



Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



SSC MTS



SBI PO



BPSC



UP TET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

Delhi Police Constable 2020 Prev. Yr. Paper (02-Dec-2020) (Shift 3)

Total Time: 1 Hour : 30 Minute

Total Marks: 100

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks	Negative Marks	Positive Marks
1	General Knowledge/Current Affairs	50	50	0.25	1
2	Reasoning	25	25	0.25	1
3	Numerical Ability	15	15	0.25	1
4	Computer Awareness	10	10	0.25	1

- 1.) A total of 90 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 Knowledge/Current Affairs

1. With which musical instrument was the noted musician Pandit Kishan Maharaj associated? (+1, -0.25)
- a. Rudra Veena
 - b. Mridangam
 - c. Santoor
 - d. Tabla
-
2. The Prime Minister and the other Ministers of the Indian Union are appointed by the President under: (+1, -0.25)
- a. Article 79 of the Constitution of India
 - b. Article 75 of the Constitution of India
 - c. Article 85 of the Constitution of India
 - d. Article 70 of the Constitution of India
-
3. The Governor of a State may, if he is of the opinion that the Anglo-Indian community needs representation in the Legislative Assembly of the State and is not adequately represented therein, nominate _____ of that community to the Assembly. (+1, -0.25)
- a. one member
 - b. two members
 - c. three members

d. four members

4. Who among the following is the only Indian to win an Individual Gold in the Olympics? **(+1, -0.25)**

- a. Leander Paes
 - b. Saina Nehwal
 - c. Sushil Kumar
 - d. Abhinav Bindra
-

5. As per Census 2011, the literacy rate of India is: **(+1, -0.25)**

- a. 74.04%
 - b. 69.04%
 - c. 76.04%
 - d. 67.04%
-

6. The Finance Commission is constituted by the President: **(+1, -0.25)**

- a. at the expiration of every sixth year
 - b. at the expiration of every tenth year
 - c. at the expiration of every seventh year
 - d. at the expiration of every fifth year
-

7. Name the scientific principle behind the working of optical fibres. (+1, -0.25)

- a. Total external refraction of light
 - b. Total internal refraction of light
 - c. Total internal reflection of light
 - d. Total external reflection of light
-

8. Which of the following features distinguishes Buddhism from Jainism? (+1, -0.25)

- a. Non-injury to living beings
 - b. Extreme form of conduct and self-mortification
 - c. Belief in good action
 - d. Rejection of the authority of the Vedas
-

9. Who among the following has been appointed as Chairman of the Telecom Regulatory Authority of India (TRAI) in September 2020? (+1, -0.25)

- a. Ajay Kumar Bhalla
 - b. PD Vaghela
 - c. Snehlata Shrivastava
 - d. KN Vyas
-

10. The 2018 edition of the Commonwealth Games was hosted by _____. (+1, -0.25)

- a. UK
 - b. Pakistan
 - c. Australia
 - d. India
-

11. In which state is the Sarhul festival celebrated? (+1, -0.25)

- a. Chhattisgarh
 - b. Gujarat
 - c. Jharkhand
 - d. Assam
-

12. On which river is the Krishna Raja Sagar Dam built? (+1, -0.25)

- a. Tungabhadra
 - b. Krishna
 - c. Kali nadi
 - d. Kaveri
-

13. Who among the following was appointed as the Chairman of the International Financial Services Centres Authority (IFSCA) on July 6, 2020? (+1, -0.25)

- a. Nazir Laway
- b. Injeti Srinivas

- c. K.S. Reddy
 - d. Anil Kumar Chawla
-

14. What is the maximum amount of a loan granted by a scheduled commercial bank that is covered under the Credit Guarantee Fund Scheme for Micro and Small Enterprises? (+1, -0.25)

- a. Rs. 150 lakh
 - b. Rs. 100 lakh
 - c. Rs. 200 lakh
 - d. Rs. 50 lakh
-

15. Which Indian king issued a silver coin and termed it as Rupiya in the 16th century? (+1, -0.25)

- a. Hemu
 - b. Krishnadevaraya
 - c. Sher Shah Suri
 - d. Akbar
-

16. The Governor of a State holds office during the pleasure of the: (+1, -0.25)

- a. Prime Minister of India
- b. President of India
- c. Vice President of India

d. Chief Minister of the concerned State

17. What is the maximum age for joining the Atal Pension Yojana? (+1, -0.25)

- a. 45 years**
 - b. 50 years**
 - c. 35 years**
 - d. 40 years**
-

18. Who was the founder of the Vakataka Dynasty in ancient India? (+1, -0.25)

- a. Sarvasena**
 - b. Vindhyaasakti**
 - c. Pravarasena I**
 - d. Rudrasena I**
-

19. Who among the following is the author of the book 'The Art of Living – A Guide to Contentment, Joy and Fulfillment'? (+1, -0.25)

- a. Dalai Lama**
 - b. Kiran Bedi**
 - c. NR Narayana Murthy**
 - d. Tenzin Gyatse Tethong**
-

20. Which of the following is a thermosetting plastic? (+1, -0.25)

- a. Bioplastic
 - b. Bagasse
 - c. Mycotecture
 - d. Bakelite
-

21. In which state is the Ponung folk dance practised? (+1, -0.25)

- a. Sikkim
 - b. Manipur
 - c. Assam
 - d. Arunachal Pradesh
-

22. Which of the following pass(es) through the Indian mainland? (+1, -0.25)

- 1. The Tropic of Capricorn
 - 2. The Tropic of Cancer
 - 3. The Equator
- a. Both 2 and 3
 - b. Only 1
 - c. Only 2
 - d. Both 1 and 2

23. What is the highest rate of Goods and Services Tax (GST) in India? **(+1, -0.25)**

- a. 28%
- b. 22%
- c. 12%
- d. 18%

24. Which of the following statements is true about gases? **(+1, -0.25)**

- a. Gases have definite volume but no definite shape
- b. Gases have definite shape but no definite volume
- c. Gases neither have definite volume nor definite shape
- d. Gases have definite volume and definite shape

25. The Indian Administrative Service and the Indian Police Service are deemed to be services created by the Parliament: **(+1, -0.25)**

- a. under Article 312
- b. under Article 301
- c. under Article 292
- d. under Article 307

26. Who among the following was appointed as the Vice-President of the Asian Development Bank (ADB) for private sector operations and public- **(+1, -0.25)**

private partnerships on July 15, 2020?

- a. Ashok Lavasa
- b. Sahil Seth
- c. Rajiv Kumar
- d. R Narayanaswamy

27. During whose reign did the Moroccan traveller Ibn Battuta visit India in the 14th century? (+1, -0.25)

- a. Mohammad Bin Tughlaq
- b. Alauddin Khalji
- c. Jalaluddin Khalji
- d. Feroz Shah Tughlaq

28. What is the minimum amount of bank loan granted under the Stand-Up India scheme of the Government of India? (+1, -0.25)

- a. Rs. 20 lakh
- b. Rs. 5 lakh
- c. Rs. 10 lakh
- d. Rs. 2 lakh

29. In which year was the Battle of Talikota fought between the Vijayanagara Empire and the Deccan sultanates? (+1, -0.25)

- a. 1561 AD
 - b. 1556 AD
 - c. 1565 AD
 - d. 1575 AD
-

30. Who among the following formally stepped down as International Cricket Council (ICC) Chairman on July 1, 2020, after leading the governing body of the international cricket for four years? (+1, -0.25)

- a. Brijesh Patel
 - b. Niranjan Shah
 - c. N Srinivasan
 - d. Shashank Manohar
-

31. Who among the following has been appointed as the Ambassador and Permanent Representative of India to the UN and other International Organizations in Geneva on July 1, 2020? (+1, -0.25)

- a. Indra Mani Pandey
 - b. Venu Rajamony
 - c. Uma Shankar Bajpai
 - d. Deepak Bhojwani
-

32. With which of the following musical instruments is the musician Sikkil Mala Chandrasekhar associated? (+1, -0.25)

- a. Swarmandal
 - b. Flute
 - c. Tanpura
 - d. Tabla
-

33. Who was the first Governor-General under the British rule in India? (+1, -0.25)

- a. Warren Hastings
 - b. John Adam
 - c. George Barlow
 - d. Charles Cornwallis
-

34. What is the SI Unit of temperature? (+1, -0.25)

- a. Degree Fahrenheit
 - b. Candela
 - c. Kelvin
 - d. Degree Celsius
-

35. In which state is the Ananthagiri Hills located? (+1, -0.25)

- a. Kerala
- b. Andhra Pradesh

- c. Telangana
 - d. Karnataka
-

36. Which of the following football clubs won the La Liga Football Title for the 34th time on July 16, 2020, in Madrid? (+1, -0.25)

- a. Levante
 - b. Barcelona
 - c. Real Madrid
 - d. Villarreal
-

37. In which state is the archaeological site of Surkotada situated? (+1, -0.25)

- a. Karnataka
 - b. Haryana
 - c. Rajasthan
 - d. Gujarat
-

38. Which organisation is operating the Pradhan Mantri Vaya Vandana Yojana of the Government of India? (+1, -0.25)

- a. Unit Trust of India
- b. LIC of India
- c. Post Office

d. State Bank of India

39. Which of the following commodities is NOT included in the Essential Commodities Act, 1955? (+1, -0.25)

- a. Wooden furniture
 - b. Cement
 - c. Tyres of scooters
 - d. Soap
-

40. Former Union Food Processing Minister Harsimrat Kaur Badal virtually inaugurated the Zoram Mega Food Park in _____ on July 20, 2020, to boost the food processing industry in the North-East. (+1, -0.25)

- a. Meghalaya
 - b. Mizoram
 - c. Manipur
 - d. Tripura
-

41. In which state had the Central Government amalgamated three Regional Rural Banks (RRBs) into one bank with effect from 1 January 2019? (+1, -0.25)

- a. Haryana
- b. Rajasthan
- c. Uttar Pradesh

d. Punjab

42. While performing the Suwa folk dance of Chhattisgarh, women act like which of the following birds? **(+1, -0.25)**

- a.** Pigeon
 - b.** Peacock
 - c.** Hornbill
 - d.** Parrot
-

43. Which of the following activities belongs to the secondary sector of an economy? **(+1, -0.25)**

- a.** Tea plantation
 - b.** Legal consulting
 - c.** Farm equipment manufacturing
 - d.** Banking
-

44. Name the king who built the famous Lingaraj Temple in Bhubaneswar? **(+1, -0.25)**

- a.** Jajati Keshari
 - b.** Dharmaratha
 - c.** Janmejaya I
 - d.** Bhimaratha
-

45. Which of the following scientists developed the Theory of Relativity? (+1, -0.25)

- a. Niels Bohr
- b. Ernest Rutherford
- c. JJ Thomson
- d. Albert Einstein

46. Which of the following Articles of the Constitution of India has provisions for a joint sitting of both Houses of Parliament? (+1, -0.25)

- a. Article 93
- b. Article 126
- c. Article 108
- d. Article 122

47. In which of the following states is the Kolleru Lake located? (+1, -0.25)

- a. Kerala
- b. Karnataka
- c. Andhra Pradesh
- d. Tamil Nadu

48. Who among the following founded the Hyderabad city? (+1, -0.25)

- a. Subhan Quli Qutb Shah
 - b. Ibrahim Quli Qutb Shah
 - c. Muhammad Quli Qutb Shah
 - d. Jamsheed Quli Qutb Shah
-

49. Which of the following instruments is used to measure electromotive force? (+1, -0.25)

- a. Polarimeter
 - b. Potometer
 - c. Potentiometer
 - d. Platometer
-

50. In which state is the Kanha National Park situated? (+1, -0.25)

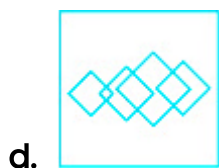
- a. Madhya Pradesh
- b. Haryana
- c. Karnataka
- d. Manipur

Reasoning

51. Select the option in which the given figure (X) is embedded (rotation is allowed). (+1, -0.25)



Figure (X)



52. Which two signs should be interchanged to make the given equation correct? (+1, -0.25)

$$77 + 12 - 4 \div 10 \times 1 = 70$$

- a. and $\times$

- b. and $\div$
- c. $\div$ and $\times$
- d. + and -

53. Select the option that is related to the third term in the same way as the second term is related to the first term. (+1, -0.25)
- Amend : Rectify :: Chaos : ?

- a. Creativity
- b. Array
- c. Disorder
- d. Ungrateful

54. Figure (X) given below is a standard dice. Select the option that represents the image of the same dice when it is rotated 4 times 90 degrees and then once anticlockwise. (+1, -0.25)

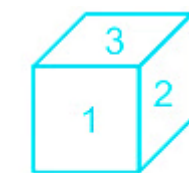
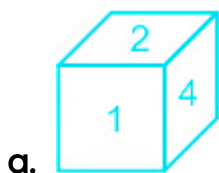
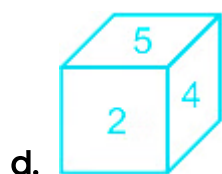
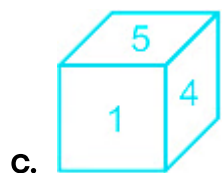
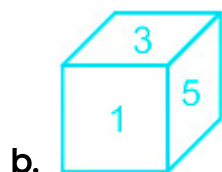


Figure (X)



a.



55. Select the correct image of the given figure (X) when the mirror is placed on the right side of the figure. (+1, -0.25)





d.

56. Three of the following terms are alike and one is different. Select the option that indicates the odd one. (+1, -0.25)

- a. Torch
- b. Candle
- c. Table Lamp
- d. Night Bulb

57. Select the Venn diagram that best illustrates the relationship between the following classes. (+1, -0.25)

Tree, Leaves, Chlorophyll



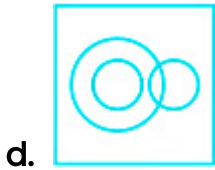
a.



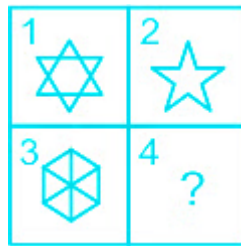
b.



c.



58. Select the option that is related to the third figure in the same way as the second figure is related to the first figure. (+1, -0.25)



59. Select the option that can replace the question mark (?) in the following series. (+1, -0.25)

22, 25, 32, 41, 55, 82, 110, 191, ?

- a. 247

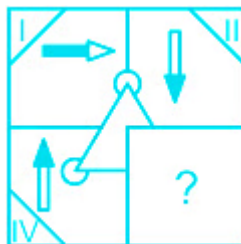
- b. 233
- c. 218
- d. 256

60. Select the option that can replace the question mark in the following matrix: (+1, -0.25)

8	14	21
24	42	63
17	29	?

- a. 33
- b. 40
- c. 43
- d. 32

61. Given below is a pattern out of which a section has been cut. Select the option that when replaced with the question mark (?) will complete the pattern. (+1, -0.25)



a.



b.



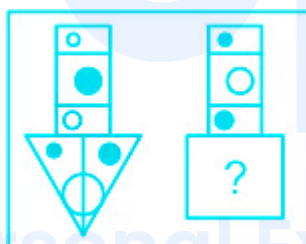
c.



d.

62. Given below is a pattern out of which a section has been cut. Select the option that when replaced with the question mark (?) will complete the pattern.

(+1, -0.25)



a.



b.



c.

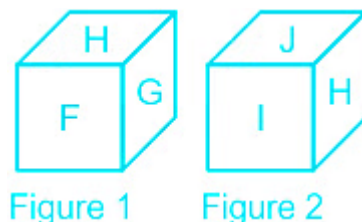


d.



63. Two different positions of the same dice are shown in Figure 1 and 2.
Select the letter on the face opposite to the face showing 'G'.

(+1, -0.25)



a. I

b. J

c. H

d. F

64. Select the option that is related to the third number in the same way as the second number is related to the first number.

(+1, -0.25)

8 : 515 :: 14 : ?

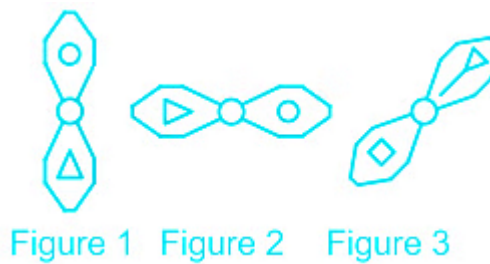
a. 2784

b. 2747

c. 2477

d. 2845

65. Select the option that is related to the third figure in the same way as the second figure is related to the first figure. (+1, -0.25)

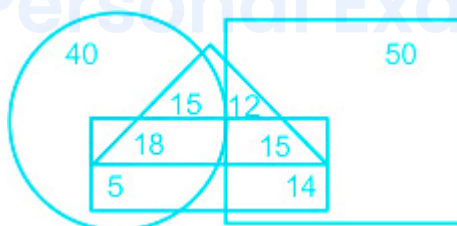


66. Select the option that will replace the question mark (?) in the following figure series. (+1, -0.25)





67. In the diagram given below. The circle represents the 'Female' and the square represents the 'Male'. Triangle represents 'Cooking' and the rectangle represents 'Gardening'. (+1, -0.25)



What is the total number of males and females who can perform gardening but not cooking?

