Time Allotted- 150 Minutes   **Max marks-** 150

General English

Read the following passage carefully and choose the most appropriate answer to each question out of the four alternatives.

Expedition mountaineering could be viewed as slow and heavy, where climbers may use porters, pack animals, glacier airplanes cooks, multiple carries between camps, usage of fixed lines, etc., Expedition mountaineers still employ the skill sets of the alpine mountaineer, except they have to deal with even higher altitudes, expanded time scale, longer routes, foreign logistics, more severe weather, and additional skills unique to expeditionary climbing. The prevalence of expedition-style climbing in the Himalaya is largely a function of the nature of the mountains in the region. Because Himalaya base camps can take days or weeks to trek to, and Himalayan mountains can take weeks or perhaps even months to climb, a large number of personnel and amount of supplies are necessary. This is why expedition-style climbing is frequently used on large and islolated peaks in the Himalaya. In Europe and North America there is less of a need for expedition-style climbing on most medium-sized mountains. These mountains can often be easily accessed by car or air, are at a lower altitude and can be climbed in a shorter time scale.

1. Which of the following is true?
   1. Expeditionay climbing is popular in the Americans.
   2. Most medium-sized peaks in Europe are accessed by car or air.
   3. Himalayan base camp treks can be completed in a day or two.
   4. European and North American mountains require expanded time scale for climbing.

2. What necessitates the huge amount of supplies and large number of personnel in Himalayan expeditions?
   1. foreign logistics   **3.** expanded time scale
   2. low altitudes   **4.** severe weather condition

3. Which of the following style of mountaineering is considered to be slow and heavy?
   1. sports mountaineering   **3.** alpine mountaineering
   2. expedition mountaineering   **4.** Himalayan mountaineering

4. What accounts for the greater prevalence of expedition mountaineering in the Himalayas?
   1. glacier airplanes
   2. the severe weather condition
   3. the specific nature of mountains
   4. multiple carries between camps

5. Which of the following is best undertaken as expedition mountaineering?
   1. medium-sized mountains
   2. short time scale mountaineering
   3. peaks in Europe and North America
   4. large and isolated peaks

Directions: Four alternatives are given for the Idiom/Phrase underlined in the sentence. Choose the alternative which best expresses the meaning of the Idiom/Phrase.

6. John was <u>as good as his word</u> and came on time for the meeting.
   1. convincing   **3.** able to fulfill his promise
   2. punctual   **4.** a promising young man

7. He came to work looking very <u>off colour</u>.
   1. tired   **2.** unhappy   **3.** worried   **4.** ill

8. I was asked to <u>take a hike</u> for a comment I made.
   1. be quiet   **3.** leave
   2. think   **4.** take a break

Directions: Sentences given with blank to be filled in with appropriate word(s). Four alternatives are suggested for each question. Choose the most appropriate alternative out of the four and indicate it by blackening the corresponding circle in the Answer Sheet.

9. As soon as this workshop is over, I am going to _____ every duty and go <u>on a holiday</u>.
   1. sidetrack   **3.** overthrow
   2. abandon   **4.** close down

10. She _____ great pleasure and satisfaction from cooking.
   1. wants   **2.** has   **3.** draws   **4.** derives

11. Poetry is a _____ form of expression in which the particularity of the word and the image to evoke feeling, assumes great importance.
   1. suppressed   **3.** compressed
   2. patronized   **4.** digressed

12. He was so filled with contempt for the prisoner that he gave him a _____ look.
   1. humiliated   **2.** derisive   **3.** pitying   **4.** hurtful

13. Next summer we're going _____ a trip to Canada.
   1. to   **2.** for   **3.** on   **4.** over

14. Romeo and Juliet's _____ affair is probably the most loved of all times.
   1. secret   3. candid
   2. covert   4. clandestine
15. The _____ towards the school was very steep.
   1. ascend   2. ascent   3. assent   4. accent
16. Some interesting matters _____ in our discussion yesterday.
   1. came up   3. came in
   2. got up   4. came about
17. He loaded the _____ of cotton on the truck.
   1. baskets   2. bales   3. bunches   4. bundles
18. Anything is _____ which is not against the nature of things.
   1. practicable 2. parable   3. probable   4. possible

Directions: A sentence or a part of the sentence is underlined. Below are given alternatives to the underlined part which may improve the sentence. Choose the correct alternative. In case no improvement is needed choose **"No Improvement"**.

19. There are schools in either sides of the road.
   1. school on either side   3. school on either side
   2. no improvement   4. schools on either side
20. Many years have passed since India became free.
   1. no improvement   3. had became free
   2. has became free   4. become free
21. We acted your instructions.
   1. acted over your   3. no improvement
   2. acted upon your   4. acted your very
22. As soon as I called her, she came out of her house.
   1. is coming out   3. come out
   2. no improvement   4. has come out
23. Coding is nothing but putting up information in a given format.
   1. filling up   3. organizing
   2. no improvement   4. putting in

Directions: Some part of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the circle corresponding to the appropriate correct option. If a sentence is free from error, blacken the circle corresponding to **"No Error"** option in the answer Sheet.

24. Could you please maintain silence for a while?
   1. please maintain silence   3. Could you
   2. for a while?   4. No error
25. She hopes to become an engineer after she will complete her education.
   1. an engineer after she   3. She hopes to become
   2. will complete her education.   4. No error
26. Kindly please direct the tourists to the museum.
   1. kindly please   3. to the museum
   2. direct the tourists   4. no error
27. If you stand with me in hour of need, I will never forget you.
   1. no error   3. If you stand
   2. I will never forget you.   4. with me in hour of need
28. At last, he married with a poor girl.
   1. at last   3. no error
   2. he married   4. with a poor girl.
29. Our team played a football match.
   1. played   3. a football match.
   2. our team   4. no error
30. It is better to stay at home than go to market when it is raining.
   1. when it is raining.   3. It is better to stay at home
   2. no error   4. than go to market
31. All the girls students are advised to attend the meeting positively.
   1. attend the meeting positively. 3. all the girls students
   2. no error   4. are advised to
32. The thief had hardly put the cash in his pocket then the owner woke up.
   1. no error   3. then the owner woke up.
   2. the thief had hardly   4. put the cash in his pocket.
33. Bengal tigers are now almost extincted.
   1. Bengal tigers   3. almost extincted.
   2. are now   4. No error

Directions: Out of the four alternatives, choose the one which best expresses the meaning opposite to the given word.

34. scatter
   1. store   2. pile   3. hoard   4. collect
35. peak
   1. inferior   2. deep   3. mount   4. bottom
36. despair
   1. hope   2. sorrow   3. repair   4. empty

Directions: Out of the four alternatives, choose the one which best expresses the meaning of the given word.

37. Exactly
   1. different   2. Precisely   3. Similar   4. Same
38. Answer
   1. Response   2. Speak   3. Question   4. React
39. Pain
   1. Comfort   2. Vibration   3. Ache   4. Throb

Directions: Out of the four alternatives, choose the one which can most appropriately substitute the given word (s) or sentence.

40. The centre of attraction.
   1. cynosure   2. focus   3. custodian   4. point
41. The murder of one's father.
   1. patricide   2. homicide   3. fratricide   4. regicide
42. Overturn in water.
   1. drown   2. swim   3. wreck   4. capsize
43. One whose wife is dead.
   1. widower   2. spinster   3. bachelor   4. widow
44. That cannot be explained.
   1. intolerable   3. irrevocable
   2. inexplicit   4. inexplicable

Directions: Four words are given out of which only one word is correctly spelt. Find the correctly spelt word.

45. 1. hiar   2. hier   3. heir   4. heirr
46. 1. milenium   3. millennium
    2. millennium   4. millenium
47. 1. hygene   2. higene   3. hygiene   4. higiene
48. 1. government   3. guvernment
    2. goverment   4. goverrment
49. 1. skeem   2. scheme   3. skeme   4. sceme
50. 1. sillabus   2. cyllabus   3. syllabus   4. sylabus

General Intelligence & Reasoning

Directions: Find the odd number/letters/word from the given alternatives.

51. 1. HIVW   2. FGKL   3. ACDF   4. TUOP
52. 1. Cricket   2. Chess   3. Football   4. Hockey
53. 1. 23   2. 17   3. 13   4. 63
54. Some equations are solved on the basis of certain system. Find out the correct answer for the unsolved equation on that basis.
   If $12 \times 9 = 810$ and $15 \times 9 = 513$ then $13 \times 8 = ?$
   1. 104   2. 410   3. 411   4. 401

55. A piece of paper is folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.
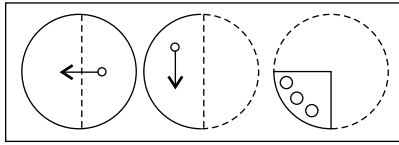
1.

2.

3.

4.

