TARA INSTITUTE

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NAME :...

ROLL NO. :...

Time Allowed: Two Hours
Maximum Marks: 200

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET   DOES NOT HAVE ANY UN PRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.

2. ENCODE CLEARLY THE TEST BOOKLET SERIES **A**, **B**, **C** OR **D** AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.

3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **Do NOT** write anything else on the Test Booklet.

4. This Test Booklet contains 200 items (Questions). Each item is printed in English and Hindi. Each item comprises FOUR responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response with you consider the best. In any case, choose **ONLY ONE** response for each item.

5. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See direction in the answers sheet.

6. All items carry equal marks.

7. Before you proceed to mark in the Answer sheet the response to various items in the Test booklet, you have to fill in some particulars in the answer sheets as per instruction sent to you with your Admission Certificate.

8. After you have completed filling in all responses on the answer sheet and the examination has concluded, you should hand over to Invigilator only the answer sheet. You are permitted to take away with you the Test Booklet.

9. Sheet for rough work are appended in the Test Booklet at the end.

10. **Penalty for Wrong answers**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE
(i). There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-fourth (0.25)** of the marks assigned to that question will be deducted as penalty.
(ii). If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
(iii). If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.
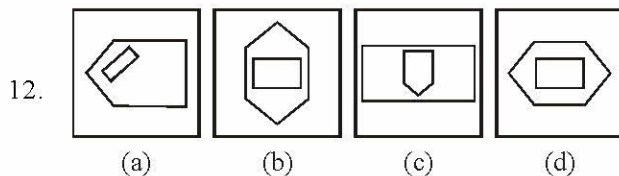
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

PART - A
INTELLIGENCE AND REASONING

Directions (Q. 1-9): *In the following questions, there is a definite relationship between two groups of letters to the left of the sign ': :'. Out of the four responses select one and substitute it for the '?'.*

1. JKLM : LJMK : : TUVW : ?
   (a) UTWV   (b) VTWU
   (c) VUTW   (d) VTUW

2. HGIJ : GHHK : : POQR : ?
   (a) OPPS   (b) QPPT
   (c) OQQS   (d) QOOS

3. SAFE : TCII : : CLAP : ?
   (a) OMCR   (b) DMET
   (c) DNES   (d) DNDT

4. CFGI : RUTX : : KMNO : ?
   (a) PMNL   (b) LNMP
   (c) LMNP   (d) PNML

5. 21 : 3 : : 574 : ?
   (a) 23   (b) 82
   (c) 97   (d) 113

6. 11 : 119 : : 15 : ?
   (a) 154   (b) 223
   (c) 233   (d) 152

7. 2 : 0 : : 3 : ?
   (a) 18   (b) 19
   (c) 20   (d) 21

8. MAN : BIOGRAPHY : NATION : ?
   (a) PEOPLE   (b) POPULATION
   (c) GEOGRAPHY   (d) HISTORY

9. Crop : Farm : : Ore : ?
   (a) Iron   (b) Volcano
   (c) Mine   (d) Factory

Directions (Q. 10 to 15): *Select the one which is different from the other three responses.*

10. (a) C X D W   (b) G T H S
    (c) J Q K P   (d) H R I S

11. (a) Wool   (b) Feather
    (c) Hair   (d) Grass

12.
    (a)   (b)   (c)   (d)

13. (a) 57–47   (b) 39–29
    (c) 19–9   (d) 59–39

14. (a) Giraffe   (b) Horse
    (c) Camel   (d) Bullock

15. (a) Foreword   (b) Text
    (c) Index   (d) Preface

16. Which one of the given responses would be a meaningful order of the following words ?
    1. Book   2. Words
    3. Letters   4. Sentences
    5. Chapter   6. Pages
    (a) 3   2   6   5   4   1
    (b) 3   2   5   4   6   1
    (c) 3   2   4   5   4   1
    (d) 3   2   4   6   5   1

17. Your mother is 4 years younger than your father who is six times oldest than you. If your age is 6 years, what is your mother's age ?
    (a) 36 years   (b) 34 years
    (c) 28 years   (d) 32 years

18. If A is the mother of D, B is not the son of C, C is the father of D, D is the sister of B, then how is A related to B ?
    (a) Mother   (b) Brother
    (c) Stepson   (d) Sister

19. In an examination, Rahul got the 11th rank and he was 47th from the bottom among those who passed. 3 students could not appear for the exam. 1 student failed. What is the total no. of students ?
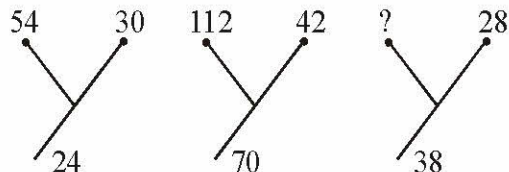   (a) 60   (b) 62
    (c) 59   (d) 61

20. Raju is Ramu's neighbour and he stays 100 metes away towards southeast. Venu is Raju's neighbour and he stays 100 metres away towards southwest. Khader is Vensu's neighbour and he stays 100 metres away towards northwest. Then where is the position of Khader's home in relation to Ramu's ?
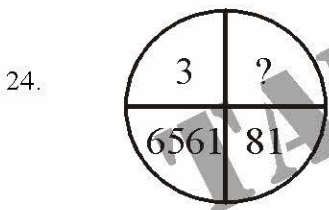   (a) South-East (b) South-West
    (c) North-West (d) North

21. Sanmitra walks towards north 4 km, turns right and walks 5 km. Then he turns towards south and walks 2 km. Again he takes a turn towards west walks 3 km and stops for a while. Then he further walks 2 km. What is the distance of Sanmitra from starting point ?

