

STAFF SELECTION COMMISSION
Multi Tasking (Non-Technical) Staff

SOLVED PAPER

(6th October 2021: Shift-2)

Time Allotted- 100 Minutes

Max marks- 100

Important Instructions:-

- ⇒ This paper contains 100 questions which are divided into 4 sections and each section contains 25 questions.
 - ✓ General English
 - ✓ General Intelligence & Reasoning
 - ✓ Numerical Aptitude
 - ✓ General Awareness
- ⇒ There will be 1 mark for each correct answer and also there will be a negative marking of 0.25 for each wrong answer.
- ⇒ Each question is compulsory to attempt and there will be no negative marking for unattempted questions.

General English

1. Identify the segment in the sentence which contains a grammatical error.
The flood situation in the eastern region of the country remain grim for the fifth day today.
1. remain grim 3. for the fifth day
2. of the country 4. the flood situation
2. Select the most appropriate ANTONYM of the given word.
BLAME
1. Rebuke 2. Criticise 3. Shout 4. Praise
3. Select the most appropriate synonym of the given word.
OUTRAGED
1. Absurd 2. Angry 3. Content 4. Satisfied
4. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required.'
These days I like to eat nuts and seeds along with fruits as I'm conscious of my healthfulness.
1. healthful 3. healthy
2. health 4. no substitution required
5. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.
Hurry up, in case you will be late for your school.
1. otherwise 3. no substitution required
2. even if 4. so that
6. Select the most appropriate ANTONYM of the given word.
RIDICULOUS
1. Incredible 3. Noteworthy
2. Unbelievable 4. Reasonable
7. Select the word which me the same as the group of words given.
Living or growing in water
1. Submarine 3. Amphibian
2. Mammal 4. Aquatic
8. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.
It is much more difficult to judge oneself than to judge others.
1. more difficulty 3. much more difficulty
2. much difficult 4. No substitution required
9. Identify the segment in the sentence which contains a grammatical error.
Though the schools have reopened, children are not go to school and are having online lessons.
1. though the schools 3. are having
2. have reopened 4. are not go
10. Select the most appropriate synonym of the given word.
ANTIQU
1. Beautiful 2. Modern 3. Recent 4. Ancient
11. Select the most appropriate meaning of the given idiom.
Turn a deaf ear
1. Pretend to listen carefully
2. Shout to be heard by someone
3. Be hard of hearing
4. Ignore what someone says
12. Select the word which me the same as the group of words given.
Certain to happen
1. Unbelievable 3. Inevitable
2. Unchanging 4. Indelible
13. Select the most appropriate word to fill in the blank
You _____ told me that you are planning to take up a course in photography and now you are denying it.
1. ourselves 3. itself
2. themselves 4. yourself
14. Select the INCORRECTLY spelt word.
1. Explanation 3. Extension
2. Aviasion 4. Tradition
15. Select the most appropriate word to fill in the blank.
The management is going to change the _____ criteria for undergraduate courses.
1. available 3. appearance
2. curricular 4. eligibility
16. Select the INCORRECTLY spelt word.
1. Actually 3. Tripple
2. Probably 4. Application
17. Select the most appropriate meaning of the given idiom.
Pull someone up
1. Agree with someone 3. Criticise someone
2. Drag someone 4. Help someone

18. Select the most appropriate word to fill in the blank.

The _____ expenses for a trip to Europe are very high.

1. overhead 3. overburdened
2. overdone 4. overpaid

19. Select the most appropriate word to fill in the blank.

The family living next door has left for France, _____ it?

1. didn't 2. aren't 3. haven't 4. hasn't

20. Identify the segment in the sentence which contains a grammatical error.

I was told that we would met at five in the evening but no one has turned up for the meeting so far.

1. for the meeting 3. I was told
2. in the evening 4. we would met

Comprehension:

In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Time is very precious and must not be wasted on petty matters that have (1)_____ value in our lives. People keep money in safes but time (2)_____ be saved in this way. Time can be saved and utilised only by being alert, (3)_____ it very carefully and being conscious of its passage. People who made the right use of time by not wasting it on worldly (4)_____ and spent it on understanding the true nature of life and its purpose have left us with a (5)_____ collection of religious books and wise thoughts.

21. Select the most appropriate option to fill in blank number 1.
1. nothing 2. no 3. none 4. no one
22. Select the most appropriate option to fill in blank number 2.
1. wasn't 2. can't 3. hadn't 4. wouldn't
23. Select the most appropriate option to fill in blank number 3.
1. holding 2. creating 3. treating 4. spending
24. Select the most appropriate option to fill in blank number 4.
1. laughter 2. subjects 3. pleasures 4. chances
25. Select the most appropriate option to fill in blank number 5.
1. richer 2. richest 3. too rich 4. rich

General Intelligence and Reasoning

26. Two statements are given followed by three conclusions numbered I, II and III.

Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All pigeons are crows.

No crow is a bird.

Conclusions:

I. Some crows are pigeons.

II. Some pigeons are birds.

III. No pigeon is a bird.

1. Only conclusions I and II follow.
2. Either conclusion II or III follows.
3. Only conclusions I and III follow.
4. Only conclusions II and III follow.
27. Select the set of classes the relationship among which is best illustrated by the following Venn diagram.



1. Sugarcane, Fruits, Milk
2. Cars, Buses, Cycles
3. Motorcycles, Vehicles, Scooters
4. Spices, Cumin, Metal

28. Among five iron balls P, Q, R, S and T, the weight of Q is 5 kg, which is double the weight of P. The weight of S is half the weight of T. The weight of R is equal to the weight of P and Q taken together. The weight of T is four times the weight of R. What is the weight of S?

1. 10 kg 2. 30 kg 3. 15 kg 4. 7.5 kg

29. Which two signs should be interchanged to make the given equation correct?

$$32 + 14 \times 3 - 91 \div 7 = 3$$

1. + and - 2. + and \times 3. \div and - 4. \div and \times

30. Which of the following numbers will replace the question mark (?) in the given series?

68, 77, 89, 105, ?, 153

1. 126 2. 130 3. 141 4. 120

31. Vinita, Anita, Preeti and Kunjan are dining around a square table facing the centre.

Each friend is sitting at the middle of one of the four sides. Kunjan is sitting to the left of Anita. Preeti is sitting to the right of Vinita. Who is sitting to the left of Kunjan?

1. Anita 3. Vinita
2. Either Vinita or Anita 4. Preeti

32. In a certain code language, 'PLANT' is written as 'OJXJO'. How will 'FORTE' be written in that language?

1. ENPPZ 2. EMOPZ 3. EMOQY 4. ELNPZ

33. In a certain code language, 'DOSIER' is written as 'DEIORS' and 'LOGIC' is written as 'CGILO'. How will 'CORTEX' be written in that language?

1. DPSUFY 2. ECROXT 3. CEORTX 4. CEROXT

34. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

PRANIC : SQOBDJ :: SORBID : ?

1. PTNSEK 2. PUCTEJ 3. PTCSEJ 4. QTCRFJ

35. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

445 285 80

550 332 109

655 441 ?

1. 107 2. 90 3. 129 4. 147

36. Select the correct mirror image of the given combination when the matrix is placed at MN as shown below.

M
G u P 4 t R
|
N

1. R t P 4 u G

2. R t P 4 n G

3. R t P 4 u G

4. R t P 4 u G

37. Select the option that is related to the third word in the same way as the second word is related to the first word.

Lazy : Hard-working :: Wealthy : ?

1. Money 2. Unhappy 3. Rich 4. Penniless

38. Which two numbers should be interchanged to make the given equation correct?

$$72 + 63 \div 9 \times 5 - 36 = 67$$

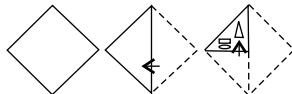
1. 63 and 36 2. 63 and 72 3. 5 and 36 4. 72 and 36

39. Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).



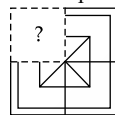
- 1.
- 2.
- 3.
- 4.

40. A paper is folded and cut as shown below. How will it appear when unfolded?



- 1.
- 2.
- 3.
- 4.

41. Select the option figure that will replace the question mark (?) in the figure given below to complete the pattern.



- 1.
- 2.
- 3.
- 4.