56. If 'LONDON' is coded as MPOEPO. What code is needed for 'DELHI'?

1. DEHLI   **2.** HLDEI   **3.** EFIMJ   **4.** EFMIJ

57. The total age of a mother and her daughter is 60 years. The difference between their ages is 30 years. Find out the age of mother.

1. 40 years   **2.** 55 years   **3.** 45 years   **4.** 50 years

Directions: A series is given with one term missing. Out of the four alternatives, choose the alternative that will complete the series.

58. 5, 7, 11, 17, 25, ?

1. 35   **2.** 32   **3.** 34   **4.** 33

59. BKS, DJT, FIU, HHV, ?

1. IGU   **2.** IGX   **3.** JGW   **4.** IJX

60. One or two statements are given followed by two Conclusions/Assumptions, I and II. You have to consider the statement to be true, even if it seems to be at variance from commonly known facts. You are to decide which of the given conclusions/assumptions can definitely be drawn from the given statement. Indicate your answer.

Statement:
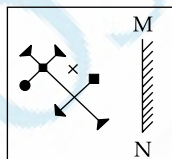
I. All Players are Singers.

II. All Dancers are Singers.

Conclusion:

I. Some Singers are Dancers.

II. Some Dancers are Players.

1. Only conclusion II follows.

2. Both conclusions I and II follow.

3. Only conclusion I follows.

4. Neither conclusion I nor II follows.

61. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

1.

2.

3.

4.

62. Find the missing number from the given responses.

7	3	10
3	4	7
2	7	?
42	84	140

1. 2   **2.** 17   **3.** 9   **4.** 34

Directions: Select the related word/letters/number from the given alternatives.

63. RATE : EATR :: SEAT :?

1. TSEA   **2.** TESA   **3.** TEAS   **4.** TSAE

64. Book : Literature :: ? : ?

1. Man : Beast   **3.** Song : Music

2. Dancer : Musician   **4.** Species : Science

65. 21 : 3 ::574 : ?

1. 97   **2.** 23   **3.** 82   **4.** 113

66. Giant : Dwarf :: Genius : ?

1. Tiny   **2.** Gentle   **3.** Idiot   **4.** Wicked

67. Choose the correct Venn diagram which best illustrates the relationship among Hockey, Cricket, Games.

1.

2.

3.

4.

68. How many triangles are there in the given figure?
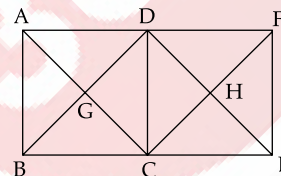
1. 16   **2.** 18   **3.** 8   **4.** 12

69. Which one of the given responses would be a meaningful order of the following?

1. Cutting   **2.** Dish   **3.** Vegetable   **4.** Market
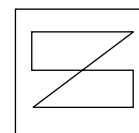
5. Cooking

1. 1, 2, 4, 5, 3   **3.** 3, 2, 5, 1, 4

2. 5, 3, 2, 1, 4   **4.** 4, 3, 1, 5, 2

70. Out of the four words given, choose the word which cannot be formed using the letters of the following word.

TRANSLATION

1. Ratio   **2.** Nation   **3.** Transmit   **4.** Transit

71. From the given answer figures, select the one in which the question figure is hidden/embedded.

1.

2.

3.

4.

72. 'Z' starred walking straight towards South. He walked a distance of 15 metres and then took a left turn and walked a distance of 30 metres. Then he took a right turn and walked a distance of 15 metres again. Z is facing which direction?
1. North   **2.** West   **3.** South   **4.** East

73. Which answer figure will complete the pattern in the question figure?
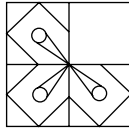
1.   **3.**

2.   **4.**

74. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., 'A' can be represented by 00,44 etc., and 'X' can be represented by 78,97 etc. Similarly, you have to identify the set for the word PICK.

Matric-I

	0	1	2	3	4
0	A	R	B	C	E
1	T	H	S	E	R
2	R	E	H	D	S
3	S	D	T	O	C
4	E	B	O	R	A

Matrix-II

|	5	6	7	8	9
5	K	P	I	L	M
6	X	W	Z	M	G
7	F	I	K	X	P
8	G	N	F	L	W
9	N	P	X	Z	L

1. 76, 66, 34, 98   **3.** 56, 76, 34, 55
2. 65, 67, 43, 65   **4.** 76, 67, 34, 89

75. If P denotes '÷', Q denotes '×', R denotes '+' and S denotes '-', then 18Q12P4RS56 is equal to :
1. 65   **2.** 36   **3.** 53   **4.** 34

Numerical Aptitude

76. If 'a' and 'b' are positive integers such that $a^2 - b^2 = 19$, then the value of 'a' is :
1. 20   **2.** 19   **3.** 10   **4.** 9

77. A fan is listed at ₹ 150/- with a discount of 20%. What additional discount must be offered to the customer to bring the net price of ₹ 108/-?
1. 15%   **2.** 5%   **3.** 10%   **4.** 20%

78. The radius of a circle is increased by 10%. The percentage increase of its area is :
1. 21%   **2.** 20%   **3.** 11%   **4.** 10%

79. If the ratio of areas of two circles is 4 : 9, then the ratio of their circumference will he :
1. 4 : 9   **2.** 2 : 3   **3.** 3 : 2   **4.** 9 : 4

80. The average age of 30 students is 20 years and average age of 20 other students is 30 years. The average age of total number of students is :
1. 24 years   **2.** 48 years   **3.** 25 years   **4.** 50 years

81. A fruit seller buys 100 kg of superior variety of mangoes at ₹ 45 per kg and 200 kgs of inferior variety at ₹ 40 per kg and sells all the mangoes at ₹ 45 per kg. The profit percentage of the fruit seller is :
1. $22\frac{2}{9}$ **2.** 12.5   **3.** 8   **4.** 25

82. A certain number of men complete a piece of work in 60 days. If there were 8 men more, the work can be finished in 10 days less. The number of men originally is :
1. 32   **2.** 40   **3.** 36   **4.** 30

83. The simple interest on a sum for 5 years is $3/5$th of the sum. The rate of interest per annum is :
1. $12\frac{1}{2}$%   **2.** 10%   **3.** 12%   **4.** 8%

84. A shopkeeper sold a TV set for ₹ 17940 with a discount of 8% and earned a profit of 19.6%. What should have been the percentage of profit earned if no discount was offered?
1. 23.07%   **2.** 30%   **3.** 24.05%   **4.** 24%

85. At what percent above the cost price must a person mark the price of an article so that he can enjoy 20% profit after allowing 20% discount?
1. 60%   **2.** 30%   **3.** 50%   **4.** 40%

86. If a train maintains an average speed of 42 km per hour, it arrives at its destination at the right time, if however, the average speed is 40 km per hour, it arrives 15 minutes late. Find the length of the journey?
1. 210 km   **2.** 205 km   **3.** 209 km   **4.** 200 km

87. A train covers a distance of 12 km in 10 minutes. If it takes 6 seconds to pass a telegraph post, then the length of the train is:
1. 120 m   **2.** 90 m   **3.** 100 m   **4.** 140 m

88. A sphere has a total surface area 9Π cm². Its volume is :
1. 36Π cm³   **2.** 18Π cm³   **3.** $\frac{4}{3}$ Π cm³   **4.** $\frac{9}{2}$ Π cm³

89. The population of a city increases at the rate of 5% per annum. If the present population of the city is 3, 70,440. Its population 3 years ago was :
1. 2,80,000   **2.** 3,60,000   **3.** 3,20,000   **4.** 30,000

90. The least number of five digits exactly divisible by 88 is :
1. 10088   **2.** 10023   **3.** 10132   **4.** 10032

Directions: The following bar diagram graph depics the sales of items (in lakhs) in a departmental store from April to August in the current year. Study the graph and answer the following questions using the data provided here.
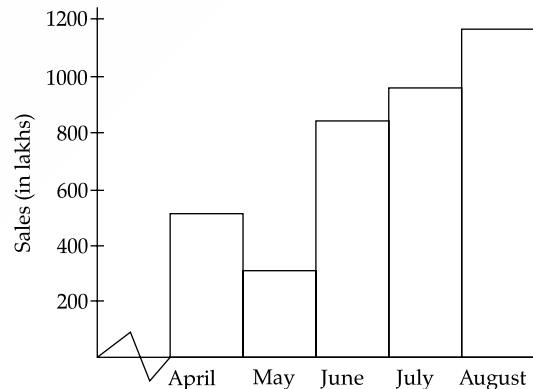
91. The sales in July is how many times to sales in May?
1. 300   **2.** 3   **3.** 2.5   **4.** 2

92. The average monthly sale (in lakhs) is :
1. 600   **2.** 780   **3.** 650   **4.** 720

93. A litre of water weighs a kilogram, a litre of another liquid weighs 1,340 kilograms. A mixture of the two weighs 1,270 kilograms per litre. The ratio of their volumes in a litre of the mixture is :
1. 27 : 34   **2.** 7 : 27   **3.** 17 : 24   **4.** 7 : 17

