All India Sainik School Entrance Examination (AISSEE)

Solved Paper 2022

SECTION-A: ENGLISH

Directions (Q. Nos. 1-3) Read the following passage and answer the questions given below.

The ancient Greeks made a list of places that people should see. The list was named 'the Seven Wonders of the World'. Only one of the ancient wonders can be found today in Giza, which is in Egypt. This is the Great Pyramid of Giza. It is one of the three great pyramids built around 2500 BC. The Hanging Gardens of Babylon are other ancient wonder. They are located on the bank of the River Euphrates. This area is near Baghdad in Iraq. A King built this garden for his wife. The Statue of Zeus was built in Olympia, Greece in 457 B.C. This statue was built to honour the Greek God Zeus. The statue was as tall as a four-storey building! In addition to Zeus, the Greeks built another very big statue, to honour the Greek Sun God. Helios, this wonder is known as the Colossus of Rhodes, built around 550 B.C. The Temple of Artemis at Ephesus was considered the most beautiful structure on Earth. Ephesus was an ancient city that was located in what is now Turkey. The Mausoleum at Halicarnassus was also constructed in Turkey. The only wonder built for practical use was the Pharos of Alexandria. This was a lighthouse off the coast of Egypt. It was once the tallest building in the world.

1. **Which of the following statements is not true about the passage?**
   (a) Colossus of Rhodes was built to honour Helios.
   (b) Pharos of Alexandria was a lighthouse
   (c) The Great Pyramid of Giza was destroyed.
   (d) The Hanging Gardens of Babylon were built by a king for his wife.

2. **Which of the Seven Ancient wonders of the world was as tall as a four-storey building?**
   (a) The Great Pyramid of Giza
   (b) The Statue of Zeus
   (c) The Mausoleum of Halicarnassus
   (d) The Colossus of Rhodes

3. **What is meaning of the underlined word in 'The Lighthouse at Halicarnassus'?**
   (a) A kind of fabric
   (b) A country
   (c) Building to guide the ships
   (d) A temple

4. **Fill in the blank with the correct option. My mother advised me to stay .... home.**
   (a) in   (b) at
   (c) on   (d) for

5. **Fill in the blank with the correct article. Rakesh is .... excellent Science teacher.**
   (a) an   (b) a
   (c) the   (d) No article

6. **Rearrange the following words/phrases to make meaningful sentence by choosing the correct sequence. waved (A)/she (B)/ greeted (C)/and (D) cheerfully (E)/ us (F).**
   (a) BCDFEA   (b) CADBEF
   (c) ADBFEC   (d) BADCFE

7. **Fill in the blank with the correct option. It was a steep .... from the hilltop.**
   (a) dissent   (b) decent
   (c) descent   (d) desent

8. **Rearrange the following words/phrases to make meaningful sentence by choosing the correct sequence. snowfall (A) /heavy (B)/ the (C)/ everything (D) covered (E)**
   (a) CBAED   (b) BAECD
   (c) DEBA   (d) CABED

9. **Choose the correct noun to fill the blank. A .... of soldiers marched into the battleground.**
   (a) Troupe   (b) Trupe
   (c) Troop   (d) Truope

10. **Choose the correct pronoun to fill the blank. Is she the girl .... won the first prize?**
    (a) that   (b) whom
    (c) which   (d) who

11. **Choose the correct Question Tag to fill the blank. You paid the bill, ... ?**
    (a) won't you   (b) didn't you
    (c) will you   (d) doesn't you

12. **Identify the type of the following sentence. Mohan gave me a ten-rupee note.**
    (a) Declarative   (b) Imperative
    (c) Exclamatory   (d) Interrogative

13. **Choose the correct verb to fill the blank. The water .... from the tap last night.**

(a) dripping   (b) drip
(c) dripped   (d) will drip

14. **Choose the correct spelling from the following options.**
    (a) Appointiment   (b) Apoinment
    (c) Appointmant   (d) Appointment

15. **Choose the word nearest in meaning to the underlined word.**
    There was a <u>momentous</u> moment in the cricket match.
    (a) Insignificant   (b) Important
    (c) Sudden   (d) Abrupt

16. **Choose the correct adjective to fill the blank. Yesterday was the .... day of our trip.**
    (a) most worse   (b) more worse
    (c) worst   (d) worser

17. **Choose the opposite of 'literate' from the following options.**
    (a) Illiterate   (b) Unliterate
    (c) Deliterate   (d) Misliterate

18. **Choose the option that is the opposite of 'EARLIER'.**
    (a) Former   (b) Previous
    (c) Latter   (d) Later

19. **Choose the option that is nearest in the meaning to 'gigantic'.**
    (a) Very small   (b) Very good
    (c) Very bad   (d) Very big

20. **Choose the correct option to fill the blank.**
    A cobbler is a person who
    (a) repairs taps   (b) mends clothes
    (c) mends bulbs   (d) repairs footwear

21. **Choose the appropriate option to fill the blank.**
    All my friends are good-natured. As they say, birds of a feather .... together.
    (a) wing   (b) clique
    (c) flock   (d) group

22. **Choose the correct option to fill the blank. Seeing the wounded bird, she .... her mother.**
    (a) was calling   (b) called
    (c) call   (d) calling

23. **Identify the adverb in the following sentence.**
    The doctor will see you later.
    (a) later   (b) will
    (c) see   (d) The

24. **Choose the incorrect pair from the following options.**
    (a) knife-knives   (b) woman-women
    (c) deer-deer   (d) mouse-mouses

25. **Fill in the blank with the correct conjunction.**
    Manjeet cannot drive .... he has a licence.
   (a) if   (b) unless
    (c) although   (d) yet

SECTION-B: MATHEMATICS

26. **Which one of the following is the incorrect option?**

Area = 240 sq cm
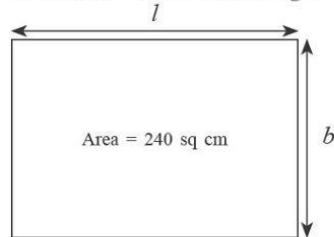
    (a) l = 19.2 cm, b = 12.5 cm
    (b) l = 16 cm, b = 15 cm
    (c) l = 54 cm, b = 5 cm
    (d) l = 32 cm, b = 7.5 cm

