solidification** of magma or lava.
- Granite is typically composed of **quartz, feldspar, and mica**, and it's known for its **coarse-grained structure**.

★ Additional Information

- **Sandstone:**
  - **Sandstone** is a **classic sedimentary rock** composed mainly of **sand-sized minerals or rock grains**.
  - Most sandstone is composed of quartz and/or feldspar because these are the most common minerals in the Earth's crust.
- **Loess:**
  - **Loess** is a **sedimentary deposit** composed largely of **silt-sized particles that are loosely cemented by calcium carbonate**.
  - It is usually pale yellowish to buff in color and often known for being a fertile agricultural soil.
- **Shale:**
  - **Shale** is a **fine-grained sedimentary rock** that forms from the compaction of silt and clay-size mineral particles.

- It is the most common sedimentary rock and is found in sedimentary basins worldwide.
- 

36. Answer: b

**Explanation:**

The correct answer is Sanjay Malhotra.

★ Key Points

- The Centre has appointed Sanjay Malhotra, a 1990 batch Indian Administrative Service (IAS) officer of the Rajasthan cadre, as the new revenue secretary.
  - He will replace Tarun Bajaj who will superannuate at the end of November.
  - Malhotra, currently serving as secretary in the Department of Financial Services (DFS), will join the Revenue Department as an officer on special duty.
  - The centre has announced new secretaries for 16 ministries and departments.
- 

37. Answer: b

**Explanation:**

The correct answer is Ajay Kumar Mishra.

★ Key Points

- Ajay Kumar Mishra, presented the Criminal Procedure (Identification) Bill, 2022 on March 28 in Lok Sabha.
- This bill aims to establish a uniform procedure for the identification of arrested persons and suspects and to prevent the abuse of power by law enforcement agencies.
- Mishra is a Member of Parliament from Uttar Pradesh and is currently serving as the Minister of State for Home Affairs.

### ★ Additional Information

- The main objectives of the **The Criminal Procedure (Identification) Bill 2022** are as
- follows:
  - to provide **legal sanction** for using latest measurement techniques for taking appropriate body measurements of persons who are required to give such measurements to help the **investigation agencies to gather sufficient legally admissible evidence and establish the crime of the accused person.**
  - to expand the "**ambit of persons**" whose measurements can be taken to **make the investigation of crime more efficient, expeditious and also help in increasing the conviction rate.**
  - to **empower the National Crime Records Bureau of India to collect, store and preserve the record of measurements and for sharing, dissemination, destruction and disposal of these records.**
  - to empower a **Magistrate to direct any person to give measurements.**
  - to **empower police or prison officer to take measurements of any person who resists or refuses to give measurements.**

38. Answer: a

Explanation:

The correct answer is Elephant.

### ★ Key Points

- **Megasthenes** indeed mentions the **grandeur of the Mauryan court, including the use of elaborately decorated elephants.**
- **Chandragupta Maurya's royal procession** was known to feature these **adorned elephants.**
- **Elephants were (and still are) symbols of majesty and power in the Indian subcontinent, and their use in royal parades and processions was common in many historical periods.**

★ Additional Information

- Chandragupta Maurya was the founder of the Maurya Empire in ancient India.
- He ruled from 322 to 297 BCE and is credited with unifying most of the Indian subcontinent.
- His empire stretched from Bengal in the east to Afghanistan and Balochistan in the west, from the Himalayas in the north to the Deccan Plateau in the south.
- Chandragupta is known for his role in defeating the Nanda dynasty and establishing the Mauryan Empire.

39. Answer: a

**Explanation:**

The correct answer is Rajasthan.

★ Key Points

- Kalbelia is a folk dance mainly performed by the Kalbelia Community in Rajasthan.
- It is also known by other names like 'Sapera Dance' or 'Snake Charmer Dance'.
- It was included in UNESCO's representative list of the Intangible Cultural Heritage of Humanity from the year 2010.
- In Kalbelia dance, males play generally various traditional instruments, and females of the Kalbelia Community perform the dance.
- Kalbelia dance is one of the most sensuous dances among all Rajasthani dances.

★ Additional Information

- Rajasthan: (As of June 2022)
  - Chief Minister – Ashok Gehlot
  - Governor – Kalraj Mishra
  - Famous Dances – Ghoomar, Bhavai, Kalbelia, Chari, Chakri and Gair
  - National Park – Ranthambore National Park, Sariska Tiger Reserve, Mount Abu Wildlife Sanctuary.

- Maharashtra Dance forms are **Lavani Dance, Dhangari Gaja, Folk Dances, Koli Dances, Tamasha etc.**
- Kerala Dance forms are **Kathakali, Mohiniyattam, Thirvathirakali, Chakyar Koothu etc.**
- Gujarat Dance forms are **Dandiya Raas, Garba, Tippani, Padhar etc.**

40. Answer: a

### Explanation:

The correct answer is Onam.

#### ★ Key Points

- **Onam:**
  - It is a harvest festival of Kerala.
  - It is celebrated to commemorate the arrival of King Mahabali.
  - The festival lasts for ten days.
  - It is also a harvest festival and falls on the 22nd Nakshatra Thiruvonam in the Malayalam calendar month of Chingam, which in Gregorian calendar overlaps with August–September.