94. A merchant buys 20 kgs of a variety of rice at ₹ 14 per kg and another 40 kgs of rice at ₹ 10 per kg. He mixes them and sells $^1/_3$ of the mixture at ₹ 12.50 per kg. At what rate should he sell the remaining mixture so as to earn a profit of 25% on the whole outlay?
1. ₹ 12/-   **2.** ₹ 15/-   **3.** ₹ 12.50/-   **4.** ₹ 13/-

95. A man sells an article at a loss of 10%. If he had sold it for ₹ 75 more he would have gained 20%. The cost price of the article is (in Rs.) :
1. 225   **2.** 300   **3.** 250   **4.** 150

96. A person spends 25% of his annual income on house rent, 15% on education of children and 45% on other items. If he saves ₹ 14,400 annually, then the person's total income is :
1. ₹ 98,000   **3.** ₹ 96,000
2. ₹ 1,00,000   **4.** ₹ 1,20,000

97. The sum of the present ages of father and son is 90 years. 10 years earlier the ratio of their ages was 5:2. The present age of the father is :
1. 65   **2.** 68   **3.** 70   **4.** 60

98. A can do a piece of work in 5 days and B in 4 days. How long will they take to do the same work when working together?
1. $3\dfrac{2}{9}$ **2.** $2\dfrac{2}{9}$ **3.** $4\dfrac{1}{3}$ **4.** 9

99. $\dfrac{1}{2}$ of A = $\dfrac{2}{5}$ of B : $\dfrac{1}{3}$ of C, then A : B : C is :
1. 4 : 6 : 5   **2.** 6 : 4 : 5   **3.** 4 : 5 : 6   **4.** 5 : 4 : 6

100. Of the three numbers, the first is twice the second, and the second is twice the third. The average of the reciprocal of the numbers is $\dfrac{7}{12}$. The numbers are :
1. 20, 10, 5   **2.** 4, 2, 1   **3.** 36, 18, 9   **4.** 16, 8, 4

General Awareness

101. Amrita Shergil was a famous _____.
1. singer   **2.** dancer   **3.** actress   **4.** painter

102. The highest plateau of India is the :
1. Chota Nagpur   **2.** Malwa   **3.** Ladakh   **4.** Deccan

103. Which of the following elicits the public opinion on a Bill?
1. Referendum   **2.** Recall   **3.** Plebiscite   **4.** Initiative

104. Biogas is formed through :
1. Fermentation   **3.** Aerobic respiration
2. Reduction   **4.** Oxidation

105. Hepatitis is a disease of the :
1. Kidney   **2.** Liver   **3.** Heart   **4.** Eyes

106. A _____ is a program that interprets and displays Web Pages.
1. Server   **2.** Browser   **3.** Website   **4.** Link

107. Which of the following countries won the 2023 Cricket World Cup?
1. India   **3.** New Zealand
2. Australia   **4.** South Africa

108. The State with largest gap in male and female literacy is :
1. Rajasthan   **3.** Uttar Pradesh
2. Kerala   **4.** Madhya Pradash

109. The law of demand states that when :
1. income and price rises demand rises.
2. price rises demand rises.
3. price falls demand rises.
4. income rises demand rises.

110. Slow and uniform cooling of hot iron in its metallurgy is known as :
1. chilling   **2.** annealing   **3.** quenching   **4.** tempering

111. Fraternity means :
1. Unity and Integrity
2. Elimination of Economic Justice
3. Fatherly treatment
4. Spirit of brotherhood

112. The Pallava dynasty had their capital at :
1. Kanchipuram   **3.** Madurai
2. Vengi   **4.** Thanjavur

113. Recently, Kishtwar saffron was given a Geographical Indication (GI) tag. It belongs to which of the following states?
1. Jammu & Kashmir   **3.** Madhya Pradesh
2. Maharashtra   **4.** Himachal Pradesh

114. Nek Chand Saini's name is associated with which of the following gardens :
1. Shalimar Bagh, Srinagar   **3.** Vrindavan Garden, Mysore
2. Rock garden, Chandigarh   **4.** Hanging garden, Mumbai

115. Which of the following sultans adopted Persian customs and manners in court?
1. Iltutmish   **3.** Balban
2. Jalaluddin Khilji   **4.** Alauddin Khilji

116. Who convened the 'Congress of Vienna', 1815?
1. Bismarck   **3.** Metternich
2. Mussolini   **4.** Napolcon Bonaparte

117. In the context of alternative sources of energy, ethanol us a viable bio-fuel can be obtained from :
1. Potato   **2.** Wheat   **3.** Sugarcane   **4.** Rice

118. Buland Darwaza is located in which fort?
1. Red fort at Agra   **3.** Fatehpur sikri
2. Red fort at Delhi   **4.** Hawa Mahal

119. Distant objects can be seen with the help of ?
1. spectroscope   **3.** microscope
2. telescope   **4.** chronometer

120. In which of the following states is the world's first 3D-printed temple being built?
1. Karnataka   **3.** Andhra Pradesh
2. Maharashtra   **4.** Telangana

121. When all inputs are doubled and as a result, output also doubles then we have :
1. Increasing returns to scale.   **3.** Decreasing returns to scale.
2. Constant returns to scale.   **4.** None of the options.

122. Two gaseous molecules can react only when they have same _____.
1. energy   **3.** free energy
2. entropy   **4.** orientation/steric factor

123. Fathima Beevi passed away recently. She was a/an_____.
1. Actor   **2.** Engineer   **3.** Doctor   **4.** Judge

124. Himalayan Forest Research Centre is located at :
1. Dehradun   **2.** Bhutan   **3.** Srinagar   **4.** Shimla

125. Brown ring test is used for the detection of _____.
1. sulphate   **2.** chlorate   **3.** phosphate   **4.** nitrate

126. The element involved with blood clotting is :
1. Iron   **3.** Sodium
2. Phosphorus   **4.** Calcium

127. Through which states does the river Chambal flow?
1. MP, Gujarat, UP   **3.** Gujrat, MP, UP, Bihar
2. UP, MP, Rajasthan   **4.** Rajasthan, MP, Bihar

128. A hinged door is an example of :
1. First order lever   **3.** Cantilever
2. Third order lever   **4.** Second order lever

129. The sub-marine of Indian Navy is :
1. INS Virat   **3.** INS Sindhurakshak
2. INS Vikrant   **4.** INS Rajali

130. Stories of Buddha's birth and his previous lives are contained in :
1. Tripitakas
2. Jataka talcs
3. Panchatantra tales
4. Triratnas

131. The basis for determining the dearness allowance of employees in India is :
1. National Income.
2. Consumer Price Index.
3. Per capita income.
4. Standard of living.

132. In winter, at the time of hibernation, Toads maintain breathing through :
1. Both by Skin and Lungs
2. Skin
3. Lungs
4. Buccal Cavity

133. The objective of Sangam Yojana of government is
1. To ensure wellness of handicapped and disabled.
2. To unite various Hindu groups
3. To make Ganga water pollution free
4. To make Sangam region of Allahabad more attractive for tourists.

134. Does the President of India have veto power?
1. No
2. The Constitution is silent on this.
3. Only for money bills
4. Yes

135. The consumer is compared to a king under ?
1. Communism
2. Mixed Economy
3. Capitalism
4. Socialism

136. The term Renaissance means :
1. The Golden Age
2. The Era of Religious reforms
3. The Dark Age
4. The age of Reason, Enlightenment & Discoveries

137. Which type of function does the analytical engine perform ?
1. Logical functions
2. Arithmetic functions
3. Control functions
4. Relational functions

138. Which one of the following is a land locked country ?
1. Russia
2. Austria
3. India
4. China

139. Area which supports the economy and export trade of a sea port is called its :
1. economic zone
2. export basin
3. umland
4. hinter land

140. In an inflationary situation, which of the following statements is false for a country?
1. Cost of living rises.
2. Profits rise faster than wages.
3. Value of money falls.
4. Country's exports become more competitive.

141. Which one of the following statement is True regarding rate of interest :
1. Rate of interest may be zero.
2. Rate of interest increases with economic growth.
3. Rate of interest can not be zero.
4. Rate of interest cannot be determined.

142. Which of the following is an example of direct democracy ?
1. Village Panchayat
2. Gram Sabha
3. District Panchayat
4. Nagar Panchayat

143. Who among the following is not an Olympics medal winner?
1. K. Malleshwari
2. Abhinav Bindra
3. Jwala Gutta
4. Mary Kom

144. Water stomata are present in the :
1. Ventral surface of Leaf
2. Leaf margin
3. Veins
4. Dorsal surface of Leaf

145. A person suffering from long sightedness wears spectacles having:
1. Convex lenses
2. Concave convex lens
3. Lenses with negative power
4. Concave lenses

146. The words socialist and secular were inserted in the Preamble to the Constitution by :
1. The 16th Amendment
2. The 42nd Amendment
3. The 44th Amendment
4. The 7th Amendment

147. A pressure cooker reduces cooking time because :
1. the boiling point of the water inside is elevated
2. it absorbs more hear from its flame.
3. the higher pressure tenderizes the food.
4. the heat is more evenly distributed.