27. **Convert the fraction $15\frac{1}{25}$ into a decimal number.**
    (a) 150.4   (b) 15.04
    (c) 15.04   (d) 1.504

28. **A webinar has three intervals of 5 min each.**
    What is the total duration of the intervals in seconds?
    (a) 1000   (b) 800
    (c) 900   (d) 1500

29. **What is the weight of two dozen biscuits if each biscuit weighs 4 g?**
    (a) 24 g   (b) 64 g
    (c) 48 g   (d) 96 g

30. **Select values of m, n to make the statement true.**
    127 × 15 = (_m_ × 15) + (_n_ × 15)
    (a) m = 100, n = 15   (b) m = 120, n = 15
    (c) m = 15, n = 27   (d) m = 100, n = 27

31. **Which one of the following are arranged in descending order?**
    (a) $\frac{2}{5},\frac{2}{7},\frac{2}{13},\frac{2}{9},\frac{2}{3}$ (b) $\frac{6}{11},\frac{14}{11},\frac{10}{11},\frac{4}{11},\frac{2}{11}$
    (c) $\frac{7}{6},\frac{7}{8},\frac{7}{12},\frac{7}{15},\frac{7}{18}$ (d) $\frac{10}{9},\frac{13}{9},\frac{5}{9},\frac{15}{9},\frac{7}{9}$

32. **Which one of the following figures is not symmetrical along the dotted line?**

    (a)   (b)   (c)   (d)

33. **In 563672, the place value of 6 at the ten thousands place is_____ times the place value of 6 at the hundreds place.**
    (a) 1000   (b) 100
    (c) 10   (d) 10000

34. **128400 pens are to be packed in cartons with 150 pens in each. How many cartons will be needed?**
    (a) 856   (b) 805
    (c) 846   (d) 876

35. Find the area of the shaded part of the figure.
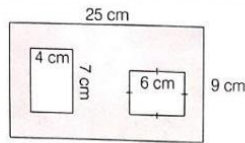
(a) 161 sq cm
(b) 171 sq cm
(c) 173 sq cm
(d) 163 sq cm

36. Choose a figure that will continue the series in the given figure.
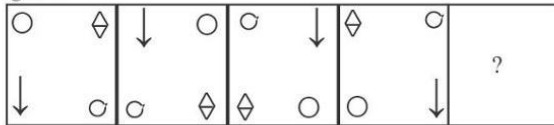
37. What would be the price of seven chairs, if the price of one chair is 7642.45?

(a) ₹53497.35
(b) ₹53497.15
(c) ₹53499.15
(d) ₹53597.15

38. Fill in the blank with the correct option.

CCCXC + LIX =

(a) CCCCXLIX
(b) CDXLIX
(c) CDCXLIX
(d) CDXXXXIX

39. In a particular year, 7643872 students appeared for an exam. Out of them if 4237602 were girls, how many were boys?

(a) 4306270
(b) 3456270
(c) 3406270
(d) 4305370

40. Shreya has 32 red pens and 56 blue pens. She wants to make packs of equal number of pens out of them in such a way that each pack has pens of only one colour. How many pens would be there in the biggest pack?

(a) 4
(b) 8
(c) 16.
(d) 12

41. I am a five-digit even number. I have 9 at my tens place. The digit at the ten thousands place is three less than the digit at the tens place. The digit at the hundreds place is half the value of the digit at the ten thousand place. The digit at the thousand place is double the digit at the ones place. Who am I?

(a) 68494
(b) 61392
(c) 64391
(d) 68394

42. What would be the water image of SEARCH ?

(a)   (b)   (c)   (d)
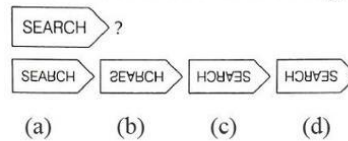
43. Which of the following numerals are arranged in ascending order?

(a) 6821, 6812, 6261, 2861
(b) 9075, 7905, 9701, 5907
(c) 10529, 12049, 12509, 15249
(d) 23124, 23213, 21467, 2764

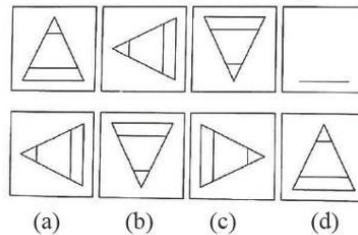44. What should be subtracted from 3 million to get 1765498?

(a) 1234602
(b) 1234502
(c) 1324502
(d) 1234402

45. An athlete finishes 400 m race in 48 sec.

How many minutes has he spent in running if he ran five times on the same track at the same speed?

(a) 4
(b) 3.5
(c) 5
(d) 6

46. Select the next figure in the pattern.

(a)   (b)   (c)   (d)

47. Rounding off 7348561 to the nearest hundreds is ....

(a) 7348000
(b) 7348600
(c) 7348560
(d) 7348500

48. If △ + △ + ◖ = 420 and ◖ − △ = 90, then what is the value of ◖?

(a) 100
(b) 200
(c) 90
(d) 120

49. Seventy six lakh four thousand eighty three is written as .... in the international number system.
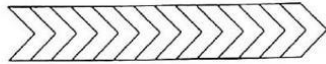
(a) 7,640,083
(b) 76,483
(c) 760,483
(d) 7,604,083

50. Prisha weighs 42 kg and Kyra weighs 39.5 kg. What is their total weight?

(a) 82500 g
(b) 8250 g
(c) 81500 g
(d) 8150 g

51. Which one of the following options is incorrect?

(a) $\frac{2}{5}$ = 0.4
(b) 1.147 >1.039
(c) 5.862< 5.9
(d) 3.21 >3.222

52. How many parts of the given figure should be shaded to represent $\frac{3}{7}$?

   (a) 4   (b) 12
   (c) 8   (d) 6

53. Sum of place values of the underlined digits in the given numbers is.......... 69<u>5</u>281 and 5<u>3</u>48<u>5</u>73
   (a) 305071   (b) 300551
   (c) 305017   (d) 3005071