#### ★ Additional Information

Festivals	Region/Culture	Date	Significance	Traditions
<b>Makar Sankranti</b>	Celebrated all over India, more popular in Western and Southern India	January 14th	Celebrates the sun's transit into Capricorn and arrival of longer days	Kite flying, bonfires, feasts, and giving gifts
<b>Lohri</b>	Primarily celebrated in Punjab and other parts of North India	January 13th	Celebrates end of winter, arrival of longer days, and harvest of rabi crops	Bonfire, singing and dancing, feasting on traditional foods
<b>Baisakhi</b>	Primarily celebrated in Punjab and other parts of North India	April 13th or 14th	Celebrates the start of the harvest season; commemorates the formation of the Khalsa in 1699	Parades and processions, dancing, singing, feasting, visiting Gurdwaras

41. Answer: a

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**Explanation:**

**Concept Used:**

The third proportion of two numbers  $x, y$  is  $y^2/x$  and the fourth proportion of three numbers  $x, y, z$  is  $y*z/x$ .

**Calculation:**

$$\Rightarrow \text{Third proportion of 5 and 12} = (12^2)/5 = 28.8$$

$$\Rightarrow \text{Fourth proportion of 5, 8, and 9} = (8 \times 9/5) = 14.4$$

$$\Rightarrow \text{Ratio} = 28.8/14.4 = 2:1$$

Therefore, the ratio of the third proportion of 5 and 12 with the fourth proportion of 5, 8 and 9 is 2:1

---

**42. Answer: c**

**Explanation:**

Given data:

Covered  $1/2$  of journey by 10 a.m.

Covered  $4/5$  of journey by 1 a.m. next day (This is equivalent to 25 hours from midnight)

**Concept Used:**

If he covers a certain fraction of the journey in a specific time period, we can deduce the total time for the journey and thereby identify the start time.

**Calculation:**

$$\Rightarrow \text{Total time for journey} = \text{Time to cover } 1/2 \text{ of the journey} / 1/2 = 10 \text{ a.m. to midnight} / 1/2 = 14 \text{ hours} / 1/2 = 28 \text{ hours}$$

$$\Rightarrow \text{Total time for journey} = \text{Time to cover } 4/5 \text{ of the journey} / 4/5 = 25 \text{ hours} / 4/5 = 31.25 \text{ hours}$$

Considering the lesser time (to avoid unnecessary waiting periods), 29 hours is the total journey time

$$\Rightarrow \text{Journey start time} = 10 \text{ a.m.} - 29 \text{ hours} = 5:00 \text{ a.m.}$$

Therefore, Anil started his journey at 5:00 a.m.

---

43. Answer: b

Explanation:

Given data:

Cone: height (h) = 8 cm, radius (r) = 4 cm

Rectangular block: length = 8 cm, breadth = 6 cm, height = 4 cm

Concept Used:

The volume of a cone =  $\frac{1}{3}\pi r^2 h$ ,

the volume of a rectangular block = length  $\times$  breadth  $\times$  height.

The percentage waste =  $\left(\frac{\text{Volume of block} - \text{Volume of cone}}{\text{Volume of block}}\right) \times 100\%$ .

Calculation:

$$\Rightarrow \text{Volume of cone} = \frac{1}{3}\pi(4)^2 \times (8) = 134.041 \text{ cm}^3$$

$$\Rightarrow \text{Volume of block} = 8 \times 6 \times 4 = 192 \text{ cm}^3$$

$$\Rightarrow \text{Waste} = 192 - 134.041 = 57.959 \text{ cm}^3$$

$$\Rightarrow \text{Percentage waste} = \left(\frac{57.959}{192}\right) \times 100\% \approx 30\%$$

Therefore, the approximate percentage of wood wasted is 30%.

44. Answer: b

Explanation:

Given data:



Principal (P) = ₹500

Time (T) = 2 years

Difference between compound interest and simple interest (CI - SI) = ₹1.25

**Concept Used:**

The difference between compound interest and simple interest for two years is

given by the formula  $CI - SI = P \times (r/100)^2$ ,

where r is the rate of interest.

**Calculation:**

$$\Rightarrow \text{Rate of interest } (r) = \sqrt{((CI - SI) \times 100^2 / P)}$$

$$\Rightarrow \text{Rate of interest } (r) = \sqrt{((1.25 \times 100^2) / 500)} = 5\%$$

Hence, the rate of interest per annum is 5%.

---

**45. Answer: a**

**Explanation:**

Given data:

Listed price = ₹1,200

After discounts, price paid = ₹972

Rate of the first discount = 10%

**Concept Used:**

Successive discounts imply a discount on the discounted price.

So, after the first discount,

the price becomes  $(100\% - 10\%)$  of the original price.

The second discount is applied to this price.

**Calculation:**

⇒ Price after the first discount =  $1,200 \times (1 - 10/100) = ₹1,080$

⇒ Second discount rate =  $(1 - 972/1080) \times 100\% \approx 10\%$

Hence, the rate of the second discount is approximately 10%.