148. A Computer that keeps copies of responses and recent requests is known as _____.
1. Mail Server
2. Proxy Server
3. Server
4. Web Server

149. An area reserved for the protection of the wildlife is called :
1. Sanctuary
2. National Park
3. Zoological Park
4. Reserved Forest.

150. The largest part of our brain is :
1. Hypothalamous
2. Medulla oblongata
3. Cerebellum
4. Cerebrum

Answer Key

| 1.	(2)	2.	(3)	3.	(2)	4.	(3)	5.	(4)	6.	(3)	7.	(4)	8.	(3)	9.	(2)	10.	(4)
11.	(3)	12.	(2)	13.	(3)	14.	(4)	15.	(2)	16.	(1)	17.	(2)	18.	(1)	19.	(4)	20.	(1)
21.	(2)	22.	(2)	23.	(1)	24.	(4)	25.	(2)	26.	(1)	27.	(4)	28.	(4)	29.	(4)	30.	(4)
31.	(3)	32.	(3)	33.	(3)	34.	(4)	35.	(4)	36.	(1)	37.	(2)	38.	(1)	39.	(3)	40.	(1)
41.	(1)	42.	(4)	43.	(1)	44.	(4)	45.	(3)	46.	(2)	47.	(3)	48.	(4)	49.	(2)	50.	(3)
51.	(3)	52.	(2)	53.	(4)	54.	(2)	55.	(2)	56.	(4)	57.	(3)	58.	(1)	59.	(3)	60.	(3)
61.	(4)	62.	(1)	63.	(3)	64.	(3)	65.	(3)	66.	(3)	67.	(2)	68.	(2)	69.	(4)	70.	(3)
71.	(4)	72.	(3)	73.	(2)	74.	(3)	75.	(3)	76.	(3)	77.	(3)	78.	(1)	79.	(2)	80.	(1)
81.	(3)	82.	(2)	83.	(3)	84.	(2)	85.	(3)	86.	(1)	87.	(1)	88.	(4)	89.	(3)	90.	(4)
91.	(2)	92.	(4)	93.	(2)	94.	(2)	95.	(3)	96.	(3)	97.	(4)	98.	(2)	99.	(3)	100.	(2)
101.	(4)	102.	(4)	103.	(1)	104.	(3)	105.	(2)	106.	(2)	107.	(2)	108.	(1)	109.	(3)	110.	(2)
111.	(4)	112.	(1)	113.	(1)	114.	(2)	115.	(3)	116.	(3)	117.	(3)	118.	(3)	119.	(2)	120.	(4)
121.	(2)	122.	(4)	123.	(4)	124.	(4)	125.	(4)	126.	(4)	127.	(2)	128.	(4)	129.	(3)	130.	(2)
131.	(2)	132.	(1)	133.	(1)	134.	(3)	135.	(3)	136.	(4)	137.	(2)	138.	(2)	139.	(4)	140.	(4)
141.	(1)	142.	(2)	143.	(3)	144.	(1)	145.	(1)	146.	(2)	147.	(1)	148.	(2)	149.	(2)	150.	(4)

Answers with Explanations

1. Option (2) is correct.

The statement 'expeditionary climbing is popular in the Americans' is untrue as obvious from the line 'in Europe and North America there is less of a need for expedition-style climbing on most medium-sized mountains'. The assertion that 'Himalayan base camp treks can be completed in a day or two' is incorrect as Himalaya base camps can take weeks or perhaps even months to climb. The statement 'European and North American mountains require expanded time scale for climbing' is false because they are at a lower altitude and can be climbed in a shorter time scale. This also evinces the claim that most medium-sized peaks in Europe are accessed by car or air.

2. Option (3) is correct.

The sentences 'the prevalence of expedition-style climbing in the Himalaya is largely a function of the nature of the mountains in the region. Because Himalaya base camps can take weeks of perhaps even months to climb, a large number of personnel and amount of supplies are necessary' clarifies the huge amount of supplies and large number of personnel in Himalayan expeditions are necessary because of expanded time scale.

3. Option (2) is correct.

The answer to the question is very obvious and stated in the first line of the passage- 'Expedition mountaineering could be viewed as slow and heavy…'

4. Option (3) is correct.

The statement 'the prevalence of expedition-style climbing in the Himalaya is largely a function of the nature of the mountains in the region' justifies the specific nature of mountains to be responsible for the greater prevalence of expedition mountaineering in the Himalayas.

5. Option (4) is correct.

'Because Himalaya base camps can take weeks of perhaps even months to climb, a large number of personnel and amount of supplies are necessary. This is why expedition-style climbing is frequently used on large and isolated peaks in the Himalaya.' Therefore, the correct answer is 'large and isolated peaks'.

6. Option (3) is correct.

The idiom 'as good as his word' means 'to do everything that you promise someone you will'. So 'able to fulfil his promise' is the correct answer. John fulfilled his promise when he came on time for the meeting.

7. Option (4) is correct.

The idiom 'off colour' means slightly unwell. So 'ill' is the correct answer.

8. Option (3) is correct.

The idiom 'take a hike' means a rude way of telling someone to leave. So 'leave' is the correct answer.

9. Option (2) is correct.

The correct sentence is: As soon as this workshop is over, I am going to abandon every duty and go on a holiday. The verb 'abandon' means to give up completely. 'Sidetrack' means 'to delay the progress of something by causing people to waste time on something else that is unimportant.

10. Option (4) is correct.

She derives great pleasure and satisfaction from cooking. To derive is to *receive*, while to draw is to infer. Therefore, the sentence implies that she gets extreme pleasure and satisfaction from cooking.

11. Option (3) is correct.

The correct sentence is: Poetry is a compressed form of expression in which the particularity of the word and the image to evoke feeling, assumes great importance. The word 'compressed' means squeezed or pressed together. Poetry often does pack a great deal of meaning into carefully chosen words, so it is a compressed form of expression. 'Supressed' and 'digressed'(deviated) are words with negative connotations.

12. Option (2) is correct.

The correct sentence is: He was so filled with contempt for the prisoner that he gave him a derisive look. The meaning of *derisive* is expressing or causing contemptuous ridicule or scorn. The fact that he was filled with disrespect for the prisoner makes it evident that he gave a derisive/scornful look.

13. Option (3) is correct.

The correct sentence is: Next summer we're going on a trip to Canada. The phrase 'go on a trip' implies to go for a journey.

14. Option (4) is correct.

The correct sentence is: Romeo and Juliet's clandestine affair is probably the most loved of all times. Clandestine means that is planned or done in secret; while 'covert' means not openly acknowledged/secret, hidden.; whereas 'candid' means truthful, honest.

15. Option (2) is correct.

The correct sentence is: The ascent towards the school was very steep. 'Ascent' means the act of rising or mounting upward'. 'Assent' means acceptance; 'ascend' is a verb.

16. Option (1) is correct.

The correct sentence is: Some interesting matters came up in our discussion yesterday. The phrasal verb 'come up' means to occur, arise. While 'came about' means 'to happen, or start to happen'.

17. Option (2) is correct.

The correct sentence is: He loaded the bales of cotton on the truck. Bale refers to a large bundle.

18. Option (1) is correct.

The correct sentence is: Anything is practicable which is not against the nature of things. 'Practicable' means able to be done or put into practice successfully.

19. Option (4) is correct.

The correct sentence is: There are schools on either side of the road. The pronoun 'either' is followed by a singular noun and pronoun, so 'side' is appropriate instead of 'sides'.

20. Option (1) is correct.

The correct sentence is: Many years have passed since India became free. The sentence speaks of an event that occurred and got over in the past, so simple past tense is preferred. No improvement required.

21. Option (2) is correct.

The correct sentence is: We acted upon your instructions. To 'act upon' is to take action as a result of advice, information, etc.

22. Option (2) is correct.

The correct sentence is: As soon as I called her, she came out of her house. The sentence is correct. No improvement required.

23. Option (1) is correct.

Coding is nothing but filing up information in a given format. The phrasal verb 'filling up' means to complete (a form, application, etc) to make or become completely full. While 'putting up' means to construct or erect something.

24. Option (4) is correct.
The correct sentence is: Could you please maintain silence for a while? The sentence is correct. No improvement required.

25. Option (2) is correct.
The correct sentence is: She hopes to become an engineer after she completes her education. Part 'will complete her education' contains an error, it will be replaced by 'completes her education'. Here, 'will' must be removed from the conditional clause.

