

**STAFF SELECTION COMMISSION**  
**Multi Tasking (Non-Technical) Staff**

**SOLVED PAPER**

**(2<sup>nd</sup> August 2019: Shift-1)**

**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. Choose the correctly spelt word.  
1. hotiness                      3. haughtiness  
2. haughtyness                4. hautiness
  2. Choose the correctly spelt word.  
1. Gramar    2. Gramer    3. Grammar    4. Grammer
  3. Select the most appropriate option to fill in the blank.  
Her parents always \_\_\_\_\_ her in her studies.  
1. encouraged    2. interested    3. impressed    4. expected
  4. Select the most appropriate antonym of the given word.  
Fertile  
1. Barren        2. Civilized    3. Sane        4. Tough
  5. Choose the most appropriate word that can substitute the given group of words.  
One who pretends to be what he is not  
1. Director    2. Hypocrite    3. Creator    4. Acrobat
  6. Select the most appropriate antonym of the given word.  
Acute  
1. Dark        2. Clever        3. Grave        4. Blunt
  7. Select the most appropriate synonym of the given word.  
Deepen  
1. Soothe        2. Neutralize    3. Relieve        4. Intensify
  8. Select the most appropriate meaning of the given idiom.  
The ball is in (one's) court  
1. To be responsible for further action  
2. To pass the responsibility to another  
3. To be fearful of taking any action  
4. To risk everything in one venture
  9. Select the most appropriate option to fill in the blank.  
The entry gates were closed \_\_\_\_\_ we could enter in.  
1. Till        2. before        3. after        4. until
  10. Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
I told the tailor/to made a new/dress for me. /No error.  
1. dress for me                      3. no error  
2. I told the tailor                    4. to made a new
  11. Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
The lady/standing in the/corner is fat. /No error.  
1. corner is fat                      3. standing in the  
2. no error                              4. The lady
  12. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.  
Please tell the story in a nutshell.  
1. at a nutshell                      3. in nutshells  
2. in the nutshell                    4. no Improvement
  13. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select No Improvement.  
He did not like the novel, nor I did.  
1. nor did I                              3. nor I like it  
2. no Improvement                    4. nor did I likes it
  14. Choose the most appropriate word that can substitute the given group of words.  
A place where nuns live and work  
1. Convent    2. Dormitory    3. Hostel    4. Quarter
  15. Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.  
It was not possible/for we/to understand her. /No error.  
1. for we                                  3. It was not possible  
2. to understand her                    4. no error
  16. Select the most appropriate option to fill in the blank.  
\_\_\_\_\_ you like some water?  
1. do                      2. would        3. shall        4. can
  17. Select the most appropriate synonym of the given word.  
Courage  
1. Meekness    2. Valour        3. Humility    4. Timidity
  18. Select the most appropriate option to fill in the blank.  
We must start now \_\_\_\_\_ it will be too late.  
1. until        2. unless        3. or        4. but
- 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.  
Humanity can be (1) \_\_\_\_\_ as the quality of being human; the peculiar nature (2) \_\_\_\_\_ man, by which he is distinguished (3) \_\_\_\_\_ other beings. Being human (4) \_\_\_\_\_ not mean that an individual possesses humanity. One of the (5) \_\_\_\_\_ outstanding

examples of extraordinary humanity in a human being has been portrayed beautifully by Mother Teresa.

- 19. Select the most appropriate option for blank no. 1.  
 1. define      2. defining      3. defined      4. defines
- 20. Select the most appropriate option for blank no. 2.  
 1. of            2. in            3. at            4. to
- 21. Select the most appropriate option for blank no. 3.  
 1. along       2. for        3. by        4. from
- 22. Select the most appropriate option for blank no. 4.  
 1. had        2. does       3. has       4. did
- 23. Select the most appropriate option for blank no. 5.  
 1. more       2. many       3. most       4. much
- 24. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select no Improvement.  
 The father with his children were expected to attend the function.  
 1. are    3. no Improvement  
 2. have    4. was
- 25. Select the most appropriate meaning of the given idiom.  
 Bend over backwards  
 1. To express sudden shock  
 2. To exert a lot of effort towards some end  
 3. To end all activities  
 4. To confess to a crime

**General Intelligence & Reasoning**

- 26. Five articles, bat, ball, fan, table and chair, are kept one above the other (not necessarily in the same order). The bat is four places above the fan. The table is between the ball and the chair. The chair is three places below the bat.  
 Which article is at the second position from the top?  
 1. Fan      2. Table      3. Ball      4. Chair
- 27. Five teachers, H, K, P, R and T, are sitting around a circular table facing towards the centre (not necessarily in the same order). T is between H and R. P is second to the right of R. H is to the immediate left of T. Who is sitting to the immediate left of K?  
 1. T                      2. H                      3. P                      4. R
- 28. In a certain code language, 'RIGIDS' is written as 'TFIFPP'. What will be the code for 'CORNET' in that code language?  
 1. GNVMS      2. FMULHR      3. ELTKRQ      4. ELTKGQ
- 29. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.  
**Statements:**  
 I. No A is B.  
 II. All C are D.  
 III. Some C are B.  
**Conclusions:**  
 I. Some D are B.  
 II. Some B are C.  
 III. All C are B.  
 1. Both conclusions I and II follow.  
 2. Both conclusions I and III follow.  
 3. Only conclusion III follows.  
 4. Only conclusion II follows.

- 30. Select the option in which the given figure is embedded. (Rotation is not allowed)



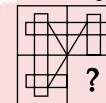
1.

2.

3.

4.

- 31. In a certain code language, 'ROK' is written as '44' and 'MIG' is written as '29'. What will be the code for 'TAL' in that code language?  
 1. 33    2. 34    3. 41    4. 43
- 32. Which two signs need to be interchanged to make the following equation correct?  
 $73 - 13 \times 42 \div 14 + 56 = 56$   
 1. + and  $\times$       2.  $\times$  and  $\div$       3. - and +      4. - and  $\times$
- 33. Select the option that is related to the third number in the same way as the second number is related to the first number.  
 $35 : 66 :: 29 : ?$   
 1. 63    2. 62    3. 60    4. 57
- 34. Study the given pattern carefully and select the figure that will complete the pattern given in the question figure.



1.

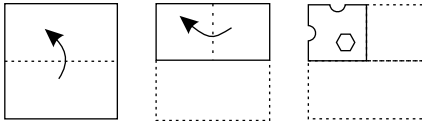
2.

3.

4.

- 35. In a certain code language, 'PING' is written as '4' and 'METAL' is written as '5'. What will be the code for 'STEADYS' in that code language?  
 1. 8    2. 7    3. 5    4. 6
- 36. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.  
**Statements:**  
 I. Some red are rat.  
 II. Some rat are wild.  
**Conclusions:**  
 I. Some wild are rat.  
 II. All wild are rat.  
 III. Some red are wild.  
 1. None of the conclusions follows.  
 2. Only conclusion I follows.  
 3. Only conclusion III follows.  
 4. Only conclusion II follows.