54. Choose the smallest possible 7-digit number that you can form using each of the following digits 5, 1, 8, 0, 3.
   (a) 1310058   (b) 1001358
   (c) 1130058   (d) 1000358

55. Anil had 78.6 m fabric which was just enough to make one set of uniform for 12 students. How much fabric would be used to make one uniform?
   (a) 6.05 m   (b) 6.65 m
   (c) 6.55 m   (d) 6.25 m

56. An oil tank can hold 60 L of oil. Another oil tank can hold thrice as much. What is the total capacity of both the tanks?
   (a) 180 L   (b) 240 L
   (c) 120 L   (d) 300 L

57. If the cost of fencing lm is 215, then find the cost of fencing a park with length 45 m and breadth 23 m.
   (a) ₹ 29240   (b) ₹ 25340
   (c) ₹ 29440   (d) ₹ 29540

58. Solve $\frac{6}{8} \div \frac{3}{2} \times \frac{4}{5}$
   (a) $\frac{3}{5}$ (b) $\frac{3}{8}$
   (c) $\frac{5}{8}$ (d) $\frac{2}{5}$

59. The product of the LCM and HCF of two numbers is 322. If one of the numbers is 23, what is the other ?
   (a) 7   (b) 14
   (c) 18   (d) 46

60. Identify the greatest fraction from the following:
$\frac{2}{11}, \frac{2}{7}, \frac{2}{13}, \frac{2}{9}, \frac{2}{3}$
   (a) $\frac{2}{11}$ (b) $\frac{2}{9}$
   (c) $\frac{2}{7}$ (d) $\frac{2}{3}$

61. How many acute angles are there inside the given figure?

   (a) 4   (b) 6
   (c) 5   (d) 7

62. Which one of the following is not an equivalent fraction of $\frac{5}{7}$?
   (a) $\frac{15}{21}$ (b) $\frac{45}{56}$
   (c) $\frac{25}{35}$ (d) $\frac{10}{14}$

63. Raman started a journey 4 h before Sameer. If Sameer started his journey at 2:15 pm, at what time did Raman start his journey?
   (a) 09:15 h   (b) 11:15 h
   (c) 10:15 h   (d) 14:15 h

64. Identify the angle created by the minute hand and the hour hand at 2:30 pm.
   (a) Acute   (b) Obtuse
   (c) Straight   (d) Right

65. The area of a triangle whose base is 12 cm and the height twice the base is ....
   (a) 288 sq cm   (b) 144 sq cm
   (c) 289 sq cm   (d) 298 sq cm

66. If the classes for the senior students start everyday at 8:35 am and end at 1:45 pm (with no breaks), find the total duration of the classes.
   (a) 4 h 40 min   (b) 310 min
   (c) 5 h 20 min   (d) 315 min

67. What must be added to 2.4624 to get 6.785 ?
   (a) 4.321   (b) 4.3221
   (c) 4.3226   (d) 4.3229

68. What is the side of a cube if its volume is 64 cm"?
   (a) 12 cm   (b) 4 cm
   (c) 8 cm   (d) 16 cm

69. What is the fraction that the sum of the shaded regions represent?
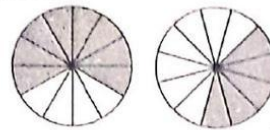
   (a) $\frac{10}{12}$ (b) $\frac{1}{4}$
   (c) 1   (d) $1\frac{1}{12}$

70. A dealer purchased 50 tables for ₹ 4570 each. Nine tables got damaged in transit. He sold the remaining tables for ₹ 5000 each. Choose the most appropriate statement for this case ?
   (a) He was able to recover the cost of the damaged tables
   (b) He made a profit of ₹ 25000
   (c) He incurred a loss of ₹ 23500
   (d) He made a profit of ₹ 23500

Directions (Q. Nos. 71-75) The following graph represents the activities taken up by Grade V students in a particular school. Study the graph and answer the following questions.

Student Activities
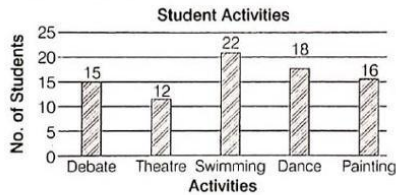
71. **How many students chose Dance?**
    (a) 16   (b) 18
    (c) 17   (d) 19

72. **How many students were there in the 2 least popular activities?**
    (a) 25   (b) 24
    (c) 28   (d) 27

73. **What is the total number of students in Grade V?**
    (a) 80   (b) 83
    (c) 85   (d) 84

74. **How many more students chose Swimming as compared to Debate?**
    (a) 6   (b) 8
    (c) 5   (d) 7

75. **The number of students who chose Painting is.......... more than the number of students who chose Theatre.**
    (a) 1   (b) 2
   (c) 3   (d) 4

SECTION-C: GENERAL KNOWLEDGE

76. **What is the major source of fresh water in India?**
    (a) Ocean water   (b) River water
    (c) Pond water   (d) Ground water

77. **Salman Rushdie won the Booker Prize for which book?**
    (a) The Satanic Verses   (b) Midnight's Children
    (c) Fury   (d) Shalimar the Clown

78. **Who invented electric bulb?**
    (a) Thomas Alva Edison   (b) Alexander Graham Bell
    (c) Marie Curie   (d) CV Raman

79. **By what other name is the Water Cycle known as?**
    (a) Water movement cycle   (b) Air cycle
    (c) Hydrologic cycle   (d) Tectonic cycle

80. **Pick an example of water pollution.**
    (a) An oil spill from a large ship
    (b) Animals walking along the beach
    (c) Drinking water out of a plastic bottle
    (d) Gasoline in a car

81. **Who has won the Sushila Devi Literature Award for the novel "Things to Leave Behind"?**
    (a) Kanika Mukherjee   (b) Ram Suri
    (c) Namita Gokhale   (d) Rita Chandra

82. **Where is the United Nations Headquarters located?**
    (a) Vienna   (b) New York
    (c) Paris   (d) Zurich

83. **Which classical dance form is named after the village it originated from?**
    (a) Kuchipudi   (b) Kathakali
    (c) Bharatnatyam   (d) Mohiniattam

84. **What do tissues help in?**
    (a) Faster development
    (b) Division of labour among cells
    (c) Higher reproductive potential
    (d) Body strength

85. **Which bacteria is responsible for the formation of curd?**
    (a) Vibrio Cholerae
    (b) Lactobacillus Acidophillus
    (c) Streptococcus thermophillus
    (d) Bacillus radicicola

86. **Which one of the following statements is true about fossil fuels?**
    (a) They are renewable resources
    (b) They are found within the top layers of the Earth's crust.
    (c) They are formed over the course of ten years.
    (d) They are the remains of once-living organisms.