42. In a certain code language, 'BOXER' is written as '251224229'. How will 'PULLY' be written in that language?

1. 16615158 2. 11615152 3. 16211212 4. 11612152

43. Select the option that is related to the third word in the same way as the second word is related to the first word.

Hibiscus : Flower :: Penguin : ?

1. Reptile 2. Snow 3. Bird 4. Black

44. In a certain code language, 'WORSHIP' is written as '23418198316' and 'ROAD' is written as '18414'. How will 'REDUCE' be written in that language?

1. 1824532 2. 1823132 3. 9546035 4. 1854735

45. Six friends G, H, M, J, K and L are sitting in a straight line facing north. G is sitting between L and H. H is fourth to the right of M. K is to the immediate right of H. Who is sitting between L and M?

1. J 2. G 3. H 4. K

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

20 : 421 :: 18 : ?

1. 343 2. 389 3. 289 4. 305

47. Which of the following letter-clusters will replace the question mark (?) in the given series?

YTM, AQQ, CNU, ?, GHC

1. ELZ 2. EKY 3. DLY 4. EKK

48. Two statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All machines are refrigerators.

All refrigerators are geysers.

Conclusions:

I. Some machines are not geysers.

II. Some geysers are machines.

1. Only conclusion II follows.
 2. Neither conclusion I nor II follows.
 3. Both conclusions I and II follow.
 4. Only conclusion I follows.

49. Select the option that will replace the question mark (?) in the following figure series.



- 1.
- 2.
- 3.
- 4.

50. Which of the following numbers will replace the question mark (?) in the given series?

55, 68, 82, ?, 113, 130

1. 97 2. 104 3. 94 4. 90

Numerical Aptitude

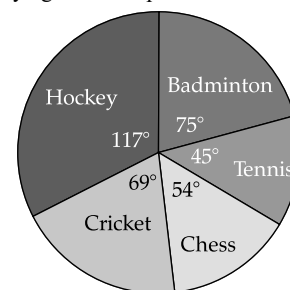
51. A sum of ₹4,095 is divided between n A, B, C and D such that the ratio of the shares of A and B is 1 : 3, that of B and C is 2 : 5 and that of C and D is 2 : 3. What is the difference (in ₹) between the shares of B and D?

1. 1,440 2. 1,485 3. 1,540 4. 1,845

52. A 248-m-long train travelling at 88 km/h takes 30 seconds to cross another train, x m long, travelling 34 km/h in the same direction. What is the value of x?

1. 192 2. 197 3. 202 4. 207

53. Study the given pie chart and answer the question that follow: The given chart shows the distribution (degree wise) of students in a college playing different sports.



Total Number of Students = 600

- The average number of students playing tennis and hockey is what per cent more than the number of students playing badminton?

1. 4.7 2. 8 3. 8.2 4. 10

54. When an article is sold for ₹640, there is a loss of 12%. To gain 21%, it should be sold for:
 1. ₹774.40 2. ₹880.00 3. ₹770.00 4. ₹828.80
55. The sides of a triangular field are 96 m, 110 and 146 m. The cost of levelling the field at ₹5.60 per m² is:
 1. ₹30,564 2. ₹31,680 3. ₹28,224 4. ₹29,568
56. Let x be the least number which on being divided by 8, 12, 15, 24, 25 and 40 leaves a remainder of 7 in each case.
 1. 18 2. 27 3. 19 4. 20
57. A and B working together can complete 45% of a work in 18 days. A alone can complete the same work in 60 days. A and B work together for 16 days, and then A leaves. B alone will complete the remaining work in:
 1. 80 days 2. 60 days 3. 72 days 4. 75 days
58. If $(x + 25)\%$ of 270 is 20% more than $x\%$ of 240, then 12% of $(x + 125)$ is what per cent more than 10% of x ?
 1. 55 2. 45 3. 42 4. 60

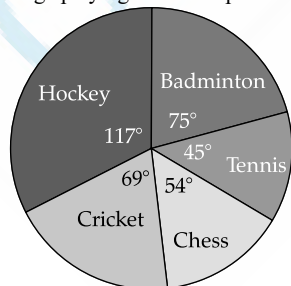
59. The value of $\frac{\frac{8}{3} \div \frac{3}{5} \times \frac{7}{5}}{\frac{5}{3} \div \frac{5}{7} \times \frac{8}{9}} \div 6$ is:

1. $\frac{1}{6}$ 2. $\frac{1}{4}$ 3. $\frac{1}{3}$ 4. $\frac{1}{2}$

60. A trader marks his goods in such a way that after allowing 16% discount on the marked price, he still gains 26%. If the cost price of the goods is ₹318, then what is the marked price of the goods?
 1. ₹477 2. ₹456 3. ₹450 4. ₹427
61. X is 60% more efficient than Y, and Y alone can do a work in 80 days. Working together, X and Y will complete 52% of the same work in:
 1. 16 days 2. 15 days 3. 18 days 4. 20 days
62. A car covers a distance of 450 km at a certain uniform speed (in km/h). The number of hours it takes for the journey is $\frac{1}{8}$ of the number representing the speed. The time taken (in hours) by the car to cover the distance is:

1. 9 2. 6 3. $6\frac{1}{4}$ 4. $7\frac{1}{2}$

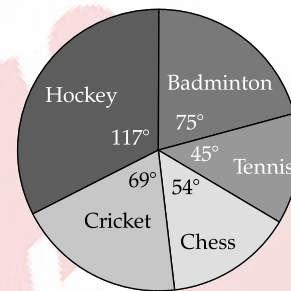
63. A certain sum is lent at 5% p.a. for 2 years, 9% p.a. for the next 3 years and 13% p.a. after 5 years. If the simple interest on the sum for a period of 10 years is ₹8,160, then the sum (in ₹) is:
 1. 8,000 2. 9,000 3. 8,400 4. 9,600
64. The average score of A, B and C in a test is 78 and that of C, D and E is 52. The average score of E and F is 48 and that of E and C is 60. What is the average score of A, B, C, D, E and F?
 1. 62 2. 67 3. 63 4. 61
65. Study the given pie chart and answer the question that follows: The given pie chart shows the distribution (degree wise) of students in a college playing different sports.



Total Number of Students = 600

The difference between the number of students playing class and badminton is x . The value of x lies between:

1. 32 and 38 3. 44 and 50
 2. 26 and 32 4. 38 and 44
66. The value of $39 - [30 - \{33 - (19 - 4 \div 3 \times 8 \times 6)\}]$ is:
 1. 15 2. 18 3. 24 4. 9
67. The ratio of acid to water in solutions A and B is 2 : 7 and 4 : 5, respectively, these solutions are mixed in the ratio of 4 : 3. What is the ratio to water in the resulting solution?
 1. 25 : 21 2. 23 : 40 3. 21 : 40 4. 20 : 43
68. If $(11a^3 - 15b^3) : (10a^3 + 4b^3) = 5 : 7$, then $(9a - 5b) : (5a - 3b)$ is equal to:
 1. 10 : 7 2. 13 : 5 3. 15 : 4 4. 14 : 9
69. Study the given pie chart and answer the question that follows: The given pie chart shows the distribution (degree wise) of students in a college different sports.