- a. 29
b. 90

c. 19

d. 15

68. Select the option that can replace the question mark (?) in the following series. (+1, -0.25)

5, 41, 258, 1561, ?

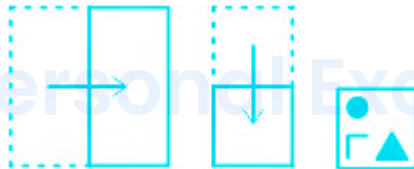
a. 8140

b. 9380

c. 8841

d. 9983

69. A paper is folded and cut as shown below. How will it appear when unfolded? (+1, -0.25)





70. If a seller brought a product for 360 rupees and sold it with 28% profit. (+1, -0.25)
Select the option which represents the approximate selling price of the product.

- a. 461
- b. 459
- c. 464
- d. 458

71. Select the option in which the given figure (X) is embedded (rotation is allowed). (+1, -0.25)



b.

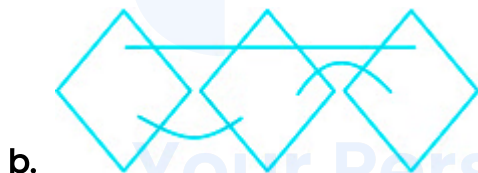


c.

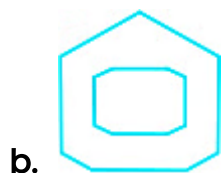


d.

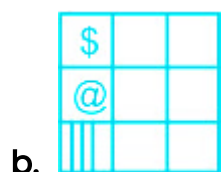
72. Three of the following figures are alike and one is different. Select the option that indicates the odd one. (+1, -0.25)

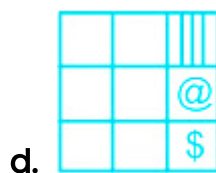
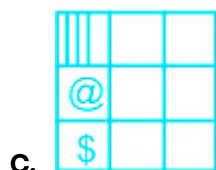


73. Three of the following are alike and one is different. Select the option that indicates the odd one. (+1, -0.25)



74. Select the option that will replace the question mark (?) in the following figure series. (+1, -0.25)





75. In a certain code language, 'ONE DAY AT A TIME' is written as 'J2I SN5 N3 N 3LG1'. How will 'DYNAMITE' be written in the same code language? (+1, -0.25)

- a. 5SA2G3L1
- b. S52NLG31
- c. S52NGL31
- d. S5N2GL31

Your Personal Exams Guide

Numerical Ability

76. A sum of Rs. 7,560 is divided between A, B and C such that if their shares are diminished by Rs. 400, Rs. 300 and Rs. 260, respectively, then their shares are in the ratio 4 : 2 : 5. What is the original share of B? (+1, -0.25)
- a. Rs. 1,500
- b. Rs. 1,200
- c. Rs. 2,400
- d. Rs. 2,700
-
77. The marked price of an article is Rs. 2,400. It is sold for Rs. 1,542.24 after allowing three successive discounts of 15%, 10% and $x\%$. What is the value of x ? (+1, -0.25)
- a. 16
- b. 16.5
- c. 18
- d. 15.6
-
78. What least number should be subtracted from 2983 so that the resulting number when divided by 9, 10 and 15, the remainder in each case is 3? (+1, -0.25)
- a. 10
- b. 13
- c. 12

d. 9

79. Two positive integers differ by 1627. When the largest integer is divided by the smaller, the quotient is 7 and the remainder is 157. The sum of the digits of the smaller integer is: (+1, -0.25)

a. 17

b. 13

c. 11

d. 12

80. The amount obtained by investing a certain sum at $r\%$ p. a. for 4 years simple interest is equal to the simple interest on the same sum at the same rate for 14 years. What is the value of r ? (+1, -0.25)

a. 10

b. 8

c. 9

d. 12

81. A person travelled a distance of 60 km and then returned to the starting point. The time taken by him for the return journey was $\frac{1}{2}$ hour more than the time taken for the outward journey, and the speed during the return journey was 10 km/h less than that during the outward journey. His speed during the outward journey (in km/h) was: (+1, -0.25)

a. 24

- b. 40
- c. 36
- d. 30

82. The value of $\frac{4}{21} \div \frac{3}{7}$ of $\frac{1}{2} - \frac{1}{2} \times 1\frac{2}{3} + (0.\overline{89} \div 0.9\overline{8} \times 7\frac{1}{3}) \div 2\frac{1}{2}$ is: (+1, -0.25)

- a. $\frac{32}{9}$
- b. $\frac{49}{18}$
- c. $\frac{7}{9}$
- d. $\frac{25}{18}$

83. The diameter of the base of a solid right circular cone is 66 cm, and its curved surface area is $2145 \pi \text{ cm}^2$. The volume of the cone, in cm^3 , is: (+1, -0.25)

- a. 17787π
- b. 15246π
- c. 13552π
- d. 20328π

84. The area of a triangular park, whose sides are 72 m, 210 m, and 222 m, is equal to the area of a rectangular garden whose sides are in the ratio of 21 : 10. What is the perimeter (in m) of the rectangular garden? (+1, -0.25)

- a. 372
- b. 434

c. 310

d. 248

85. The compound interest on a certain sum for 2 years at 15% p. a. is Rs.7,282, interest being compounded 8-monthly. What will be the amount of the same sum at the same rate for the same duration, when the interest is compounded yearly? (+1, -0.25)

a. Rs. 29,095

b. Rs. 28,540

c. Rs. 29,282

d. Rs. 26,620

86. If $x\%$ of 240 is equal to 60% of $(x + 450)$, then 20% of $(x + 50)$ is what percentage less than 40% of x ? (+1, -0.25)

a. $33\frac{1}{3}\%$

b. $16\frac{2}{3}\%$

c. 50%

d. 40%

87. The ratio of the number of boys and girls in a class is 9 : 7. The average weight of all the boys and girls is 54.25 kg. If the average weight of the girls is 52 kg, then what is the average weight (in kg) of the boys? (+1, -0.25)

a. 56.5

b. 57.5

c. 57

d. 56

88. A can do $33\frac{1}{3}\%$ of a work in 10 days and B can do $66\frac{2}{3}\%$ of the same work in 8 days. Both together worked for 8 days then C alone completes the remaining work in 3 days. A and C together will complete $\frac{5}{6}$ part of the original work in:

a. 20 days

b. 15 days

c. 12 days

d. 18 days

89. By selling an article at $\frac{8}{11}$ of its selling price, Madhu incurs a loss of 10%. If he sells the article at 85% of its actual selling price, then what is the profit percentage (correct to one decimal place)?

a. 6.4

b. 5.8

c. 6.5

d. 5.2

90. Arun spends 30% of his monthly income on groceries, 20% of the remaining on rent, and 45% of the remaining on children's education and

others. If he saves Rs. 5,544 a month, then how much (in Rs.) does he spend on rent?

- a. 2,690
- b. 2,520
- c. 2,500
- d. 2,680

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Computer Awareness

91. State whether the following statements related to MS Word are true or false. (+1, -0.25)

(i) A document file can have both, bulleted and numbered lists.

(ii) Page margins in an MS Word document can be customised.

a. (i) True, (ii) False

b. (i) False, (ii) True

c. (i) False, (ii) False

d. (i) True, (ii) True

92. When you open a new file in the newer versions of MS Word, such as Word 2016, the default page margin is set as: (+1, -0.25)

a. Moderate

b. Normal

c. Narrow

d. Mirrored

93. Which of the following appears at the extreme right position of a worksheet in MS Excel? (+1, -0.25)

a. Status bar

b. Vertical scroll bar

- c. Horizontal scroll bar
 - d. Menu bar
-

94. Consider a formula " $= D3 + C5$ " in cell B4. If cell B4 is copied and pasted into F10, then what will be the formula in cell F10? (+1, -0.25)

- a. $= E3 + D5$
 - b. $= D3 + C5$
 - c. $= E4 + D6$
 - d. $= D4 + C6$
-

95. Which of the following keyboard shortcuts is used to open a new window in incognito (private) mode in a Chrome browser? (+1, -0.25)

- a. Ctrl + N
 - b. Alt + Ctrl + N
 - c. Ctrl + Shift + N
 - d. Ctrl + P
-

96. Which of the following does NOT appear as a part of the 'Paragraph' command group within the Home menu in recent versions of MS Word, such as Word 2016? (+1, -0.25)

- a. Bullets
- b. Multilevel list

- c. Numbering
 - d. Change case
-

97. POP3 is an email-related protocol. What does the numeric value '3' in POP3 represent? (+1, -0.25)

- a. Number of characters in POP
 - b. Header size of POP
 - c. Version of POP
 - d. Number of codes in POP
-

98. What will be the result of the following MS Excel formula? (+1, -0.25)

= FACT(5-4)

- a. 120
 - b. 1
 - c. 96
 - d. 24
-

99. Which of the following is NOT a web search engine? (+1, -0.25)

- a. Bing
- b. Baidu
- c. Google

d. Safari

100. Which of the following keyboard shortcuts is equivalent to CTRL + S to save an open file in MS Word? (+1, -0.25)

- a. Shift + F5
- b. Ctrl + F5
- c. Shift + F12
- d. Ctrl + F12

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Answers

1. Answer: d

Explanation:

The correct answer is Tabla.

- Pandit Kishan Maharaj (3 September 1923 – 4 May 2008) was an Indian tabla player who belonged to the Benares Gharana of Hindustani classical music.

★ Additional Information

- The person who can be regarded as the 'doyen' of the table in the modern era, is **Pt. Kishan Maharaj**.
- **He was a close friend of Pt. Ravi Shankar, who he accompanied many times.**
- He also shared the stage with many stalwarts of his time including Ustad Ali Akbar Khan, Pandit Omkarnath Thakur, Pandit Bhimsen Joshi, Bade Ghulam Ali Khan, Ustad Vilayat Khan, Amjad Ali Khan, Girija Devi. Birju Maharaj to name a few.
- In most of his performances, he used to put the big red 'Tika', on the center of his forehead, a trademark style of the Benares Gharana.
- Kishanji was a very versatile musician, he could play **all sorts of percussion instruments like pakhawaj, mridangam, dhol, etc.**
- He was able to play the sitar and sarod also and could sing as well as dance

2. Answer: b

Explanation:

The correct answer is Article 75 of the Constitution of India.

- The Prime Minister shall be appointed by the President and the other ministers shall be appointed by the President on the advice of the Prime Minister.
 - This article sought to govern the office of the Prime Minister and Ministers.

★ Additional Information

- The Prime Minister of India is the head of the government and country. He is appointed by the President of India after the political party wins a general election and nominates a candidate for the post.
 - The leader of that political party is hence **appointed as the Prime Minister of India** .
 - The Prime Minister acts as the link and bond between the President and cabinet.
 - He communicates and transmits all decisions of the Cabinet to the President which is related to the administration of the affairs of the Union and proposals for legislation.
-

3. Answer: a

Explanation:

The correct answer is one member.

- In **Article 170, the Governor of a State may** , if he is of opinion that the Anglo-Indian community needs representation in the Legislative Assembly of the State and is not adequately represented therein, nominate one member of that community to the Assembly.

★ Additional Information

- The state executive is made up of the Governor, Chief Minister, Council of Ministers, and Advocate-General of State. Governor, as President, heads the state government.
 - **Article 153–167 in the Indian Constitution deal with the provisions related to the state governments of the country.**
- Governor is a titular head or constitutional head and at the same time, he is the agent of the center as the union government nominates Governor in each state.
- On 16th February 2021, Kiran Bedi, the Lieutenant Governor of Puducherry has been replaced.

- Telangana Governor, Tamilisai Soundararajan has been given the additional charge as the LG of Puducherry.
-

4. Answer: d

Explanation:

The correct answer is Abhinav Bindra.

- Abhinav Bindra had become the first Indian to win an individual Olympic gold medal.

★ Additional Information

- Abhinav Bindra is also known as 'The Iceman'.
 - The gold medal in the men's 10m air rifle at Beijing 2008 was the crowning glory in Abhinav Bindra's stellar sporting career, which includes a World Championship gold and multiple medals at the Commonwealth Games and the Asian Games.
 - At the age of 15 years, Abhinav competed at the Commonwealth Games of 1998 as the youngest participant at the event.
 - The Indian shooter went to the **1998 Commonwealth Games as a 15-year-old** and then traveled to the Sydney Olympics in 2000 as the youngest Indian participant.
-

5. Answer: a

Explanation:

The correct answer is 74.04%.

- The results of the **2011 census** revealed that there has been an increase in literacy in the country .

- The literacy rate in the country is 74.04 percent, 82.14 for males and 65.46 for females.

★ Additional Information

- The literacy rates for the country as a whole increased from 18.33 percent in 1951 to 65.38 percent in 2001 with the literacy rate for males at 75.85 percent and that for females at 54.16 percent.
- Among the states in India, Kerala had the highest literary rate with 94 percent in 2011.
- Chandigarh, Himachal Pradesh, and the capital territory of Delhi followed Kerala with above-average literacy rates. Notably, all the leading states in the country had more literate males than females at the time of the census.
- Jains are the most literate community in India.

6. Answer: d

Explanation:

The correct answer is at the expiration of every fifth year.

- The Finance Commission is constituted by the President under article 280 of the Constitution, mainly to give its recommendations on the distribution of tax revenues between the Union and the States and amongst the States themselves.

★ Additional Information

- Finance Commission is a constitutional body for the purpose of allocation of certain revenue resources between the Union and the State Governments.
- It was established under Article 280 of the Indian Constitution **by the Indian President**.
- It was created to define the financial relations between the Centre and the states.
- It was formed in 1951.
- Shri Ajay Narayan Jha recently joined the Fifteenth Finance Commission as its member.

- The 15th Finance Commission has released a report titled 'Finance Commission in COVID Times' on 1st February 2021.
-

7. Answer: c

Explanation:

The correct answer is Total internal reflection of light.

- Optical fibers work on the principle of total internal reflection.
- When light ray strikes at the internal surface of optical fiber cable called such the incidence angle is greater than the critical angle, then incident light ray reflects in the same medium, and this phenomenon repeats.

★ Additional Information

- The phenomenon in which the angle of incidence is more than the critical angle is known as **total internal reflection**.
 - **Characteristics of optical fiber:**
 - The bandwidth of the optical fiber is large **with a frequency of 2×10^{14} Hz**.
 - The transmission losses in an optical fiber are near 0.1db/km.
 - They are flexible with high tensile strength.
 - Communication using optical fibers are free from electromagnetic interference
-

8. Answer: b

Explanation:

The correct answer is Extreme form of conduct and self-mortification.

★ Key Points

- Buddhism and Jainism are ancient religions that developed during the days of Ancient India.
- Buddhism is based on the teachings of Gautama Buddha, while Jainism is based on the teachings of Mahavira

★ Additional Information

- Buddhism is centered upon the life and teachings of **Gautama Buddha**, whereas Jainism is centered on the life and teachings of Mahavira .
- Jainism is also a polytheistic religion and its goals are based on non-violence and liberation of the soul.
- Mahavira was born a little before the Buddha.
- While the Buddha was the founder of Buddhism, Mahavira did not found Jainism.
- He is the 24th great teacher (Tirthankar) in the Jain tradition that was founded in the present era by Rishabh or Adinath, thousands of years before Mahavira

9. Answer: b

Explanation:

The correct answer is PD Vaghela.

- PD Vaghela, currently secretary in the Department of Pharmaceuticals, has been appointed the next chairman of the Telecom Regulatory Authority of India,
- He replaced RS Sharma, who retired on September 30, 2020.

★ Additional Information

- TRAI's mission is to ensure that the interests of consumers are protected and at the same time nurture conditions for the growth of telecommunications, broadcasting and cable services in a manner and at a pace that will enable India to play a leading role in an emerging global information society.
- As per TRAI's new rules, all SMS messages have to be verified before they reach the users and all messages have to be registered in the TRAI DLT platform. These

include communication messages like OTP, verification codes, notifications sent by businesses to their customers, etc.