37. Select the number that can replace the question mark (?) in the following series.  
16, 20, 29, 45, 70, ?  
1. 106      2. 116      3. 96      4. 126
38. Six laptops N, Q, P, L, R and A, are placed in a row facing towards the north (not necessarily in the same order). N is placed to the immediate left of A. R is placed second to the left of Q. P is placed second to the right of A. P is placed to the immediate right of R. L is placed to the left of N. Which laptop is placed to the immediate right of L?  
1. N      2. Q      3. P      4. A
39. If the two signs, '+' and  $\div$  are interchanged, which of the following equations will be correct?  
1.  $16 \div 9 + 4 \times 8 = 34$   
2.  $16 \div 21 + 13 \times 26 = 56$   
3.  $11 + 13 \times 4 \div 2 = 37$   
4.  $13 \times 9 + 16 \div 2 = 125$
40. A paper is folded and cut as shown below. How will it appear when unfolded?

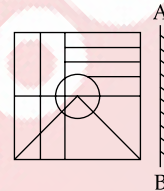


1.      3.
2.      4.

41. Select the number that can replace the question mark (?) in the following series.  
31, 44, 58, 73, 89, ?  
1. 105      2. 106      3. 115      4. 116
42. Select the option figure that will come next in the following series.
- 
1.      3.
2.      4.

43. Identify the Venn diagram that best represents the relationship between the given classes.  
Painter, Lawyer, Singer
1.      3.
2.      4.

44. Select the letter-pair that can replace the question mark (?) in the following series.  
AR, CU, EX, GA, ?  
1. JE      2. ID      3. IF      4. KF
45. Select the word pair in which the two words are related in the same way as the two words in the following word-pair.  
Five : Pentagon  
1. Four : Rectangle      3. Square : Four  
2. Triangle : Thre      4. Six : Septagon
46. Study the given pattern carefully and select the number that can replace the question mark (?) in it.
- |   |   |   |    |
|---|---|---|----|
| 7 | 6 | 3 | 48 |
| 4 | 9 | 8 | 63 |
| 2 | 5 | 7 | ?  |
1. 28      2. 42      3. 52      4. 56
47. In a certain code language, 'GROUND' is written as 'BMJPIY'. What will be the code for 'FREAK' in that code language?  
1. BOAYH      2. AMYVF      3. BNAWG      4. AMZVF
48. Select the option that is related to the third term in the same way as the second term is related to the first term.  
Colour : Red :: Profession : ?  
1. Lawyer      2. Court      3. School      4. Black
49. Select the correct mirror image of the given figure when the mirror is placed at line AB.



1.      3.
2.      4.

50. Select the option in which the letters share the same relationship as that shared by the given pair of letters.  
JT : NX  
1. TP : XT      2. RK : VG      3. GS : KU      4. LD : PG

**Numerical Aptitude**

51. A travels 15 km with a speed of 30 km/h. He travels another 25 km with a speed of 10 km/h. What is his average speed for the journey?  
1.  $\frac{40}{3}$  km/h      2.  $\frac{80}{3}$  km/h      3. 20 kh/h      4. 12 km/h
52. If  $P : Q = 5 : 2$ , then  $(2P - 3Q) : (3P - 5Q)$  is equal to:  
1. 5 : 6      2. 2 : 7      3. 4 : 5      4. 3 : 4
53. The Table given presents the number of books on different subjects kept on separate shelves. Subjects with odd and even numbers are of Arts and Science respectively.

Subjects	Number of books
S1	26
S2	29
S3	31
S4	34
S5	36
S6	38
S7	44

What is the ratio of the number of books of S1 and the average number of books per subject?

1. 13 : 17      2. 14 : 17      3. 18 : 13      4. 14 : 13
54. What will be the compound interest on a sum of ₹ 1200 for 2 years at the rate 20% per annum when the interest is compounded yearly?  
 1. ₹ 624      2. ₹ 504      3. ₹ 576      4. ₹ 528
55. The simple interest on a sum for a certain number of years, same as the rate percentage of the interest, is equal to the sum itself. The number of years is equal to:  
 1. 5      2. 10      3. 8      4. 1
56. Pipe A can fill a tank in 6 hours. Pipe B can fill the same tank in 8 hours. Pipe A, B and C together can fill the same tank in 12 hours. Then which of the following statements is true for pipe C?  
 1. It can fill the tank in 4 hours 40 minutes  
 2. It can fill the tank in 4 hours 48 minutes  
 3. It can empty the tank in 4 hours 48 minutes  
 4. It can empty the tank in 4 hours 40 minutes
57. By selling an article for 320, a man incurs a loss of 20%. What should be the selling price of an article to gain 20%?  
 1. ₹ 450      2. ₹ 480      3. ₹ 420      4. ₹ 500
58. 0.1 percent of  $1.728 \times 10^6$  spherical droplets of water, each of diameter 2 mm, coalesce to form a spherical bubble. What is the diameter (in cm) of the bubble?  
 1. 1.2      2. 1.6      3. 1.8      4. 2.4
59. The ratio of monthly incomes of Pawan and Sunil is 4 : 3 and the ratio of their monthly expenditures is 3 : 2. If Pawan and Sunil save ₹ 4000 and ₹ 6000 respectively per month, then what is the sum of their monthly incomes?  
 1. ₹ 60000      2. ₹ 70000      3. ₹ 50000      4. ₹ 36000
60. What is the value of  $32 \div 4$  of  $2 \times 3 + [5$  of  $6 - \{7$  of  $8 (10 + 6$  of  $\frac{5}{6} \div 5 - 1) \div 80\}] - 7 \times 3 \div 2$ ?  
 1. 7.5      2. 17.5      3. 12.5      4. 24.5
61. What is the value of  $\frac{72 \div 9 + 3 - (2 \times 3) + 5 \text{ of } 3 - (1 + 5 \times 2 - 2)}{8 \div 4 + 2 - (6 \times 8 \div 2) + (7 \times 4 - 2 \times 2)}$ ?  
 1.  $\frac{11}{4}$       2.  $\frac{5}{4}$       3. 0      4.  $\frac{15}{4}$
62. If the volumes of two cubes are in the ratio of 64:125, then what is the ratio of their total surface areas?  
 1. 9 : 16      2. 4 : 5      3. 16 : 25      4. 64 : 125
63. The average of 13 numbers is 42. If a 14th number is included, then the average becomes 44. What is the 14th number?  
 1. 70      2. 62      3. 66      4. 68
64. Radius of base of a right circular cone and a sphere is each equal to r. If the sphere and the cone have the same volume, then what is the height of the cone?  
 1. 7r      2. 4r      3. 2r      4. 3r
65. What is a single discount equivalent to two successive discounts of 10% and 15%?  
 1. 21.5%      2. 23.5%      3. 25%      4. 26.5%