87. **Which sweet is deep-fried, dipped in sugar syrup, round shaped and usually orange in colour?**
    (a) Gajar ka halwa   (b) Rasgulla
    (c) Bhakarwadi   (d) Jalebi

88. **The reading above .... on Richter scale can cause severe damage.**
    (a) 7   (b) 6
    (c) 5   (d) 4

89. **What does white colour in the Indian National Flag represent?**
    (a) Sacrifice   (b) Peace and Truth
    (c) Prosperity of life   (d) None of these

90. **Pick out the incorrect statement.**
    (a) Gravitation affects only part of the earth.
    (b) Gravitation pulls iron.
    (c) Gravitation prevents things from floating.
    (d) Aeroplane do not fly in the gravitational field.

91. **Which State/Union Territory is Nanda Devi located in?**
    (a) Himachal Pradesh   (b) Jammu and Kashmir
    (c) Uttarakhand   (d) Uttar Pradesh

92. **What is meant by seed coat?**
    (a) Hard cover around the food stored
    (b) Hard cover around the baby plant
    (c) The protective outer coat of a seed
    (d) Hard cover around the roots of the plant

93. **Name the holy book of the Parsis.**
    (a) Bible   (b) Zend Avesta
    (c) Quran   (d) Guru Granth Sahib

94. **Which Vitamin deficiency leads to bleeding of gums, slow healing of wounds and aching limbs?**
    (a) Vitamin A   (b) Vitamin B
    (c) Vitamin C   (d) Vitamin D

95. Which part of the Earth supports its biodiversity?
    (a) Biosphere
    (b) Sanctuary
    (c) Ecosystem reserve
    (d) Biotic community
96. Where did Buddha attain enlightenment?
    (a) Lumbini
    (b) Bodh Gaya
    (c) Sarnath
    (d) Kushinagar
97. What process is involved in Cloud Seeding, which is a technique that induces rain?
    (a) Adopting an agricultural practice that depends on clouds.
    (b) When water vapour in the atmosphere cools and condenses around a particle of dust or salt.
    (c) Making clouds and placing them in the sky.
    (d) Scattering clouds to form seed like structures.
98. Where is the famous Meenakshi Temple located?
    (a) Ujjain
    (b) Varanasi
    (c) Madurai
    (d) Rameswaram
99. In which sport is the term "Knock-Out" used ?
    (a) Archery
    (b) Boxing
    (c) Gol
    (d) Billiards
100. Who was the Chief of Army during the Indo-Pak war, 1971?
    (a) General PP Kumaramangalam
    (b) Field Marshal SHFJ Manekshaw
    (c) General JN Chaudhari
    (d) General KS Thimayya

SECTION-D: INTELLIGENCE

101 Which character when placed at the sign of interrogation (?) shall complete the given pattern?
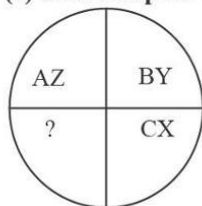
    (a) DW
    (b) DK
    (c) DE
    (d) DL
102. Choose the correct alternative. Smoke : Pollution : : War : ?
    (a) Peace
    (b) Victory
    (c) Treaty
    (d) Destruction
103. Replace the question mark (?) in the given series. mm, OO, qq, SS,?
    (a) uu
    (b) SS
    (c) UU
    (d) rr
104. Choose the correct alternative from the options for the Assertion (A) and Reason (R) given below. Assertion (A) In India, people elect their own representatives. Reason (R) India is a democratic country.

    (a) 'A' is true but 'R' is false
    (b) 'A' is false but 'R' is true
    (c) Both 'A' and 'R' are true
    (d) Both 'A' and 'R' are false
105. If Grain is related to Warehouse, then Water is related to ......
    (a) Estuary
    (b) River
    (c) Canal
    (d) Dam
106. If in a certain language 'PARROT' is written as 123345' and 'SOAT' is written as '6425', then how would 'ROAST' be written in that code?
    (a) 34625
    (b) 32564
    (c) 32456
    (d) 34265
107. 7 boys are standing in a row. Aakash is 14th from the right end. If he is shifted six places to the left, what is his position from the left end?
    (a) 20
    (b) 18
    (c) 11
    (d) 14
108. A residential complex has four buildings A, B, C, D. The height of each is different. The height of D is less than only B. The height of A is less than D and C. Who among them has the lowest height?
    (a) A
    (b) B
    (c) C
    (d) D
109. Which sequence of mathematical symbols can replace * in the given equation to balance the equation? 7 * 7 * 2 *1 = 12
    (a) $\times \div -$
    (b) $+ - \times$
    (c) $\div + -$
    (d) $\times - \times$
110. Surbhi is facing East. She turns 90° in the clockwise direction and moved 2 km, then she turns 145° in clockwise direction and moved 1 km. Which direction is she facing now?
    (a) North
    (b) East
    (c) North-West
    (d) South-East
111. Fill in the blank with one of the options given below, which is in line with the sequence in the question. PUE, QVF, RWG, ..., TYI
    (a) SXH
    (b) TSQ
    (c) ABN
    (d) STY
112. In a certain language, 'FIGHT' is written as 'TGHFI', then how will 'PAPER' be written in that code?
    (a) RPEPA
    (b) REPPA
    (c) PEARP
    (d) PAEPR