- TRAI is the Telecom Regulatory Authority of India.
- Its main purpose is to regulate telecommunication services, adjudicate disputes, dispose of appeals and protect the interest of the service providers as well as consumers.

10. Answer: c

Explanation:

The correct answer is Australia.

- This year's Commonwealth Games held in Gold Coast, Queensland, Australia.
- It was held from **4 April 2018 to 15 April 2018** and will consist of **275 events in 18 games**.

★ Additional Information

- 70 members of the Commonwealth of Nations took part in this edition.
- Earlier 71 countries were scheduled to take part but the Maldives pulled out of the games amidst internal political tensions.
- However, later on, the Gambia was set to make their return to the Commonwealth Games at Gold Coast 2018, which makes them the 71st participants.
- 70 members of the Commonwealth of Nations will be taking part in this edition.

11. Answer: c

Explanation:

The correct answer is Jharkhand.

★ Key Points

- Sarhul is a popular festival celebrated by **various tribes in the Jharkhand region**. The festival is the tribal New Year and is celebrated by the Munda, Oraon, Ho, etc. tribes of Jharkhand.

★ Additional Information

- One of the most popular tribal festivals celebrated across the Jharkhand region, the Sarhul festival marks the beginning of New Year.
 - It is celebrated by the Oraon, the Munda, and the Ho tribes, of the Jharkhand region.
 - Celebrated every year in the first month of the Hindu calendar, on the third day of the moon or the fortnight of 'Chaitra', Sarhul marks the advent of the spring season or "Phaagun" and is celebrated till the month of June or "Jeth".
 - Sarhul means worship of trees. **Being close to nature, these tribes start the Sarhul festival with the worship of trees and other elements of nature.**

12. Answer: d

Explanation:

The correct answer is Kaveri.

- The dam was built across river Kaveri in **1924**. It is the main source of water for the districts of Mysore.
- The water is used for irrigation in Mysore and Mandya, and it is the main source of drinking water for all of Mysore, Mandya, and almost the whole of Bengaluru city, the capital of Karnataka.

★ Additional Information

- **Long before Jawaharlal Nehru conjured up visions of 'temples' for modern India, Visvesvaraya had already built one.**
- As the chief engineer of Mysore, he conceived and supervised the construction of the Krishna Raja Sagara Dam on the Cauvery, India's largest river valley project at the time.

- Vani Vilasa Sagara is the oldest dam in the state.
- The Dam is the creation of one of the greatest engineers that India had produced, Sir M. Vishweshwaraiah.
- His birthday, 15th September is celebrated as Engineers Day.

13. Answer: b

Explanation:

The correct answer is Injeti Srinivas.

- Senior bureaucrat Injeti Srinivas has been appointed as the first chairman of the International Financial Services Centre Authority (IFSCA) for the Gandhinagar-based **financial special economic zone or Gujarat International Finance Tech (GIFT) City**.

★ Additional Information

- The main objective of the IFSCA is to develop a strong global connect and focus on the needs of the Indian economy as well as to serve as an international financial platform for the entire region and the global economy as a whole.
- The International Financial Services Centres Authority (IFSCA) has been established on **April 27, 2020, under the International Financial Services Centres Authority Act, 2019. It is headquartered at GIFT City, Gandhinagar in Gujarat.**
- The IFSCA is a unified authority for the development and regulation of financial products, financial services and financial institutions in the International Financial Services Centre (IFSC) in India.
- At present, the GIFT IFSC is the maiden international financial services centre in India. Prior to the establishment of IFSCA, the domestic financial regulators, namely, RBI, SEBI, PFRDA and IRDAI regulated the business in IFSC.

14. Answer: c

Explanation:

The correct answer is **Rs. 200 lakh.**

- Both new and existing MSMEs can avail credit under the scheme.
- For the guarantee scheme, up to 75% of the loan allowed under the Credit Guarantee Scheme is covered under the guarantee up to a maximum of Rs 50 lakh.
- The guarantee cover is provided for 5 years or above in blocks of 5 years

★ **Additional Information**

- The Credit Guarantee Fund Scheme for Micro and Small Enterprises (CGS) was launched by the Government of India (GoI) to make available collateral-free credit to the micro and small enterprise sector.
- Both the existing and the new enterprises are eligible to be covered under the scheme. The Ministry of Micro, Small and Medium Enterprises, GoI and Small Industries Development Bank of India (SIDBI) established a Trust named Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) to implement the Credit Guarantee Fund Scheme for Micro and Small Enterprises.
- The guarantee cover available under the scheme is to the extent of **50% / 75% / 80% & 85% of the sanctioned amount of the credit facility.**
- The extent of guarantee cover is **85% for micro-enterprises for credit up to Rs 5 lakh.**
- The extent of guarantee cover is 50% of the sanctioned amount of the credit facility for credit from Rs 10 lakh to Rs 100 lakh per MSE borrower for retail trade activity.

15. Answer: c

Explanation:

The correct answer is **Sher Shah Suri.**

- Sher Shah issued a coin of silver which was termed the Rupiya.
- This weighed 178 grains and was the precursor of the modern rupee.

★ **Additional Information**

- Sher Shah Suri's real name was Farid Khan and he had served in the Lodi Sultanate army in the early years.
- Sher Shah issued a coin of silver which was termed the Rupiya.
- This weighed 178 grains and was the precursor of the modern rupee.
- It remained largely unchanged till the early 20th Century. Together with the silver Rupiya were issued gold coins called the Mohur weighing 169 grains and copper coins called Dam.

16. Answer: b

Explanation:

The correct answer is President of India.

- The Governor of a State shall be appointed by the President by warrant under his hand and seal.
- As such, governors are responsible for implementing state laws and overseeing the operation of the state executive branch.
- As state leaders, governors advance and pursue new and revised policies and programs using a variety of tools, among them executive orders, executive budgets, and legislative proposals and vetoes.

★ Additional Information

- The second job that a governor has is as a chief legislator, that is, being able to come up with new legislation that is then passed through committees, voted over on the floor of the houses of the state legislature, and hopefully passed with a majority vote, in which case he can then sign it into law.
- The executive power of the State shall be vested in the Governor and shall be exercised by him either directly or through officers subordinate to him in accordance with this Constitution.
- The Governor shall not be a member of either House of Parliament or of a House of the Legislature of any State specified in the First Schedule, and if a member of either House of Parliament or of a House of the **Legislature of any**

such State is appointed Governor, he shall be deemed to have vacated his seat in that House on the date on which he enters upon his office as Governor.

17. Answer: d

Explanation:

The correct answer is 40 years.

- The maximum age is 40 years. This is because the minimum contribution period is 20 years. At the age of 60, you will start receiving your pension.

★ Additional Information

- The age limit for joining APY is 18–40 years, meaning those aged 18 years or above but below 40 years can join this pension scheme.
 - For a guaranteed pension of Rs 5000/month, a person joining at the age of 39 years will have to make a half-yearly contribution of Rs 7778.
 - The total yearly contribution of such subscribers will be $\text{Rs } 7778 \times 2 = \text{Rs } 15,556$.
 - Those joining at the age of **25 years and 30 years will have to make half-yearly contributions of Rs 2219 and Rs 3405 respectively**.

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18. Answer: b

Explanation:

The correct answer is Vindhyasakti.

- The Vakataka dynasty was a Brahmin dynasty. Little is known about Vindhyashakti (c. 250 – c. 270 CE), the founder of the family.

★ Additional Information

- His name is derived from the name of the goddess Vindhya.

- The Satavahanas in peninsular India were succeeded by the Vakatakas (local power) who ruled the Deccan for more than two and a half centuries.
 - The Vakatakas were the contemporaries of the Guptas in northern India.
 - In the Puranas, the Vakatakas are referred to as the Vindhyakas.
 - **The Vakatakas belonged to the Vishnuvridha gotra** of the Brahmanas and performed numerous Vedic sacrifices.
 - A large number of copperplate land grant charters issued by the Vakatakas to the Brahmins have helped in reconstructing their history.
 - They were Brahmins and promoted Brahmanism, however, they also patronized Buddhism.

19. Answer: a

Explanation:

The correct answer is Dalai Lama.

- **This gorgeous book by the Dalai Lama** brings together profound, accessible teachings by his Holiness on living a joyful life with extraordinary images that offer insight into the rich cultural heritage of Tibetan Buddhism.

★ Additional Information

- Tenzin Gyatso is the 14th Dalai Lama of Tibetan Buddhism.
- He was born on July 6, 1935, to a farming family, in a small hamlet located in Taktser, Amdo, northeastern Tibet.
- The Dalai Lama belongs to the Gelugpa tradition of Tibetan Buddhism, which is the largest and most influential tradition in Tibet.
- The institution of the Dalai Lama is a relatively recent one. There have been only 14 Dalai Lamas in the history of Tibetan Buddhism, and the first and second Dalai Lamas were given the title posthumously.

20. Answer: d

Explanation:

The correct answer is Bakelite.

- Bakelite is the thermosetting plastic.
- The material becomes very rigid and irreversible in nature when it is heated.

★ Additional Information

- Thermosoftening (also called thermoplastics) are plastics that will soften when **heated and can be reshaped**.
- **Thermosetting plastics are plastics that do not soften on heating.**
- They are used when resistance to heat is important (eg kettles, plugs, laptop chargers, etc).
- Thermosets are used to produce electrical goods and components, including insulators and panels.
- These are used to produce construction equipment panels. Because they are heat resistant, they are used to produce heat shields. In automobiles, thermosets are used to produce brake pistons.

21. Answer: d

Explanation:

The correct answer is Arunachal Pradesh.

- **Ponung** folk dance is a popular dance of Arunachal Pradesh.
 - It belongs to the Adi tribe. This tribe is known for many of its traditional folk dances.
 - Ponung dance is an important religious **celebration for the Adi tribe**.

★ Additional Information

- The word "So-lung" has been derived from two words, E (so) – Bros frontalis/Mithun, main animal sacrificed during the festival, and a (lung) meaning group (herds of Mithun) of Esos.

- It is celebrated from 1st to 3rd September and is the most important festival of the Adis.
- Esos (Mithun's) are sacrificed and ponung (folk dance) is performed by unmarried girls wherein the Miri (shaman) recites all about the origin of the adis and animals etc. comes into the universe.

22. Answer: c

Explanation:

The correct answer is The Tropic of Cancer.

- Tropic of Cancer passes through the middle part of India.
- Tropic of Cancer is an imaginary line that is at an angle of **23.50 degrees**.
- It is North of the Equator, which passes through the middle of India.

★ Additional Information

- The Tropic of Cancer ($23^{\circ}30'N$) passes almost halfway through the country India
- The Tropic of Cancer passes through eight states in India.
- From the extends south to north, the mainland of India extends between $8^{\circ}4'N$ and $37^{\circ}6'N$ latitudes.
- From the other extends west to east, India extends between **$68^{\circ}7'E$ and $97^{\circ}25'E$ longitudes.**
- The difference between these two points would be approximately two hours.

23. Answer: a

Explanation:

The correct answer is 28%.

- The council meeting was held to 'reduce' the tax rates on certain items based on customer preferences.
- Hence, no additional items were added to the highest GST rates slab of 28%.
- The GST rates for various products are subject to change from time to time without prior information.

★ Additional Information

- The GST council has fitted over **1300 goods and 500 services under four tax slabs of 5%, 12%, 18%, and 28% under GST.**
 - This is aside from the tax on gold that is kept at 3% and rough precious and semi-precious stones that are placed at a special rate of 0.25% under GST.
 - Though there are five slab rates, consultancy services fall under 18% slab only. Other GST slabs are **0%, 5%, 12%, 18% and 28%.**
 - Goods and Service Tax (GST) is levied on the supply of goods and services. Goods and Services Tax Law in India is a comprehensive, multi-stage, destination-based tax that is levied on every value addition.
 - GST is a single domestic indirect tax law for the entire country.

24. Answer: c

Explanation:

The correct answer is Gases neither have definite volume nor definite shape.

- Gases have neither definite shape nor definite volume because the molecules of gas are very far apart compared with the molecules of solid or liquid.

★ Additional Information

- Particles are far apart from each other because there are very **weak forces of attraction between** them.
 - They move fast in all directions. Because of this, gases don't have a **definite shape or volume and fill any container** .

- Because there is lots of free space between particles, gases can easily be compressed.
- Gases are fluid and flow easily.
- Gases diffuse (mix and spread out) and **effuse** (travel through small holes).

25. Answer: a

Explanation:

The correct answer is under Article 312.

- The Indian Administrative Service and The Indian Police Service are deemed to be constituted by the Parliament in terms of Article 312 of the Constitution.
 - After the promulgation of the Constitution, a new All India Service, namely, The Indian Forest Service, was created in 1966.

★ Additional Information

- Article 301 Constitution of India: Freedom of trade, commerce, and intercourse. Subject to the other provisions of this Part, trade, commerce, and intercourse throughout the territory of India shall be free.
- Article 292 of the Indian Constitution states that the Government of India can borrow amounts specified by the Parliament from time to time.
- Thus the Government of India incurs both external and internal debt, while State Governments incur only internal debt.

26. Answer: a

Explanation:

The correct answer is Ashok Lavasa.

- The Asian Development Bank (ADB) appointed Ashok Lavasa as Vice-President for Private Sector Operations and Public-Private Partnerships.
 - He succeeded Diwakar Gupta, whose term will end on 31 August.

★ **Additional Information**

- Mr. Lavasa has a long and distinguished career in the Indian civil service.
 - He was one of the Election Commissioners of India and previously served in a range of senior posts including as Union Finance Secretary of India; Union Secretary for the Ministry of Environment, Forests, and Climate Change; and Union Secretary for the Ministry of Civil Aviation.
 - He has extensive experience in **public-private partnerships and infrastructure development at the state and federal levels, with deep knowledge of public policy and the role of the private sector.**

27. Answer: a

Explanation:

The correct answer is Mohammad Bin Tughlaq.

- A Moroccan traveler, Ibn Battuta (1333-1347 AD) visited India during the reign of Muhammad-bin-Tughlaq.

★ **Additional Information**

- After his third pilgrimage to Mecca, Ibn Battuta decided to seek employment with the Muslim Sultan of Delhi, Muhammad bin Tughluq.
 - In the autumn of 1330 (or 1332), he set off for the Seljuk-controlled territory of Anatolia with the intention of taking an overland route to India.
- According to Ibn Battuta, the Indian cities were full of opportunities for those people who had the Zeal, resources, and were skillful.
- He described Delhi as a large and well-populated city. Daulatabad was no less than Delhi in size.

28. Answer: c

Explanation:

The correct answer is Rs. 10 lakh.

- **Stand-Up India Scheme facilitates bank loans between Rs 10 lakh and Rs 1 Crore** to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower and at least one woman borrower per bank branch for setting up a greenfield enterprise.
- This enterprise may be in manufacturing, services, or the trading sector.

★ Additional Information

- Initially, it was outlined that at least one SC or ST borrower and at least one woman borrower gets the benefit of the scheme per bank branch to set up a greenfield enterprise in the manufacturing, services, or trading sector.
- Enterprises can also avail of the benefits of the scheme given that they satisfy the eligibility criteria.
- The objective of the Stand-Up India scheme is to provide financing for Scheduled Caste (SC), Scheduled Tribe (ST), and women entrepreneurs to realize their business ideas.

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29. Answer: c

Explanation:

The correct answer is 1565 AD.

- Battle of Talikota, confrontation in the Deccan region of southern India between the forces of the **Hindu raja of Vijayanagar and the four allied Muslim sultans of Bijapur, Bidar, Ahmadnagar, and Golconda**.
 - The battle was fought on **January 23, 1565**, at a site southeast of Bijapur, in what is now northern Karnataka state.

★ Additional Information

- Krishna Deva Raya, king of the Vijayanagar empire at its zenith, stormed the Raichur Fort after a bloodily victorious battle against the forces of Ismail Adil Shah, ruler of the Bijapur Sultanate.
 - The Battle of Raichur (1520), though celebrated widely through the streets of Vijayanagara, signaled the slow-yet-steady downfall of the Vijayanagara Empire.
 - Ultimately, the Battle of Talikota (1565) brought about the fated decline of a kingdom over two hundred years old.
 - After this decisive battle, the Vijayanagara Empire could never reach the same heights of the past.

30. Answer: d

Explanation:

The correct answer is Shashank Manohar.

- Shashank Manohar has formally stepped down as International Cricket Council (ICC) chairman after heading the sport's global governing body for four years.

★ Additional Information

- The ICC is the global governing body for cricket.
- Representing **104 members**, the ICC governs and administrates the game and works with our members to grow the sport .
- The ICC is also responsible for the staging of all ICC Events.
- The ICC presides over the ICC Code of Conduct, playing conditions, the Decision Review System, and other ICC regulations. The ICC also appoints all match officials that officiate at all sanctioned international matches. Through the Anti-Corruption Unit, it coordinates action against corruption and match-fixing.