66. Selling price of an article is  $\frac{8}{7}$  of cost price. What is the profit percentage?

1.  $\frac{100}{9}$       2.  $\frac{100}{11}$       3.  $\frac{100}{8}$       4.  $\frac{100}{7}$

67. What is the HCF of  $2^3 \times 3^4$  and  $2^5 \times 3^2$ ?  
 1.  $2^5 \times 3^3$       2.  $2^3 \times 3^4$       3.  $2^3 \times 3^2$       4.  $2^5 \times 3^4$
68. A number is first increased by 20% and then reduced by 15%. If the final value is 2040, then what is the initial value of the number?  
 1. 2100      2. 1800      3. 2000      4. 1900

69. The daily average rainfall on 5 days of a week is 30 mm. If the rainfall on 6th and 7th day are 42 mm and 25 mm respectively, then what is the average daily rainfall for the 7 days?  
 1. 31      2. 29.5      3. 33      4. 28.5

70. The Table given below presents the number of books on different subjects kept on separate shelves. Subjects with odd and even numbers are of Arts and Science respectively.

Subjects	Number of books
S1	26
S2	29
S3	31
S4	34
S5	36
S6	38
S7	44

The number of books of S3 is what percent (correct to one decimal place) of the average number of science books?

1. 92.1      2. 91.2      3. 93.1      4. 90.7

71. The table given below shows the number of students having obtained different marks.

Marks	Number of Students
9 – 11	6
11 – 13	5
13 – 15	2
15 – 17	2
17 – 19	5

What is the mean marks per student?

1. 13.5      2. 12.25      3. 15.5      4. 14.25

72. If  $\frac{a}{b} = \frac{3}{4}$ ,  $\frac{b}{c} = \frac{4}{5}$  and  $\frac{c}{d} = \frac{5}{6}$ , then the sum of the numerator

and the denominator (which are coprimes) of  $\left(\frac{a}{d}\right)^{10}$  is:

1. 1025      2. 4097      3. 2049      4. 513

73. A man leaves from P at 6 am and reaches Q at 2 pm on the same day. Another man leaves Q at 8 am and reaches P at 3 pm on the same day. At what time do they meet?

1. 11 : 46 am      3. 10 : 48 am  
 2. 11 : 24 am      4. 11 : 00 am

74. The Table given below presents the number of books on different subjects kept on separate shelves. Subjects with odd and even numbers are of Arts and Science respectively.

Subjects	Number of books
S1	26
S2	29
S3	31
S4	34
S5	36
S6	38
S7	44



What is the ratio of the total number of books on Arts to that of Science?

1. 141 : 97      2. 145 : 93      3. 137 : 101      4. 149 : 89

75. Two teachers A and B can complete an academic work in 10 days and 15 days respectively. Then started the work together, but A left after 5 days and another teacher C joined, who alone can complete the work in 60 days. In how many days the work got completed?

1. 7                      2. 5                      3. 6                      4. 2

---

**General Awareness**

---

76. Which article of Indian constitution deals with discrimination against any Indian citizen on various grounds?

1. Article 11                      3. Article 13  
2. Article 19                      4. Article 15

77. Silver Fiber Revolution is associated to:

1. Leather      2. Oil seeds      3. Jute      4. Cotton

78. The Indian Standard Time is calculated from the clock tower of \_\_\_\_\_.

1. Hamirpur                      3. Mirzapur  
2. Rampur                      4. Sambalpur

79. Who among the following was the first Indian woman to swim across the English Channel?

1. Arati Saha                      3. Nisha Millet  
2. Ujwala Rai                      4. Karnam Malleswari

80. The name of UTI Bank was changed to \_\_\_\_\_ in 2007.

1. HDFC Bank                      3. Centurion Bank  
2. IDBI Bank                      4. Axis Bank

81. Which party government announced the formation of a second backward classes commission in 1978?

1. Indian National Congress Party  
2. Bharatiya Janata Party  
3. Janata Party  
4. United Democratic Party

82. Who is the writer of 'Becoming'?

1. Jhumpa Lahiri                      3. Michelle Obama  
2. Sudha Murthy                      4. Hillary Clinton

83. Blue jay or Indian Roller is the state bird of how many Indian states?

1. 4                      2. 5                      3. 2                      4. 3

84. The upper part of the respiratory tract is provided with small hair-like structures called \_\_\_\_\_.

1. bronchi      2. cilia      3. villi      4. alveoli

85. Which of the following was declared as world heritage site by UNESCO in 2018?

1. Rani ki vav  
2. The Victorian Gothic and Art Deco Ensembles of Mumbai  
3. Historic city of Ahmedabad  
4. The Architectural Works of Le Corbusier

86. Which of the following gases causes explosion in coal mines?

1. Carbon dioxide                      3. Butane  
2. Nitrogen                      4. Methane

87. What is the contribution of agriculture sector in GDP of India in 2017-18?

1. 0.154                      2. 0.192                      3. 0.16                      4. 0.171

88. Pin valley National park is situated in:

1. Andhra Pradesh                      3. Himachal Pradesh  
2. Arunachal Pradesh                      4. Madhya Pradesh

89. Bhawai is a folk dance of which state?

1. Haryana                      3. Gujarat  
2. Maharashtra                      4. Rajasthan

90. Who is known as the father of Blue Revolution in India?

1. Verghese Kurien                      3. Hiralal Chaudhuri  
2. Sam Pitroda                      4. M.S. Swaminathan

91. Dibyendu Barua is associated with which of the following sports?

1. Chess                      2. Hockey                      3. Snooker                      4. Tennis

92. Which of the following is not a nuclear power station?

1. Ramagundam                      3. Naraura  
2. Rawat Bhata                      4. Kalpakkam

93. When did the Quit India Movement Start?

1. 1930                      2. 1942                      3. 1932                      4. 1940

94. Which of the following temple is built by Rastrakutas Dynasty?

1. Kailash Temple                      3. Brihadeshwara Temple  
2. Adi Kumbeswarar                      4. Chennakeshava Temple

95. In which field 'Saraswati Samman' award is given?

1. Music                      3. Journalism  
2. Literature                      4. Dance

96. Name the Indian sprinter who won the gold medal in women's 100m in World Universiade, 30th Summer University Games held in Naples, Italy?

1. Dutee Chand                      3. Hima Das  
2. Pinki Pramanik                      4. Santhi Soundara

97. \_\_\_\_\_ is the study of ancient plants, like mosses, that grow in moist, humid environments.