---

**46. Answer: c**

**Explanation:**

**Given data:**

Numbers 3, 12, and 14

**Concept Used:**

The fourth proportion of three numbers  $x, y, z$  is  $(y \times z)/x$ .

**Calculation:**

⇒ Fourth proportional =  $(12 \times 14)/3 = 56$

Therefore, the fourth proportional to 3, 12, 14 is 56.

---

**47. Answer: d**

**Explanation:**

**Given data:**

Radius of the large iron ball = 21 cm

Radius of the small spherical balls = 7 cm

**Concept Used:**

The volume of a sphere is  $(4/3)\pi r^3$ .

The number of small balls that can be formed from a larger ball is the ratio of their volumes,

because volume is conserved when the iron ball is melted and recast.

**Calculation:**

$$\Rightarrow \text{Volume of the large iron ball} = (4/3)\pi \times (21)^3$$

$$\Rightarrow \text{Volume of a small spherical ball} = (4/3)\pi \times (7)^3$$

$$\text{Number of small balls} = (\text{Volume of the large ball}) / (\text{Volume of a small ball}) = (21/7)^3 = 27$$

Therefore, 27 spherical balls of radius 7 cm can be formed.

---

**48. Answer: d**

**Explanation:**

**Concept Used:**

To find the smallest 6-digit number divisible by 18, 24, and 25,

we need to find their least common multiple (LCM).

**Calculation:**

LCM of 18, 24, and 25 = 1800

The smallest 6-digit number is 100000.

The smallest multiple of 1800 greater than or equal to 100000 is 100800.

Sum of the digits of 100800 = 1 + 0 + 0 + 8 + 0 + 0 = 9

Therefore, the sum of the digits of the smallest 6-digit number divisible by 18, 24, and 25 is 9.

49. Answer: b

Explanation:

Concept used:

Follow the BODMAS rule to solve this question, as per the order given below,

<b>B</b>	Brackets in order (), {}, []	ब्रैकेट (), {}, [] क्रम में
<b>O</b>	of	का
<b>D</b>	Division (÷)	विभाजन (÷)
<b>M</b>	Multiplication (×)	गुणा (×)
<b>A</b>	Addition (+)	जोड़ (+)
<b>S</b>	Subtraction (-)	घटाव (-)

Calculation:

$$1 \div 2 + 3 - 5 \times (1/3) \text{ of } 15 - \{75 \div (28 - 3)\}$$

$$\Rightarrow 1/2 + 3 - 5 \times (1/3) \text{ of } 15 - \{75 \div 25\}$$

$$\Rightarrow 1/2 + 3 - 5 \times (1/3) \text{ of } 15 - 3$$

$$\Rightarrow 1/2 + 3 - 5/3 \times 15 - 3$$

$$\Rightarrow 1/2 + 3 - 5 \times 5 - 3$$

$$\Rightarrow 1/2 + 3 - 25 - 3$$

$$\Rightarrow 3.5 - 25 - 3$$

$$\Rightarrow \frac{-49}{2}$$

Therefore, the value of the expression is  $\frac{-49}{2}$

**50. Answer: c**

**Explanation:**

**Given data:**

Weight used by the vendor is 12% less than the actual weight.

Profit earned on the cost price is 32%.

**Concept Used:**

To find the total profit percentage, we need to consider the profit percentage on the selling price,

taking into account the weight reduction.

**Calculation:**

$\Rightarrow$  The weight used by the vendor =  $100\% - 12\% = 88\%$  of the actual weight.

$\Rightarrow$  Let's assume the cost price of the vegetable is ₹100 (considering a convenient value).

$\Rightarrow$  Selling price = Cost price + Profit = ₹100 + 32% of ₹100 = ₹132

$\Rightarrow$  Actual selling price considering the weight reduction = ₹132/88% = ₹150 (since 88% of actual weight is being sold at ₹132)

Total profit percentage =  $(\text{Actual Selling Price} - \text{Cost Price}) / \text{Cost Price} * 100$

$\Rightarrow (\text{₹}150 - \text{₹}100) / \text{₹}100 * 100$

$\Rightarrow \text{₹}50 / \text{₹}100 * 100$

$\Rightarrow 50\%$

Therefore, the correct answer for the total profit percentage is indeed 50%.

## 51. Answer: b

### Explanation:

#### Given data:

A can complete work in 18 days.

B can complete work in 36 days.

They work together for 8 days.

#### Concept Used:

The speed of work is inversely proportional to the time taken to complete the work.

If A and B work together for a while and then only B continues,

we can subtract the work done by both to find out the remaining work for B.

#### Calculation:

$\Rightarrow$  Work done by A in a day =  $1/18$

$\Rightarrow$  Work done by B in a day =  $1/36$

$\Rightarrow$  Work done by A and B in a day =  $1/18 + 1/36 = 1/12$

$\Rightarrow$  Work done by A and B in 8 days =  $8/12 = 2/3$

⇒ Remaining work =  $1 - 2/3 = 1/3$

⇒ Time taken by B to complete the remaining work =  $(1/3) / (1/36) = 12$  days

Hence, B will take 12 days to complete the rest of the work.