31. Answer: a

Explanation:

The correct answer is Indra Mani Pandey.

- Shri Indra Mani Pandey (IFS: 1990), presently Additional Secretary in the Ministry, has been appointed as the next Ambassador/Permanent Representative of India to the United Nations and other International Organisations in Geneva.

★ Additional Information

- The United Nations is an international organization founded in 1945.
 - Currently made up of **193 Member States**, the UN and its work are guided by the purposes and principles contained in its founding Charter .
 - The UN has evolved over the years to keep pace with a rapidly changing world.
 - The main bodies of the UN are the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the UN Secretariat.

32. Answer: b

Explanation:

The correct answer is Flute.

- **Sikkil Mala Chandrasekhar** is a noted South Indian Carnatic flutist. Mala Chandrasekhar was born to a musical family.

★ Additional Information

- Sikkil Mala Chandrasekhar was born in a reputed musical family, she started learning flute at the age of five from her gurus Padmasree Sangeetha

Kalanidhi Smt Sikkil Neela (Mother) and Smt. Sikkil Kunjumani (Aunt). Learning was very informal.

- She has gifted a small flute in Nagercoil.
- They very casually taught her how to create sound, special blowing exercises, and sarali varisais in ragam 'Harikamboji
- It was during her final year, that she had the opportunity to participate in the "Violin Venu Veena" trio ensemble with Smt. Lalagudi Vijayalakshmi on the violin and her friend Padmavathi on the veena

33. Answer: a

Explanation:

The correct answer is Warren Hastings.

★ Key Points

- **Warren Hastings, the first and most famous of the British governors-general of India**, dominated Indian affairs from 1772 to 1785 and was impeached (though acquitted) on his return to England.
- The English statesman Warren Hastings (1732–1818) **was the first governor-general of British India.**
- He established the system of civil administration that was the basis of Anglo-Indian security and prosperity.

34. Answer: c

Explanation:

The correct answer is Kelvin.

- Kelvin is the base unit of temperature in the SI system (International System of Units). Kelvin unit's abbreviation is K (no degree or degree sign).

★ Additional Information

- The "degree Celsius" has been the only SI unit whose full unit name contains an uppercase letter since 1967, when the SI base unit for temperature became the kelvin, replacing the capitalized term degrees Kelvin.
- The plural form is "degrees Celsius".
- The Kelvin scale is widely accepted or used in the field of science and engineering.
- However, in most parts of the world, Celsius or Fahrenheit scale is used for measuring temperature

35. Answer: c

Explanation:

The correct answer is Telangana.

- Ananthagiri Hills is located in **Vikarabad district**, Telangana, India. The water flows from these hills to Hussain Sagar and Himayathsagar.

★ Additional Information

- Ananthagiri hills are 5 km from Vikarabad city of Rangareddy.
 - It is one of the dense forests in Telangana. Ananthagiri Temple is located in this forested area.
 - It is the source of the **Musi River, which flows through Hyderabad**.
 - It is one of the earliest habitat areas. Ancient caves, medieval fort structures, and temples show the antiquity of this area.

36. Answer: c

Explanation:

The correct answer is Real Madrid.

- Real Madrid clinched the 2019-'20 La Liga title with a **2-1 win over Villarreal at Estadio Alfredo di Stefano** to win their 34th Spanish league title, moving eight clear of nearest rivals Barcelona.

★ Additional Information

- La Liga, the first national football league in Spain was founded in 1929 (the first season started in February that year and ended in June).
 - At this time, it consisted of one division, Primera División, and contained ten clubs.
 - The number of clubs would later expand on several occasions.
 - Real Madrid has 34 La Liga title wins and is the Spanish La Liga team with the most wins in Spain.

37. Answer: d

Explanation:

The correct answer is Gujarat.

- **The site at Surkotada is located 160 km (99 mi) north-east of Bhuj, in the district of Kutch, Gujarat.**
 - The ancient mound stands surrounded by an undulating rising ground clustered by small sandstone hills.

★ Additional Information

- Surkotada is a small, 3.5-acre site northeast of Bhuj, in Gujarat. Approx 30 km from Rapar.
 - It was discovered and excavated by Shri Jagat Pati Joshi of ASI in 1964-1968.
 - The Harappans came to Surkotada around 2300 B.C. and built a fortified citadel and residential annex, made of mud brick, mud lumps, and rubble, containing houses with bathrooms and drains.
 - **A new element in the population along with the already extant Harappa is seen in c. 1900 B.C.**

38. Answer: b

Explanation:

The correct answer is LIC of India.

- PMVVY (Pradhan Mantri Vaya Vandana Yojana) is a retirement cum pension scheme for senior citizens.
 - The scheme is operated and managed by Life Insurance Corporation (LIC).

★ **Additional Information**

- The Union Cabinet has extended Pradhan Mantri Vaya Vandana Yojana (PMVVY) for a period of three years.
 - This social security scheme for senior citizens will now be valid till March 2023.
- Earlier, the scheme was open till 31st March 2020.
- Initially, an assured rate of return of 7.40% per annum for the year 2020–21 per annum will be provided and thereafter to be reset every year in line with the Senior Citizen Savings Scheme (SCSS).
- The Finance Minister will approve an annual reset rate of return at the beginning of every financial year.

39. Answer: a

Explanation:

The correct answer is Wooden furniture.

- At present, there are seven commodities scheduled under the Essential Commodities Act, 1955, as essential drugs; fertilizer, whether inorganic, organic, or mixed; foodstuffs, including edible oilseeds and oils; hank yarn made wholly

from cotton; petroleum and petroleum products; raw jute and jute textile; seeds of food.

★ **Additional Information**

- The Essential Commodities (Amendment) Ordinance, 2020 **allows the central government to regulate the supply of certain food items only under extraordinary circumstances (such as war and famine).**
 - Stock limits may be imposed on agricultural produce only if there is a steep price rise.
 - The Essential Commodities Act (ECA) is an act of the Parliament of India that was established to ensure the delivery of certain commodities or products, the supply of which, if obstructed due to hoarding or black marketing, would affect the normal life of the people.

40. Answer: b

Explanation:

The correct answer is **Mizoram.**

- Union Minister of Food Processing Harsimrat Kaur Badal e-inaugurates Zoram Mega Food Park in Mizoram.
 - Union Minister of Food Processing Industries in the Government of India and Member Harsimrat Kaur Badal on Monday inaugurated the Zoram Mega Food Park Ltd at Kolasib in Mizoram through a virtual conference.

★ **Additional Information**

- This Mega Food Park will benefit farmers, growers, processors, consumers and prove to be a big boost to the growth of the food processing sector in the North East Region.
- Mega Food Park will provide direct and indirect employment to 5,000 people and benefit around 25,000 farmers.
- The park will leverage an additional investment of about Rs. 250 crore in 30 food processing units and would eventually lead to a turnover of about Rs. 500

crore annually.

- This Mega Food Park is equipped with a dry warehouse of 3000 metric tonnes capacity and cold storage of 1000 metric tonnes.

41. Answer: d

Explanation:

The correct answer is Punjab.

- The government amalgamated three Regional Rural Banks -- Punjab Gramin Bank, Malwa Gramin Bank, and Sutlej Gramin Bank -- into a single RRB with effect from January 1.

★ Additional Information

- The Reserve Bank of India was established on **April 1, 1935, in accordance with the provisions of the Reserve Bank of India Act, 1934.**
 - The Central Office of the Reserve Bank was initially established in Kolkata but was permanently moved to Mumbai in 1937.
 - The Central Office is where the Governor sits and where policies are formulated.
 - The Reserve Bank's affairs are governed by a central board of directors.
 - The board is appointed by the Government of India in keeping with the Reserve Bank of India Act.

42. Answer: d

Explanation:

The correct answer is Parrot.

- Sowa or Suwa/Sua tribal dance in Chhattisgarh state is also a form of Parrot Dance.

- It is a symbolic form of dancing related to the worship of God.
- Dancers keep a parrot in a **pot made of Bamboo and form a circular shape around it.**
- Then performers sing and dance which is a pleasure to watch, moving around it with clapping.
- This is one of the main dance forms of women of a tribal section of Chhattisgarh.

★ Additional Information

- The Sowa dance songs are an integral part of the heritage, festivals, and celebrations in the rural parts of the state.
 - The performances in this style of song and dance are the special attraction of the celebration of Diwali in the district of Bastar and Soowa or Soowa/Sua tribal dance in Chhattisgarh is also known as Parrot Dance.
 - It is a symbolic form of dancing related to worship.
 - Dancers keep a parrot in a bamboo pot and form a circle around it.
 - Then performers sing and dance, moving around it with clapping. This is one of the main dance forms of tribal women of Chhattisgarh.

43. Answer: c

Explanation:

The correct answer is Farm equipment manufacturing.

- Activities associated with the secondary sector include metalworking and smelting, automobile production, textile production, chemical and engineering industries, aerospace manufacturing, energy utilities, engineering, breweries and bottlers, construction, and shipbuilding.

★ Additional Information

- Primary Sector Activities **Agriculture, forestry, animal husbandry, fishing, poultry farming, and mining.**
- Secondary Sector Activities Include manufacturing and construction.

- Tertiary Sector Activities Trade, transport, communication, banking, education, health, tourism, services, insurance, etc

44. Answer: a

Explanation:

The correct answer is Jajati Keshari.

- Lingaraj temple is one of the most famous religious sites in Bhubaneshwar.
- People and visitors from across the country visit the **Lingaraj temple to offer their worship and prayers** .
- Lingaraj temple was built by King Jajti Keshari.

★ Additional Information

- It is built in red stone and is a classic example of the Kalinga style of architecture.
- The main tower of this temple measures 180-feet in height.
- It was constructed in the 11th century, the temple is dedicated to Lord Shiva.

45. Answer: d

Explanation:

The correct answer is Albert Einstein.

- He published the first part of his theory special relativity in the German physics journal Annalen der Physik in 1905 and completed his theory of general relativity only after another decade of difficult work.

★ Additional Information

- Albert Einstein had a massive influence on contemporary physics.

- His theory of relativity shifted the contemporary understanding of space completely.
 - **In his four papers, published in November 1915, Einstein laid the foundation of the theory.**
 - In the third in particular, he used general relativity to explain the precession of the perihelion of Mercury.
 - General relativity predicted that light would bend in a gravitational field.
-

46. Answer: c

Explanation:

The correct answer is Article 108.

- As per Article 108 of the Constitution, a Joint session of Parliament can be summoned.

★ Additional Information

- Article 108 of the Indian Constitution provides for a joint sitting of both Houses of Parliament.
 - The joint session is summoned by the President.
 - It is presided over **by the Speaker of the Lok Sabha**.
 - The joint sitting is governed by the Rules of Procedure of Lok Sabha and not of Rajya Sabha.
 - The quorum to constitute a joint sitting: 1/10th of the total number of members of the House.
 - The Bill is passed by a simple majority of the total number of members of both the Houses present and voting in the joint sitting,
-

47. Answer: c

Explanation:

The correct answer is Andhra Pradesh.

- Kolleru Lake is one of the largest freshwater lakes in India located in the state of Andhra Pradesh 15 kilometers away from the city of Eluru.
- Kolleru is located between Krishna and Godavari deltas. Kolleru spans two districts – Krishna and West Godavari.

★ Additional Information

- Kolleru is located between **Krishna and Godavari delta and covers an area of 308 km²**.
 - The lake serves as a natural flood-balancing reservoir for these two rivers.
 - The RAMSAR site of the Kolleru sanctuary is facing pollution and degradation due to large-scale shrimp farming for export.
 - The waters and surrounding aquifers of Kolleru Lake continue to be polluted by aquacultural operations, while residents continue to resist moves by the government to reduce the size of the lake.

48. Answer: c

Explanation:

The correct answer is Muhammad Quli Qutb Shah.

- Mohammed Quli Qutb Shah of the Qutb Shahi dynasty founded the city of Hyderabad in 1589–94 south of the Musi River, 8km from the Golconda Fort, and built a bridge over the river to connect the fort to the city (it is now called Purana Pul).

★ Additional Information

- The fifth ruler of the Qutb Shahi dynasty, Muhammad Quli Qutb Shah, built the Charminar in 1591 after shifting his capital from Golkonda to the newly formed city of Hyderabad.
- The name Hyderabad means "Haydar's city" or "lion city", from Haydar 'lion' and ābād 'city', after Caliph Ali Ibn Abi Talib, also known as Haydar because of his

lion-like valor in battle.

- The city was originally called Baghnagar 'city of gardens', and later acquired the name Hyderabad .

49. Answer: c

Explanation:

The correct answer is Potentiometer.

- Potentiometers work by varying the position of a sliding contact across a uniform resistance.
- In a potentiometer, the entire input voltage is applied across the whole length of the resistor, and the output voltage is the voltage drop between the fixed and sliding contact.

★ Additional Information

- There are two main types of potentiometers, linear potentiometers, and rotary potentiometers.
 - Membrane Potentiometers are another type of potentiometer.
 - They are often referred to as "soft spots" and can be either linear or rotary.
 - The principle of a potentiometer is that the **potential dropped across a segment of a wire of uniform cross-section** carrying a constant current is directly proportional to its length.
 - The potentiometer is a simple device used **to measure the electrical potentials(or compare the e.m.f of a cell)**.

50. Answer: a

Explanation:

The correct answer is Madhya Pradesh.

- Kanha Tiger Reserve, also called Kanha National Park, is one of the tiger reserves of India and the largest national park of Madhya Pradesh, a state in the heart of India.
 - The present-day Kanha area is divided into two sanctuaries, Hallon and Banjar, of 250 and 300 km² respectively.
 - Kanha National Park was created on 1 June 1955 and in 1973 was made the Kanha Tiger Reserve.
 - Today it stretches over an area of 940 km² in the two districts Mandla and Balaghat.

★ Additional Information

- The park has a significant population of the Royal Bengal tiger, Indian leopards, the sloth bear, barasingha, and Indian wild dog.
 - The forest depicted in the famous novel by Rudyard Kipling, The Jungle Book is based on jungles including this reserve.
 - It is also the first tiger reserve in India to officially introduce a mascot, "Bhoorsingh the Barasingha".

51. Answer: c

Explanation:

Given,



Figure (X)

The above figure is embedded in,



Hence, the correct answer is **option 3**).

52. Answer: b

Explanation:

Given,

$$77 + 12 - 4 \div 10 \times 1 = 70$$

The correct equation is as follows,

1) - and $\times \rightarrow 77 + 12 \times 4 \div 10 - 1 = 77 + 4.8 - 1 = 80.8 \neq 70$

2) - and $\div \rightarrow 77 + 12 \div 4 - 10 \times 1 = 77 + 3 - 10 = 70 = 70$

3) $\div$ and $\times \rightarrow 77 + 12 - 4 \times 10 \div 1 = 89 - 40 = 49 \neq 70$

4) + and - $\rightarrow 77 - 12 + 4 \div 10 \times 1 = 65 + 0.4 = 65.4 \neq 70$

Hence, the correct answer is - **and $\div$**

53. Answer: c

Explanation:

Given,

Amend : Rectify :: Chaos : ?

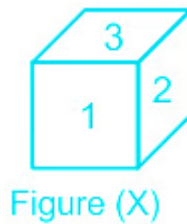
Here we see Amend and Rectify are synonyms similarly, Disorder is the synonym of Chaos.

Hence, the correct answer is **Disorder**.

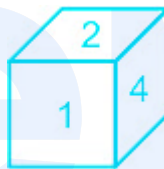
54. Answer: a

Explanation:

Given,



The option that represents the image of the same dice when it is rotated 4 times 90 degrees and then once anticlockwise is,



Hence, the correct answer is **option 1**).

55. Answer: c

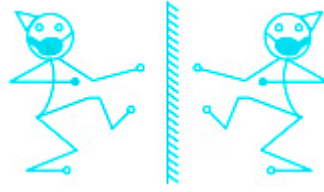
Explanation:

Given,



In the mirror image, the top and the bottom part of the figure remains the same and the left and the right part of the figure interchanges.

∴



Hence, the correct answer is **option 3).**

56. Answer: b

Explanation:

Given,

Torch, Candle, Table Lamp, Night Bulb

Here we see all the devices produce light with the help of electricity except **Candle**.

Hence, the correct answer is **Candle**.