1. Ethnobotany                      3. Palynology  
2. Bryology                      4. Dendrology

98. Which of the following committees recommended inclusion of fundamental duties?

1. Tarapore Committee  
2. Radha Krishnan Committee  
3. Balwantraji Mehta Committee  
4. Swaran Singh Committee

99. Who became the Nawab of Bengal after Alivardi Khan?

1. Sarfaraaz Khan  
2. Shuj-ud-din Muhammad Khan  
3. Siraj-ud-Daulah  
4. Mir Zafar

100. Who among the following was popularly known as the 'Parrot of India'?

1. Tansen                      3. Amir Khosrow  
2. Ibn Battuta                      4. Ziauddin Barani

### Answer Key

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

### Answers with Explanations

1. **Option (3) is correct.**  
The correctly spelt word is 'haughtiness' which implies arrogance. There is no word as 'hotiness'.
2. **Option (3) is correct.**  
The correctly spelt word is 'Grammar'.
3. **Option (1) is correct.**  
Her parents always encouraged her in her studies. 'Encouraged' means to 'give support'. The parents interested/impressed/expected' their daughter in studies hardly makes sense.
4. **Option (1) is correct.**  
Fertile is productive. So 'barren', meaning unproductive is appropriate.
5. **Option (2) is correct.**  
Director is a manager of an organisation, company, college, etc. Acrobat is a person who entertains people by doing difficult and skilful physical things. Hypocrite is one who pretends to be what he is not.
6. **Option (4) is correct.**  
Acute implies sharp or severe in effect. The opposite of sharp is blunt. Therefore, 'blunt' is the antonym of 'acute'.
7. **Option (4) is correct.**  
'Deepen' refers to something more strongly felt or experienced, that is to intensify.
8. **Option (1) is correct.**  
The idiom 'the ball is in (one's) court' means that it is his or her responsibility to take the next action or decision in a situation. Example: Both Rimi and Ritu have given their best shot, now the ball is in the court of the team captain to choose one of them. So, the idiom implies 'be responsible for further action'.
9. **Option (2) is correct.**  
The entry gates were closed before we could enter in. The preposition 'before' suits the blank because it is apparent that the people could not enter the gate, as the gate got closed.
10. **Option (4) is correct.**  
'To made a new' will be replaced by 'to make a new'. This is so because the infinitive form 'to' takes the base form of the verb. I told the tailor to make a new dress for me.
11. **Option (2) is correct.**  
The sentence given is grammatically correct. As evident in the sentence, it is not known where the lady is standing - in a closed space or in open. So, both 'in' and 'at' can be used.
12. **Option (4) is correct.**  
The idiom 'in a nutshell' means 'in a very brief statement'. So the speaker requests the listener to narrate the story briefly. The sentence given is grammatically correct.
13. **Option (1) is correct.**  
He did not like the novel, nor did I. In case of inversion, (sentence or a clause starts with an adverb), a helping verb is used before the subject.
14. **Option (1) is correct.**  
Dormitory- a large room containing numerous beds.  
Hostel- a large house where people can stay free or cheaply  
Quarter- an area of a town where a particular group of people live or work or where a particular activity happens.  
Convent- A place where nuns live and work
15. **Option (1) is correct.**  
It was not possible for us to understand her. The subject of the sentence is -it, while the object of the preposition 'for' should be 'us'. 'We' stands for the subject, not object.
16. **Option (2) is correct.**  
While offering you a drink one would say "want some water?"  
We can use would as a more formal or polite alternative to will in requests/questions. Would you like some water?
17. **Option (2) is correct.**  
Courage implies daring/valour. All options, except (2) are antonyms. So 'valour' is the synonym.
18. **Option (3) is correct.**  
We must start now or it will be too late. 'Until' suggests up to a certain point of time; 'Unless' implies 'except if'. 'But' is used to suggest contrast. While 'or' is a conjunction of option that introduces the consequences of something.
19. **Option (3) is correct.**  
Humanity can be defined as the quality of being human. 'Defined' is correct because the modal verb 'can be' requires the past participle.
20. **Option (1) is correct.**  
the peculiar nature of man ... 'Of' is the correct preposition as per the context of the sentence because we need a word which means belonging to something; being part of something.
21. **Option (4) is correct.**  
the peculiar nature of man, by which he is distinguished from other beings. The preposition 'from' distinguishes a characteristic that makes two people, animals or things different.
22. **Option (2) is correct.**  
Being human does not mean that an individual possesses humanity.
23. **Option (3) is correct.**  
One of the most outstanding examples of extraordinary humanity. The indefinite pronoun 'one of' will take the superlative degree. This is so because Mother Teresa is being hailed as an example of extraordinary humanity in a human being. Therefore, 'most' is correct.

24. **Option (4) is correct.**

The father with his children was expected to attend the function. When two subjects are conjoined with 'as well as, with, alongwith, together with' then the verb used will be according to the first subject. Since the first subject is 'father' the verb will be singular (was).

25. **Option (2) is correct.**

'Bend over backwards' means to try extremely hard to help or to please someone. Radha bent over backwards to help her friends, but they were so ungrateful that they hardly thanked her. Thus, the correct meaning is : 'to exert a lot of effort towards some end'.

26. **Option (3) is correct.**

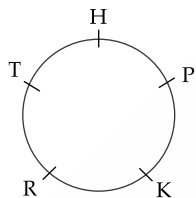
As per the statements given in the question, following arrangement can be made:

Position	Article
1.	Bat
2.	Ball
3.	Table
4.	Chair
5.	Fan

Hence, the ball is at the second position from the top.

27. **Option (4) is correct.**

As per the statements given in the question, following arrangement can be made.



Hence, R sits to the immediate left of K.

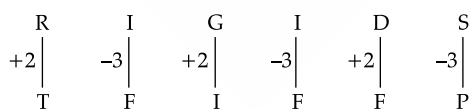
28. **Option (4) is correct.**

Point to remember:

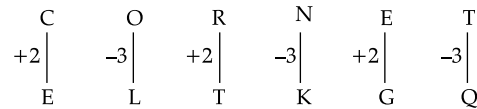
The positional values of alphabets.

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

Given that: RIGIDS' is written as 'TFIFFP'

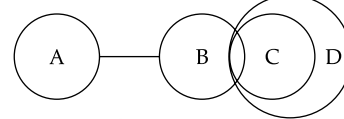


Similarly, 'CORNET' can be written as:



29. **Option (1) is correct.**

As per the statements, following Venn diagram can be made:



Conclusion I - Some D are B.

As given, all C are D and some C are B, it implies some D are B as well.

So, this conclusion follows.

Conclusion II - Some B are C.

As given, some C are B, it implies some B are C as well.

So, conclusion II also follows.

Conclusion III - All C are B.

As given, some C are B, so this conclusion is possible but not definite.

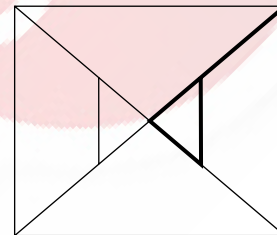
Hence, both conclusions I and II follows.

30. **Option (4) is correct.**

Given figure:



The embedded figure is highlighted in the option no.4 below.