Total Number of Students = 600

If the ratio of the number of male students to that of female students playing hockey is 6 : 7 and 40% of the number of students playing tennis are females, then the total number of male students playing hockey and tennis is:

1. 135 2. 108 3. 120 4. 117
70. Anu sells articles A and B for ₹4,000 each, with no loss or profit in the entire transaction. If A is sold at a 25% profit, then B is sold at a loss of:
 1. $15\frac{1}{2}\%$ 2. 25% 3. 20% 4. $16\frac{2}{3}\%$
71. Three years ago, the average age of A, B and C was 29 years. If the average age of B and C, 5 years ago, was 23 years, then what is the present age (in years) of A?
 1. 49 2. 40 3. 46 4. 50
72. The value of $\frac{5}{8} \div \left(\frac{8}{11} \times 2\frac{3}{4} \div \frac{4}{9} \right) + 5\frac{1}{3} \div \left(5\frac{1}{4} \div \frac{3}{8} \times \frac{3}{7} \right)$ of $1\frac{7}{9}$ is:
 1. $\frac{1}{2}$ 2. $\frac{1}{4}$ 3. $\frac{23}{36}$ 4. $\frac{5}{18}$
73. What is the mean of the median and range of the following data?
 3, 8, 7, 12, 4, 3, 16, 20, 23, 10, 9, 15, 2, 7
 1. 14.5 2. 14.75 3. 13.75 4. 19.5
74. What is the compound interest on a sum of ₹12,000 at 18% per annum for $1\frac{1}{3}$ years, if the interest is compounded 8-monthly?
 1. ₹4,708.80 2. ₹2,980.20 3. ₹3,840.40 4. ₹3,052.80

75. The diameter of the base of a solid right circular cone is 22 cm and its height is 60 cm. The cost of polishing its curved surface at ₹1.40 cm² is:

$$\left(\text{Take } \pi = \frac{22}{7} \right)$$

1. ₹3,006 2. ₹2,904 3. ₹2,807.20 4. ₹2,952.40

General Awareness

76. Who among the following was awarded the Padma Vibhushan posthumously in 2020?
1. P Parameswaran
2. Ustad Ghulam Mustafa Khan
3. Kuldip Nayar
4. Arun Jaitley
77. _____ is the harvest festival of the Kodava community of Coorg.
1. Madai 2. Bhagoria 3. Theyyam 4. Puttari
78. Which of the following is a book by Lewis Carroll?
1. Rikki-Tikki-Tavi
2. The Man Who Would be King
3. The Jungle Book
4. Alice's Adventures in Wonderland
79. Name the captain of the Indian Men's Hockey Team as of 30th July 2020.
1. Manpreet Singh 3. Gurinder Singh
2. Jarmanpreet Singh 4. Harmanpreet Singh
80. Which of the following Indian festivals is celebrated by suspending a pot containing butter, curd, etc. high above the ground with people trying to break it by forming human pyramids?
1. Ramnavami 3. Sankranti
2. Janmashtami 4. Ugadi
81. The Ganga-Brahmaputra basin lies between _____ latitudes.
1. 16°N and 36°N 3. 12°N and 32°N
2. 14°N and 34°N 4. 10°N and 30°N
82. Which part of the soil contains humus?
1. A-horizon 2. C-horizon 3. Bedrock 4. B-horizon
83. Sponges belong to phylum _____ of the animal kingdom.
1. Echinodermata 3. Aschelminthes
2. Porifera 4. Mollusca
84. Which of the following statements about the city of Ahmedabad is NOT true?
1. The first mill in Ahmedabad was established in the year 1895.
2. Ahmedabad is located on the banks of the river Sabarmati.
3. Ahmedabad was often referred to as the 'Manchester of India'.
4. Ahmedabad is situated very close to cotton growing areas.
85. Which of the following is a dance form from the state of Uttarakhand?
1. Therukoothu 3. Rouf
2. Choliya 4. Kutiyattam
86. As per the recommendations of the National Statistical Commission, the Base Year of the GDP Series in India was revised from 2004-05 to _____ with effect from January 2015.
1. 2011-12 2. 2013-14 3. 2005-06 4. 2009-10
87. Which of the following is NOT a public sector insurance company?
1. United India Insurance Company Limited
2. The New India Assurance Company Limited
3. SBI Life Insurance
4. General Insurance Corporation of India
88. Part _____ of the Constitution of India deals with amendment of the Constitution.
1. 18 2. 13 3. 20 4. 10
89. Which of the following is the only President of India to have her/his wax statue at the Madame Tussauds wax museum in Delhi as of September 2020?
1. APJ Abdul Kalam 3. Pratibha Patil
2. Sarvepalli Radhakrishnan 4. Rajendra Prasad
90. Rivers such as the Ganga and Son flowed through _____, a mahajanapada in ancient India.
1. Kamboja 2. Kosala 3. Magadha 4. Machcha
91. The United Nations Sustainable Development Goal 6 strives to _____.
1. achieve gender equality and empower all women and girls
2. end hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. ensure healthy lives and promote well-being for all at all ages
4. ensure availability and sustainable management of water and sanitation for all
92. Which of the following statements about the Constitution of India is NOT true?
1. It prevents the State from making any law in matters of religion.
2. Its makers chose the model of a secular state.
3. It provides all individuals and communities the freedom to profess, practice and propagate any religion.
4. It prohibits discrimination on grounds of religion.
93. Ancient Indian manuscripts were usually written on palm leaves or the bark of the _____ tree, which grows in the Himalayas.
1. boxwood 2. maple 3. birch 4. cedar
94. The size of the pupil of the eye is controlled by the _____.
1. blind spot 2. retina 3. cornea 4. iris
95. Which of the following statements about forests is INCORRECT?
1. In a forest, trees form the uppermost layer of vegetation.
2. Forests protect the soil from erosion.
3. In a forest, shrubs form the lowest layer of vegetation.
4. Forests influence climate, water cycle and air quality.
96. Which of the following is a Palaeolithic site of archaeological importance in India?
1. Chirand 2. Burzahom 3. Hunasagi 4. Mehrgarh
97. A _____ is an instrument used for measuring electrical potential difference between two points in an electric circuit.
1. voltmeter 3. ammeter
2. galvanometer 4. bolometer
98. In which year did the Government of India set up the first mutual fund by an Act of Parliament?
1. 1979 2. 1982 3. 1963 4. 1971
99. Cricketer Zaheer Khan was awarded the _____ in 2020.
1. Padma Shree 3. Padma Bhushan
2. Arjuna Award 4. Dronacharya Award
100. Article 57 of the Constitution of India states that _____.
1. A person who holds, or who has held, office as President shall, subject to the other provisions of this Constitution, be eligible for re-election to that office.
2. The executive power of the Union shall be vested in the President and shall be exercised by him either directly or through officers subordinate to him in accordance with this Constitution.
3. The President shall hold office for a term of five years from the date on which he enters upon his office.
4. The President shall be elected by the members of an electoral college consisting of—(a) the elected members of both Houses of Parliament; and (b) the elected members of the Legislative Assemblies of the States.

Answer Key

1. (1)	2. (4)	3. (2)	4. (2)	5. (1)	6. (4)	7. (4)	8. (4)	9. (4)	10. (4)
11. (4)	12. (3)	13. (4)	14. (2)	15. (4)	16. (3)	17. (3)	18. (1)	19. (4)	20. (4)
21. (2)	22. (2)	23. (4)	24. (3)	25. (4)	26. (3)	27. (3)	28. (3)	29. (1)	30. (1)
31. (4)	32. (2)	33. (3)	34. (3)	35. (1)	36. (4)	37. (4)	38. (2)	39. (1)	40. (4)
41. (3)	42. (4)	43. (3)	44. (1)	45. (1)	46. (1)	47. (2)	48. (1)	49. (4)	50. (1)
51. (2)	52. (3)	53. (2)	54. (2)	55. (4)	56. (2)	57. (3)	58. (4)	59. (4)	60. (1)
61. (1)	62. (4)	63. (1)	64. (4)	65. (1)	66. (3)	67. (4)	68. (3)	69. (1)	70. (4)
71. (2)	72. (3)	73. (2)	74. (4)	75. (4)	76. (4)	77. (4)	78. (4)	79. (1)	80. (2)
81. (4)	82. (1)	83. (2)	84. (1)	85. (2)	86. (1)	87. (3)	88. (3)	89. (1)	90. (3)
91. (4)	92. (1)	93. (3)	94. (4)	95. (3)	96. (3)	97. (1)	98. (3)	99. (1)	100. (1)