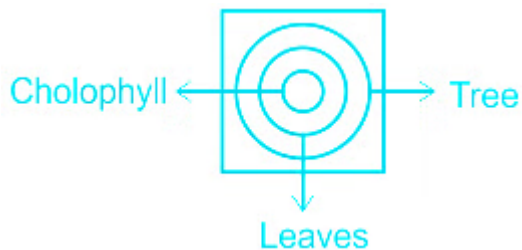
57. Answer: b

Explanation:

Given,

Tree, Leaves, Chlorophyll

The least possible Venn diagram is as follows,

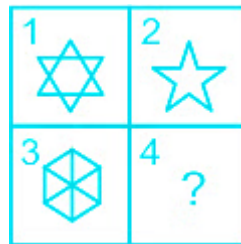


Hence, the correct answer is **option 2).**

58. Answer: a

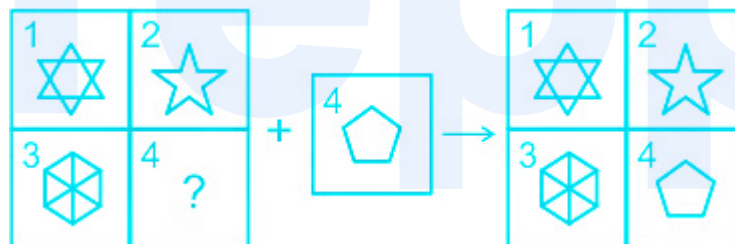
Explanation:

Given,



Here we see the second image is related to the first image, in the second image only the outline of the first image is shown and one dimension is also reduced.

∴ The image in the place of the question mark (?) is



Hence, the correct answer is option 1).

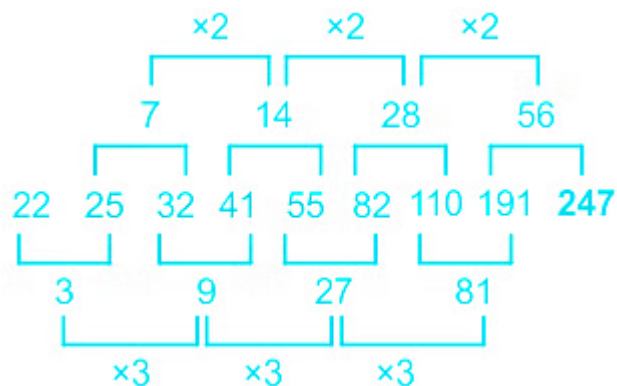
59. Answer: a

Explanation:

Given,

22, 25, 32, 41, 55, 82, 110, 191, ?

The pattern followed here is,



Hence, the correct answer is **247**.

60. Answer: c

Explanation:

Given,

8	14	21
24	42	63
17	29	?

The pattern followed here is:

In a column:

(1st number + 3rd number) - 1 = middle number

First column - 8, 24, 17

$$8 + 17 = 25 - 1 = 24$$

Second column- 14, 42, 29

$$14 + 29 = 43 - 1 = 42$$

Similarly,

Third column - 21, 63, ?

$$(21 + ?) - 1 = 63$$

$$21 + ? = 64$$

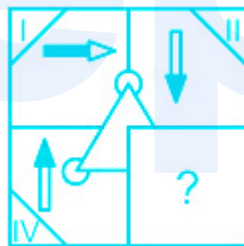
$$? = 64 - 21 = 43$$

Hence, the correct answer is **43**.

61. Answer: b

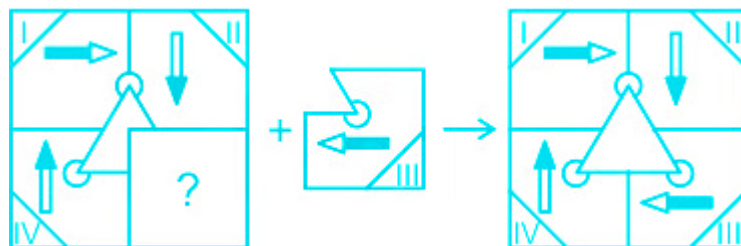
Explanation:

Given,



The pattern followed here is the arrow is rotating in the clockwise direction and the rectangles are also numbered from I to IV.

∴ The figure in the place of the question mark (?) is

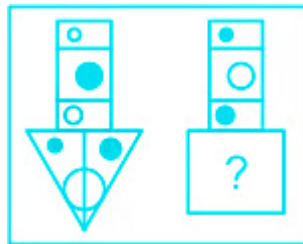


Hence, the correct answer is **option 2**).

62. Answer: a

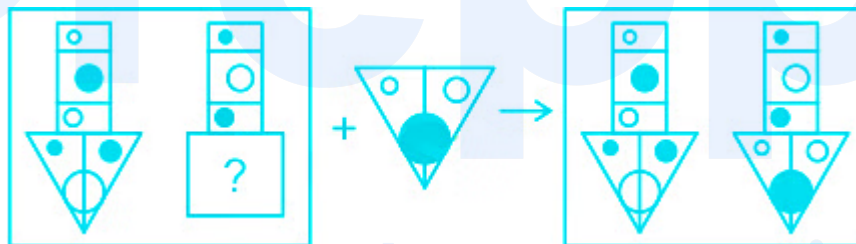
Explanation:

Given,



In the given figure the pattern is as, the missing figure is same except the circles are colored alternatively. In first figure circle colored with second circle similarly in missing figure circle colored with first circle.

∴ The image in the place of the question mark (?) is

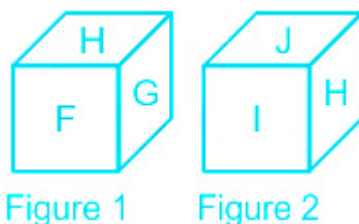


Hence, the correct answer is **option 1**).

63. Answer: a

Explanation:

Given,



H is common in both the dice the start with common in clockwise direction in figure 1, (H - G - F) similarly in figure 2, (H - I - J)

The opposite faces of the dice are,

F	G	H
J	I	

Here we see I is on the face opposite to the face showing 'G'.

Hence, the correct answer is I.

64. Answer: b

Explanation:

Given,

$$8 : 515 :: 14 : ?$$

The pattern followed here is,

$$8^3 = 512 + 3 = 515$$

Similarly,

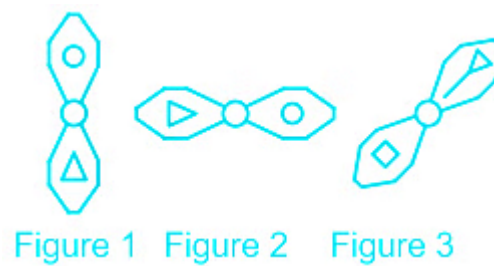
$$14^3 = 2744 + 3 = 2747$$

Hence, the correct answer is **2747**.

65. Answer: d

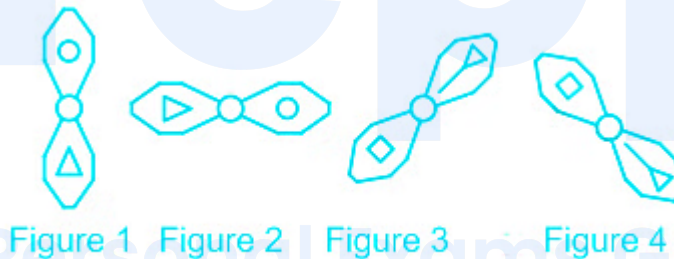
Explanation:

Given,



The first figure is rotated clockwise 90° similarly, the third image will be rotated 90° clockwise.

$\therefore$ The related figure is



Hence, the correct answer is **option 4**).

66. Answer: c

Explanation:

Given,



The pattern followed here is the lines are drawn inward direction and triangles are flipped and shifted alternatively.

∴ The figure in the place of the question mark (?) is



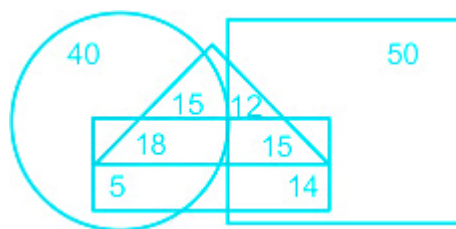
Hence, the correct answer is **option 3**).

67. Answer: c

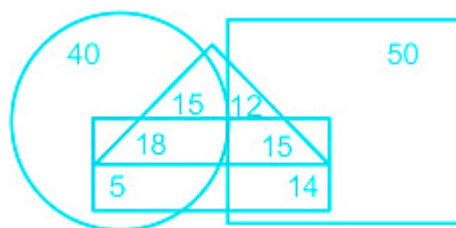
Explanation:

Given,

The circle represents the 'Female' and the square represents the 'Male'. Triangle represents 'Cooking' and the rectangle represents 'Gardening'.



The following figure shows the total number of males and females who can perform gardening but not cooking.



Hence, the correct answer is **19**.

68. Answer: b

Explanation:

Given,

5, 41, 258, 1561, ?

The pattern followed here is,

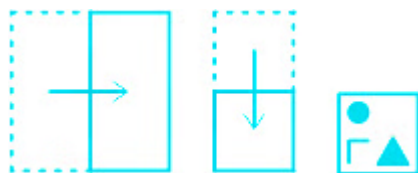
$$\begin{array}{ccccccccc} 5 & & 41 & & 258 & & 1561 & & 9380 \\ \downarrow & \uparrow & \downarrow & \uparrow & \downarrow & \uparrow & \downarrow & \uparrow & \\ \times 6 + 11 & \times 6 + 12 & \times 6 + 13 & \times 6 + 14 & \end{array}$$

Hence, the correct answer is **9380**.

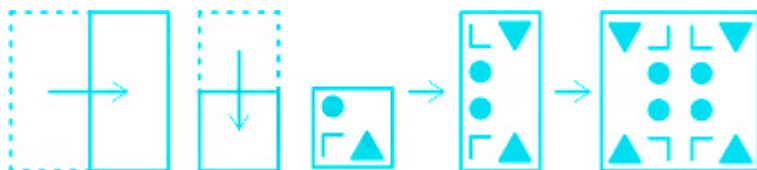
69. Answer: a

Explanation:

Given,



The unfolded paper will appear as,



Hence, the correct answer is **option 1**).

70. Answer: a

Explanation:

Given,

The seller brought a product for 360 rupees and sold it with a 28% profit.

The selling price = $(128/100) \times 360$

$\therefore$ Selling price = $460.8 \approx 461$

Hence, the correct answer is **461**.

71. Answer: a

Explanation:

Given,

21
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The above figure is embedded in the following figure,



Hence, the correct answer is **option 1**).

72. Answer: a

Explanation:

In the above images we see there is a straight line in each image except in the option 1).



Hence, the correct answer is **option 1).**

73. Answer: c

Explanation:

In the above images we see all the inner figures have one more dimension than to outer figure except in the option 3).



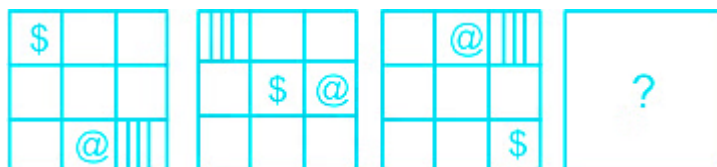
Hence, the correct answer is **option 3).**

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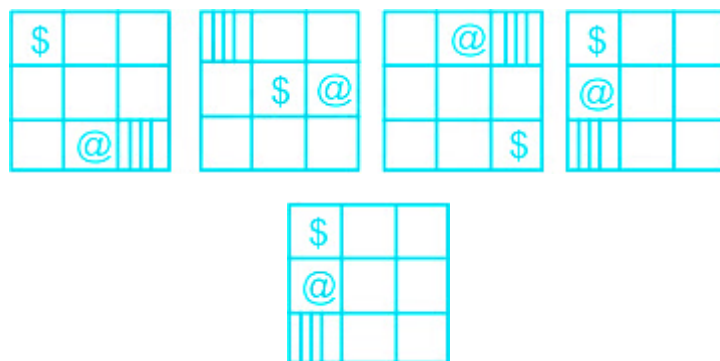
74. Answer: b

Explanation:

Given,



The pattern followed here is, \$ is shifting diagonally one box at a time and lines are shifting diagonally and horizontally and @ is rotating clockwise in the middle boxes.



Hence, the correct answer is **option 2).**

75. **Answer: c**

Explanation:

Given,

'ONE DAY AT A TIME' is written as 'J21 SN5 N3 N 3LG1'.

The pattern followed here is,

O	N	E	D	A	Y	A	T	A	T	I	M	E
J	2	1	S	N	5	N	3	N	3	L	G	1

∴

D	Y	N	A	M	I	T	E
S	5	2	N	G	L	3	1

Hence, the correct answer is **S52NGL31.**

76. **Answer: a**

Explanation:

Given :

Sum of Rs. 7560 is divided among A,B and C

If Rs 400, 300 and 260 is taken from A,B and C respectively then the ratio is 4 : 2 : 5

Calculation :

Shares of A,B and C is diminished by Rs.400,Rs.300 and Rs.260 respectively

⇒ Diminished sum = Rs.7560 - (400 + 300 + 260)

⇒ Rs.6600

The new ratio is 4 : 2 : 5

⇒ 11 units = Rs.6600

⇒ 1 unit = Rs.600

⇒ Diminished share of B = 2 × 600

⇒ Rs.1200

∴ B was diminished by Rs.300

∴ Original share of B is Rs.1500

77. Answer: a**Explanation:**

Given :

The marked price of the article = Rs.2400

The selling price of the article = Rs.1542.24

Three successive discounts are 15%, 10% and x%

Formula used :

Selling price = Marked price - Discount

Calculation :

$$\Rightarrow 1542.24 = 2400 \times (85/100) \times (90/100) \times \left(\frac{100-x}{100} \right)$$

$$\Rightarrow 1542.24 = \{1836 \times (100 - x)\}/100$$

$$\Rightarrow 154224 = 183600 - 1836x$$

$$\Rightarrow 1836x = 29376$$

$$\Rightarrow x = 16$$

$\therefore$ The value of 'x' is 16

78. Answer: a

Explanation:

Given :

A number when divided by 9, 10 and 15 the remainder in each case be 3

What least number should be subtracted from 2983 to get desired result

Concept used :

Take the LCM of given numbers to get required value and perform accordingly

Calculation :

LCM of 9, 10 and 15 = 90

Now, when 2983 divided by 90 the remainder is 13

⇒ 13 should be subtracted from 2983 to make it divisible by all three numbers i.e. 9, 10 and 15

⇒ Desired number = $2983 - 13$

⇒ 2970

but there should be remainder of 3 in each case

⇒ 3 must be added to 2970

⇒ 2973

⇒ 10 is the least number that should be subtracted from 2983 to get desired result

79. Answer: c

Explanation:

Given :

Two positive integers are differed by 1627

Also if the larger integer is divided by the smaller one then the quotient = 7 and the remainder is 157

Concept used :

Dividend = Divisor $\times$ quotient + Remainder

Calculation :

Let the two positive integers be x and y (' x ' being the larger one)

$$\Rightarrow x - y = 1627 \quad \text{----(1)}$$

$$\text{Also } x = y \times 7 + 157$$

$$\Rightarrow x - 7y = 157 \quad \text{----(2)}$$

From Eq (1) and (2), we have

$$\Rightarrow 6y = 1470$$

$$\Rightarrow y = 245$$

$\therefore$ Sum of the digits of the smaller integer is 11

80. Answer: a

Explanation:

Given:

Amount obtained at a sum for 4 years at $r\%$ = SI on the same sum at $r\%$ for 14 years

Formula used ;

Amount = Principal + SI

$$SI = \frac{P \times r \times t}{100}$$

Calculation :

Let the principal be P

According to the question

The amount for 4 years at $r\%$ = SI for 14 years at $r\%$

$P + \text{SI for 4 years at } r\% = \text{SI for 14 years at } r\%$

$$\Rightarrow P + \frac{P \times r \times t}{100} = \frac{P \times r \times T}{100}$$

$$P + \frac{P \times r \times 4}{100} = \frac{P \times r \times 14}{100}$$

$$\Rightarrow P = (14Pr/100) - (4Pr/100)$$

$$\Rightarrow P = Pr/10$$

$$\Rightarrow r = 10$$

$\therefore$ The value of 'r' is 10 %

81. Answer: b

Explanation:

Given :

The person traveled 60 km and returned to the same point

Time taken for return journey = $\frac{1}{2}$ Hr + Time taken for outward journey

Speed during return journey = Speed during the outward journey - 10 km/h

Formula used :

Speed = Distance/Time

Calculation :

Let the Speed of outward journey be S_1 and speed for return journey be S_2

Also, Let the time taken for outward journey be T_1 and time taken for return journey be T_2