---

**52. Answer: a**

**Explanation:**

Given:

First term: 3

Number of terms: 10

Calculation:

Sum of an arithmetic sequence =  $(\text{Number of terms}) \times (\text{Sum of the first and last term}) / 2$

Sum of the first 10 multiples of 3 =  $10 \times (3 + 3 \times 10) / 2 = 10 \times 33 / 2 = 165$

Average =  $(\text{Sum of terms}) / (\text{Number of terms}) = 165 / 10 = 16.5$

Therefore, the average of the first 10 multiples of 3 is 16.5.

---

**53. Answer: d**

**Explanation:**

Given:

Increase in price: 10%

Concept Used:

Expenditure = Price × Consumption

After the price increase, the new expenditure = (Price + (10% of Price)) × (Consumption - x% of Consumption)

**Calculation:**

Since the expenditure remains unchanged, we have:

Price × Consumption = (Price + (10% of Price)) × (Consumption - x% of Consumption)

Simplifying the equation and solving for 'x':

Consumption - x% of Consumption = Consumption / (1 + 10%)

⇒ x% of Consumption = Consumption - Consumption / (1 + 10%)

⇒ x% of Consumption = Consumption × (1 - 1 / (1 + 10%))

⇒ x% of Consumption = Consumption × (1 - 1 / 1.1)

⇒ x% of Consumption = Consumption × (1 - 10 / 11)

⇒ x% of Consumption = Consumption × (1/11) ≈ 9.1%

Therefore, the user needs to cut down their consumption by 9.1%

**54. Answer: b**

**Explanation:**

Given data:

Current value of the car = ₹8,50,000

Depreciation rate = 10% per annum

Time = 4 years



**Concept Used:**

To calculate the value of the car after a certain number of years with a constant depreciation rate,

we can use the formula: Final value = Initial value  $\times$  (1 - Depreciation rate)<sup>Time</sup>.

**Calculation:**

$$\Rightarrow \text{Value after 4 years} = ₹8,50,000 \times (1 - 10/100)^4 = ₹8,50,000 \times (0.9)^4 \approx ₹5,57,685$$

Therefore, the value of the car after 4 years will be approximately ₹5,57,685.

---

**55. Answer: b****Explanation:**

Given data:

Original weight = 1 kg

Profit percentage = 25%

**Concept Used:**

If a shopkeeper wants to gain a certain profit percent by using a faulty weight, the faulty weight would be  $100/(100 + \text{profit percent})$  of the original weight.

**Calculation:**

$$\Rightarrow \text{Faulty weight} = 1 \times (100/(100 + 25)) = 0.8 \text{ kg} = 800 \text{ grams}$$

Therefore, the faulty weight used by the shopkeeper is 800 grams.

---

**56. Answer: a**

## Explanation:

### Given data:

Time taken by A to complete the work = 30 days

Time taken by B to complete the work = 60 days

Time taken by C to complete the work = 120 days

A left 10 days before completion

B left 5 days before completion

### Concept Used:

We can find the rate of work for each person and determine the combined work rate when all three are working together.

Using this information, we can calculate the number of days required to complete the whole work.

### Calculation:

⇒ Rate of work for A =  $\frac{1}{30}$

⇒ Rate of work for B =  $\frac{1}{60}$

⇒ Rate of work for C =  $\frac{1}{120}$

⇒ Combined work rate when A, B, and C are working together =  $\frac{1}{30} + \frac{1}{60} + \frac{1}{120} = \frac{1}{20}$

Let the number of days required to complete the whole work be D.

⇒ Work done by A in D-10 days + Work done by B in D-5 days + Work done by C in D days = 1 (Complete work)

⇒  $\frac{(D-10)}{30} + \frac{(D-5)}{60} + \frac{D}{120} = 1$

⇒  $4(D-10) + 2(D-5) + D = 120$

$$\Rightarrow 4D - 40 + 2D - 10 + D = 120$$

$$\Rightarrow 7D - 50 = 120$$

$$\Rightarrow 7D = 120 + 50$$

$$\Rightarrow 7D = 170$$

$$\Rightarrow D = 170/7$$

Therefore, the number of days required to complete the whole work is  $170/7$  days.

---

**57. Answer: a**

**Explanation:**

Given data:

Percentage of income spent on rent = 15%

Percentage of remaining income spent on other expenses = 75%

Savings = ₹1,700

Concept:

The remaining income after spending on rent and other expenses is the savings.

This can be used to calculate the total income.

**Calculation:**

$$\Rightarrow \text{Income after spending on rent} = \text{savings} / (1 - 0.75) = ₹1,700 / 0.25 = ₹6,800$$

$$\Rightarrow \text{Total income} = ₹6,800 / (1 - 0.15) = ₹8,000$$

Therefore, Mr. Sharma's monthly income is ₹8,000.

---

**58. Answer: d**

**Explanation:**

**Given:**

Aravind's speed:  $5/4$  times Bhanu's speed

Lead given by Aravind to Bhanu: 60 m

**Concept Used:**

Let the distance from the starting point where both of them meet be 'x' meters.