Answers with Explanations

1. **Option (1) is correct.**
The correct sentence is: The flood situation in the eastern region of the country remains grim for the fifth day today. In the given sentence, 'the flood situation' is the main subject that is singular. Hence, a singular helping verb should be used. So, 'remains grim' will replace 'remain grim'.
2. **Option (4) is correct.**
The meaning of blame is to find fault with. All options, except 'praise' are synonyms of 'blame'. So 'praise' is the antonym.
3. **Option (2) is correct.**
'Outrage' means to cause someone to feel very angry, shocked, or upset. So 'angry' is the synonym.
4. **Option (2) is correct.**
The correct sentence is: These days I like to eat nuts and seeds along with fruits and I'm conscious of my health. 'Healthfulness' is an adjective which means 'beneficial to the health of body or mind'. Whereas, we need a noun, so 'health' should be used instead of 'healthfulness'.
5. **Option (1) is correct.**
The correct sentence is: Hurry up, otherwise you will be late for your school. The given sentence is trying to express the fact that the person will be late for school if he/she does not hurry. 'Otherwise' is used after an order or suggestion to show what the result will be if you do not follow that order or suggestion. The meaning of in case is as a precaution against the event that. Hence 'otherwise' will be used instead of 'in case'.
6. **Option (4) is correct.**
Ridiculous means funny and silly. Incredible means very difficult to believe. Unbelievable means extremely surprising. Noteworthy means deserving attention. Thus, it is clear that the correct antonym of 'ridiculous' is 'reasonable'.
7. **Option (4) is correct.**
A submarine is a watercraft capable of independent operation underwater. Amphibians are cold-blooded vertebrates that don't have scales. While the term 'aquatic' can be applied to animals that live in either fresh water or salt water.
8. **Option (4) is correct.**
The correct sentence is: It is much more difficult to judge oneself than to judge others. 'Much more' is used before a noncountable noun, for emphasis on a greater amount. The correct answer is 'No substitution required'.
9. **Option (4) is correct.**
The correct sentence is: Though the schools have reopened, children are not going to school and are having online lessons. The present continuous verb tense indicates that an action or condition is happening now, frequently, and may continue into the future. Here, 'are not going' should be used instead of 'are not go'.
10. **Option (4) is correct.**
'Antique' is a relic or object of ancient times. So 'ancient' is appropriate.
11. **Option (4) is correct.**
To turn a deaf ear means refuse to listen or respond to a statement or request. So to say, 'ignore what someone says'.
12. **Option (3) is correct.**
'Unbelievable' implies 'not able to be believed'. 'Unchanging' means remaining the same. Inevitable connotes certain to happen; unavoidable. Indelible is that cannot be removed, washed away, or erased. The correct sentence is: inevitable.
13. **Option (4) is correct.**
The correct sentence is: You yourself told me that you are planning to take up a course in photography and now you are denying it. An emphatic pronoun is a pronoun such as myself, herself, yourself, etc., that is used immediately after the noun to which it refers in order to show emphasis. So, the pronoun 'yourself' is placed after the personal pronoun 'you' to emphasise that it was he who told me that you are planning to take up a course in photography and now you are denying it.
14. **Option (2) is correct.**
'Aviasion' is incorrect, the correctly spelt word is 'aviation'.
15. **Option (4) is correct.**
The correct sentence is: The management is going to change the eligibility criteria for undergraduate courses. The meaning of eligibility is the quality or state of being eligible. The criteria for undergraduate courses refer to the 'eligibility', if the candidate is fit or proper to be chosen.
16. **Option (3) is correct.**
The incorrectly spelt word is 'tripple'. It will be 'triple'.
17. **Option (3) is correct.**
The idiom 'pull someone up' implies 'to tell someone that they have done something wrong'. So 'criticise someone' is correct. example: My brother always pulls me up before my parents for my poor spoken English.
18. **Option (1) is correct.**
The correct sentence is: The overhead expenses for a trip to Europe are very high. 'Overhead' in business means 'expenses (such as rent, insurance, or heating) not chargeable to a particular part of the work or product'. 'Overpaid' is paying more than usual. The expenses cannot be referred as 'overburdened/overdone'.
19. **Option (4) is correct.**
The correct sentence is- The family living next door has left for France, hasn't it? Question tags in a sentence are placed as per the auxiliary verb in the sentence. Here, 'has' is used, so for a positive auxiliary verb we need a negative question tag.

20. Option (4) is correct.

The correct sentence is: I was told that we would meet at five in the evening but no one has turned up for the meeting so far. It's a rule that whenever we use an auxiliary verb, then we need to use a base form with it instead of any other form of the verb. In the given sentence, 'met' is a second form of the verb 'meet'. So 'meet' will replace 'met'.

21. Option (2) is correct.

The correct sentence is: Time is very precious and must not be wasted on petty matters that have no value in our lives. Here, the blank needs to be supplemented by a negative adverb, because according to the context, time is so precious that it must not be wasted on petty matters, which have little value in our lives.

22. Option (2) is correct.

The correct sentence is: People keep money in safes but time can't be saved in this way. Can't/cannot means 'negligible chance of being true'.

23. Option (4) is correct.

The correct sentence is: Time can be saved and utilised only by being alert, spending it very carefully, and being conscious of its passage. Since the writer talks of the importance of time, and how it can be saved and utilised because it is very precious to be wasted on trivial things. So, 'spending' time cautiously makes sense.

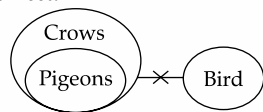
24. Option (3) is correct.

The correct sentence is: People who made the right use of time by not wasting it on worldly pleasures and spent it on understanding the true nature of life. Subjects refer to the thing that is being discussed, pleasures connote enjoyment, happiness. So, the sentence refers to the 'worldly pleasures' (joys).

25. Option (4) is correct.

The correct sentence is: People ... have left us with a rich collection of religious books and wise thoughts. In the given sentence, no comparison is being made, so it will not take a comparative degree. The collection of religious books and wise thoughts is said to be substantial. So 'rich' is appropriate for the context.

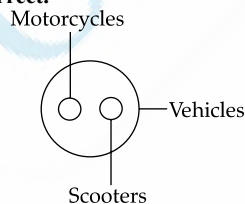
26. Option (3) is correct.



- I. Some crows are pigeons. ---True (because all pigeons are crows which implies some crows are pigeons too)
- II. Some pigeons are birds.---False (because all pigeons are crows and no crow is a bird so no pigeon is also a bird.)
- III. No pigeon is a bird. ---True (because all pigeons are crows and no crow is a bird so it implies no pigeon is a bird.)

Hence, only conclusions I and III follows.

27. Option (3) is correct.



28. Option (3) is correct.

Weight of Q = 5 kg
Weight of P = 1/2 weight of Q

Weight of P = 5/2 = 2.5 kg

Now, the weight of R = P + Q = 2.5 + 5 = 7.5 kg

Hence,

Weight of T = 4 × R = 4 × 7.5 = 30.0 kg

Weight of S = 1/2 T = 1/2 × 30 = 15 kg

29. Option (1) is correct.

$$32 + 14 \times 3 - 91 \div 7 = 3$$

(1) + and -

Interchanging the signs

$$32 - 14 \times 3 + 91 \div 7 = 3$$

Using BODMAS

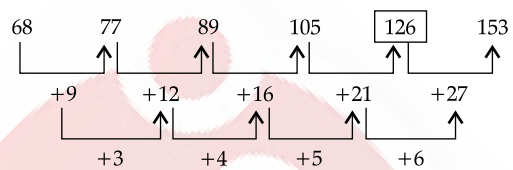
$$32 - 14 \times 3 + 13 = 3$$

$$32 - 42 + 13 = 3$$

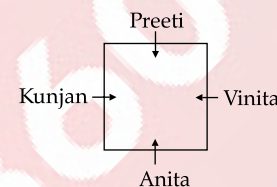
$$45 - 42 = 3$$

$$3 = 3 \text{ (LHS = RHS)}$$

30. Option (1) is correct.

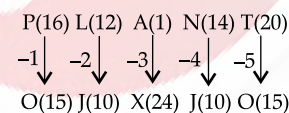


31. Option (4) is correct.



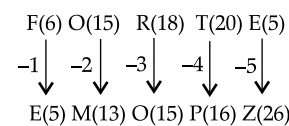
32. Option (2) is correct.

'PLANT' is written as 'OJXJO'.



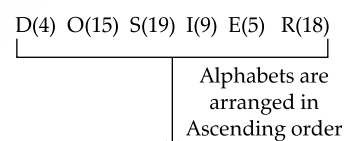
Similarly,

'FORTE' can be written as:

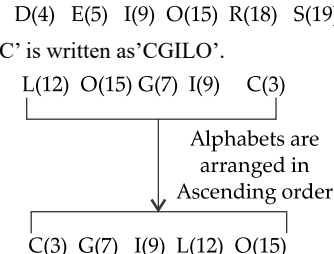


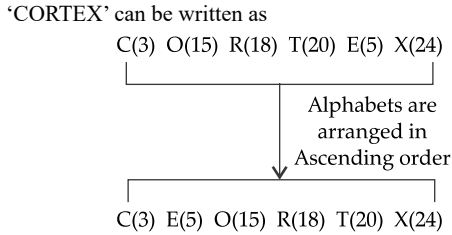
33. Option (3) is correct.