According to question,

$$S_1 = 60 / T_1$$

$$\Rightarrow T_1 = 60 / S_1 \quad \text{----(1)}$$

Also, from given information in question

$$T_1 + \frac{1}{2} = T_2 \quad \text{----(2)}$$

$$S_2 = S_1 - 10 \quad \text{----(3)}$$

For return journey,

$$T_2 = 60 / S_2$$

From Eq (2) and (3)

$$\Rightarrow T_1 + 1/2 = 60 / (S_1 - 10)$$

$$\Rightarrow (60/S_1) + 1/2 = 60 / (S_1 - 10)$$

$$\Rightarrow \frac{600}{(S_1 - 10)S_1} = \frac{1}{2}$$

$$\Rightarrow S_1 (S_1 - 10) = 1200$$

$$\Rightarrow S_1 = 40$$

$\therefore$ Speed of the person during outward journey is 40 km/h

82. Answer: b

Explanation:

Given:

$$\frac{4}{21} \div \frac{3}{7} \text{ of } \frac{1}{2} - \frac{1}{2} \times 1\frac{2}{3} + (0.\overline{89} \div 0.\overline{98} \times 7\frac{1}{3}) \div 2\frac{1}{2}$$

Concept used:

Use the **BODMAS** rule to solve the given expression

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

$$0.\bar{a} = a/9$$

$$0.a\bar{b} = (ab-a)/90$$

$$0.\overline{ab} = ab/99$$

Calculation :

$$\frac{4}{21} \div \frac{3}{7} \text{ of } \frac{1}{2} - \frac{1}{2} \times 1\frac{2}{3} + (0.\overline{89} \div 0.\overline{98} \times 7\frac{1}{3}) \div 2\frac{1}{2}$$

$$\Rightarrow \frac{4}{21} \div \frac{3}{7} \text{ of } \frac{1}{2} - \frac{1}{2} \times \frac{5}{3} + \left(\frac{89}{99} \div \frac{(98-9)}{90} \times \frac{22}{3} \right) \div \frac{5}{2}$$

$$\Rightarrow \frac{4}{21} \div \frac{3}{7} \text{ of } \frac{1}{2} - \frac{1}{2} \times \frac{5}{3} + \left(\frac{89}{99} \times \frac{90}{89} \times \frac{22}{3} \right) \times \frac{2}{5}$$

$$\Rightarrow \frac{4}{21} \div \frac{3}{7} \text{ of } \frac{1}{2} - \frac{1}{2} \times \frac{5}{3} + \frac{20}{3} \times \frac{2}{5}$$

$$\Rightarrow \frac{4}{21} \div \frac{3}{7} \times \frac{1}{2} - \frac{1}{2} \times \frac{5}{3} + \frac{20}{3} \times \frac{2}{5}$$

$$\Rightarrow \frac{4}{21} \div \frac{3}{14} - \frac{1}{2} \times \frac{5}{3} + \frac{20}{3} \times \frac{2}{5}$$

$$\Rightarrow \frac{8}{9} - \frac{5}{6} + \frac{8}{3}$$

$$\Rightarrow \frac{16-15+48}{18}$$

$$\Rightarrow 49/18$$

∴ The value of the given expression is 49/18

Explanation:

To solve the recurring number $0.\overline{89}$

Let $x = 0.\overline{89}$

$$\Rightarrow x = 0.898989\dots$$

$$\Rightarrow 100x = 89.\overline{89}$$

$$\Rightarrow 100x = 89 + x \quad [\because x = 0.\overline{89}]$$

$$\Rightarrow 100x - x = 89$$

$$\Rightarrow 99x = 89$$

$$\Rightarrow x = 89/99$$

Similarly, we can solve for $0.9\overline{8}$

83. Answer: d

Explanation:

Given :

The curved surface area of a solid right circular cone = $2145\pi \text{ cm}^2$

The diameter of the base of the cone = 66 cm

Formula used:

The curved surface area of Right circular cone = $\pi r l$

Where

r = Radius of the base of the cone

l = Slant height of the cone

The volume of the right circular cone = $\frac{1}{3} \pi r^2 h$

Where

r = Radius of the base of the cone

h = Height of the right circular cone

Calculation :

radius of the cone = 33 cm ($\because$ diameter is 66 cm)

$$\Rightarrow \pi r l = 2145 \pi$$

$$\Rightarrow 33 \times l = 2145$$

$$\Rightarrow l = 65 \text{ cm}$$

Also, we know that

$$h^2 + r^2 = l^2$$

$$\Rightarrow h^2 = 65^2 - 33^2$$

$$\Rightarrow h = \sqrt{3136} \text{ cm}$$

$$\Rightarrow h = 56 \text{ cm}$$

Volume of right circular cone = $(1/3)\pi r^2 h$

$$\Rightarrow (1/3)\pi \times 33^2 \times 56$$

$$\Rightarrow 20328 \pi$$

$\therefore$ The volume of the cone is $20328 \pi \text{ cm}^3$

84. Answer: a

Explanation:

Given :

A triangular park having sides 72 m, 210 m, and 222 m

Area of triangular park is equal to the area of rectangular garden whose sides are in the ratio 21 : 10

Formula used :

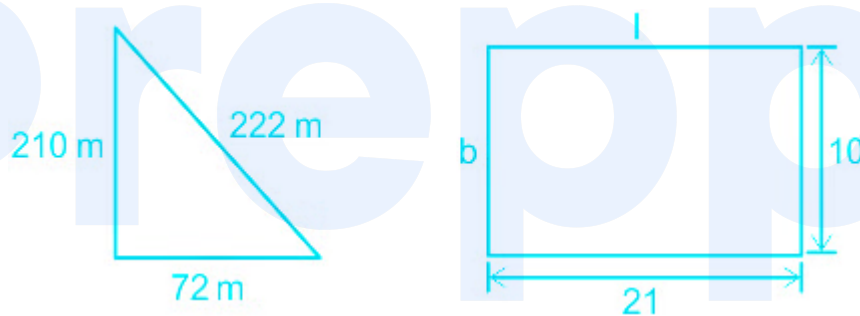
Area of a right angle triangle = $(1/2) \times \text{base} \times \text{height}$

Perimeter of rectangle = $2 \times (\text{length} + \text{breadth})$

Area of rectangle = length $\times$ breadth

Calculation :

Sides of the triangle are in triplets ()



$\Rightarrow$ the triangular park is a right angled triangle

$\Rightarrow$ Area of triangle = $(1/2) \times 210 \times 72$

$\Rightarrow$ Area of triangular park = 7560 m^2

Now, let the sides of rectangular garden be 21 units and 10 units

$\Rightarrow 210 \text{ units}^2 = 7560 \text{ m}^2$

$\Rightarrow 1 \text{ unit} = 6 \text{ m}$

$\Rightarrow$ Sides of rectangular garden are $(6 \times 21) \text{ m}$ and $(6 \times 10) \text{ m}$

$\Rightarrow$ Perimeter of rectangular garden = $2 (126 + 60)$

$\Rightarrow 2 \times 186 = 372$

∴ The perimeter of the rectangular garden is 372 m^2

85. Answer: a

Explanation:

Given:

CI on a sum for 2 years @ 15% p.a compounded 8-monthly = Rs.7282

Concept used :

$$A = P \times \left(1 + \frac{r}{100}\right)^n$$

Calculation :

rate is compounded 8-monthly

$$\Rightarrow n = 24/8 \quad (\because \text{Time is 2 years i.e. 24 months})$$

$$\Rightarrow n = 3$$

Rate is 15 % p.a

$$\Rightarrow \text{For 8-monthly rate} = (15/12) \times 8$$

$$\Rightarrow \text{rate} = 10\% \text{ per 8-month}$$

Let the principal be P

using given values of rate, n, and amount

$$\Rightarrow \text{Amount} = 1.331 \times P \quad (\because \text{at 10\% rate, time period of 3 and with principal P})$$

$$\Rightarrow \text{CI} = 1.331P - P$$

$$\Rightarrow \text{CI} = 0.331P$$

$$\Rightarrow 7282 = 0.331P$$

$$\Rightarrow P = 22000$$

$$\text{Now, } A = P \times \left(1 + \frac{r}{100}\right)^n$$

$$\Rightarrow A = 22000 \times \left(1 + \frac{15}{100}\right)^2$$

$$\Rightarrow A = 22000 \times \frac{23}{20} \times \frac{23}{20}$$

$$\Rightarrow A = 29095$$

$\therefore$ the required amount is Rs.29095

86. Answer: a

Explanation:

Given :

$$x\% \text{ of } 240 = 60\% \text{ of } (x + 450)$$

Calculation :

$$x\% \text{ of } 240 = 60\% \text{ of } (x + 450)$$

$$\Rightarrow 2.4x = 0.6x + 270$$

$$\Rightarrow 1.8x = 270$$

$$\Rightarrow x = 150$$

$$\text{Now, } 20\% \text{ of } (x + 50) = 40$$

$$\text{And, } 40\% \text{ of } x = 60$$

$$\Rightarrow \text{Required \%} = \frac{60-40}{60} \times 100$$

$$\Rightarrow 33\frac{1}{3}\%$$

$\therefore$ Required % is $33\frac{1}{3}\%$

87. Answer: d

Explanation:

Given :

The ratio of boys and girls in class = 9 : 7

the average weight of all boys and girls = 54.25 kg

the average weight of all girls = 52 kg

Concept used :

$$\text{Average weight} = \frac{\text{Total weight}}{\text{Total no. of people}}$$

Calculation :

Let the no. of boys and girls be 9 units and 7 units

According to the question,

Total weight of all the boys and girls = 16 (units) $\times$ 54.25 kg

$\Rightarrow$ 868 kg

Also, the Total weight of all the girls = 7 (units) $\times$ 52 kg

$\Rightarrow$ 364 kg

$\Rightarrow$ Total weight of all the boys = Total weight of all the boys and girls – Total weight of all the girls

$\Rightarrow$ Total weight of all the boys = 868 – 364

$\Rightarrow$ Total weight of all the boys = 504 kg

$\Rightarrow$ The average weight of all the boys = Total weight of all the boys / Total number of boys

⇒ The average weight of all the boys = $504/9$

⇒ 56

∴ The average weight of the boys is 56 kg

88. Answer: b

Explanation:

Given :

A can do $33\frac{1}{3}$ % of work in 10 days

B can do $66\frac{2}{3}$ % of the work in 8 days

Concept used :

Work done = Efficiency × Time taken

Calculation :

A does $1/3$ part of the work in 10 days

⇒ A can do whole work alone in (10×3) days

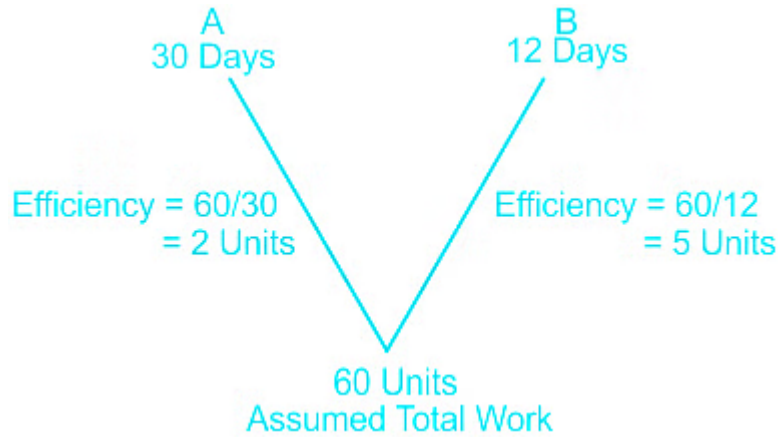
⇒ 30 days -----(1)

B does $2/3$ part of the work in 8 days

⇒ B will do the whole work alone in $(8 \times 3)/2$ days

⇒ 12 days -----(2)

Now from eq (1) and (2), we can have



A and B worked for 8 days

⇒ work done by A and B in 8 days = $(2+5) \times 8$ Units

⇒ 56 units

Now, the rest of the work ($60 - 56$) i.e 4 units work is done by 'C' in 3 days

⇒ The efficiency of C = $4/3$ units

The total efficiency of A and C = $2 + (4/3)$

⇒ $10/3$ units

A and C have to do $5/6$ of the original work

⇒ $(5/6) \times 60 = 50$ units work to be done by A and C

⇒ Time taken by A and C to do 50 units of work = $\frac{50}{10/3}$

⇒ 15 days

∴ A and C will complete $5/6$ of the original work in 15 days

89. Answer: d

Explanation:

Given :

10% loss incurs when sold at 8/11 of the selling price

Formula used :

$$\text{Profit \%} = \frac{SP - CP}{CP} \times 100$$

$$CP = \frac{SP \times 100}{(100 - \text{loss percent})}$$

Calculation :

Let the Actual selling price be 11 units

According to the question,

if SP is 8 units then loss incurs 10%

$$\Rightarrow CP = \frac{8 \times 100}{100 - 10}$$

$$\Rightarrow CP = \frac{80}{9} \quad \text{-----(1)}$$

Now, he sells at 85% of its actual selling price

$$\Rightarrow SP = 85\% \text{ of } 11 \text{ units}$$

$$\Rightarrow SP = 935/100 \text{ units} \quad \text{-----(2)}$$

From equation (1) and (2)

$$\Rightarrow SP - CP = 415/900 \quad (\because \text{Profit} = SP - CP)$$

$$\Rightarrow \text{Profit \%} = (415/900) \times (9/80) \times 100$$

$$\Rightarrow \text{Profit \%} = 5.187 \text{ or } 5.2 \text{ (approx.)}$$

$\therefore$ The profit percentage gained by Madhu is 5.2%

90. **Answer: b**

Explanation:

Given :

30% spends on groceries

20% of the remaining spends on rent and

45% of the remaining spends on children's education

Calculation :

Let the total monthly income be Rs.100 units

⇒ groceries = 30 (now, remaining Rs.70)

⇒ rent = 20% of 70

⇒ rent = 14 units (now, remaining Rs. 70 - 14 = 56)

⇒ children's education = 45% of 56

⇒ children's education = 25.2

⇒ Total spending = 30 + 14 + 25.2 = 69.2

⇒ Total monthly savings = 100 - 69.2

⇒ 30.8

according to question,

30.8 units = Rs.5544

⇒ 1 unit = Rs.180

∴ spending on rent is 14 units

∴ **Arun spends Rs.2520 on rent**

★ Alternate Method

Let Arun's income be y

⇒ $y \times \frac{7}{10} \times \frac{4}{5} \times \frac{11}{20} = 5544$

$$\Rightarrow y = (5544 \times 10 \times 5 \times 20) / (7 \times 4 \times 11)$$

$$\Rightarrow y = 18000$$

$$\text{Amount spend on rent} = 18000 \times 7/10 \times 1/5 = 2520$$

$\therefore$ Arun spends Rs.2520 on rent .

91. Answer: d

Explanation:

The correct answer is (i) True, (ii) True.

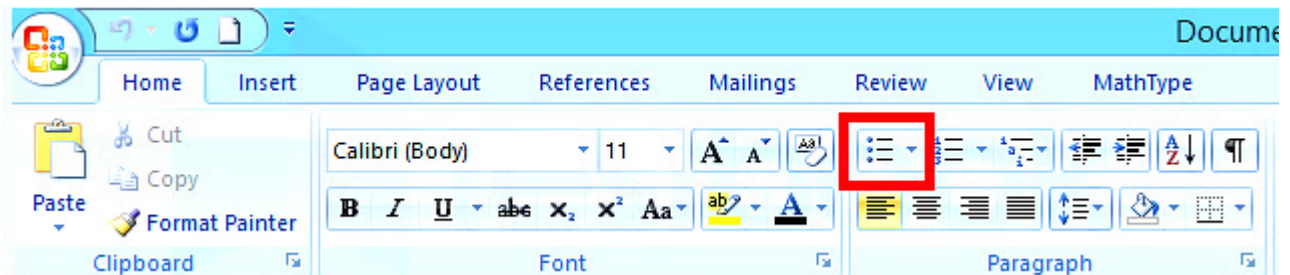
The given statements are true.

- A document file can have both, bulleted and numbered lists.
- Page margins in an MS Word document can be customized.