31. **Option (1) is correct.**

Points to remember:

Positional values of the alphabets:

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

Given that:

'ROK' is written as '44'

$$R + O + K = 18 + 15 + 11 = 44$$

and

'MIG' is written as '29'.

$$M + I + G = 13 + 9 + 7 = 29$$

Similarly,

'TAL' can be written as: -

$$T + A + L = 20 + 1 + 12 = 33$$

Hence, 33 is the correct answer.

**32. Option (3) is correct.**

Given equation:

$$73 - 13 \times 42 \div 14 + 56 = 56$$

Upon checking option 3 and interchanging - and +, we get

$$73 + 13 \times 42 \div 14 - 56 = 56$$

Applying BODMAS

$$73 + 13 \times 3 - 56 = 56$$

$$73 + 39 - 56 = 56$$

$$112 - 56 = 56$$

$$56 = 56$$

**33. Option (3) is correct.**

Given pair:

$$35 : 66 :: 29 : ?$$

The pattern is as follows:

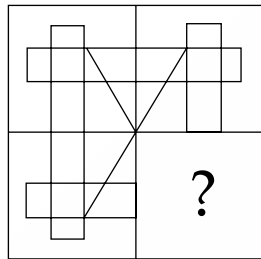
$$35 + 31 = 66$$

Similarly,

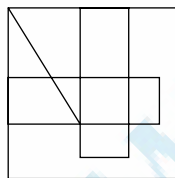
$$29 + 31 = 60$$

**34. Option (2) is correct.**

Given figure:



Follow the pattern and the symmetry.



**35. Option (2) is correct.**

The pattern followed here is:

The number of letters of the word is the code of the word

'PING' is written as '4'

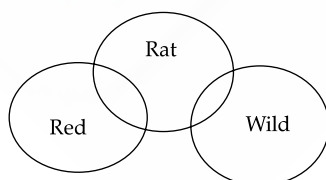
'METAL' is written as '5'.

Similarly,

'STEADYS' can be written as: 7

**36. Option (2) is correct.**

As per the statements, following venn diagram can be made:



I. Some wild are rat. .... True

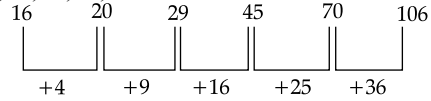
II. All wild are rat. .... False (It is possible but not definite)

III. Some red are wild. .... False (It is possible but not definite)  
Hence, only conclusion 1 follows.

**37. Option (1) is correct.**

Given series:

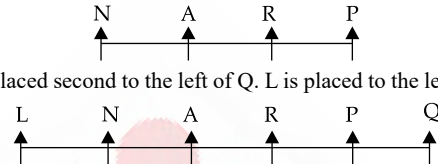
$$16, 20, 29, 45, 70, ?$$



Hence, 106 is the correct answer.

**38. Option (1) is correct.**

Given that: N is placed to the immediate left of A. P is placed second to the right of A. P is placed to the immediate right of R.



R is placed second to the left of Q. L is placed to the left of N.

Hence, Laptop N is placed to the immediate right of L.

**39. Option (1) is correct.**

Given equation:

$$16 \div 9 + 4 \times 8 = 34$$

Upon checking the option no. 4 and interchanging the signs, we get:

$$16 + 9 \div 4 \times 8 = 34$$

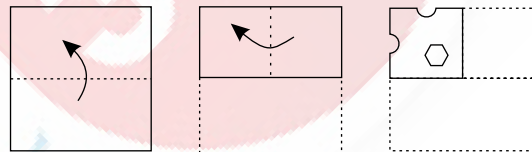
$$16 + 18 = 34$$

$$34 = 34$$

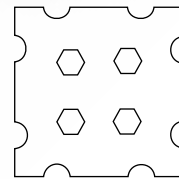
Hence, it is the correct option.

**40. Option (2) is correct.**

Given figure:



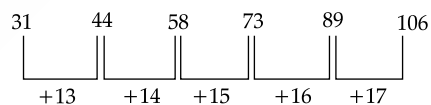
Follow the pattern and symmetry.



**41. Option (2) is correct.**

Given series:

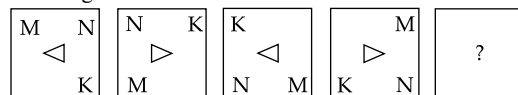
$$31, 44, 58, 73, 89, ?$$



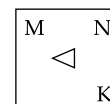
Hence, 106 is the correct answer.

**42. Option (4) is correct.**

Given figure:



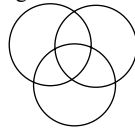
Follow the pattern and the sequence





43. Option (1) is correct.

Given that: Painter, Lawyer, Singer.  
A painter can be a lawyer or singer. A lawyer can be a painter or singer and a singer can be a painter or lawyer.  
Hence, the best venn diagram which can identify this is:



44. Option (2) is correct.

Given that: AR, CU, EX, GA, ?  
The pattern followed here is:  
 $A + 2 = C, C + 2 = E, E + 2 = G, G + 2 = I$   
 $R + 3 = U, U + 3 = X, X + 3 = A, A + 3 = D$   
Hence, ID is the correct answer.

45. Option (1) is correct.

Given that:  
Five: Pentagon  
The relationship between the given pair is that there are five sides in a pentagon.  
Similarly, there are four sides in a rectangle.  
Hence, Four : Rectangle is the correct answer.

46. Option (2) is correct.

Given that:  
7 6 3 48  
4 9 8 63  
2 5 7 ?  
The pattern followed here is:  
Rowwise:  
 $(1^{st} \text{ number} + 2^{nd} \text{ number} + 3^{rd} \text{ number}) \times 3 = 4^{th} \text{ number}$   
Hence,  
Row 1  
 $(7 + 6 + 3) \times 3 = 48$   
Similarly,  
Row 3  
 $(2 + 5 + 7) \times 3 = 42$

47. Option (4) is correct.

Given that: 'GROUND' is written as 'BMJPIY'.  
The pattern followed here is:  
G R O U N D  
-5 | -5 | -5 | -5 | -5 |  
B M J P I Y

Similarly, 'FREAK' can be written as:  
F R E A K  
-5 | -5 | -5 | -5 |  
A M Z V F

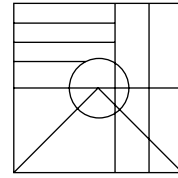
48. Option (1) is correct.

Given that:  
Colour: Red :: Profession : ?  
As red is an example of color  
Similarly, Lawyer is an example of profession.

49. Option (1) is correct.

Given image:

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



50. Option (1) is correct.

Given pair:  
JT : NX  
The pattern followed here is:  
Each letter is increased by 4 positional values.  
So,  
 $J + 4 = N$   
 $T + 4 = X$   
Similarly,  
Upon checking option 1, we get  
 $T + 4 = X$   
 $P + 4 = T$

51. Option (1) is correct.

Time taken to travel 15 km =  $\frac{15}{30} = \frac{1}{2}$  h.  
Time taken to travel 25 km =  $\frac{25}{10} = \frac{5}{2}$  h.  
Total time =  $\frac{1}{2} + \frac{5}{2} = 3$ h  
Total distance = 15 km + 25 km = 40 km  
Average speed =  $\frac{\text{Total distance}}{\text{Total time}}$   
 $= \frac{40}{3}$  km/h.