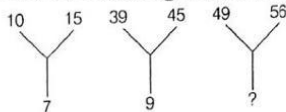113. **If 35 out of 70 people are diabetic, which figure will depict the diabetic group?**
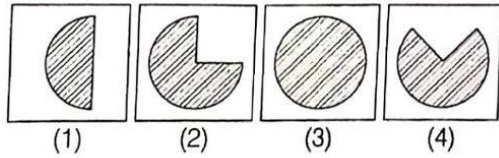
(a) 1   (b) 2
(c) 3   (d) 4

114. **Which of the following diagrams best depicts the relationship between Table, Chair, Furniture?**
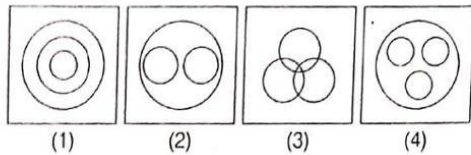
(a) 1   (b) 2
(c) 3   (d) 4

115. **Find the missing number from the given alternatives.**

(a) 28   (b) 21
(c) 11   (d) 38

116. **What comes in the place of question mark (?) in the following number series? 4, 12, 36, 108, 324,?**
(a) 520   (b) 475
(c) 680   (d) 972

117. **A bus for Delhi leaves every 30 min from a bus station. The station master told a passenger that a bus has already left 10 min ago and the next bus will leave at 9:35 am. At what time the station master gave this information to the passenger?**
(a) 9 : 20 am   (b) 9:10 am
(c) 9:15 am   (d) 9:25 am

118. **If 'A' means '÷', 'B' means '−', 'C' means '×' and 'D' means '+', then find the value of the following equation. 16 D 64 A 4 B 4C 3 = ?**
(a) 20   (b) 15
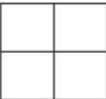(c) 9 :   (d) 17

119. **Two positions of dice are shown below. Identify the number at the bottom when the top is '5'.**
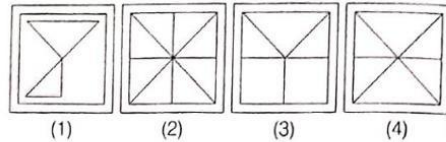

(a) 3   (b) 2
(c) 6   (d) 4

120. **Figure** **is embedded in one of the four alternatives. Find the alternatives which contains figure** **as its part.**
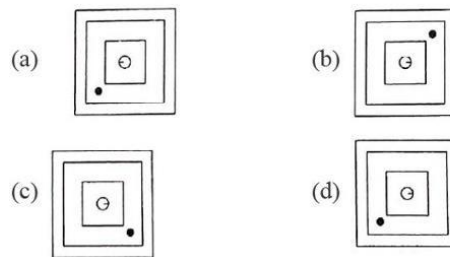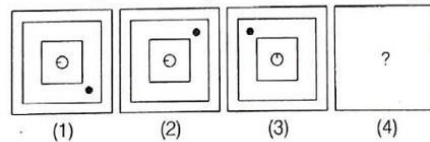

121. **R is K's sister. P is K's brother. Q is T's father who is P's brother. H is K's mother. At least how many sons do Q and H have?**
(a) 3   (b) 2
(c) 1   (d) 4

122. **Which of the following option is an odd one?**
(a) PORS   (b) LMNOP
(c) BCDE   (d) FGHI

123. **Which figure among the four alternatives a, b, c, d would replace the question mark in figure '4'?**

124. **Find out the pair in which the words bear the same relationship to each other as the given one. Austria : Vienna**
(a) Egypt : Cairo   (b) Germany: London
(c) USA : Orlando   (d) Australia : Sydney

125. **Which of the following words cannot be forme out of the word 'CONDUCT"?**
(a) DUCT   (b) COUNTED
(c) COUNT   (d) DONUT

Answers with Explanations

SECTION-A: ENGLISH

1. (c) As per the given passage, only one of the ancient wonders can be round today in Giza which is in Egypt. This is the Great Pyramid of Giza. The Great Pyramid of Giza wasn't destroyed.

2. (b) As per the passage, the statue of zeus was as tall as a four-storey building.

3. (c) The meaning of the word lighthouse is a great building to guide the ships.

4. (b) The correct option is (b). My mother advised me to stay at home. Preposition at can be used in multiple contents such as telling time or location.

5. (a) The correct article in this sentence should be 'an'.

6. (d) The correct order of the words/phrases do make meaningful sentence is– She waved and greated us chearfully.

7. (c) It was a sheep descent from the hilltop.

8. (a) The correct order should be–

The heavy snowfall covered everything.

9. (c) A troop of soldiers marched into the battleground.

10. (d) Is she the girl who won the first prize?

11. (b) You paid the bill, did not you?

12. (a) The given sentence is a declarative sentences.

The declarative sentence states a fact or it conveys information.

13. (c) The water dripped from the tap last night.

14. (d) The correctly spelt option is Appointment. While other are wrongly spelt.

15. (b) Momentous means very important because of effects on future events.

16. (c) The correct adjective to fill the blank is 'worst'.

17. (a) The opposite word of 'literate' is 'illeterate'.

18. (d) 'Later' is the opposite word of 'Earlier'.

19. (d) Very big is the nearest in meaning to 'gignatic'.

20. (d) A cobbler is a person who repairs footwear.

21. (c) All my friends are good natured. As they say, birds of a feather flock together.

22. (b) Called

23. (a) The adverb in the given sentence is 'later'.

24. (c) The plural form of 'deer' is 'deers'.

25. (b) The correct conjunction is unless. Manjeet cannot drive unless he has a licence.

SECTION-B: MATHEMATICS

26. (c) Given figure in question is a rectangle

Area of rectangle $= l \times b$
$= 54 \times 5$ sq cm.
$= 270$ sq cm.

27. (c) $15\frac{1}{25} = \frac{376}{25} = 15.04$

28. (c) Total time in seconds $= 5 \times 3 \times 60 = 900$ seconds.