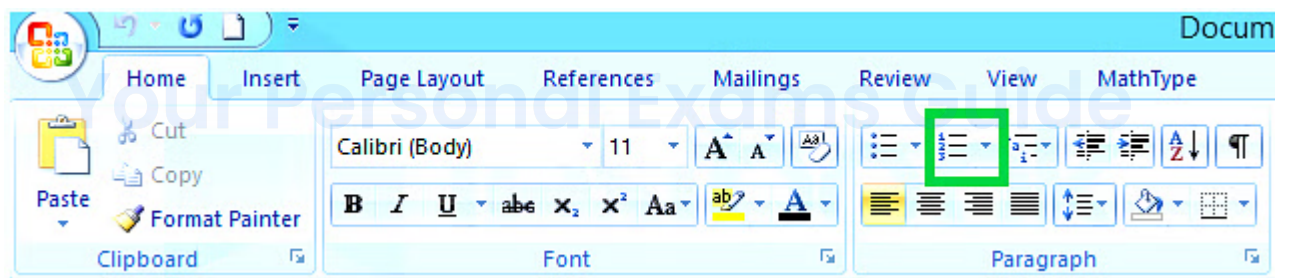
★ Additional Information

- **Bulleted and numbered lists**
 - A **bullet** is usually a black circle, but it can be any other symbol used to highlight items in a list.
 - The two types of lists are **Bullet Library and Numbering Library**.
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 - You can use the default bullets and numbering settings by clicking the appropriate button on the Formatting toolbar.
 - You can control the appearance, or format, of a bulleted or numbered list.
 - The bullet or numbering format you use last becomes the default format; that is, the next time you create a bulleted or numbered list, Word uses the same format you used the last time you created a bulleted or numbered list.
- **To create a bulleted list:**

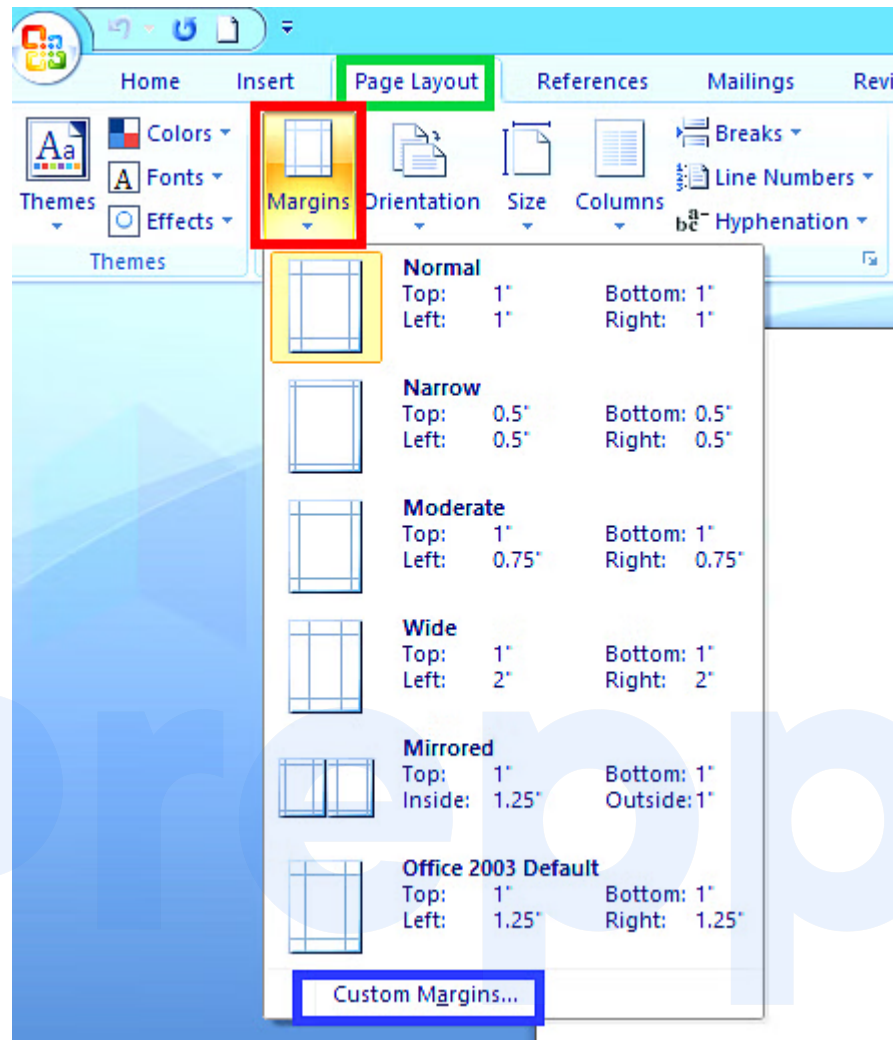
- Click the **Bullets button** on the **Formatting** toolbar.
- Type the first item on your list, and press **Enter**.
- The next line will begin automatically with a new bullet.
- Type the next item on your list, and press Enter.
- When your list is complete, press the Enter key **twice** to stop the bulleted list.



- To create a numbered list:
 - Click the **Numbering button** on the **Formatting** toolbar.
 - Type the first item on your list, and press **Enter**.
 - The next line will begin automatically with the next number.
 - Type the next item on your list, and press Enter.
 - When your list is complete, press the Enter key **twice** to stop the numbered list.



- **Page Margins**
 - Margins are the blank spaces that line the top, bottom, and left and right sides of a document.
 - They are important because they help make a document look neat and professional.
 - Page margins in an MS Word document can be customized
 - **Select Page Layout → Margins → Customize Margins**



- Microsoft Word or MS Word
 - Microsoft Word or MS Word is a graphical word processing program that users can type with and it is developed by Microsoft.
 - This program was initially named "Multi-Tool Word" but in 1983, was renamed MS Word by Microsoft.
 - Its purpose is to allow users to type and save documents.
 - The main functions of MS Word:
 - Creating new text documents.
 - Editing and Formatting the existing documents.
 - Making a text document interactive with different features and tools.
 - Graphical documents, comprising images.
 - Used by Authors and Researchers.
 - Detect grammatical errors in a text document.
- Microsoft Word's file extension formats are denoted either by a .doc or .docx.

★ Important Points

- MS Word is invented by Charles Simonyi and Richard Brodie.
- The founder of Microsoft – Bill Gates and Paul Allen.
- The CEO of Microsoft – Satya Nadella.

92. Answer: b

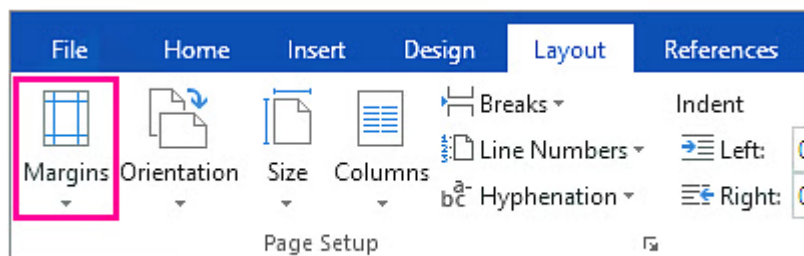
Explanation:

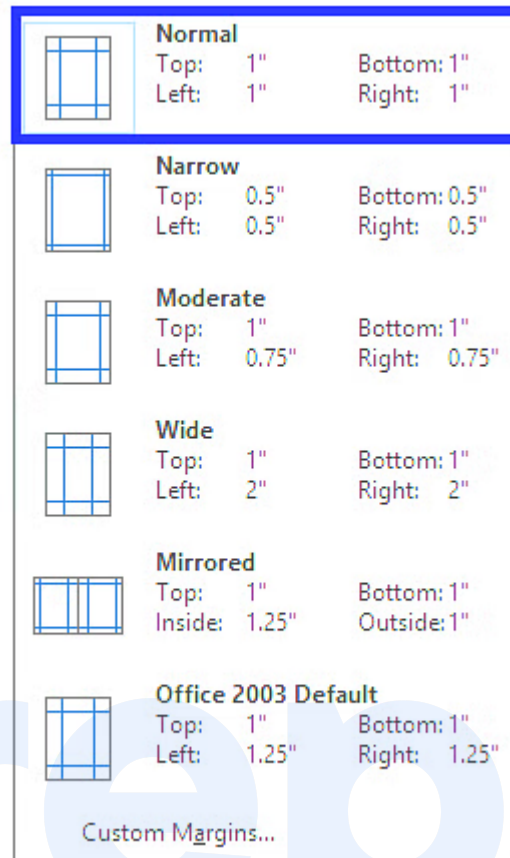
The correct answer is Normal.

- When you open a new file in the newer versions of MS Word, such as Word 2016, the default page margin is set as Normal .

★ Additional Information

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-

93. Answer: b

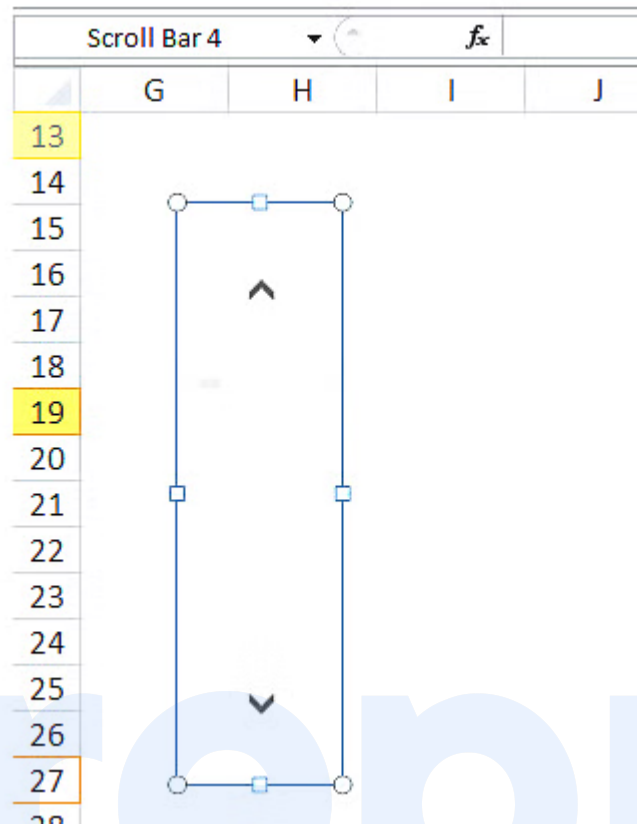
Explanation:

The correct answer is Vertical scroll bar.

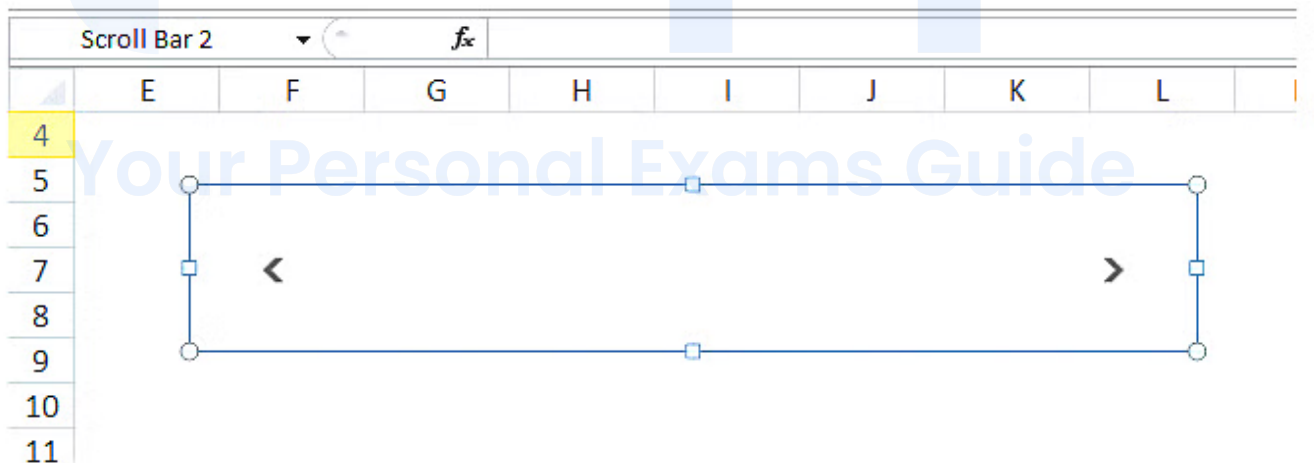
- A vertical scroll bar appears at the extreme right position of a worksheet in MS Excel.

★ Key Points

- Scroll Bar
 - A **scroll bar** in Excel is just like the one you have seen at many places while using a computer system.
 - This is a thin bar mainly displayed in most computer applications to move the viewing area of computer applications, left, and right or up and down.
 - Based on the direction of movement, the scrollbar is of two types **Vertical scroll bar and Horizontal scroll bar**.
 - **The vertical scroll bar** is used to view the data in excel from top to bottom.



- The horizontal scroll bar is used to view the data in excel from left to right.



- **Status bar**
 - The **status bar** is a name for the lower edge of the worksheet window, which displays various information about an Excel worksheet.
 - The status bar can be configured to display things like **sum, count, and the average of the currently selected cells**.

- It also displays information about the current status of the **worksheet**, whether scroll lock or end mode are enabled , etc.

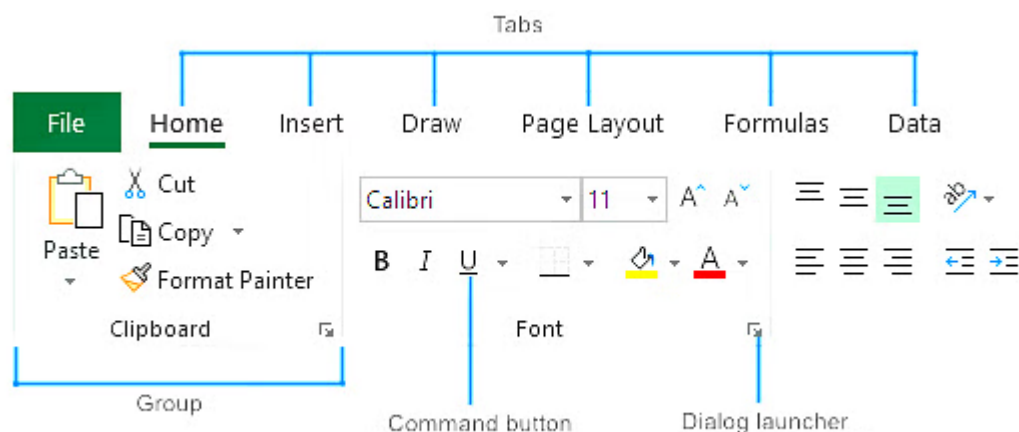
#	Name	Type	Generation	Total	HP	Attack	Defense
6	Charizard	FIRE, FLYING	I	534	78	84	78
9	Blastoise	WATER	I	530	79	83	100
25	Pikachu	ELECTRIC	I	320	35	55	40
52	Meowth	NORMAL	I	290	40	45	35
59	Arcanine	FIRE	I	555	90	110	80
65	Alakazam	PSYCHIC	I	500	55	50	45
116	Horsea	WATER	I	295	30	40	70
120	Staryu	WATER	I	340	30	45	55
149	Dragonite	DRAGON, FLYING	I	600	91	134	95
160	Feraligatr	WATER	II	530	85	105	100
175	Togepi	FAIRY	II	245	35	20	65
244	Entei	FIRE	II	580	115	115	85
258	Mudkip	WATER	III	310	50	70	50
323	Camerupt	FIRE, GROUND	III	460	70	100	70

Status Bar

Ready | Average: 171.25 | Count: 8 | Sum: 685 | 100%

- Menu bar**

- The **Menu bar** is directly below the Title bar and displays the menu.
- The menu begins with the word File and continues with the following: **Edit, View, Insert, Format, Tools, Data, Window, and Help** .



- Microsoft Excel
 - Microsoft Excel is part of the **Microsoft Office suite** of programs and developed by **Microsoft in 1987** .
 - Microsoft Excel is a **spreadsheet program** used to **record and analyze numerical and statistical data** .
 - Microsoft Excel provides multiple features to perform various operations like **calculations, pivot tables, graph tools, macro programming** , etc.
 - An Excel spreadsheet can be understood as a collection of columns and rows that form a table.
 - **Alphabetical letters** are usually assigned to **columns** , and **numbers** are usually assigned to **rows** .
 - The point where a column and a row meet is called a **cell** .
 - The address of a cell is given by the **letter representing the column and the number representing a row** .