52. Option (3) is correct.

Given that: P : Q = 5 : 2  
Let P = 5x and Q = 2x  
Now,  $\frac{2P - 3Q}{3P - 5Q} = \frac{2(5x) - 3(2x)}{3(5x) - 5(2x)}$   
 $= \frac{10x - 6x}{15x - 10x} = \frac{4x}{5x} = \frac{4}{5} = 4 : 5$

53. Option (1) is correct.

The average number of books  
 $= \frac{26 + 29 + 31 + 34 + 36 + 38 + 44}{7}$   
 $= \frac{238}{7} = 34$

Number of books of S1 = 26

Ratio =  $\frac{26}{34} = \frac{13}{17} = 13 : 17$

54. Option (4) is correct.

Given that: P = ₹ 1200, T = 2 years and R = 20%  
Since compounded yearly

$$\therefore CI = P \left[ \left( 1 + \frac{R}{100} \right)^n - 1 \right]$$

$$= 1200 \left[ \left( 1 + \frac{20}{100} \right)^2 - 1 \right]$$

$$= 1200 \left[ \left( \frac{6}{5} \right)^2 - 1 \right]$$

$$= 1200 \left[ \left( \frac{36}{25} \right) - 1 \right]$$

$$= 1200 \times \frac{11}{25}$$

$$= 48 \times 11 = ₹ 528$$

**55. Option (2) is correct.**

Let the Principle be ₹ P and the time be  $n$  years  
According to question, SI = P and R =  $n$

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

$$= P = \frac{P \times n \times n}{100}$$

$$= n^2 = 100 = n = \sqrt{100} = 10 \text{ years.}$$

**56. Option (3) is correct.**

Since A can fill a tank in 6 hours.

$$\therefore \text{A can fill a tank in 1 hour} = \frac{1}{6} \text{ part}$$

Similarly,

$$\text{B can fill a tank in 1 hour} = \frac{1}{8} \text{ part}$$

A, B and C together can fill the tank in 1 hour

$$= \frac{1}{12} \text{ part}$$

$\therefore$  C alone can empty a tank in 1 hour

$$= \frac{1}{12} - \left( \frac{1}{6} + \frac{1}{8} \right)$$

$$= \frac{1}{12} - \left( \frac{4+3}{24} \right)$$

$$= \frac{1}{12} - \frac{7}{24} = \frac{2-7}{24} = \frac{-5}{24}$$

$\therefore$  C alone can empty a tank in =  $\frac{24}{5}$  hours

$$= 4\text{h and } 48 \text{ min}$$

**57. Option (2) is correct.**

Given that SP = ₹ 320 and Loss = 20%

$$\therefore \text{CP} = \frac{\text{SP} \times 100}{100 - \text{Loss}\%} = \frac{320 \times 100}{100 - 20}$$

$$= \frac{320 \times 100}{80} = ₹ 400$$

$$\text{New SP} = \text{CP} \left( 1 + \frac{\text{gain}\%}{100} \right)$$

$$= 400 \left( 1 + \frac{20}{100} \right) = 400 \times \frac{6}{5}$$

$$= ₹ 480$$

**58. Option (4) is correct.**

Given that: Diameter = 2 mm =  $\frac{2}{10}$  cm = 0.2 cm

$$r = 0.1 \text{ cm.}$$

The volume of each droplet =  $\frac{4}{3} \pi r^3$

$$= \frac{4}{3} \times \frac{22}{7} \times (0.1)^3$$

Total volume of droplets

$$\frac{4}{3} \times \frac{22}{7} \times \pi R^3 = \frac{0.1}{100} \times 1.728 \times 10^6 \times \frac{4}{3} \times \frac{22}{7} \times (0.1)^3$$

$$\Rightarrow R^3 = 1.728 \times 10^6 \times \frac{1}{1000} \times \frac{1}{1000}$$

$$\Rightarrow R^3 = 1.728$$

$$\Rightarrow R = \left( \frac{1.728}{1000} \right)^{\frac{1}{3}} = 1.2$$

$$\text{Diameter} = 2R = 2.4 \text{ cm.}$$

**59. Option (2) is correct.**

Let the income of Pawan and Sunil be  $4x$  and  $3x$  respectively.  
And the monthly expenditures of Pawan and Sunil be  $3y$  and  $2y$  respectively.

$\therefore$  According to question

$$4x - 3y = 4000 \quad \dots(i)$$

$$3x - 2y = 6000 \quad \dots(ii)$$

Now, subtract  $3 \times (ii)$  from  $2 \times (i)$

$$8x - 6y = 8000$$

$$\frac{9x - 6y = 18000}{-x = -10000}$$

$$-x = -10000$$

$$x = 10000$$

$$\text{Hence, the sum of monthly incomes} = 4x + 3x = 7x = ₹ 70000$$

**60. Option (4) is correct.**

Given equation:

$$32 \div 4 \text{ of } 2 \times 3 [5 \text{ of } 6 - \{7 \text{ of } 8 (10 + 6 \text{ of } \frac{5}{6} \div 5 - 1) \div 80\}]$$

$$= 7 \times 3 \div 2$$

$$= 32 \div 8 \times 3 + \left[ 30 - \left\{ 56 \left( 10 + \frac{5}{5} - 1 \right) \div 80 \right\} \right] - 7 \times 3 \times \frac{1}{2}$$

$$= 4 \times 3 + [30 - \{56(10 + 1 - 1) \div 80\}] - \frac{21}{2}$$

$$= 12 + [30 - \{560 \times \frac{1}{80}\}] - \frac{21}{2}$$

$$= 12 + [30 - 7] - 10.5$$

$$= 12 + 23 - 10.5 = 35 - 10.5$$

$$= 24.5$$

**61. Option (2) is correct.**

$$\frac{72 \div 9 + 3 - (2 \times 3) + 5 \text{ of } 3 - (1 + 5 \times 2 - 2)}{8 \div 4 + 2 - (6 \times 8 \div 2) + (7 \times 4 - 2 \times 2)}$$

$$= \frac{8 + 3 - 6 - 6 + 15 - (1 + 10 - 2)}{2 + 2 - (6 \times 4) + (28 - 4)}$$

$$= \frac{26 - 12 - 9}{4 - 24 + 24} = \frac{5}{4}$$

**62. Option (3) is correct.**

The ratio of total volumes of two cubes

$$\frac{a_1^3}{a_2^3} = \frac{64}{125} \Rightarrow \frac{a_1}{a_2} = \frac{4}{5}$$