'DOSIER' is written as 'DEIORS'

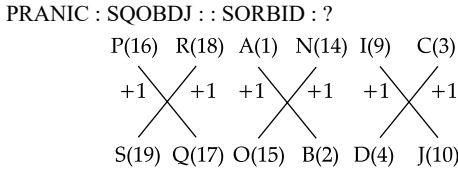


and 'LOGIC' is written as 'CGILO'.

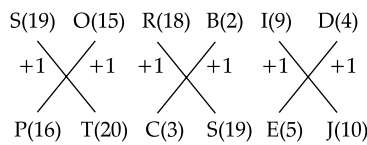




34. Option (3) is correct.



Similarly,



35. Option (1) is correct.

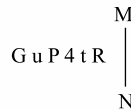
445	285	80
550	332	109
655	441	?

Logic: (1st number - 2nd number) ÷ 2 = 3rd number

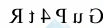
Row 1:
 = (445 - 285) ÷ 2
 = 160 ÷ 2
 = 80

Similarly,
 Row 3:
 = (655 - 441) ÷ 2
 = 214 ÷ 2
 = 107

36. Option (4) is correct.



Logic: In the mirror image left becomes right and the right becomes left. Hence,



37. Option (4) is correct.

Lazy : Hard-working :: Wealthy : ?

Logic:

Hard-working is the antonym of lazy.

Similarly,

Penniless is the antonym of wealthy.

38. Option (2) is correct.

72 + 63 ÷ 9 × 5 - 36 = 67

Logic:

63 and 72

After interchanging the numbers:

63 + 72 ÷ 9 × 5 - 36 = 67

Using BODMAS we get,

63 + 72 ÷ 9 × 5 - 36 = 67

63 + 8 × 5 - 36 = 67

63 + 40 - 36 = 67

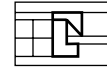
103 - 36 = 67

67 = 67

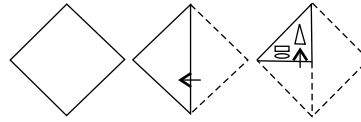
39. Option (1) is correct.



Logic:

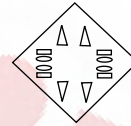


40. Option (4) is correct.

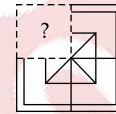


Logic:

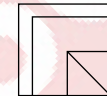
Follow the pattern. Hence,



41. Option (3) is correct.



Logic:



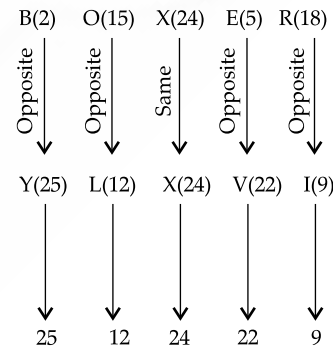
42. Option (4) is correct.

Logic:

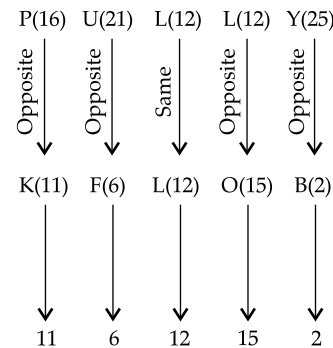
- (1) Every letter has been assigned its reverse positional value as per English alphabetical series except the middle letter.
- (2) Middle letter has been assigned its original positional value.

Hence,

'BOXER' can be written as '251224229'



Similarly, 'PULLY' can be written as:



43. Option (3) is correct.

Hibiscus : Flower :: Penguin : ?

Logic:

Hibiscus is a type of flower.

Similarly,

Penguin is a type of bird.

44. Option (1) is correct.

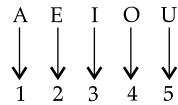
Logic:

(1) The consonants has been assigned their positional values.

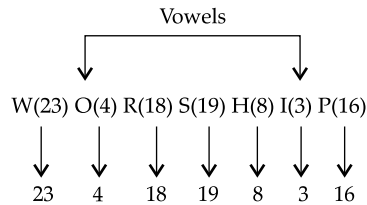
(2) And the vowels has been assigned their positions as

A = 1, E = 2, I = 3, O = 4, U = 5

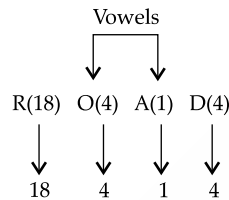
Vowel order value:



'WORSHIP' is written as '23418198316'

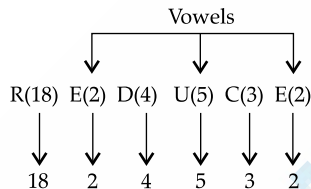


'ROAD' is written as '18414'.



Similarly,

'REDUCE' can be written as



45. Option (1) is correct.

H is fourth to the right of M.

K is to the immediate right of H.



G is sitting between L and H



So, finally only J is left. The final sitting arrangement will be as follows:



Hence, J is sitting between L and M.

46. Option (1) is correct.

20 : 421 :: 18 : ?

20 : 421

⇒ (20)² + (20 + 1) = 400 + 21 = 421

Similarly,

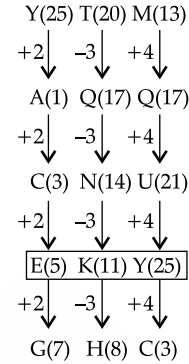
18 : ?

⇒ (18)² + (18 + 1) = 324 + 19 = 343

47. Option (2) is correct.

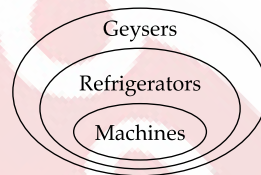
Given series: YTM, AQQ, CNU, ?, GHC

Logic is as follows:



48. Option (1) is correct.

Logic:

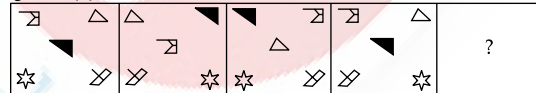


I. Some machines are not geysers – False (It is not possible because all machines are refrigerators and all refrigerators are geysers so some machines are definitely geysers)

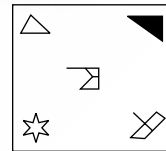
II. Some geysers are machines – True (because all machines are refrigerators and all refrigerators are geysers so some geysers are definitely machines)

Hence, only conclusion II follows

49. Option (4) is correct.

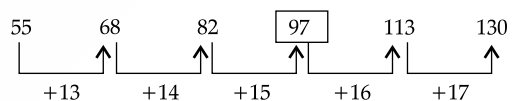


Logic: Follow the sequence and pattern. Hence,



50. Option (1) is correct.

Logic:



51. Option (2) is correct.

$$\frac{A}{B} = \frac{1}{3} \times \frac{4}{4} = \frac{4}{12}$$

$$\frac{B}{C} = \frac{2}{5} \times \frac{2}{2} = \frac{4}{10} \times \frac{3}{3} = \frac{12}{30}$$

$$\frac{C}{D} = \frac{2}{3} \times \frac{5}{5} = \frac{10}{15} \times \frac{3}{3} = \frac{30}{45}$$

A : B : C : D = 4 : 12 : 30 : 45

Total = 4 + 12 + 30 + 45 = 91 units

91 units = ₹ 4095

$$1 \text{ unit} = \frac{₹4095}{91} = ₹45$$

Difference between the shares of B and D = $45 - 12 = 33$ units
Hence, the value of 33 units = ₹ 1485

52. Option (3) is correct.

Total distance = $(248 + x)$ m

Time = 30 seconds

$$\text{Speed of 1st train} = \frac{88 \text{ km}}{\text{hour}}$$

$$\text{Speed of 2nd train} = 34 \frac{\text{km}}{\text{hour}}$$

Since, they are travelling in the same direction.