26. Option (1) is correct.
The correct sentence is: Kindly direct the tourists to the museum. The phrase 'Kindly please' reiterate the same meaning, therefore, to avoid redundancy, we have to eliminate 'please'.

27. Option (4) is correct.
The correct sentence is: If you stand by me in hour of need, I will never forget you. Replace 'with me in hour of need' with 'by me in hour of need'.

28. Option (4) is correct.
The correct sentence is: At last, he was married to a poor girl. The verb 'married' generally takes 'to' after it, instead of 'with'.

29. Option (4) is correct.
The correct sentence is: Our team played a football match. The sentence is grammatically correct as the event refers to a past one.

30. Option (4) is correct.
The correct sentence is: It is better to stay at home than go to the market when it is raining. The definite article 'the' will precede before 'market'.

31. Option (3) is correct.
The correct sentence is: All the girl students are advised to attend the meeting positively. We have to use 'girl students' instead of 'girls student'. 'Girl students' imply students who are girls.

32. Option (3) is correct.
The correct sentence is: The thief had hardly put the cash in his pocket when the owner woke up. The adverb 'hardly' is always followed by 'when', not 'then'. Hardly, scarcely and barely are followed by when , while no sooner is followed by 'than' . Thus, the part 'then the owner woke up' will be replaced by 'when the owner woke up'.

33. Option (3) is correct.
The correct sentence is: Bengal tigers are now almost extinct. The verb 'extincted' will be replaced by 'extinct'. The verb 'extinct' has its past form in 'extinct', not 'extincted'.

34. Option (4) is correct.
The word 'scatter' means 'throw in various random directions.' Thus, the antonym is 'collect'.

35. Option (4) is correct.
'Peak' means 'at the highest level; maximum.' Thus, the opposite is 'bottom'.

36. Option (1) is correct.
The word 'despair' means 'the complete loss or absence of hope'. Thus, the antonym is 'hope'.

37. Option (2) is correct.
The word 'exactly' means 'in an exact manner, accurately or precisely'. Thus, the synonym is precisely.

38. Option (1) is correct.
The word 'answer' means ' a correct response.' Thus, the synonym is 'response'.

39. Option (3) is correct.
'Pain' means unpleasant sensation caused by illness or injury. Thus, the synonym is 'ache'.

40. Option (1) is correct.
The word 'cynosure' refers to 'centre of attraction'. 'Custodian' refers to a person who has responsibility for taking care of or protecting something.

41. Option (1) is correct.
Patricide is the act of killing one's own father or stepfather. Homicide occurs when a person kills another person. Fratricide is the act of killing one's own brother. Regicide is the purposeful killing of a monarch.

42. Option (4) is correct.
'Drown' means 'to die under water or other liquid of suffocation.' 'Wreck' implies destroy or severely damage. Capsizing or keeling over occurs when a boat or ship is rolled on its side or further by wave action, therefore, the correct answer is 'capsize'.

43. Option (1) is correct.
A widower is a person whose spouse has died and has usually not remarried. 'Spinster' refers to an unmarried woman, typically an older woman beyond the usual age for marriage. A man whose spouse has died is typically called a widower, while a woman is a widow.

44. Option (4) is correct.
'Intolerable' means unable to be endured; 'inexplicit' is not definitely or clearly expressed or explained. 'Irrevocable' means 'not able to be changed, reversed, or recovered'. 'Inexplicable' means that cannot be explained.

45. Option (3) is correct.
The correctly spelt word is 'heir'.

46. Option (2) is correct.
The correctly spelt word is 'millennium'.

47. Option (3) is correct.
The correctly spelt word is 'hygiene'.

48. Option (4) is correct.
The correctly spelt word is 'government'.

49. Option (2) is correct.
The correctly spelt word is 'scheme'.

50. Option (3) is correct.
The correctly spelt word is 'syllabus'.

51. Option (3) is correct.
HIVW $\Rightarrow$ H + 1 $\rightarrow$ I, V + 1 $\rightarrow$ W
FGKL $\Rightarrow$ F + 1 $\rightarrow$ G, K + 1 $\rightarrow$ L
ACDF $\Rightarrow$ A + 2 $\rightarrow$ C, D + 2 $\rightarrow$ F, this is the odd one out.
TUOP $\Rightarrow$ T + 1 $\rightarrow$ U, O + 1 $\rightarrow$ P

52. Option (2) is correct.
Cricket, football, and hockey are played outside on the ground, while chess is an indoor game. Hence, Chess is the odd one out.

53. Option (4) is correct.
23
17
13
63
In 23, 17 and 13, the 1st digits of the numbers are not divisible by the 2nd digits, while in 63, 1st term (6) is divisible by 2nd term (3). Hence, 63 is the odd one out.

54. Option (2) is correct.
Multiply both the given terms and write the last letter at first position (of the number obtained after multiplication).
12 × 9 = 108 $\Rightarrow$ 810
Similarly,
15 × 9 = 135 $\Rightarrow$ 513
Hence, 13 × 8 = 104 $\Rightarrow$ 410

55. Option (2) is correct.
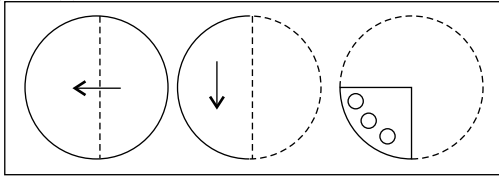
Follow the pattern and the symmetry.
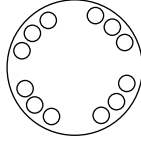
56. Option (4) is correct.

'LONDON' is coded as MPOEPO.

L	O	N	D	O	N
12	15	14	4	15	14
+1	+1	+1	+1	+1	+1
M	P	O	E	P	O

'DELHI' can be coded as:

D	E	L	H	I
4	5	12	8	9
+1	+1	+1	+1	+1
E	F	M	I	J

57. Option (3) is correct.

Total age of mother and daughter
Mother + Daughter = 60…(1)
Difference in age of mother and daughter
Mother – Daughter = 30…(2)
Adding (1) and (2)
Mother + Daughter = 60
Mother – Daughter = 30
_____
2 Mother = 60 + 30

Mother = $\dfrac{90}{2}$ = 45

Hence, mother's age is 45 years.

58. Option (1) is correct.

5, 7, 11, 17, 25, ?
5 + 2 = 7
7 + (2 × 2) = 11
11 + (2 × 3) = 17
17 + (2 × 4) = 25
25 + (2 × 5) = 35

59. Option (3) is correct.

B $\xrightarrow{+2}$ D $\xrightarrow{+2}$ F $\xrightarrow{+2}$ H $\xrightarrow{+2}$ J

K $\xrightarrow{-1}$ J $\xrightarrow{-1}$ I $\xrightarrow{-1}$ H $\xrightarrow{-1}$ G

S $\xrightarrow{+1}$ T $\xrightarrow{+1}$ U $\xrightarrow{+1}$ V $\xrightarrow{+1}$ W

60. Option (3) is correct.
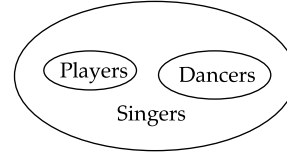
(1) Some singers are dancers ---True
(2) From the diagram, we cannot say definitely if some dancers are players or not.
Hence, only conclusion 1 Follows

61. Option (4) is correct.
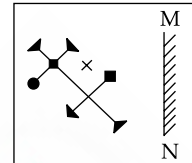
In mirror image left becomes right and right becomes left. Hence, the answer figure is:
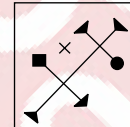
62. Option (1) is correct.

7	3	10
3	4	7
2	7	?
42	84	140

Columwise:
1st number × 2nd number × 3rd number = 4th number
Column 1
7 × 3 × 2 = 42
Similarly,
Column 3
10 × 7 × ? = 140

$? = \dfrac{140}{70}$

? = 2

63. Option (3) is correct.

RATE : EATR : : SEAT : ?
Two middle terms are as it is. First and the last letters are interchanged.
RATE : EATR
Similarly,
SEAT can be written as:
TEAS.

64. Option (3) is correct.

As literature is a part of book, similarly, music is part of a song.

65. Option (3) is correct.

21 : 3 :: 574 : ?
1st term/7 = 2nd term.

So, $\dfrac{21}{7}$ = 3
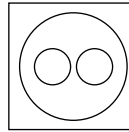
Similarly, $\dfrac{574}{7}$ = 82

66. Option (3) is correct.

Dwarf is the antonym for Giant. Similarly,
Idiot is antonym of Genius.

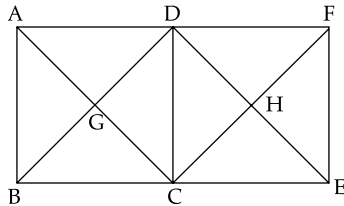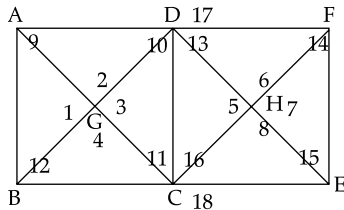**67. Option (2) is correct.**

Hockey, Cricket, Games

Both hockey and cricket are games. Hence, the best suited venn diagram is:
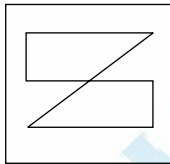
68. Option (2) is correct.