The ratio of total surface areas

$$= \frac{6a_1^2}{6a_2^2} = \left(\frac{a_1}{a_2}\right)^2 = \left(\frac{4}{5}\right)^2 = 16 : 25$$

**63. Option (1) is correct.**

Sum of 13 numbers =  $13 \times 42 = 546$

Sum of 14 numbers =  $14 \times 44 = 616$

$\therefore$  14<sup>th</sup> number =  $616 - 546 = 70$

**64. Option (2) is correct.**

Since, the radius and volume of a right circular cone and a sphere are equal:

$\therefore$  Volume of the cone = volume of the sphere

$$\frac{1}{3} \pi r^2 h = \frac{4}{3} \pi r^3$$

$$\Rightarrow h = 4r$$

**65. Option (2) is correct.**

Let the marked price be ₹ 100

$$\begin{aligned} \therefore \text{SP} &= 100 \left(1 - \frac{10}{100}\right) \left(1 - \frac{15}{100}\right) \\ &= 100 \times \frac{9}{10} \times \frac{17}{20} = \frac{153}{2} \\ &= 76.5 \end{aligned}$$

$\therefore$  Single discount =  $100 - 76.5 = 23.5\%$

**66. Option (4) is correct.**

Let the cost price be ₹  $x$ .

$$\therefore \text{SP} = \frac{8x}{7}$$

$$\therefore \text{Profit} = \frac{8x}{7} - x = \frac{1}{7}x$$

$$\text{Profit \%} = \frac{\frac{1}{7}x \times 100}{x} = \frac{100}{7}\%$$

**67. Option (3) is correct.**

H.C.F of  $2^3 \times 3^4$  and  $2^5 \times 3^2$

$$= 2^3 \times 3^2$$

( $\therefore$  The lowest power of 2 is 3 and power of 3 is 2).

**68. Option (3) is correct.**

Let the initial value of number be  $x$ .

$$\begin{aligned} \therefore 2040 &= x \left(1 + \frac{20}{100}\right) \left(1 - \frac{15}{100}\right) \\ &= x \times \frac{6}{5} \times \frac{17}{20} \\ \therefore x &= \frac{2040 \times 5 \times 20}{6 \times 17} \\ &= 2000 \end{aligned}$$

**69. Option (1) is correct.**

Sum of rainfall on 5 days =  $5 \times 30 = 150$  mm

Sum of rainfall on 7 days =  $150 + 42 + 25 = 217$

$\therefore$  Average rainfall on 7 days =  $\frac{217}{7} = 31$  mm

**70. Option (1) is correct.**

$$\begin{aligned} \text{Average number of science books} \\ &= \frac{29 + 34 + 38}{3} = \frac{101}{3} \end{aligned}$$

Number of books of S3 = 31

Percentage of the number of books of S3

$$= \frac{31 \times 3 \times 100}{101} = 92.1\%$$

**71. Option (1) is correct.**

C.I	No. of students ( $f_i$ )	$x_i$	$x_i f_i$
9-11	6	10	60
11-13	5	12	60
13-15	2	14	28
15-17	2	16	32
17-19	5	18	90
	$\Sigma f_i = 20$		$\Sigma x_i f_i = 270$

$$\therefore \text{Mean} = \frac{\Sigma x_i f_i}{\Sigma f_i} = \frac{270}{20} = 13.5$$

**72. Option (1) is correct.**

$$\therefore \frac{a}{b} = \frac{3}{4}$$

$$\Rightarrow \frac{b}{c} = \frac{4}{5}$$

$$\Rightarrow \frac{c}{d} = \frac{5}{6}$$

$$\therefore a : b : c : d = 3 : 4 : 5 : 6$$

$$\text{Now, } \left(\frac{a}{d}\right)^{10} = \left(\frac{3}{6}\right)^{10} = \left(\frac{1}{2}\right)^{10} = \frac{1}{2^{10}}$$

The sum of the numerator and the denominator =  $2^{10} + 1 = 1025$

**73. Option (3) is correct.**

$M_1$  : 6 am  $\xrightarrow{\hspace{10em}}$  2 pm  $\rightarrow$  Time = 8

P Q

$M_2$  : 3 pm  $\xleftarrow{\hspace{10em}}$  8 am  $\rightarrow$  Time = 7

Let PQ =  $x$  m

Now speed of man ( $M_1$ ) =  $\frac{x}{8}$

Speed of man ( $M_2$ ) =  $\frac{x}{7}$

Let them meet at  $t$  am

$$\therefore (t-6) \times \frac{x}{8} + (t-8) \times \frac{x}{7} = x$$

$$\Rightarrow 7t - 42 + 8t - 64 = 56$$

$$\Rightarrow 15t = 162$$

$$\therefore t = \frac{162}{15} = 10 : 48 \text{ am.}$$

**74. Option (3) is correct.**

The total number of arts books =  $26 + 31 + 36 + 44 = 137$

The total number of science books =  $29 + 34 + 38 = 101$

Hence, ratio =  $137 : 101$

**75. Option (1) is correct.**

A can do the academic work in one day =  $\frac{1}{10}$  parts

B can do the academic work in one day =  $\frac{1}{15}$  parts

C can do the academic work in one day =  $\frac{1}{60}$  parts

A and B together can do the academic work in one day

$$= \frac{1}{10} + \frac{1}{15}$$

$$= \frac{3+2}{30} = \frac{1}{6} \text{ parts}$$

A and B can do the work in 5 days =  $\frac{5}{6}$  parts

Remaining work =  $1 - \frac{5}{6} = \frac{1}{6}$  parts

Which is completed by B and C.

∴ B and C can do the work in one day

$$= \frac{1}{15} + \frac{1}{60} = \frac{4+1}{60} = \frac{1}{12} \text{ part}$$

∴ B and C can do  $\frac{1}{12}$  part of work in 1 day

∴ B and C can do 1 part of work in 12 day

∴ B and C can do  $\frac{1}{6}$  part of work in =  $12 \times \frac{1}{6} = 2$  days

Total days to complete =  $5 + 2 = 7$  days

**76. Option (4) is correct.**

Article 15 of Indian constitution deals with discrimination against any Indian citizen on various grounds. It applies Article 14's general principle of equality in specific situations by forbidding classifications made on protected grounds. It prohibited discrimination on five grounds: religion, race, caste, sex or place of birth. No person in India can be denied the use of tanks, wells, bathing ghats, roads and sites of public resort that are created and managed fully or partially by the government.

**77. Option (4) is correct.**

Silver Fiber Revolution is associated to Cotton. Its name is derived from cotton fiber's silvery, wasp like appearance. The silver revolution was started in India by Late BV Rao who was the founder of the private sector company 'Venkys'.

**78. Option (3) is correct.**

Indian Standard Time is calculated on the basis of the 82.5°E longitude, roughly located in Mirzapur, Uttar Pradesh. In 1905, the meridian passing east of Allahabad was declared as a standard time zone for British India and was declared as IST in 1947 for the dominion of India.