$$\text{Hence, Relative speed} = 88 - 34 = \frac{54 \text{ km}}{\text{hour}}$$

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\Rightarrow 15 = \frac{248 + x}{30}$$

$$\Rightarrow 248 + x = 15 \times 30$$

$$\Rightarrow x = 450 - 248$$

$$\Rightarrow x = 202 \text{ m}$$

53. Option (2) is correct.

Number of students playing hockey and tennis

$$= \frac{45^\circ + 117^\circ}{360^\circ} \times 600$$

Average Number of students playing hockey and tennis

$$= \frac{162^\circ}{2 \times 360^\circ} \times 600$$

Number of students playing badminton = $\frac{75^\circ}{360^\circ} \times 600$

$$\text{Required percentage} = \frac{\left[\left(\frac{162}{2 \times 360} \right) \times 600 - \left(\frac{75}{360} \right) \times 600 \right]}{\left(\frac{75}{360} \right) \times 600}$$

$$= \frac{81 - 75}{75} \times 100 = 8\%$$

54. Option (2) is correct.

SP = ₹ 640

Loss% = 12

Gain% = 21

$$\text{CP of article} = \frac{\text{SP} \times 100}{100 - \text{loss}\%}$$

$$= \frac{640 \times 100}{88}$$

$$\text{New SP of article} = \text{CP} \times \frac{100 + \text{gain}\%}{100}$$

$$= \frac{640 \times 100}{88} \times \left(\frac{121}{100} \right)$$

$$= ₹ 880.00$$

55. Option (4) is correct.

$a = 96 \text{ m}, b = 110 \text{ m}, c = 146 \text{ m}$

$$S = \frac{a + b + c}{2} = \frac{96 + 110 + 146}{2} = 176 \text{ m}$$

$$\therefore \text{Area of Triangle} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \sqrt{176(176-96)(176-110)(176-140)}$$

$$= \sqrt{176 \times (80) \times (66) \times (176-140)}$$

$$= 5280 \text{ m}^2$$

The cost of levelling $1 \text{ m}^2 = ₹ 5.60$

$$\text{So, the cost of levelling } 5280 \text{ m}^2 = ₹ 5.60 \times 5280 = ₹ 29,568$$

56. Option (2) is correct.

LCM of 8, 12, 15, 24, 25 and 40 is 600

$$\Rightarrow x = 600 + 7$$

$$\Rightarrow x = 607$$

Hence, when 607 is divided by 29, the remainder will be 27.

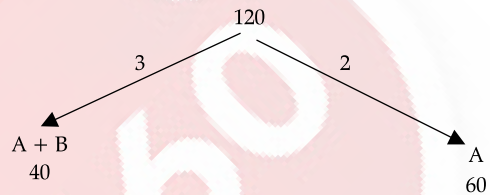
57. Option (3) is correct.

A and B can complete 45% of the work in 18 days

$$\text{i.e. } \frac{45}{100} = \left(\frac{9}{20} \right) \text{th of work in 18 days}$$

Hence, complete work can be done in

$$= 18 \times \left(\frac{20}{9} \right) \text{ days}$$



Total efficiency of A and B = 3 units

Total efficiency of B = 3 units – 2 units = 1 unit

Total work = 120 unit

Work done by A and B in 16 days = $16 \times 3 = 48$ units

Work left = $120 - 48 = 72$ units

B will complete = $\left(\frac{72}{1} \right)$ unit = 72 days

58. Option (4) is correct.

$(x + 25)\%$ of 270 = $x\%$ of 240 + 20% of $x\%$ of 240

$$\frac{(x + 25)270}{100} = \frac{240x}{100} + \frac{48x}{100}$$

$$\Rightarrow \frac{(x + 25)270}{100} = \frac{288x}{100}$$

$$\Rightarrow 270x + 6750 = 288x$$

$$\Rightarrow 6750 = 18x$$

$$\Rightarrow x = 375$$

12% of $(x + 125)$

$$= 12\% \text{ of } (375 + 125)$$

$$= 12\% \text{ of } 500 = 60$$

$$10\%x = 10\% \text{ of } 375 = 37.5$$

$$\text{Required \%} = \frac{60 - 37.5}{37.5} \times 100$$

$$= \frac{22.5}{37.5} \times 100 = 60$$

59. Option (4) is correct.

$$\left[\left(\frac{8}{3} \right) \div \left(\frac{3}{5} \right) \times \left(\frac{7}{5} \right) \right] \div 6$$

$$\left[\left(\frac{5}{3} \right) \div \left(\frac{5}{7} \right) \times \left(\frac{8}{9} \right) \right] \div 6$$

$$= \frac{\left[\left(\frac{8}{3}\right) \times \left(\frac{5}{3}\right) \times \left(\frac{7}{5}\right)\right]}{\left[\left(\frac{5}{3}\right) \times \left(\frac{7}{5}\right) \times \left(\frac{8}{9}\right)\right]} \times \left(\frac{1}{6}\right)$$

$$= \frac{\left[\frac{56}{9}\right]}{\left[\frac{56}{27}\right]} \times \left(\frac{1}{6}\right) = \left(\frac{1}{2}\right)$$

60. Option (1) is correct.

CP : MP
 $(100 - D\%) : (100 + P\%)$
 $(100 - 16) : (100 + 26)$
 $84 : 126$
 $2 : 3$
 CP = 2 units
 MP = 3 units
 2 units = ₹ 318 (Given)
 1 unit = ₹ 159
 3 units = $159 \times 3 = ₹ 477$

61. Option (1) is correct.

Efficiency is inversely related to time
 Workdone = efficiency \times time
 Let the efficiency of Y be 100
 Let the efficiency of X be 160
 Ratio = X : Y = 160 : 100 \Rightarrow 8:5
 It is inversely related to time
 Ratio of efficiency = Ratio of time
 $8 : 5 = 80 : X$
 $\Rightarrow 8X = 80 \times 5$
 $\Rightarrow X = 50$
 X can complete a work in 50 days
 Total work (LCM of 50 and 80) = 400
 52% of work = 52% of 400
 $\Rightarrow 208$ units

$$\text{Time} = \frac{\text{Efficiency}}{\text{work}}$$

$$= \frac{208}{8+5}$$

$$= \frac{208}{13}$$

$$= 16 \text{ days}$$

62. Option (4) is correct.

Let the speed of a car is x km/h

So, time is $\left(\frac{x}{8}\right)$ km/h

$$\Rightarrow \left(\frac{x}{8}\right) = \left(\frac{450}{x}\right)$$

$$\Rightarrow x^2 = 450 \times 8$$

$$\Rightarrow x^2 = 3600$$

$$\Rightarrow x = 60$$

$$\text{Time} = \left(\frac{1}{8}\right) \times 60$$

$$\text{Time} = \left(\frac{15}{2}\right)$$

$$\text{Time} = 7\left(\frac{1}{2}\right)$$

63. Option (1) is correct.

$$SI = \frac{P \times R \times T}{100}$$

$$160 = \frac{P \times 2 \times 5}{100} + \frac{P \times 3 \times 9}{100} + \frac{P \times 5 \times 13}{100}$$

$$\Rightarrow 8160 = \frac{10P}{100} + \frac{27P}{100} + \frac{65P}{100}$$

$$\Rightarrow 8160 = \frac{102P}{100}$$

$$\Rightarrow P = \frac{(8160 \times 100)}{102}$$

$$\Rightarrow P = \frac{(8160 \times 100)}{102}$$

$$\Rightarrow P = ₹ 8000$$

64. Option (4) is correct.

Since Average = $\frac{\text{Sum of all observations}}{\text{Number of observations}}$

$$\frac{A + B + C}{3} = 78$$

$$\Rightarrow A + B + C = 234$$

$$\frac{C + D + E}{3} = 52$$

$$\Rightarrow C + D + E = 156$$

$$\frac{E + F}{2} = 48$$

$$\Rightarrow E + F = 96$$

$$\Rightarrow E = 96 - F$$

$$\frac{E + C}{2} = 60$$

$$\Rightarrow E + C = 120$$

$$\Rightarrow E = 120 - C$$

From (2) and (3)

$$96 - F = 120 - C$$

$$\Rightarrow 96 - 120 = -C + F$$

$$\Rightarrow F + 24 = C$$

From 1 and 4

$$F + 24 + D + 96 - F = 156$$

$$\Rightarrow D = 156 - 120$$

$$\Rightarrow D = 36$$

$$A + B + C = 234$$

$$D = 36$$

$$E + F = 96$$

$$\text{So, the average is} = \frac{234 + 36 + 96}{6} = \frac{366}{6} = 61$$

65. Option (1) is correct.

The number of students playing badminton

$$= \frac{75^\circ}{360^\circ} \times 600$$

The number of students playing chess

$$= \frac{54^\circ}{360^\circ} \times 600$$

Difference between the number of students playing chess and badminton is x .

$$\text{Then, } x = \frac{75 - 54}{360^\circ} \times 600 = 35$$

Hence, value of x lies between 32 and 38.