★ Additional Information

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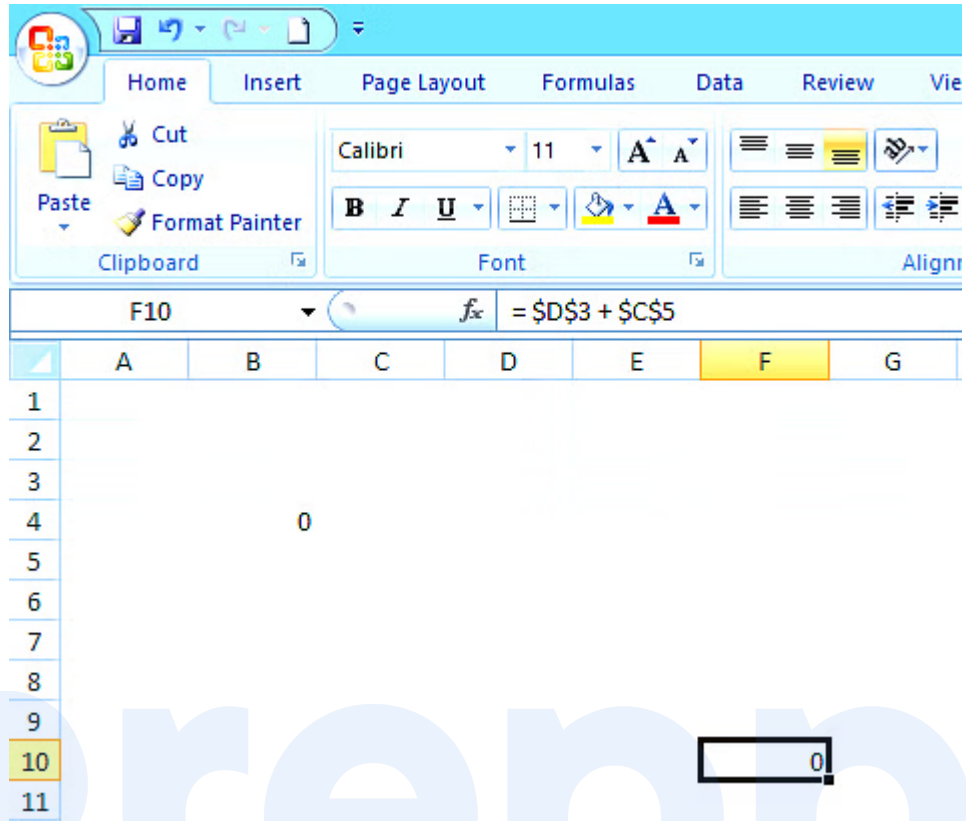
94. Answer: b

Explanation:

The correct answer is =D3 + C5.

★ Key Points

- **Ctrl + C** is used to copy the selected content to the clipboard.
- **Ctrl + V** is used to paste the selected content to the clipboard.



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★ Important Points

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95. Answer: c

Explanation:

The correct answer is Ctrl + Shift + N.

- Ctrl + Shift + N keyboard shortcuts are used to open a new window in an incognito (private) mode in a Chrome browser.

★ Key Points

- **Google Chrome**
 - Google Chrome is a **cross-platform web browser** developed by Google.
 - The Chrome browser was initially released on 2nd September 2008 for Windows XP and was later ported to Linux, macOS, iOS, and Android.
- Ctrl + N: is a shortcut used to open a new tab.
- Ctrl + P: is a shortcut used to print the current page.

New tab	Ctrl+T
New window	Ctrl+N
New Incognito window	Ctrl+Shift+N

★ Additional Information

- Web browser
 - A **web browser** is a type of software that allows you to find and view websites on the Internet.
 - The most important web browsers are **Mozilla Firefox, Google Chrome, Microsoft Edge (formerly Internet Explorer), Safari, Opera.**
 - **Internet Explorer** was introduced by Microsoft in 1995.
 - **Mozilla Firefox** is a free and open-source web browser developed by the Mozilla Foundation and its subsidiary, the Mozilla Corporation in 2002.
 - **Safari** is a graphical web browser developed by Apple in 2003.

★ Important Points

- First Web browser – Nexus (developed by Tim Berners Lee).
- First Web browser developed by India – **Epic**.
- Fastest Web browser – **Safari**.
- The founder of Google – Larry Page and Sergey Brin.
- The CEO of Google – Sundar Pichai.
- Full form of GOOGLE– Global Organization of Oriented Group Language of Earth.

96. Answer: d

Explanation:

The correct answer is Change case.

- Change case does NOT appear as a part of the 'Paragraph' command group within the Home menu in recent versions of MS Word, such as Word 2016.



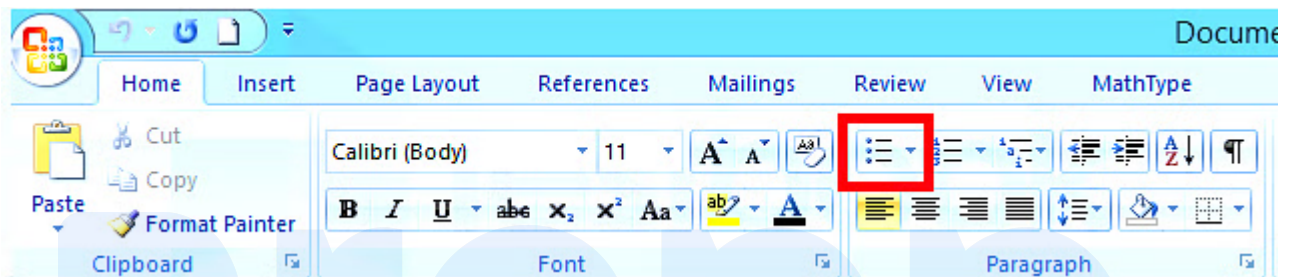
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the same format you used the last time you created a bulleted or numbered list.

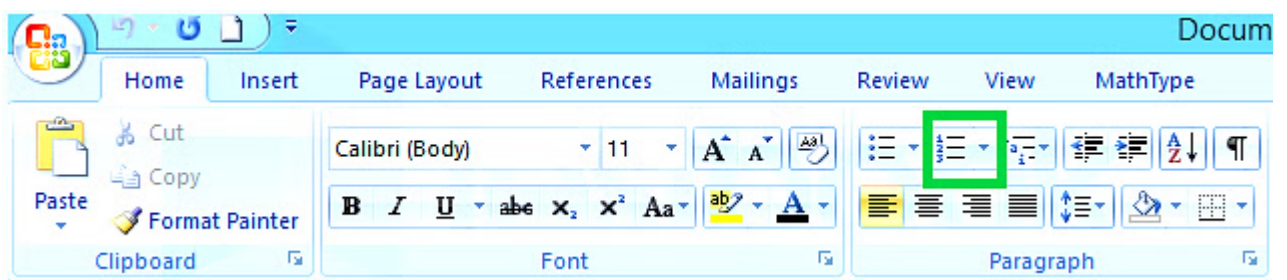
- **To create a bulleted list:**

- Click the **Bullets button** on the **Formatting** toolbar.
- Type the first item on your list, and press **Enter**.
- The next line will begin automatically with a new bullet.
- Type the next item on your list, and press Enter.
- When your list is complete, press the Enter key **twice** to stop the bulleted list.



- **To create a numbered list:**

- Click the **Numbering button** on the **Formatting** toolbar.
- Type the first item on your list, and press **Enter**.
- The next line will begin automatically with the next number.
- Type the next item on your list, and press Enter.
- When your list is complete, press the Enter key **twice** to stop the numbered list.



- **Multilevel lists**

- **Multilevel lists** can contain **numbered lists** and **bulleted lists**.
- **Automatic lists** are a handy feature because if you add a paragraph in the middle of a numbered list or rearrange the order of the items in a list.

- Word automatically renumbers the paragraphs so that they retain their sequence.
- **Microsoft Word or MS Word**
 - Microsoft Word or MS Word is a **graphical word processing program** that users can type with and it is developed by **Microsoft**.
 - This program was initially named **"Multi-Tool Word"** but in 1983, was renamed MS Word by Microsoft.
 - Its purpose is to **allow users to type and save documents**.
 - The main functions of MS Word:
 - **Creating new text documents.**
 - **Editing and Formatting the existing documents.**
 - **Making a text document interactive with different features and tools.**
 - **Graphical documents, comprising images.**
 - **Used by Authors and Researchers.**
 - **Detect grammatical errors in a text document.**
- Microsoft Word's file extension formats are denoted either by a **.doc** or **.docx**.



Important Point

Your Personal Exams Guide

- MS Word is invented by **Charles Simonyi and Richard Brodie**.
- The founder of Microsoft – **Bill Gates and Paul Allen**.
- The CEO of Microsoft – **Satya Nadella**.

97. Answer: c

Explanation:

The correct answer is POP3.

- POP3(Post Office Protocol) is an application layer protocol and a standard mail protocol is used to receive emails.

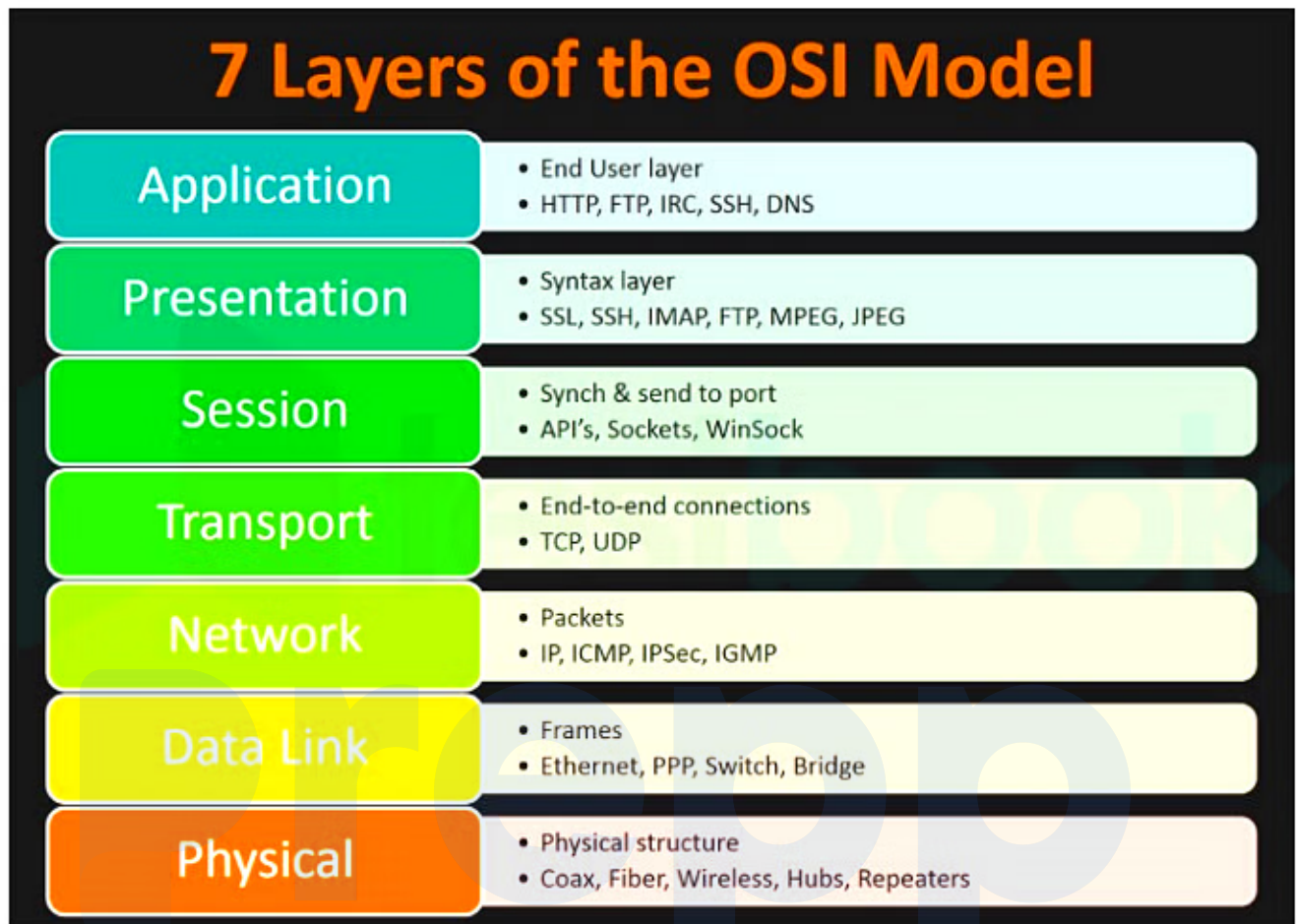
- The numeric value '3' in POP3 represents the version of POP.

★ Key Points

- The application layer is the **top most and seventh layer** of the OSI model that interacts with an application program.
- The application layer is the only layer that **directly interacts with data from the user end.**
- The application layer interacts with **software applications** to implement a communicating component.
- The interpretation of data by the application program is always outside the scope of the OSI model.
- SMTP(Simple Mail Transfer Protocol): is an application layer protocol and used to send emails over the internet. SMTP is a state-full protocol.

★ Additional Information

- The Open Systems Interconnection (OSI) Model is a logical and conceptual model that defines network communication used by systems open to interconnection and communication with other systems.
- There are **seven** OSI layers.
 - Application layer.
 - Presentation layer.
 - Session layer.
 - Transport layer.
 - Network layer.
 - Data-link layer.
 - Physical layer.



98. Answer: b

Explanation:

The correct answer is 1.

- $= \text{FACT}(5-4) = \text{FACT}(1) = 1$

★ Key Points

- The Excel Fact function returns the **factorial of a given number**.
- The FACT function is a **built-in function in Excel** that is categorized as a Math/Trig Function.
- It can be used as a **worksheet function** in Excel.

- As a worksheet function, the FACT function can be entered as part of a formula in a cell of a worksheet.
- The factorial of a number is equal to $1*2*3*...*number$.
- The syntax of the function is **FACT(number)**.
- **FACT(3)** returns the value 6 which is equivalent to $3*2*1$.
- The nonnegative number for which you want the factorial. If the number is not an integer, it is **truncated**.
- The number cannot be negative or FACT will return the **#NUM error**.
- = FACT(-4) → factorial of a negative number returns an error value **#NUM!**.
- = FACT(1.9) → factorial of the integer 1.9 is equal to 1.

★ Additional Information

- Microsoft Excel
 - Microsoft Excel is part of the Microsoft Office suite of programs and developed by Microsoft in 1987.
 - Microsoft Excel is a spreadsheet program used to record and analyze numerical and statistical data.
 - Microsoft Excel provides multiple features to perform various operations like calculations, pivot tables, graph tools, macro programming, etc.
 - An Excel spreadsheet can be understood as a collection of columns and rows that form a table.
 - Alphabetical letters are usually assigned to columns, and numbers are usually assigned to rows.
 - The point where a column and a row meet is called a cell.
 - The address of a cell is given by the letter representing the column and the number representing a row.

★ Important Points

- The founder of Microsoft – Bill Gates and Paul Allen.
- The CEO of Microsoft – Satya Nadella.

99. Answer: d

Explanation:

The correct answer is Safari.

- Safari: is a graphical web browser developed by Apple.
- Safari is a default browser on Apple devices.

★ Key Points

- Search Engine
 - A search engine is software that is designed to search information on the World Wide Web which is needed by the user.
 - The other important search engines are Yahoo, MSN, Ask.com, Yandex.

★ Additional Information

- **Bing**
 - It is a web search engine developed and operated by Microsoft.
- **Baidu**
 - It is formerly known as Baidu SparkBrowser, the web-based program that runs on the Chromium platform.
 - It is a free internet browser for devices running Windows 7 and above.
- **Google**
 - Google is a web search engine developed and operated by Google LLC.
 - It is the most used search engine on the World Wide Web across all platforms.

★ Important Points

- First search engine - **Archie**.
- The founder of Apple - **Steve Jobs, Steve Wozniak, and Ronald Wayne**.
- The CEO of Apple - **Tim Cook**.
- The founder of Google - **Larry Page and Sergey Brin**.
- The CEO of Google - **Sundar Pichai**.
- Full form of GOOGLE- **Global Organization of Oriented Group Language of Earth**.

100. Answer: c

Explanation:

The correct answer is Shift + F12.

★ Key Points

- Shift + F12 keyboard shortcuts are equivalent to CTRL + S to save an open file in MS Word.

★ Additional Information

- **Microsoft Word or MS Word**
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 - Making a text document interactive with different features and tools.
 - Graphical documents, comprising images.
 - Used by Authors and Researchers.
 - Detect grammatical errors in a text document.
- Microsoft Word's file extension formats are denoted either by a **.doc or .docx**.
- **Shift + F5**: is used to move the cursor to the location of the last revision made before the document was last closed.
- **Ctrl + F5**: is used to restore the size of the active document or window.

★ Important Points

- MS Word is invented by **Charles Simonyi and Richard Brodie**.
- The founder of Microsoft – Bill Gates and Paul Allen.
- The CEO of Microsoft – Satya Nadella.

★ Confusion Points

- Ctrl + F12: Shortcut is used to Open the already saved document in Microsoft Word.

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