Total 18 triangles

69. Option (4) is correct.

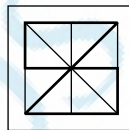| Market	Vegetable	Cutting	Cooking	Dish

70. Option (3) is correct.

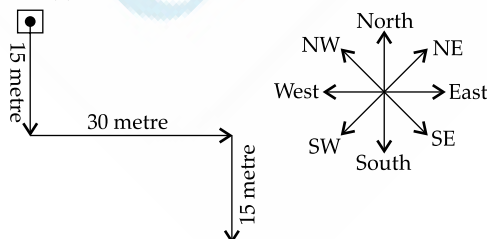TRANSMIT is the word that cannot be formed using the word TRANSLATION.

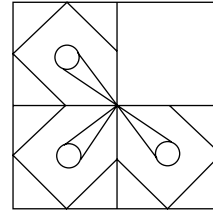**71. Option (4) is correct.**

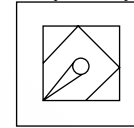The above given image is embedded in option figure 4 as highlighted below.

72. Option (3) is correct.

73. Option (2) is correct.

Follow the pattern and the symmetry. Hence,

74. Option (3) is correct.

P- 56, 79, 96

I- 57, 76

C- 03, 34

K- 55, 77

PICK- 56, 76, 34, 55

75. Option (3) is correct.

P denotes '÷'

Q denotes '×'

R denotes '+'

S denotes '–'

Then,

18Q12P4R5S6 can be coded as:

$18 \times 12 \div 4 + 5 - 6$

$\Rightarrow 18 \times 3 + 5 - 6$

$\Rightarrow 54 + 5 - 6$

$\Rightarrow 59 - 6 = 53$

76. Option (3) is correct.

Given that $a^2 - b^2 = 19$

$\Rightarrow (a+b)(a-b) = 19 \times 1$

$\Rightarrow \quad a + b = 19$

$\quad a - b = 1$

$\overline{\quad 2a = 20 \quad}$

$\Rightarrow \quad a = 10$

77. Option (3) is correct.

According to question

$$108 = 150 \times \left(1 - \frac{20}{100}\right)\left(1 - \frac{x}{100}\right)$$

$$\Rightarrow \quad 108 = 150 \times \frac{4}{5} \times \frac{100 - x}{100}$$

$$\Rightarrow \quad \frac{108}{150} \times \frac{5}{4} = \frac{100 - x}{100}$$

$$\Rightarrow \quad 90 = 100 - x$$

$$\Rightarrow \quad x = 100 - 90 = 10$$

78. Option (1) is correct.

$$\text{Area of circle} = \pi r^2 = \pi\left(\frac{11r}{10}\right)$$

$$\text{New area} = \pi\left(\frac{11r}{10}\right)^2 = \frac{121}{100} pr^2$$

$$\text{Increase in area} = \frac{121}{100}\pi r^2 - \pi r^2$$

$$= \frac{21}{100} pr^2$$

Percentage increase in area

$$= \frac{\frac{21}{100}\pi r^2 \times 100}{\pi r^2} = 21\%$$

79. Option (2) is correct.

Ratio of area of two circles

$$= \frac{r_1^2}{r_2^2} = \frac{4}{9}$$

$$\Rightarrow \quad \frac{r_1^2}{r_2^2} = \frac{4}{9} \Rightarrow \frac{r_1}{r_2} = \frac{2}{3} \qquad \qquad \dots(i)$$

$\therefore$ Ratio of circumference

$$= \frac{2\pi r_1}{2\pi r_2} = \frac{r_1}{r_2} = \frac{2}{3} \qquad \text{[From (i)]}$$

80. Option (1) is correct.

Sum of age of 30 students = $30 \times 20 = 600$

Sum of age of 20 students = $20 \times 30 = 600$

Total sum of age of 50 students = $600 + 600 = 1200$

Total average = $\dfrac{1200}{50} = 24$

81. Option (3) is correct.

Cost of 100 kg superior mangoes

$$= 100 \times 45 = ₹\, 4500$$

Cost of 200 kg inferior mangoes

$$= 200 \times 40 = ₹\, 8000$$

Total cost = $4500 + 8000 = ₹\, 12500$

Total S.P of 300 kg mangoes = $300 \times 45 = ₹\, 13500$

Profit = $13500 - 12500 = 1000$

$$\text{Profit \%} = \frac{1000 \times 1000}{12500} = 81\%$$

82. Option (2) is correct.

Let n men complete a piece of work in 60 days

$\therefore$ \qquad Total work = $60\,n$ units

$\therefore$ $(n + 8)$ men same work complete in 50 days

$\therefore$ \qquad Total work = $(n + 8)\,50$

$\therefore$ \qquad $60\,n = (n + 8)\,50$

$\Rightarrow$ \qquad $n = 40$ men.

83. Option (3) is correct.

Let principal be ₹ P.

$\therefore$ According to question

$$\Rightarrow \quad \frac{PR \times 5}{100} = P \times \frac{3}{5}$$

$$\Rightarrow \quad R = \frac{3}{5} \times \frac{100}{5} = 12\%$$

84. Option (2) is correct.

Given that S.P of = ₹ 17940

Discount = 8%

Profit = 19.6

$$\text{List price} = \frac{\text{S.P} \times 100}{100 - \text{Discount}}$$

$$= \frac{17940 \times 100}{92} = ₹\, 19500.$$

$$\text{C.P} = \frac{\text{S.P} \times 100}{100 + \text{Profit}}$$

$$= \frac{17940 \times 100}{100 + 19.6} = \frac{17940 \times 100}{119.6}$$

$$= ₹\, 15000.$$

If no discount then list price is equal to S.P.

$\therefore$ \qquad Profit = 19500-15000

$$= 4500$$

$$\text{Profit \%} = \frac{4500 \times 100}{15000} = 30\%$$

85. Option (3) is correct.

Let list price be ₹ x

$$\therefore \qquad \text{S.P} = x\left(1 - \frac{20}{100}\right) = \frac{4x}{5}$$

$$\therefore \qquad \text{C.P} = \frac{\text{S.P} \times 100}{100 + \text{Profit}} = \frac{\frac{4x}{5} \times 100}{120}$$

$$= \frac{2x}{3}.$$

Difference between list price and C.P

$$= x - \frac{2x}{3} = \frac{x}{3}$$

Percentage increase in cost price

$$= \frac{\frac{x}{3} \times 100}{\frac{2x}{3}} = 50\%$$

86. Option (1) is correct.

Let time taken by speed 42 km/h be t h.

Distance = speed $\times$ time = $48\,t$

$\therefore$ Time taken by speed 40 km/h

$$= \left(t + \frac{15}{60}\right)h = \left(t + \frac{1}{4}\right)h$$

$$\text{Distance} = 40\left(t + \frac{1}{4}\right)$$

$$\therefore \qquad 42t = 40\left(t + \frac{1}{4}\right)$$

$\Rightarrow$ $2x + 100 = 1700 \Rightarrow 2x = 1600$

$\Rightarrow$ \qquad $2t = 10 \Rightarrow t = 5\,h.$

Distance = $42 \times 5 = 210$ km.

87. Option (1) is correct.

$\therefore$ \qquad Distance = 12 km = 12000 m

Time = 10 min = 600 sec.

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}} = \frac{12000}{600} = 20 \text{ m/s}$$

Length of the train = Speed $\times$ Time

$$= 20 \times 6 = 120\ m.$$

88. Option (4) is correct.

Total surface area = $4\pi r^2$

$$9\pi = 4\pi r^2$$

$$\Rightarrow \quad r^2 = \frac{9}{4} \Rightarrow r = \frac{3}{2} \text{ cm.}$$

Volume of sphere $= \dfrac{4}{3}\pi r^3 = \dfrac{4}{3}\pi \times \dfrac{27}{8}$

$$= \frac{9}{2}\pi \text{ cm}^3$$

89. Option (3) is correct.

$\therefore$ Present population = 370440

Let population 3 years ago be x

$$\therefore \qquad 370440 = x\left(1 + \frac{5}{100}\right)^3$$

$\Rightarrow \qquad 370440 = x\left(\dfrac{21}{20}\right)^3$

$\Rightarrow \qquad x = 370440 \times \dfrac{20 \times 20 \times 20}{21 \times 21 \times 21}$

$\qquad\qquad = 320000$

90. Option (4) is correct.

We have least five digits number be 10000.

$$
\begin{array}{r}
114 \\
88\overline{)10000} \\
\underline{88} \\
1200 \\
\underline{88} \\
320 \\
\underline{352} \\
-32 \\
\end{array}
$$

∴ Least five digits number which is divisible by 88 = 10000 + 32 = 10032.