**Calculation:**

Aravind's speed =  $(5/4) \times$  Bhanu's speed

Distance covered by Aravind = Distance covered by Bhanu + Lead given

Speed = Distance / Time

Time taken by Aravind to cover 'x' meters = Time taken by Bhanu to cover 'x - 60' meters

Equating the time taken by both:

Distance covered by Aravind / Aravind's speed = Distance covered by Bhanu / Bhanu's speed

$$\Rightarrow x / (5/4)B = (x - 60) / B$$

$$\Rightarrow 4x = 5(x - 60)$$

$$\Rightarrow 4x = 5x - 300$$

$$\Rightarrow x = 300$$

Therefore, the distance from the starting point where Aravind and Bhanu will meet is 300 meters.

59. Answer: b

**Explanation:**

**Given:**

Marked price of the double bed: ₹42,000

Cash discount: ₹1,000

Scratch card discount range: 5% to 10%

**Calculation:**

Least selling price after scratch card discount

$$\Rightarrow \text{Selling price} - (10\% \text{ of Selling price}) = ₹41,000 - (10/100) \times ₹41,000$$

Maximum selling price after scratch card discount

$$\Rightarrow \text{Selling price} - (5\% \text{ of Selling price}) = ₹41,000 - (5/100) \times ₹41,000$$

Calculating the values:

Least selling price after scratch card discount

$$\Rightarrow ₹41,000 - (10/100) \times ₹41,000 = ₹41,000 - ₹4,100 = ₹36,900$$

Maximum selling price after scratch card discount

$$\Rightarrow ₹41,000 - (5/100) \times ₹41,000 = ₹41,000 - ₹2,050 = ₹38,950$$

Therefore, the difference between the least and maximum selling price of the bed is  $₹38,950 - ₹36,900 = ₹2,050$ .

---

60. Answer: b

### Explanation:

#### Given:

Distance covered in the first part of the trip: 10 km

Distance covered in the second part of the trip: 14 km

Average speed in the first part: 30 km/h

Average speed in the second part: 25 km/h

#### Formula Used:

Average speed = Total distance covered / Total time taken

#### Calculation:

⇒ Total distance covered = Distance in the first part + Distance in the second part = 10 km + 14 km = 24 km

⇒ Total time taken = (Distance in the first part / Speed in the first part) + (Distance in the second part / Speed in the second part)

⇒ Total time taken = (10 km / 30 km/h) + (14 km / 25 km/h)

Calculating the values:

⇒ Total time taken = (10 / 30) + (14 / 25) = (1/3) + (14/25) ≈ 0.333 + 0.56 ≈ 0.893

⇒ Average speed = Total distance covered / Total time taken = 24 km / 0.893 ≈ 26.87 km/h

Therefore, Arjun's average speed for the entire trip is approximately 26.87 km/h.

61. Answer: b

### Explanation:

The correct answer is 'Option 2',

★ Key Points

- The **error exists** in the bracketed segment. In the context of the sentence, the verb "**were**" is **incorrect** because the subject "the last Tsar of Russia" is singular. English grammar rules dictate that singular subjects require singular verbs.
- The **correct verb to use** is "**was**". Every singular noun is paired with a singular verb in the past tense when the action is complete.
- The past participle form of the verb "**arrest**" is "**arrested**". The **correct preposition** to use after "arrested" is "**by**", which indicates who performed the action.

Therefore, the **correct phrase** is: "*was arrested by revolutionaries*", which means the last Tsar of Russia was captured by the revolutionaries.

★ Additional Information

- Option 1, 3, and 4 propose forms of "arrest" that do not agree with the tense and number of the subject.
- The plural verb "were" (in Options 1 and 3) does not match with the singular subject "the last Tsar of Russia".
- Also, the present tense "is" (in options 1 and 4) does not fit into the context of the sentence which is in the past tense.

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62. Answer: b

**Explanation:**

The correct answer is 'Option 2'. i.e. 'Mean'.

★ Key Points

- For the **first blank**, we need to choose **an adjective** that describes Sushant. For the **second blank**, we **need a noun** that refers to the average value.
- "**Mean**" is the correct word to fill both blanks. In the first context, "mean" can describe a person who is unkind, spiteful, or unfair. In the second context, "mean" refers to the average value of a set of numbers.

- The mean or average of the first ten natural numbers is indeed 5.5. Therefore, both contexts are correct.

Therefore, the **correct sentence** is- '*Sushant is a very **mean** person and the **mean** of first ten natural numbers is 5.5.*'

★ Additional Information

- Option 1: "**Clever**" does not apply to the second blank as it is not related to an average value of a set of numbers.
- Option 3: "**Honest**" does not fit the second blank either, as the term does not relate to mathematical averages.
- Option 4: "**Shrewd**" is an adjective describing a person, and it can't be used to refer to the average of a set of numbers.