**79. Option (1) is correct.**

Arati Saha was the first Indian woman to swim across English Channel. She was an Indian-Bengali long-distance swimmer, best known for becoming the first Asian woman to swim across the English Channel on 29<sup>th</sup> September 1959 when she was nineteen years old.

**80. Option (4) is correct.**

The name of UTI Bank was changed to Axis bank ltd on 30<sup>th</sup> July 2007. The Bank changed their name to avoid confusion with other unrelated entities with similar name. Now it is third largest private sector bank in India offering entire spectrum of financial services for personal & corporate banking.

**81. Option (3) is correct.**

Janta party announced the formation of a second backward class commission in 1978. It was headed by B.P. Mandal. Hence it was popularly called the Mandal Commission. Morarji Desai was also the first Prime Minister to head India's first non-Congress Government.

**82. Option (3) is correct.**

The famous book 'Becoming' is written by Michelle Obama, former First Lady of the United States. The book shares Obama's balance between her position as the first African American First Lady of the United States of America, her motherly duties, and marital commitments. This book goes through almost every aspects of her extraordinary life.

**83. Option (4) is correct.**

Blue jay or Indian roller (Neelkanth) is the state bird of three Indian states - Odisha, Telangana, and Karnataka. The Indian roller is a bulky and broad-winged bird with a large head and short neck and legs. It is 13 inch long and is striking blue in colour.

**84. Option (2) is correct.**

The upper part of the respiratory tract is provided with small hair-like structures called cilia. The cilia on the mucous membrane move the particles trapped in the mucus out of the nose. Inhaled air is moistened, warmed, and cleansed by the tissue that lines the nasal cavity. Scattered throughout the cilia are goblet cells that secrete mucus which helps protect the lining of the bronchus and trap microorganisms.

**85. Option (2) is correct.**

The World Heritage Committee on June 30, 2018 declared the Victorian and Art Deco Ensembles of Mumbai as the World Heritage Property and also declared it as world heritage site by UNESCO in 2018. It is a collection of 19<sup>th</sup>-century Victorian Revival public and 20<sup>th</sup>-century Mumbai Art Deco private buildings in the Fort precinct of Mumbai, Maharashtra, India.

**86. Option (4) is correct.**

There are two main types of coalmine explosions: methane and coal dust. Methane explosions occur when methane gas from mining is built up and cannot escape because of high pressure. Second is coal dust explosion. A mine explosion caused by the ignition of fine coal dust. An explosion involving coal dust alone is relatively rare.

**87. Option (4) is correct.**

The agriculture sector of India has occupied almost 43% of India's geographical area. It is worthwhile to mention that around 85% of the population was living in villages, and the only means of subsistence was agriculture. The contribution of agriculture sector in GDP of India in 2017-18 was 0.171.

**88. Option (3) is correct.**

Pin Valley National Park is situated in in the cold desert area of Spiti Sub-Division of Lahaul & Spiti District of Himachal Pradesh. Altitude-wise, the national park spans between 3,300 to 6,632 m and offers a myriad of flora & fauna for nature seekers. It is India's highest cold valley National Park.

**89. Option (4) is correct.**

Bhawai or Bhavai is a genre of folk dance popular in Rajasthan state in northern India. It is a unique stage art form, performed with 'Bhava', meaning expression revealing emotions. Bhawai is performed with enormous skill this dance is an exciting pot balancing dance of the snake charmer tribe.

**90. Option (3) is correct.**

Hiralal Chaudhuri and Arun Krishnan are regarded as the Father of Blue revolution in India. Blue Revolution also called as Neel or Nili Kranti Mission in India was launched in 1985-1990 during the 7<sup>th</sup> Five-Year Plan. The fundamental goal of the Blue Revolution was to develop, manage, and promote fisheries to double the farmers' income.

**91. Option (1) is correct.**

Dibyendu Barua is an Indian chess grandmaster who is a three-time Indian Chess Champion. He is famous for being the Second Grandmaster from India, only to follow the legendry



Vishwanathan Anand.

**92. Option (1) is correct.**

From the given options, only Ramagundam is not a nuclear power station. The Rajasthan Atomic Power Station is located at Rawatbhata. Narora Atomic Power Station is a nuclear power plant located in Narora, in Uttar Pradesh. Madras Atomic Power Station (MAPS) located at Kalpakkam, Chennai. It is also India's first completely nuclear power station.

**93. Option (2) is correct.**

On 8th August 1942, the Quit India Movement started at the Bombay session of the All India Congress Committee by Mahatma Gandhi. The Quit India Movement is also known as the India August Movement or August Kranti. The All India Congress Committee launched a mass protest demanding what Gandhi called 'An Orderly British Withdrawal from India'.

**94. Option (1) is correct.**

Kailash Temple was built by Krishna I of the Rashtrakuta Dynasty. It is one of the most spectacular temples in the Ellora caves. The Kailash Temple is the sixteenth cave, and it is one of the 32 cave temples and monasteries forming the magnanimous Ellora Caves.

**95. Option (2) is correct.**

Saraswati Samman is a Literature award given by Birla Foundation. This award is given annually for outstanding prose or poetry literary works in any 22 Indian languages listed in Schedule VIII of the Indian Constitution. The first Saraswati Samman was given to Hindi litterateur Dr. Harivansh Rai Bachchan for his four-volume autobiography.

**96. Option (1) is correct.**

Dutee Chand is an Indian professional sprinter and a national

champion in the women's 100 meters event. She has won the gold medal in women's 100-meter sprint at the 30<sup>th</sup> Summer University Games in Napoli, Italy becoming the first Indian to win do so.

**97. Option (2) is correct.**

Bryology is the branch of botany concerned with the scientific study of bryophytes. It is the study of ancient plants, like mosses, that grow in moist, humid environments. It is the study of mosses, liverworts, and hornworts.

**98. Option (4) is correct.**

Under the chairmanship of Sardar Swaran Singh, Swaran Singh Committee recommended inclusion of fundamental duties. The Fundamental Duties of citizens were added to the Constitution by the 42<sup>nd</sup> Amendment in 1976, after the recommendations of the Committee.

**99. Option (3) is correct.**

Siraj-ud-Daulah became nawab of Bengal on the death of Alivardi Khan in 1756. Siraj-ud-Daulah, was the last independent Nawab of Bengal, reigning from 1756 to 1757. Siraj ud-Daulah's strong resistance against the British led to the famous 'Battle of Plassey,' during which the Nawab of Bengal was deceived by a group of his own men, headed by Mir Jafar.

**100. Option (3) is correct.**

Amir Khusro whose original name was Amir Khusrau Dehlavi was an immensely popular Indian Sufi singer and also a poet and as Parrot of India and also known as 'Tuti-e-Hind'. He was a poet historian musician and scholar who is considered an iconic figure in the cultural history of the Indian subcontinent.