29. (c) Total number of biscuits in two dozen $= 2 \times 12 = 24$

Weight of 1 biscuit $= 4$ gm

Total weight of two dozen biscuit $= 24 \times 4 = 96$ gm

30. (a) From option (a),
m = 100, n = 15
127×15 (m $\times$ 15) + (n $\times$ 15)
$1905 \neq 100 \times 15 + 15 \times 15$
$1905 \neq 1500 + 225$
$1905 \neq 1725$
From option (b),
m = 120, n = 15
127×15 (m $\times$ 15) + (n $\times$ 15)
$127 \times 15 \neq (120 \times 15) + (15 \times 15)$
$1905 \neq 1800 + 225$
$1905 \neq 2025$
From option (c),
m = 15, n = 27
$127 \times 15 = (m \times 15) + (n \times 15)$
$1905 = (15 \times 15) + (27 \times 15)$
$1905 = 225 + 405$
$1905 = 630$
From option (d),
m = 100, n = 27
$127 \times 15 = (m \times 15) + (n \times 15)$
$1905 \neq (100 \times 15) + (27 \times 15)$
$1905 \neq 1500 + 405$
$1905 = 1905$

31. (c) $\frac{7}{6} = 1.16$,

$\frac{7}{8} = 0.875$

$\frac{7}{12} = 0.583$,

$\frac{7}{15} = 0.466$,

$\frac{7}{18} = 0.388$

Hence, descending order is

$\Rightarrow \frac{7}{6} > \frac{7}{8} > \frac{7}{12} > \frac{7}{15} > \frac{7}{18}$

32. (c) In geometry, symmetry is defined as a balanced and proportionate similarity that is found in two halves of an object. It means one-half is the mirror image of the other half. The imaginary line or axis along which we can fold a figure to obtain the symmetrical halves is called the line of symmetry.

33. (b) Place value of 6 in the given number 563672 = 60000 at the ten thousand place.

The place value of 6 at the hundred place = 600

$60000 = 100 \times 600$

$60000 = 60000$

34. (a) Required cartoons

$$= \frac{128400}{150}$$

$$= 856$$

35. (a) Area of rectangle (1) = $25 \times 9 = 225$ sq. cm.

Area of rectangle (1) = $4 \times 7 = 28$ sq. cm.

Area of square = $6^2 = 36$ sq. cm.

Area of shadow = $225 - (28 + 36)$

$$= 225 - 64$$

$$= 161 \text{ sq. cm.}$$

36. (c) Figure given in option (c) will come first.

37. (b) Cost of one chair = 7642.45

Cost of seven chairs = 7×4672.45

$$= ₹53,497.15$$

38. (b) CCCXC + LIX = ...

CCCXC = 390

LIX = 59

$390 + 59 = 444$

$449 = $ CDXLI X

CCCXC + LIX = CDXLIX

39. (c) Number of boys in board exam

$$= 76,73,7872 - 42,37,602$$

$$= 34,06,270$$

40. (b)

```
32)56(1
   32
   24)32(1
      24
      8)24(3
        24
        ×
```

Hence, 8 pens can be filled in the largest pack.

41. (d) Option (d) fulfils all the conditions.

42. (b)
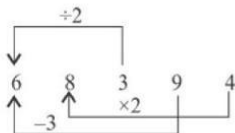
$$\text{SEARCH}$$
$$\overline{\text{///////////////////////}}$$
$$\text{ƧEVᴚCH}$$

43. (c) In ascending order

10529, 12049, 12509, 15249

44. (b) 3 million = 3000000

```
  3000000
 −1234502
  1765498
```

45. (a) Time taken to finish 400 m race − 48 sec

∴ Time taken if he ran five times on the same track at the same speed

$$= \frac{240}{60} = 4 \text{ minute}$$

46. (c) The next figure in the given problem will be option (c).

47. (b) Rounding off 7348561 to the nearest hundreds is 7348600

48. (b) ▲ + ▲ + ◖ = 420   ...(i)

◖ - ▲ = 90   ...(ii)

Putting value of ▲ in equation (i)

∴ ▲ + ▲ + 90° + ▲ = 420

3 ▲ = 420 − 90

3 ▲ = 330

▲ $= \dfrac{330}{3} = 110$

Putting value of ▲ in equation (ii)

◖ − 110 = 90

◖ = 90 + 110 = 200

49. (d) Seventy six lakh four thousand eighty three is written as 7,604,083 in the international number system.

50. (c) Weight of Prisha = 42 kg

$$= 42000 \text{ gm}$$

Weight of Kyara = 39.5 kg = 39500 gm

Total weight = 42000 + 39500 = 81500 gm

51. (d)

52. (d) Number of parts of the given figure to be shaded

$$= \frac{3}{7} \times 14 = 6$$

53. (a)

6 9 5 2 8 1

     place value   1
     place value   5000

5 3 4 8 5 7 3

     place value   70
     place value   300000

Sum of these place values $= 1 + 5000 + 70 + 300000$
$$= 305071$$

54. (c) 5, 1, 8, 0, 3 smallest number found with the help of these digit $= 1000358$

55. (c) Anil had 78.6m fabric to make one set of uniform for 12 students.

So, for 12 uniform – 78.6 m fabric needed

∴ Fabric needed for one uniform $= \dfrac{78.6}{12} = 6.55$ m

56. (b) Capacity of 1st tank $= 60$ L

Capacity of 2nd tank $3 \times 60 = 180$ L

Total capacity $= 60 + 180 = 240$ L

57. (a) Perimeter of the park

$$= 2(45 + 23) = 2 \times 68 = 136 \text{ मी.}$$

Cost of fencing

$$= 136 \times 215 = ₹29240$$

58. (d) $\dfrac{6}{8} \div \dfrac{3}{2} \times \dfrac{4}{5}$

$$= \dfrac{6}{8} \times \dfrac{2}{3} \times \dfrac{4}{5} = \dfrac{2}{5}$$

59. (b) Let second number is N

First number $\times$ second number $=$ HCF $\times$ LCM

As per question,

$N \times 23 = 322$

$N = \dfrac{322}{23} = 14$

60. (d)

$\dfrac{2}{11} = 0.1818$

$\dfrac{2}{7} = 0.285$

$\dfrac{2}{13} = 0.153$

$\dfrac{2}{3} = 0.666$

Hence, $\dfrac{2}{3}$ is the largest one.