63. Answer: c

Explanation:

The correct answer is 'Option 3'

★ Key Points

- The given word is '**Consistent**' which refers to an action or behavior that is done the same way over time, especially to be fair or accurate (स्थिर).
  - **For example:** Consistent performance is key to success.
- The correct synonym is '**Constant**' which implies being unchanging or unwavering (Hindi meaning: स्थायी).
  - **For Example:** His constant support was crucial for the project.

Therefore, the correct answer is: '**Constant**'.

★ Additional Information

- '**Evolve**' (विकसित होना) denotes develop gradually.
- '**Change**' (परिवर्तन) refers to make or become different.



- 'Alter' (बदलना) implies change in character or composition, typically in a comparatively small but significant way.

64. Answer: d

Explanation:

The correct answer is 'Option 4'. i.e. 'Bark'.

★ Key Points

- For the **first blank**, the **required word** should describe a part of a tree. For the **second blank, we need** a verb indicating an action performed by dogs towards a stranger.
- In the context of the **first half** of the sentence, "**bark**" refers to the outer covering of a tree, which often appears brown.
- In the **second context**, "**bark**" is a verb signifying the sound that a dog makes, specifically when it notices a stranger or perceives a threat.
- Thus, the word "**bark**" accurately fills both blanks, making the full sentence: "The tree has a brown bark, and the dogs bark at the stranger."

Therefore, the correct sentence is: 'The tree has a brown **bark** and the dogs **bark** at the stranger.'

★ Additional Information

- Option 1: "**Tail**" is a part of an animal's body, not a tree, and can't be used as a verb to signify a sound made by dogs.
- Option 2: "**Sound**" is typically made by living creatures or objects, but doesn't make sense as part of a tree.
- Option 3: "**Trunk**" is indeed a part of a tree but cannot signify an action performed by dogs.

65. Answer: d

## Explanation:

The correct answer is 'Option 4'

### ★ Key Points

- The given word is 'Pamper' which means to indulge with every attention, comfort, and kindness (Hindi meaning: ज्यादा लाड़ प्यार).
- For example: Parents should avoid pampering their kids all the time.
- The correct synonym to fill the blank in provided context is 'Coddle' which means to treat in an indulgent or overprotective way (Hindi meaning: लाड़ प्यार करना).
- For Example: She coddled her son to the point of dependency.

Therefore, the correct answer is 'Option 4'

### ★ Additional Information

- 'Bend' (Hindi meaning: झुकना) means to force (something straight) into a curve or angle.
- 'Comfortable' (Hindi meaning: आरामदायक) refers to (of clothes or furnishings) providing physical ease and relaxation.
- 'Attend' (Hindi meaning: संभालना) refers to to look after.

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## 66. Answer: a

## Explanation:

The correct answer is 'Option 1'

### ★ Key Points

- The given phrase is 'olden building of historical importance'. 'Olden' is rarely used in contemporary English and is considered archaic (Hindi meaning: प्राचीन).

- The correct substitution is 'ancient' which means having been in existence for a very long period (Hindi meaning: प्राचीन).
- For Example: Rome is known for its ancient architecture.

Therefore, the correct answer is 'Option 1'

★ Additional Information

- 'Elder' (Hindi meaning: वृद्ध) is usually used to describe someone older than you in your family.
- 'Older' (Hindi meaning: बड़े) usually denotes someone or something with more age relative to someone or something else.
- 'Very older' is not correct English. The correct phrase in English would be 'much older' (Hindi meaning: बहुत अधिक)

67. Answer: c

**Explanation:**

The correct answer is 'Option 3'.

★ Key Points

- This sentence's error lies in the verb phrase's construction, "was brought".
- The peon is the one doing the action (bringing), not receiving the action.
- Thus, the passive verb construction "was brought" is incorrect.
- The correct phrase should be "brought" or "has brought", indicating an active action done by the peon.
- The revised sentence will then read, "The peon brought a cup of coffee for Naina," which correctly describes the action performed by the peon.

Therefore, the correct answer is- 'Option 3'.

★ Additional Information

- Options 1, 2, and 4 are grammatically correct and don't contain errors. "The peon" is a correct noun phrase, "a cup of" is a correct phrase demonstrating

quantity of the coffee, and "coffee for Naina" correctly tells what and for whom the action is being done.

---

## 68. Answer: a

### Explanation:

The correct answer is 'Option 1'

#### ★ Key Points

- The given word is 'Earn' which refers to obtaining money in return for work or services provided (Hindi meaning: कमाना).
- For example: He earns by working overtime.
- The correct synonym is 'Receive' which can imply obtaining something as a result of one's behavior or activities (Hindi meaning: प्राप्त करना).
- For example: He received a good income from his investment.