91. Option (2) is correct.

Number of items sales in May = 300

Number of items sales in July = 900

Number of items July to May $= \dfrac{900}{300} = 3$ times

92. Option (4) is correct.

Average monthly sale

$= \dfrac{500 + 300 + 800 + 900 + 1100}{5}$

$= 720$ lakhs.

93. Option (2) is correct.

According questions

$\qquad x + 1.340y = (x + y)\,1.270$

$\Rightarrow \qquad x + 1.340y = (x + y) + 1.270y$

$\Rightarrow \qquad 1.340y - 1.270y = 1.270x - x$

$\Rightarrow \qquad 0.070y = 0.27x$

$\Rightarrow \qquad \dfrac{x}{y} = \dfrac{0.070}{0.270} = \dfrac{7}{27} = 7 : 27$

94. Option (2) is correct.

$\qquad$ Cost $= 20 \times 14 + 40 \times 10$

$\qquad\qquad = 280 \times 400 = ₹\,680$

$\qquad$ S.P $= 680\left(1 + \dfrac{25}{100}\right) = 680\dfrac{5}{4}$

$\qquad\qquad = ₹\,850$

S.P of $\dfrac{1}{3}$ of mixture $= \dfrac{1}{3} \times 60 \times 12.50$

$\qquad\qquad = ₹\,250$ units

S.P of remaining mixture $= 850 - 250$

$\qquad\qquad = ₹\,600$

Rate $= \dfrac{600}{40} = ₹\,15$ kg.

95. Option (3) is correct.

Let cost price of an article $= ₹\,x$

S.P when loss 10% $= x\left(1 - \dfrac{10}{100}\right) = \dfrac{9x}{10}$

S.P when profit 20% $= x\left(1 + \dfrac{10}{100}\right) = \dfrac{6x}{10}$

According to question

$\dfrac{9x}{10} + 75 = \dfrac{6x}{10} \Rightarrow \dfrac{12x}{10} - \dfrac{9x}{10} = 75$

$\Rightarrow \qquad \dfrac{3x}{10} = 75 \Rightarrow x = \dfrac{75 \times 10}{3} = 250$

96. Option (3) is correct.

Let person's total income be ₹ x

According to question

$x \times \dfrac{25}{100} + x \times \dfrac{15}{100} + x \times \dfrac{45}{100} + 14400 = x$

$\Rightarrow x\left(\dfrac{25 + 15 + 45}{100}\right) + 14400 = x$

$\Rightarrow \dfrac{85x}{100} + 14400 = x$

$\Rightarrow \qquad x - \dfrac{85x}{100} = 14400$

$\Rightarrow \qquad \dfrac{15x}{100} = 14400$

$\Rightarrow \qquad x = \dfrac{14400 \times 100}{15} = 96000$

97. Option (4) is correct.

Let ages of father and son 10 years earlier be $5x$ and $2x$.

∴ $\qquad$ Present age of father = $5x + 10$

$\qquad$ Present age of son = $2x + 10$

∴ $\qquad 5x + 10 + 2x + 10 = 90$

$\Rightarrow \qquad 7x + 20 = 90$

$\Rightarrow \qquad 7x + 90 - 20 = 70$

$\Rightarrow \qquad x = 10$

∴ Persent age of the father

$\qquad\qquad = 5x + 10 = 5 \times 10 + 10$

$\qquad\qquad = 60$ years

98. Option (2) is correct.

A can do a piece of work in 1 day $= \dfrac{1}{5}$ parts

B can do a piece of work in 1 day $= \dfrac{1}{4}$ parts

Both together work in 1 day $= \dfrac{1}{5} + \dfrac{1}{4}$

$\qquad\qquad = \dfrac{4 + 9}{20} = \dfrac{9}{20}$ parts

∴ Together complete the work $= \dfrac{20}{9} = 2\dfrac{8}{9}$ days

99. Option (3) is correct.

$\dfrac{1}{2}$ of A $= \dfrac{2}{5}$ of B $= \dfrac{1}{3}$ of C

$\Rightarrow \dfrac{A}{2} = \dfrac{2B}{5} = \dfrac{C}{3}$

$\Rightarrow \dfrac{A}{4} = \dfrac{B}{5} = \dfrac{C}{6}$

∴ A : B : C = 4 : 5 : 6

100. Option (2) is correct.

Let third number $= x$

Then second number $= 2x$

and first number $= 2(2x) = 4x$

$$\therefore \quad \frac{\dfrac{1}{x} + \dfrac{1}{2x} + \dfrac{1}{4x}}{3} = \frac{7}{12}$$

$$\Rightarrow \quad \frac{4 + 2 + 1}{4x} = \frac{7}{12} \times 3$$

$$\Rightarrow \quad \frac{7}{4x} = \frac{7}{7}$$

$$\Rightarrow \quad x = 1$$

∴ Number are 4, 2, 1.

101. Option (4) is correct.

Amrita Shergil was a Hungarian-Indian famous painter. She has been called 'one of the greatest avant-garde women artists of the early 20th century' and a 'pioneer' in modern Indian art. She used her paintbrush to depict the daily lives of Indian women in the 1930s, often revealing a sense of their loneliness and even hopelessness. She painted women going to the market, women at a wedding, women at home.

102. Option (4) is correct.

Deccan plateau is the highest plateau in India. It is made up of Lava flows in the Cretaceous-Eocene era through the fissure eruptions. It rises about 100 metres in North and 1000 metres in South. It is a triangular landmass that lies to the south of the river Narmada. Some of the most powerful dynasties and empires in Indian history were based on the Deccan plateau.

103. Option (1) is correct.

Referendum is a procedure whereby proposed legislation is referred to as the electorate for settlement by their direct votes. It is an occasion when all the people of a country can vote on a particular political question. Referendums are instruments of direct democracy where citizens get an opportunity to straightforwardly vote on a particular issue.

104. Option (3) is correct.

Biogas is a naturally occurring and renewable source of energy. It can be generated through anaerobic digestion in the treatment of faecal sludge. It is produced when bacteria digest organic matter (biomass) in the absence of oxygen. Biogas is a fusion of mainly methane and carbon dioxide, formed when organic matter is broken down into these gases in the absence of oxygen.

105. Option (2) is correct.

Hepatitis is a disease of the liver which is caused by the hepatitis A virus. When the liver is inflamed or damaged, its function can be affected. Several different viruses cause hepatitis, including hepatitis A, B, C, D, and E.

106. Option (2) is correct.

A browser is a software program used to view web pages. It is a Computer program that enables the internet users to access, navigate, and search World Wide Web sites. When a user requests a web page from a particular website, the browser retrieves its files from a web server and then displays the page on the user's screen.

107. Option (2) is correct.

Australia won the Cricket World Cup 2023, match was held at Narendra Modi Stadium, Ahmedabad on 19th Nov, 2023.

108. Option (1) is correct.

The literacy rate is defined by the percentage of the population of a given age group that can read and write. According to NFHS-3 (2005-06), Indian women had a literacy rate of 55.1% while men had a literacy rate of 78.1%. The State with the largest gap in male and female literacy is Rajasthan. The 2011 Census figures say female literacy was worst in Jalore and Sirohi with 38.47% and 39.73%, respectively.

109. Option (3) is correct.

The law of demand focuses on those unlimited wants. It states that there is an inverse relationship between the price of a commodity and the quantity demanded, all other factors remain constant. It is a principle of economics which states that a rise in price would be met with a decrease in the quantity demanded of the product.

110. Option (2) is correct.

The process of slow and uniform cooling of hot metals in metallurgy is known as annealing. Annealing is a heat treatment process that changes the physical and sometimes also the chemical properties of a material to increase ductility and reduce the hardness to make it more workable. Annealing increases the ductility of the metal and reduces its hardness. This makes the workpiece more formable and machinable.

111. Option (4) is correct.

Fraternity means spirit of brotherhood. It comes from the Latin word fraternitas, meaning brotherhood. It means the sense or spirit of brotherhood that promotes unity and integrity in the nation and binds its people.

112. Option (1) is correct.

The pallava dynasty had their capital at Kanchipuram. The Pallava dynasty existed from 275 CE to 897 CE, ruling a significant portion of the Deccan, also known as Tondaimandalam. Pallavas rose to prominence during the reigns of Mahendravarman I (600–630 CE) and Narasimhavarman I (630–668 CE) and ruled the southern.

113. Option (1) is correct.

The state of Jammu and Kashmir cultivated Saffron in a huge amount, got Geographical Indication tag by the Geographical Indication Registry.

114. Option (2) is correct.

Nek Chand Saini is a self-taught Indian artist, known for building the Rock Garden of Chandigarh. It is completely built of industrial and home waste and thrown-away items. The garden is most famous for its sculptures made from recycled ceramic. It is considered as one of the finest modern wonders of the world; the exquisite Rock Garden is one of the best places to visit in Chandigarh.