61. (b) There are six acute angles inside the given figure.

62. (b) $\dfrac{15}{21} = \dfrac{5}{7}, \dfrac{25}{35} = \dfrac{5}{7}, \dfrac{10}{14} = \dfrac{5}{7}$

Hence, option (b) is not un equivalent fraction of $\dfrac{5}{7}$.

63. (c)

64. (b)

65. (b) Area $= \dfrac{1}{2} \times 12 \times 2 \times 12$

$$= 144 \text{ sq. cm}$$

66. (b) Let total time $= (8:35 - 9:00) + (9:00 - 10:00)$

$+ (10:00 - 11:00) + (11:00 - 12:00) + (12:00 - 1:00)$
$+ (1:00 + 1:45)$

$= 25$ min $+ 60$ min $+ 60$ min $+ 60$ min $+ 45$ min

$= 310$ min

67. (c) $4.3226 + 2.4624 = 6.785$

68. (b) Volume of cube $= (60)^3$

$(\text{side})^3 = 64$

side $= (6^4)^{1/3} = (4^3)^{1/3} = 4$ cm

69. (d)

70. (c) Total cost of 50 tables

$$= 4570 \times 50 = 228500$$

Total cost of damaged tables

$$= 9 \times 4570 = 41130$$

Total value of rest saled tables

$$= 41 \times 5000 = 205000$$

∴ Sale price of remaining tables

$$= 5000 \times (50 - 9) = 5000 \times 41$$
$$= 205000$$

∴ Loss $= 228500 - 205000 = 23500$

Hence, the correct answer is option (c).

71. (b) Number of students who choose dance $= 18$

72. (d)

73. (b)

74. (b) Number of students who choose swiming $= 15$

Number of students who choose debate $= 22$

∴ Difference $= 22 - 15 = 7$

75. (d) The number of students who choose painting $= 16$

The number of students who choose theatre $= 12$

∴ Difference $= 16 - 12 = 4$

SECTION-C: GENERAL STUDIES

76. (d) Ground water and surface water are the major sources of Fresh water in India. Ground water is the water present beneath the earth's surface which can be extracted through various ways.

77. (b) Rushdie received the Booker Prize in 1981 for Midnight's Children. The novel subsequently won the Booker of Bookers (1993) and the Best of the Booker (2008).

78. (a) The first commercial electric bulb was first invented by Thomas Alva Edison in the year 1879.Thomas Alva Edison was an American inventor and businessman. He developed many devices in fields such as electric power generation, mass communication, sound recording, and motion pictures.

79. (c) The water cycle, also known as the hydrologic cycle, describes where water is stored on Earth and how it moves. Water is stored in the atmosphere, on the land surface, and below the ground. It can be a liquid, a solid, or a gas.

80. (a)

81. (a) .The Bhopal Literature and Art Festival named writer Namita Gokhale as the winner of the inaugural Sushila Devi Literature Award for her novel, Things To Leave Behind. The prize will be awarded during the first edition of the three-day long Bhopal Literature and Art Festival that begins on January 12 at Bharat Bhawan.

The newly-instituted award recognises the best work of fiction by a woman author and comes with a cash prize of ₹2 lakh. Books published in 2016 and 2017 were eligible for this year's prize.

82. (b) The United Nations is headquartered in Midtown Manhattan, New York City, United States, and the complex has served as the official headquarters of the United Nations since its completion in 1951.

83. (a) Kuchipudi is named after the village in Krishna district of Andhra Pradesh named Kuchipudi – shortened form of the full name Kuchelapuram or Kuchilapuri – where it developed. The name of village, states Ragini Devi, is itself derived from Sanskrit Kusilava-puram, which means "the village of actors".

84. (d) Tissue is a group of cells or fluid that work together to perform a specific job in the body like cells in an organ like the kidney or heart or blood cells that carry oxygen to and waste materials from the cells in the body.

85. (b) Lactobacillus converts milk to curd by producing lactic acid and reducing the pH of the milk. These bacteria convert the lactose into lactic acid, which imparts the sour taste to curd. When milk is heated to a temperature of 30-40 degrees centigrade and a small amount of old curd added to it, the lactobacillus in that curd sample gets activated and multiplies.

86. (d) Fossil fuels are made from decomposing plants and animals. These fuels are found in the Earth's crust and contain carbon and hydrogen, which can be burned for energy. Coal, oil, and natural gas are examples of fossil fuels.

87. (d) Jalebi sweet is deep-fried, dipped in sugar syrup, round shaped and usually orange in colour.

88. (a)

89. (b) In the national flag of India the top band is of Saffron colour, indicating the strength and courage of the country. The white middle band indicates peace and truth with Dharma Chakra.

90. (a) A gravitational force affects the whole part of the earth, due to the gravitational force, everything is in proper condition, other wise it could lead to destruction.

91. (c) Nanda Devi is the second-highest mountain in India, after Kangchenjunga, and the highest located entirely within the country. It is the 23rd-highest peak in the world.

Nanda Devi was considered the highest mountain in the world before computations in 1808 proved Dhaulagiri to be higher. It was also the highest mountain in India until 1975, when Sikkim, an independent kingdom until 1948 and a protectorate of India thereafter, became a part of the Republic of India. It is located in Chamoli Garhwal district of Uttarakhand, between the Rishiganga valley on the west and the Goriganga valley on the east.

92. (c) Seed Coat is the outer protective covering of a seed. The seed coat develops from the integument of the ovule. Also called testa.

93. (b) The Zend Avesta is the primary collection of religious texts of Zoroastrianism, composed in the Avestan language.