66. Option (3) is correct.

$$39 - [30 - \{33 - (19 - 4 \div 3 \text{ of } 8 \times 6)\}]$$

$$\Rightarrow 39 - \left[30 - \left\{ 33 - \left(19 - 4 \times \left(\frac{1}{24} \times 6 \right) \right) \right\} \right]$$

$$\Rightarrow 39 - [30 - \{33 - (19 - 1)\}]$$

$$\Rightarrow 39 - [30 - \{33 - (18)\}]$$

$$\Rightarrow 39 - (15)$$

$$\Rightarrow 24$$

67. Option (4) is correct.

Quantity of Acid in resulting solution

$$= \left(\frac{2}{9} \right) \times 4 + \left(\frac{4}{9} \right) \times 3$$

$$= \left(\frac{8}{9} \right) + \left(\frac{12}{9} \right) = \left(\frac{20}{9} \right)$$

Quantity of water in resulting solution

$$= \left(\frac{7}{9} \right) \times 4 + \left(\frac{5}{9} \right) \times 3$$

$$= \left(\frac{28}{9} \right) + \left(\frac{15}{9} \right) = \left(\frac{43}{9} \right)$$

The ratio of acid to water in resulting solution

$$= \left(\frac{20}{9} \right) : \left(\frac{43}{9} \right)$$

$$\Rightarrow 20 : 43$$

68. Option (3) is correct.

$$\frac{11a^3 - 15b^3}{11a^3 - 15b^3} = \left(\frac{5}{7} \right)$$

$$7(11a^3 - 15b^3) = 5(11a^3 - 15b^3)$$

$$77a^3 - 105b^3 = 55a^3 - 75b^3$$

$$22a^3 = 30b^3$$

$$\frac{a^3}{b^3} = \frac{125}{27}$$

$$\frac{a}{b} = \frac{5}{3}$$

$$a = \frac{5}{3}b$$

Now,

$$\left[9 \times \left(\frac{5b}{3} \right) + 5b \right] : \left[5 \times \left(\frac{5b}{3} \right) - 3b \right]$$

$$\left[3 \times 5b + 5b \right] : \left[\left(\frac{25b}{3} \right) - 3b \right]$$

$$20b : \frac{16b}{3}$$

$$15 : 4$$

69. Option (1) is correct.

Let the number of female students playing hockey = $7x$

Let the number of male students playing hockey = $6x$

Total students playing hockey

$$\Rightarrow 7x + 6x = \frac{117 \times 600}{360}$$

$$\Rightarrow 13x = \frac{117 \times 10}{6}$$

$$\Rightarrow x = \frac{117 \times 10}{6 \times 13} = 15$$

$$\text{So, } 6x = 90$$

Number of male students playing tennis

$$= 60\% \text{ of } \frac{45}{360} \times 600$$

$$= \frac{60}{100} \times \frac{45}{360} \times 600 = 45$$

Hence, the number of male students playing hockey and tennis = $90 + 45 = 135$.

70. Option (4) is correct.

Total SP = ₹ 8000

Total SP = ₹ 8000

SP of 1st article = ₹ 4000

Gain percentage = 25%

$$\text{CP of 1st article} = ₹ \left(4000 \times \left(\frac{100}{125} \right) \right) = ₹ 3200$$

CP of 2nd article = ₹ $(8000 - 3200) = ₹ 4800$

SP of 2nd article = ₹ 4000

Hence, the loss on 2nd article

$$= \left(\left(\frac{800}{4800} \right) \times 100 \right) = \frac{50}{3} = 16 \left(\frac{2}{3} \right)$$

Hence, B is sold at loss of $16 \left(\frac{2}{3} \right)\%$.

71. Option (2) is correct.

Let the present age of A, B and C be x , y and z years respectively.

Age three years ago = $(x - 3)$, $(y - 3)$ and $(z - 3)$

According to question

$$\frac{[(x - 3) + (y - 3) + (z - 3)]}{3} = 29$$

$$(x - 3) + (y - 3) + (z - 3) = 87$$

$$x + y + z = 96 \quad \dots(1)$$

$$\frac{[(y - 5) + (z - 5)]}{2} = 23$$

$$y - 5 + z - 5 = 46$$

$$y + z = 56 \quad \dots(2)$$

From (1) and (2), we get

$$x + 56 = 96$$

$$x = 96 - 56$$

$$x = 40$$

Hence, the present of A is 40 years.

72. Option (3) is correct.

$$\frac{5}{8} \div \left[\frac{8}{11} \times 2 \frac{3}{4} \div \frac{4}{9} \right] + 5 \frac{1}{3} \div \left[5 \frac{1}{4} \div \frac{3}{8} \times \frac{3}{7} \right] \text{ of } 1 \frac{7}{9}$$

$$\Rightarrow \frac{5}{8} \div \left[\frac{8}{11} \times \frac{11}{4} \div \frac{4}{9} \right] + \frac{16}{3} \div \left[\frac{21}{4} \div \frac{3}{8} \times \frac{3}{7} \right] \text{ of } \frac{16}{9}$$

$$\Rightarrow \frac{5}{8} \div \left[\frac{8}{11} \times \frac{11}{4} \times \frac{9}{4} \right] + \frac{16}{3} \div \left[\frac{21}{4} \times \frac{8}{3} \times \frac{3}{7} \right] \text{ of } \frac{16}{9}$$

$$\Rightarrow \frac{5}{8} \div \left[\frac{9}{2} \right] + \frac{16}{3} \div [6] \text{ of } \frac{16}{9}$$

$$\Rightarrow \frac{5}{8} \times \left[\frac{2}{9} \right] + \frac{16}{3} \div \frac{32}{3}$$

$$\Rightarrow \frac{5}{8} \times \left[\frac{2}{9} \right] + \frac{16}{3} \times \frac{3}{32}$$

$$\Rightarrow \frac{5}{36} + \left[\frac{1}{2} \right] = \frac{5 + 18}{36} = \frac{23}{36}$$

73. Option (2) is correct.

First arrange the data either in the ascending or descending order to find the median

$$\text{Median} = \frac{\left[\left(\frac{n}{2}\right)\text{th} + \left(\frac{n}{2} + 1\right)\text{th}\right]}{2}$$

Data in ascending order

2, 3, 3, 4, 7, 7, 8, 9, 10, 12, 15, 16, 20, 23

$$\text{Median} = \frac{\left[\left(\frac{14}{2}\right)\text{th term} + \left(\frac{14}{2} + 1\right)\text{th term}\right]}{2}$$

$$\Rightarrow \frac{7^{\text{th}} \text{ term} + 8^{\text{th}} \text{ term}}{2}$$

$$\Rightarrow \frac{8 + 9}{2} = 8.5$$

$$\text{Range} = \text{Upper limit} - \text{lower limit}$$

$$23 - 2 = 21$$

$$\text{Mean} = \frac{8.5 + 21}{2} = \frac{29.5}{2} = 14.75$$

74. Option (4) is correct.

$$\text{Principal} = ₹ 12,000$$

$$\text{Rate of interest, } r = 18\%$$

$$\text{Time} = 1\left(\frac{1}{3}\right) \text{ years}$$

$$\text{Now, CI} = P\left(1 + \frac{R}{100}\right)^n - P$$

$$\text{Time} = 2, \text{ Rate} = 12\%$$

$$\text{Now, CI} = 12000\left(1 + \frac{12}{100}\right)^2 - 12000$$

$$= 15052.8 - 12000$$

$$= ₹ 3052.8$$

75. Option (4) is correct.

Diameter of the base of the cone, $d = 22$ cm

Height of the cone, $h = 60$ cm

$$\text{Radius} = \frac{22}{2} = 11 \text{ cm}$$

$$\text{Slant height, } l = \sqrt{h^2 + r^2}$$

$$= \sqrt{(60)^2 + (11)^2}$$

$$= \sqrt{3600 + 121}$$

$$= \sqrt{3721} = 61 \text{ cm}$$

$$\text{Curved surface area of the cone} = \pi rl$$

$$= \left(\frac{22}{7}\right) \times 11 \times 61$$

$$= 2108.85$$

Hence, the cost of polishing the curved surface area of the cone = $2108.85 \times 1.4 = 2952.4$.