115. Option (3) is correct.

Ghiyas ud din Balban was the Sultan during Delhi Sultanate, who adopted Persian customs and manners in the court. Balban was convinced that the glory of Kingship was possible only by following the Persian traditions and he very carefully followed these traditions in his personal and public life. He started Persian customs Sijada and Paibos. He introduced the festival of Nauroz.

116. Option (3) is correct.

Congress at Vienna was hosted by Austrian chancellor Duke Metternich in 1815. This assembly was called the Congress of Vienna. The assembly at Vienna began in September 1814 and lasted until June 1815. The Treaty of Vienna of 25th March 1815 was the formal agreement of the allied powers -Austria, Great Britain, Prussia and Russia - committing them to wage war against Napoleon until he was defeated.

117. Option (3) is correct.

In the context of alternative sources of energy, ethanol is a viable biofuel can be obtained from sugarcane. Sugarcane ethanol is an alcohol-based fuel produced by the fermentation of sugarcane juice and molasses. Ethanol is a renewable fuel made from various plant materials collectively known as biomass Ethanol as a viable biofuel can be obtained from Sugarcane. Because, it is a clean affordable and low carbon biofuel sugarcane ethanol has emerged as a leading renewable fuel for the transportation sector.

118. Option (3) is correct.

Buland Darwaza was built by the great Mughal Emperor Akbar to commemorate his victory over Gujarat. It is the main entrance to the Jama Masjid at Fatehpur Sikri. It is the highest gateway in the world and is an example of Mughal architecture.

119. Option (2) is correct.

A telescope is a device used to observe distant objects by their emission, absorption, or reflection of electromagnetic radiation. Since convex mirror is used to form an erect image of distant object. Hence a reflecting a telescope does that. The outer layer of eye (Cornea) and the eye lens focus the image on the surface of the retina or at the back side of our eye. When the ciliary muscles are relaxed, the lens becomes thin. Thus, its focal length increases. This enables us to see distant objects clearly.

120. Option (4) is correct.

Siddipet, Telangana has the first 3D printed temple in India.

121. Option (2) is correct.

Constant returns to scale occur when the long-run average between a company's inputs and outputs are proportional to each other. If a firm doubles the amount of all of its inputs, and output doubles as a result, then the production function exhibits constant returns to scale.

122. Option (4) is correct.

Two gaseous molecules can react only when they have same orientation. According to the Collision Theory, a chemical reaction can occur only when the reactant molecules, atoms, or ions collide with more than a certain amount of kinetic energy and in the proper orientation. A reaction will not take place unless the particles collide with a certain minimum energy called the activation energy of the reaction.

123. Option (4) is correct.

Fatima Bevi was the first female Judge of the Supreme Court, appointed in 1989.

124. Option (4) is correct.

Himalayan Forest Research Institute is a Research institute situated in Shimla in Himachal Pradesh. It was established as High Level Conifer Regeneration Research Centre on May 1977. It works under the Indian Council of Forestry Research and Education of the Ministry of Environment and Forests, Govt. of India.

125. Option (4) is correct.

Brown ring test is used for the detection of nitrate ions in a solution. Almost all nitrates dissolve in water and therefore determining the presence of nitrate through wet chemistry is not that easy when compared to conducting tests for other anions.

126. Option (4) is correct.

Calcium is a crucial element involved in the blood clotting process. It plays a key role in the coagulation cascade, a series of events that lead to the formation of blood clots. Calcium ions are essential for the activation of various clotting factors, including those involved in platelet aggregation and the conversion of fibrinogen to fibrin. Without sufficient calcium, the blood clotting process would be impaired, leading to difficulties in wound healing and increased bleeding risk.

127. Option (2) is correct.

The Chambal River flows through the states of Uttar Pradesh (UP), Madhya Pradesh (MP), and Rajasthan.

128. Option (4) is correct.

In a second-order lever, the load is situated between the effort (applied force) and the fulcrum (pivot point). A hinged door is an example of a second-order lever, where the hinge acts as the fulcrum, the force applied to open or close the door represents the effort, and the door itself serves as the load.

129. Option (3) is correct.

INS Sindhurakshak is a type of submarine in the Indian Navy. It was decommissioned in the year 2017.

130. Option (2) is correct.

The stories of Buddha's previous lives, known as Jataka tales, are a part of Buddhist literature. These tales narrate the various incarnations of Siddhartha Gautama (Buddha) before he attained enlightenment.

131. Option (2) is correct.

In India, employees' Dearness Allowance (DA) is tied to the Consumer Price Index (CPI), reflecting changes in the average prices of goods and services paid by urban consumers. Adjusted regularly, the DA addresses cost of living variations, ensuring employees are fairly compensated and can maintain their purchasing power amid inflation.

132. Option (1) is correct.

During hibernation in winter, toads primarily rely on cutaneous respiration (breathing through their skin). However, they also use their lungs to some extent. The metabolic rate decreases during hibernation, and oxygen exchange through the skin becomes crucial for their survival in the reduced metabolic state.

133. Option (1) is correct.

The Sangam Yojana was launched in 1996 by the Government of India specifically to address the welfare and development of Persons With Disabilities (PWDs) in rural areas. It aimed to empower them through self-reliance and economic independence.

134. Option (3) is correct.

The President of India has a limited veto power. While the President can withhold their assent to ordinary bills, the Constitution grants them a suspensive veto on money bills. In the case of money bills, the President can either give their assent or withhold it for a certain period, during which the Parliament can reconsider the bill.

135. Option (3) is correct.

In capitalism, the concept of linking the consumer to a king is prevalent. This economic system prioritizes a market-driven approach, empowering consumers with substantial influence and choices. Describing the consumer as a 'king' underscores the significance attributed to consumer preferences and the market's adaptability to meet consumer demands within the framework of capitalism.

136. Option (4) is correct.

The term Renaissance refers to a historical period characterized by a revival of interest in art, literature, and learning. It marked a transition from the medieval to the modern world, emphasizing a renewed interest in classical knowledge, reason, and cultural achievements. The Renaissance is associated with advancements in art, science, literature, and philosophy, reflecting an age of reason, enlightenment, and discoveries.

137. Option (2) is correct.

The analytical engine, designed by Charles Babbage, was intended to perform various tasks, including arithmetic functions. It was a mechanical general-purpose computer designed to automate mathematical calculations, making it capable of performing complex arithmetic operations.

138. Option (2) is correct.

A landlocked country is a nation that is entirely surrounded by land, with no coastline. Austria is a landlocked country in Central Europe, bordered by eight other countries, and it does not have any coastlines.

139. Option (4) is correct.

The area which supports the economy and export trade of a sea port is called its hinterland. The hinterland refers to the inland area connected to a coastal or port region, and its economic activities contribute to the overall functioning and trade of the port.

140. Option (4) is correct.

In an inflationary situation, the cost of living rises, profits may rise faster than wages, and the value of money generally falls. So, the statement "Country's exports become more competitive" is false.

141. Option (1) is correct.

Rate of interest may be zero.

142. Option (2) is correct.

Gram Sabha is an example of direct democracy. Gram Sabha is a village assembly where all the registered voters in the village can participate in decision-making processes directly.

143. Option (3) is correct.

Jwala Gutta is a renowned Indian badminton player. However, she has not won an Olympic medal.

144. Option (1) is correct.

Stomata, small pores for gas exchange, are primarily found on the underside or lower surface of plant leaves. They are usually more concentrated on the lower epidermis, and the correct term is 'leaf surface' rather than 'leaf margin'. The lower side is also known as the ventral side.

145. Option (1) is correct.

A person suffering from long-sightedness, also known as hypermetropia, needs spectacles with a convex lens. A convex lens helps to converge the light rays entering the eye, enabling the person to focus on nearby objects more effectively.

146. Option (2) is correct.

The words 'socialist' and 'secular' were inserted into the Preamble of the Indian Constitution by the 42nd Amendment Act of 1976.

147. Option (1) is correct.

A pressure cooker reduces cooking time by raising the boiling point of water inside due to increased pressure. The higher pressure allows water to reach a temperature higher than its normal boiling point, leading to faster cooking and tenderizing of food.

148. Option (2) is correct.

A Proxy Server functions as an intermediary, either in the form of a computer system or an application, managing requests from clients who are seeking resources from external servers.

149. Option (2) is correct.

An area reserved for the protection of wildlife is called a National Park. National Parks are designated areas where the natural environment and wildlife are protected, and human activities are limited to ensure the preservation of the ecosystem and biodiversity.

150. Option (4) is correct.

The largest part of our brain is the cerebrum. It is responsible for higher cognitive functions, such as thinking, problem-solving, memory, and voluntary muscle movements. The cerebrum is divided into two hemispheres and is highly developed in humans compared to other animals.