Therefore, the correct answer is 'Option 1'

#### ★ Additional Information

- 'Lose' (Hindi meaning: खोना) denotes be deprived of or cease to have or retain.
  - 'Accord' (Hindi meaning: सहमत होना) typically means to grant someone a right or a status.
  - 'Surrender' (Hindi meaning: समर्पित करना) means to give up or hand over.
- 

## 69. Answer: a

### Explanation:

The correct answer is 'Option 1'

#### ★ Key Points

- The given idiom is 'Fit as a fiddle' which represents a person who is extremely fit and well (Hindi meaning: चुस्त दुरुस्त).
- For example: Even at the age of fifty, he's fit as a fiddle.
- The correct meaning is 'In good health', which signifies a person who is physically fit and hearty (Hindi meaning: अच्छी सेहत में)

Therefore, the correct answer is 'Option 1'

★ Additional Information

- 'Limited in scope' (Hindi meaning: सीमित क्षेत्र) implies something with restricted extent or possibilities.
- 'Emergency situation' (Hindi meaning: आपात स्थिति) is a situation that poses an immediate risk to health, life, property, or environment.
- 'To be of perfect size' (Hindi meaning: सही आकार का होना) means being the exact size that is needed.

70. Answer: b

**Explanation:**

The correct answer is 'Option 2'

★ Key Points

- The misspelled word is 'neurologikal' which is incorrectly spelled (Hindi meaning: मस्तिष्क संबंधी).
- The correct spelling is 'Neurological' (Hindi meaning: न्यूरोलॉजिकल) which refers to the branch of medicine dealing with nervous system.
- For example: Alzheimer's is a neurological disorder.

Therefore, the correct answer is 'Option 2'

★ Additional Information

- 'Newrologecal', 'Neurologecal', 'Newrological' are all incorrect spellings and do not align with the correct spelling or grammar rules.

71. Answer: d

**Explanation:**

The correct answer is 'Option 4'.

★ Key Points

- We need a noun to fit the blank, which should represent an economic term associated with the private entities or individual businesses influencing the economy.
- "Sector" is a part of something in the context of economy or industry. When referring to the "private sector," we mean all businesses and firms owned by private individuals or groups, not controlled by the state.
- The phrase "private sector" completes the sentence meaningfully - "The private sector has contributed immensely to the country's economy."

Therefore, the correct answer is- 'Option 4'.

★ Additional Information

- Options 1, 2, and 3: "Division," "Segment," and "Section," do not carry the right connotation or semantic weight in this context as they are more specific or limited and do not represent the wider impact of private businesses on the economy.

---

72. Answer: c

**Explanation:**

The correct answer is 'Option 3'

★ Key Points

- The given idiom is 'Take it with a grain of salt', which is used to express that one should view something with skepticism, or not to interpret something literally (Hindi meaning: संदेह के साथ देखना).
- For example: You must take his words with a grain of salt, he is known for exaggerating.
- The correct interpretation is 'To understand that something is likely to be untrue', suggesting that a piece of information might not be completely accurate or true (Hindi meaning: समझना कि कुछ संभावना होती है कि वो असत्य है).

Therefore, the correct answer is 'Option 3'

★ Additional Information

- 'To calculate things with utmost precision' (Hindi meaning: सबसे अधिक परिशुद्धता के साथ चीजों की गणना करना) refers to accurately calculating or estimating something.
- 'To misinterpret that the real situation is hidden' (Hindi meaning: भ्रंतिपूर्ण रूप से समझना कि वास्तविक परिस्थिति छिपी हुई है) suggests misunderstanding a situation.
- 'To imagine that someone is working against you' (Hindi meaning: कल्पना करना कि कोई आपके खिलाफ काम कर रहा है) expresses a sense of paranoia or distrust.

73. Answer: a

Explanation:

The correct answer is 'Option 1'

★ Key Points

- The blank should be filled with a word that complements the sentence's context, i.e., something police get in relation to drug peddlers.
- The correct word is 'list', meaning a number of connected items or names written consecutively (Hindi meaning: सूची).
- For example: The police have a long list of suspects framed for the theft.

Therefore, the correct answer is 'Option 1'.

★ Additional Information

- 'Lest' (Hindi meaning: यह न हों) is used to express fear or apprehension.
- 'Leest' is a non-standard English word and doesn't have a proper Hindi translation.
- 'Least' (Hindi meaning: कम से कम) refers to the smallest extent or degree.

---

#### 74. Answer: a

##### Explanation:

The correct answer is 'Option 1'

##### ★ Key Points

- The given word is 'Hope', which signifies a feeling of expectation and desire for a certain thing to happen (Hindi meaning: आशा).
- For example: He had high hopes for his new business venture.
- The correct antonym is 'Despair', which refers to the complete loss or absence of hope (Hindi meaning: निराशा).
- For example: After several failed attempts, he fell into despair.

Therefore, the correct answer is 'Option 1'

##### ★ Additional Information

- 'Promise' (Hindi meaning: वादा) is a declaration that something will or will not be done.
- 'Craving' (Hindi meaning: तीव्र इच्छा) is a powerful desire for something.
- 'Fantasy' (Hindi meaning: कल्पना) is an idea with no basis in reality.

---

#### 75. Answer: c

##### Explanation:

The correct answer is 'Option 3'



★ Key Points

- The given word is 'Generous', which refers to someone who shows readiness to give more of something, especially money, than is strictly necessary or expected (Hindi meaning: उदार).
- For example: His generous donations helped the charity a lot.
- The correct antonym is 'Selfish', which denotes lacking consideration for others; concerned chiefly with one's own personal profit or pleasure (Hindi meaning: स्वार्थी).
- For example: A selfish person doesn't care about others' needs.