76. Option (4) is correct.

Arun Jaitley was the Union finance minister and Corporate Affairs of the Government of India from 2014 to 2019. He was awarded the Padma Vibhushan posthumously, India's second highest civilian award, posthumously in 2020 in the field of Public Affairs. He was a Parliamentarian par excellence, a

great friend of industry and, above all, a kind and considerate human being.

77. Option (4) is correct.

Puttari is the harvest festival of the Kodava community of Coorg or Kodava tribes, celebrated in Kodagu district in the state of Karnataka. The word 'Puttari' is derived from the words 'Puth' which means new and 'Ari' which translates to rice. The festival is celebrated in the end of November or the start of December. It is celebrated in North Malabar rice bracket paddy crop harvest in the month of September to November.

78. Option (4) is correct.

Lewis Carroll was a mathematics professor at Oxford University. Alice's Adventures in Wonderland is an English Novel written by Lewis Carroll which is published in 1865. Alice's Adventures in Wonderland represents the child's struggle to survive in the confusing world of adults.

79. Option (1) is correct.

Manpreet Singh is the captain of the Indian Men's Hockey Team as of 30th July 2020. He is an Indian hockey player and also the captain of the India men's national field hockey team since May 2017.

80. Option (2) is correct.

Janmashtami is an annual Hindu festival that celebrates the birth of Krishna, the eighth avatar of Vishnu. Dahi Handi is an entertainment and competitive event associated with Krishna Janmashtami in which suspending a pot containing butter, curd, etc. high above the ground with people trying to break it by forming human pyramids.

81. Option (4) is correct.

The Ganga-Brahmaputra basin lies between 10°N and 30°N latitudes. This region is densely populated. The tributaries of rivers Ganga and Brahmaputra together form the Ganga-Brahmaputra basin in the Indian subcontinent. The Ganga - Brahmaputra basin is also known as the world's second largest hydrological region.

82. Option (1) is correct.

Soil is the loose surface material that covers most land. Humus is the left over after plants and animals have undergone a long process of thorough decomposition done by earthworms, bacteria, fungi, and other microorganisms. A horizon or topsoil of the soil contains humus. It consists of both organic matter and other decomposed materials. Moreover, the topsoil is soft and porous to hold enough water and air.

83. Option (2) is correct.

Sponges belong to the phylum Porifera. Sponges are simple invertebrate animals that live in aquatic habitats. The study of sponges is known as Parazology. Many zoologists have regarded sponges as occupying an isolated position in the animal kingdom and classify them in the subkingdom Parazoa.

84. Option (1) is correct.

Ahmedabad is the most populous city in the Indian state of Gujarat. The Sabarmati River runs through its center. It is known as the 'Manchester of India' because of similarity with the well-known cotton textile centre of Manchester. Ahmedabad is located very near to the main cotton growing region of Khandesh, Berar and Wardha. The first textile mill was established in Ahmedabad in the year 1859. Thus, it is concluded that only statement I is not true regarding the city Ahmedabad.

85. Option (2) is correct.

Choliya is a traditional folk dance form that originated in the Kumaon division of the Indian state of Uttarakhand. This

dance form is as old as a thousand years, and it is performed during the local Rajput weddings. It is a reflection of mythological warfare and soldiers.

86. Option (1) is correct.

The National Statistical Commission was constituted with effect from 12th July 2006 with a mandate to evolve policies, priorities and standards in statistical matters. As per the recommendations of the National Statistical Commission, the Base Year of the GDP Series in India was revised from 2004-05 to 2011-12 with effect from January, 2015. The commission was established through an executive order and it works under the Ministry of Statistics and Programme Implementation.

87. Option (3) is correct.

United India Insurance Company Limited, The New India Assurance Company Limited and General Insurance Corporation of India are the public sector insurance companies. SBI Life is an Indian life insurance company that was started as a joint venture between the State Bank of India and French financial institution BNP Paribas Cardiff. Hence SBI Life insurance is not a public sector insurance company.

88. Option (3) is correct.

According to the part 20 of the Indian Constitution, the Parliament cannot amend any provisions which form the basic structure of the Constitution. Part 20 has only one article i.e Article 368 that deals with the amendment of the constitution.

89. Option (1) is correct.

APJ Abdul Kalam was an Indian aerospace scientist and statesman who served as the 11th president of India from 2002 to 2007. He is the only President of India to have her/his wax statue at the Madame Tussauds wax museum in Delhi as of September 2020.

90. Option (3) is correct.

The Janapadas were the major kingdoms of Vedic India. Rivers such as the Ganga and Son flowed through Magadha. Magadha was a region and one of the sixteen Mahajanapadas. Magadha played an important role in the development of Jainism and Buddhism, and two of India's greatest empires, the Maurya Empire and Gupta Empire, originated in Magadha. Its outlying forest areas also enabled it to capture and train elephants for its armies.

91. Option (4) is correct.

According to the sustainable development commission "Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. There are 17 Goals to transform our World. The United Nations Sustainable Development Goal 6 strives to ensure availability and sustainable management of water and sanitation for all. Access to safe water, sanitation and hygiene is the most basic human need for health and well-being.

92. Option (1) is correct.

From the given options, only statement (1) is incorrect regarding constitution of India. According to the Indian Constitution 'state can regulate the administration of religious property by way of validly enacted laws'. The Indian constitution's preamble was amended in 1976 to state

that India is a secular state. It provides all individuals and communities the freedom to profess, practice and propagate any religion. Article 15(1) of the Indian Constitution prohibits discrimination against any citizen on the basis of religion, race, caste, sex, or place of birth.

93. Option (3) is correct.

Ancient Indian manuscripts were usually written on palm leaves or the bark of the birch tree, which grows in the Himalayas. The bark of Himalayan birch was used centuries ago in India as paper for writing lengthy scriptures and texts. Inscriptions were engraved either on a stone surface or on bricks or metals.

94. Option (4) is correct.

The pupil is the black opening in the middle of the colored part of our eye (iris). The size of the pupil of the eye is controlled by the iris. The lens in eye focuses light that passes through pupil. Light then goes to the back of eye and hits retina.

95. Option (3) is correct.

Only option (3) from the given options is incorrect regarding forests. The lower layer of the forest is known as the understory and it is composed of herbs and shrubs. In forests, the uppermost layer is formed by trees which have a clear stem with branches at the top called a crown. A forest helps in binding the soil together. Thus, prevent soil from erosion. Forest trees have a very positive effect on climate, water cycle, and air quality. Trees absorb harmful gases, improving both air quality and climate. Therefore, in this manner forests influence climate.

96. Option (3) is correct.

Hunasagi is a taluk of Yadgir district in the state of Karnataka in India. It is a Palaeolithic site of archaeological importance in India. Tools and weapons made up of reddish-brown chert are found there. Archaeologists have found many artefacts that belong to the palaeolithic age. Its uniqueness lies in the fact that it is the location of a numerous of early Paleolithic sites.

97. Option (1) is correct.

A voltmeter is an instrument used for measuring electrical potential difference between two points in an electric circuit. Voltmeters were made possible by an 1819 discovery by Hans Oersted. It usually has a high resistance so that it takes negligible current from the circuit.

98. Option (3) is correct.

A mutual fund is a pool of money managed by a professional Fund Manager. The Mutual Fund industry in India started in 1963 with formation of UTI in 1963. It was set up by the Reserve Bank of India. In the last few years the MF Industry has grown significantly.

99. Option (1) is correct.

Cricketer Zaheer Khan was awarded the Padma Shree in 2020. He was the second-most successful Indian pace bowler in Test cricket, behind Kapil Dev.

100. Option (1) is correct.

Article 57 of the Constitution of India states that a person who holds, or who has held, office as President shall, subject to the other provisions of this Constitution, be eligible for re-election to that office. It deals with the eligibility conditions for the re-election of the President.