94. (c) As a consequence, Vitamin C deficiency is characterized by weakness and fatigue, hyperkeratosis of the hair follicles, perifollicular hemorrhages, petechiae and ecchymoses, swollen bleeding gums, delayed wound healing, and the easy fracturing of bone. These are the characteristic clinical features of scurvy.

95. (a)

96. (b) Buddha attained enlightenment at Bodh Gaya. Bodh Gaya is a village in the northeast Indian state of Bihar. Considered one of the most important Buddhist pilgrimage sites, it's dominated by the ancient brick Mahabodhi Temple Complex, built to mark the site where the Buddha attained enlightenment beneath a sacred Bodhi Tree.

97. (b) Cloud seeding is a type of weather modification that aims to change the amount or type of precipitation that falls from clouds by dispersing substances into the air that serve as cloud condensation or ice nuclei, which alter the microphysical processes within the cloud.

98. (c)

99. (b) In the sport of Boxing the term KNOCK OUT IS USED. A bout ends in a knockout when a boxer is knocked down and cannot get up by the count of 10. A fight can be stopped by a technical knockout (TKO) when a boxer is deemed by the referee (and sometimes the ringside physician) to be unable to defend himself.

100. (b) Field Marshal SHFJ Manekshaw became the seventh Chief of the Army Staff (COAS) in 1969. Under his command, Indian forces conducted victorious campaigns against Pakistan in the Indo-Pakistani War of 1971, which led to the creation of Bangladesh in December 1971.

SECTION-D: INTELLIGENCE

101. (a) The pattern is,

$A \xrightarrow{+1} B \xrightarrow{+1} C \xrightarrow{+1} D$

$Z \xrightarrow{-1} Y \xrightarrow{-1} X \xrightarrow{-1} W$

102. (d)

103. (a) The pattern is

$$m \longrightarrow O \longrightarrow q \longrightarrow S \longrightarrow u$$
$$m \longrightarrow O \longrightarrow q \longrightarrow S \longrightarrow u$$

104. (c)

105. (d)

106. (d) As

P = 1,	S = 6
A = 2	A = 4
R = 3 &	A = 2
R = 3	T = 5
O = 4	T = 5

Similarly

R = 3	O = 4
A = 2	S = 6
T = 5	

Hence, 'ROAST' can be written as '3 4 2 6 5'

107. (b) Position of Akash from left end

$$37 - 14 - 6 + 1 = 38 - 20 = 18$$

108. (a) From the question,

$$B > D > C > A$$

109. (b) After replacing the symbol,

$$7 \times 7 \times 2 \times 1 = 12$$
$$7 + 7 - 2 \times 1 = 12$$
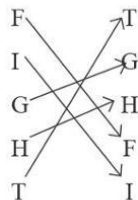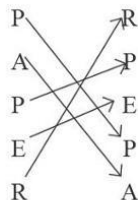$$14 - 2 \times 1 = 12$$
$$12 \times 1 = 12$$
$$12 = 12$$

110. (c)

111. (a) The pattern is:

$$P \xrightarrow{+1} Q \xrightarrow{+1} R \xrightarrow{+1} \boxed{S} \xrightarrow{+1} T$$
$$U \xrightarrow{+1} V \xrightarrow{+1} W \xrightarrow{+1} \boxed{X} \xrightarrow{+1} Y$$
$$E \xrightarrow{+1} F \xrightarrow{+1} G \xrightarrow{+1} \boxed{H} \xrightarrow{+1} I$$

112. (a) As,

```
F        T
I        G
G        H
H        F
T        I
```

Similarly,

```
P        R
A        P
P        E
E        P
R        A
```
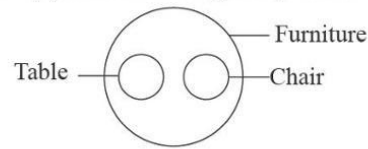
Hence, PAPER can be written as RPEPA.

113. (a) If 35 out of 70 people are diabetic then it will be depicted as given in option (a)

114. (d) Relation among table, chair & furniture is:

Table — Furniture — Chair

115. (c)
$$10 + 7 = 17 - 15 = 2$$
$$39 + 9 = 48 - 45 = 3$$
$$49 + 2 - 56 = 4$$
$$? - 7 = 4$$
$$? = 4 + 4 = 11$$

116. (d) The pattern of series is

$$4 \xrightarrow{\times 3} 12 \xrightarrow{\times 3} 36 \xrightarrow{\times 3} 108 \xrightarrow{\times 3} 324 \xrightarrow{\times 3} \boxed{972}$$

Hence, 972 is required number.

117. (c) Time of bus $= 9 : 35 - 0 : 30$

$$= 9 : 05 \text{ am}$$

Time the station master gave the information to the passenger

$$= 9 : 05 + 0 : 10 = 9 : 10 \text{ am}$$

118. (a) As per the question,

$$16 \, D \, 64 \, A \, 4 \, B \, 4 \, C \, 3 = ?$$
$$16 + 64 \div 4 - 4 \times 3 = ?$$
$$16 + 16 - 4 \times 3 = ?$$
$$32 - 12 = ?$$
$$20 = ?$$

119. (d)

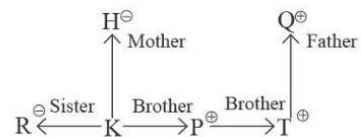| 3	2	4
3	6	5

The number at the bottom when the top is 5 = 4

120. (b) The given figure is embedded in option (b)

121. (b) From the question,

```
H⊖              Q⊕
↑ Mother        ↑ Father
         ⊖ Sister   Brother      Brother
R ←—— K ——→ P⊕ ——→ T⊕
```
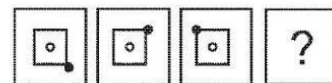
Hence, it is clear that Q and H has at least 2 son.

122. (b) Among the given option (b) is odd one. 'b' has five alphabets while other options have only 4 alphabets.

123. (d)

Option (d) is the correct answer.

124. (a) As the Vienna is capital of Austria, similarly Cairo is the capital city of Egypt. So, correct option is (a).

125. (b) Counted can not be form from CONDUCT, because E is not there.

❑❑❑