Therefore, the correct answer is 'Option 3'

★ Additional Information

- 'Liberal' (Hindi meaning: उदार) means generous or plentiful.
- 'Free' (Hindi meaning: मुक्त) means given without consideration of a return or reward.
- 'Selfless' (Hindi meaning: निस्वार्थ) describes someone who is more concerned with the needs and wishes of others than with one's own.

---

76. **Answer: b**

**Explanation:**

The correct answer is 'Option 2'.

★ Key Points

- In the given sentence, the blank needs a verb indicating the beginning or launching of something. The sentence is discussing the origin or commencement of an initiative.
- The verb "started" corresponds to the act of beginning or setting into motion something—in this case, the initiative, which is suitable for the context.

Therefore, the correct answer is- 'Option 2'.

★ Additional Information

- Option 1: "Discovered" suggests finding something already existing or revealing what was previously hidden or unknown. It doesn't fit here as the initiative is not something discovered but implemented.
- Option 3: "Reckoned" means considering or regarding in a particular way, which doesn't align with the context of initiating an action.
- Option 4: "Established" indicates creating or setting up on a permanent basis. Although close in meaning, it doesn't convey the beginning of an action as accurately as "started."

---

77. **Answer: c**

**Explanation:**

The correct answer is 'Option 3'.

★ Key Points

- The word in the blank needs to indicate an abstract idea or piece of knowledge related to Social and Emotional Learning (SEL). The sentence describes SEL as something novel or new being introduced into the educational reform sector.
- The word "concept" refers to an abstract idea or a general notion, fitting nicely with the phrase "This novel concept...".
- The word "concept" supports the idea that SEL is an abstract idea being introduced into education reform. It helps students to understand and manage their emotions, explaining why it's innovative, fitting the sentence's context perfectly.

Therefore, the correct answer is- 'Option 3'.

★ Additional Information

- Option 1: "Intention" refers to a thing intended, an aim or a plan which does not quite fill the context appropriately. In this case, SEL is more than an intention; it's a definitive idea or concept.

- Option 2: "Application" refers to the action of putting something into operation. Here, the text is referring to the idea of SEL, not its practical application.
  - Option 4: "Experiment" usually refers to a scientific procedure undertaken to make a discovery or test a hypothesis. This term doesn't accurately describe SEL, as it is a concept or approach rather than an investigational process.
- 

**78. Answer: d**

**Explanation:**

The correct answer is 'Option 4'.

★ Key Points

- The word in the blank needs to be a verb describing an action performed by the students that contributes positively to their learning experience. The entire context discusses the effectiveness of the Social and Emotional Learning (SEL) concept in terms of helping students manage their emotions.
- The verb "interact" implies communication or direct involvement with someone or something, which is consistent with the description so far about the SEL concept.

Therefore, the correct answer is- 'Option 4'.

★ Additional Information

- Option 1: "Act" implies doing something specific but without implying any interaction which is central to learning.
  - Option 2: "Affect" refers to making a difference to something, or influencing something, which does not fit appropriately into the context here.
  - Option 3: "Mingle" implies mix or cause to mix together, often used in a social context, which is not as suitable as "interact" in this context.
- 

**79. Answer: b**

## Explanation:

The correct answer is 'Option 2'.

### ★ Key Points

- The verb in the blank needs to indicate an increase or growth, in this case in the importance or popularity of the Social and Emotional Learning (SEL) concept. The context indicates a positive shift or increase in recognition.
- The verb "gained" is the most fitting, as it indicates an increase or acquisition of something valuable.

Therefore, the correct answer is- 'Option 2'.

### ★ Additional Information

- Option 1: "Gratified" means giving (someone) satisfaction or pleasure, which doesn't fit accurately in this context as the concept isn't experiencing satisfaction, but increasing its momentum.
- Option 3: "Relieved" is usually associated with a removal or lessening of something distressing or painful, which is not what the sentence wants to convey here.
- Option 4: "Profited" suggests making a gain or benefit, usually in a financial context. In the given sentence, though, the SEL concept isn't profiting in a material sense, but gaining recognition.

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## 80. Answer: a

## Explanation:

The correct answer is 'Option 1'.

### ★ Key Points

- Blank no. 5 needs to be filled with a verb that accurately frames the idea of enhancement of the given competencies within the Social and Emotional

Learning (SEL) concept.

- The word "incorporates" means to include or contain as part of a whole. Here, it refers to the fact that the concept of SEL includes the enhancement of various competencies.

Therefore, the correct answer is- 'Option 1'.

### ★ Additional Information

- Option 2: "Influences" suggests having an effect on the character, development, or behavior of someone or something, which does not fit into the context that we are discussing where competencies are part of the concept, not just influenced by it.
- Option 3: "Compares" implies estimating, measuring, or noting the similarity or dissimilarity between. This verb does not make sense as we are not comparing anything in this context.
- Option 4: "Merges" means to combine or cause to combine to form a single entity. Although it has a similar connotation to "incorporates", it assumes an equal combination and does not emphasize the SEL concept's inclusion of competencies.

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