    (a) 16 km   (b) 2 km
    (c) 4 km   (d) 3 km

22. In the series,

    6 4 1 2 2 8 7 4 2 1 5 3 8 6 2 1 7 1 4 1 3 2 8 6

    how many pairs of successive numbers have a difference of 2 each ?

    (a) Four   (b) Five
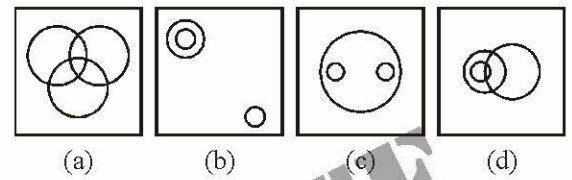   (c) Six   (d) Seven

Directions (Q. 23-24): *Find the missing number.*

23.

    (a) 76   (b) 66
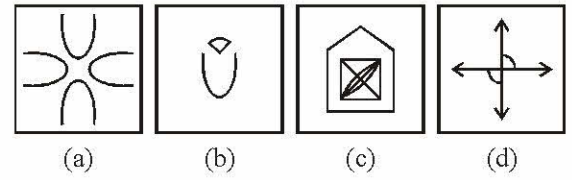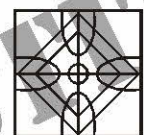   (c) 10   (d) None of these

24.

    (a) 18   (b) 27
    (c) 24   (d) 9

25. Height of A is less than that of B, but more than that of C. Height of D is less than A, but more than that of C. Height of E is less than B, but more than that of A. Then who is of the least height ?

    (a) B   (b) C
    (c) A   (d) D

26. If 'PENCIL' is coded as ? @, = ; 7 and 'PAPER' is coded as ? 9 ? @ 5, how will you code 'CLIP' ?

    (a) @ 7 ; ?   (b) @ ? ; ?
    (c) = 7 ? ;   (d) = 7 ; ?

27. If J = 10, JASMINE = 71, then ESTIMATE = ?

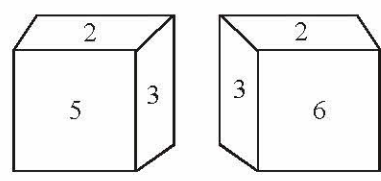   (a) 71   (b) 82
    (c) 92   (d) 91

28. Seeta starts from a point, walks 2 km towards north, turns towards her right and walks 2 km, turns right again and walks. What is the direction she is facing now ?

    (a) East   (b) West
    (c) South   (d) North

29. Out of four figures which figure will best represent the relationship amongst the classes ?

    1. Sparrow   2. Birds
    3. Mice

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

30. Which of the answer figure is not made up of only by the components of the key figure ?

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

31. From the following two different appearances of a die find out the number which is opposite to '5'.

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

32. Arrangement the following according to dictionary order–

    1. Collect   2. Collinear
    3. Collection   4. Column
    5. Collapse

    (a) 5, 1, 3, 2, 4   (b) 5, 1, 2, 3, 4
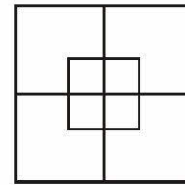   (c) 5, 1, 4, 3, 2   (d) 5, 1, 2, 4, 3

33. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it ?

c_bba_cab_ac_ab_ac

(a) babcc
(b) bcacb
(c) acbcb
(d) abcbc

34. Anil introduces Rohit as the son of the only brother of his father's wife. How is rohit related to Anil ?

(a) Cousin
(b) Son
(c) Brother
(d) Son in Law

35. If BAD is coded as YZW then MAD will be coded as–

(a) M N P
(b) M N Z
(c) N Z W
(d) N W Z

36. If Before as coded FEBORE then Jungle will be coded as –

(a) ELGNUJ
(b) GNUJEL
(c) GNUEJL
(d) NUJGLE

37. If 'skw nip xtq' stands for 'green pink dress', 'mbv xtq rib' stands for 'beautiful cotton dress' and 'tsu rib skw' stands for 'beautiful pink button' what does 'mbv' stands for ?

(a) pink
(b) cotton
(c) beautiful
(d) button

Directions (Q. 38-40): *In each of the following questions, two series are given. You have to study the pattern in series A and following the pattern fill up blanks in series B .*
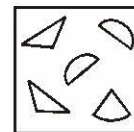
38. **Series A :** 518, 14, 5, 622, 10, 1, 972

Series B : 816, 15, 6, 912, ..., 1028

(a) 12, 4
(b) 12, 3
(c) 11, 4
(d) 11, 3

39. **Series A :** 2, 2, 4, 12, 48, 240, 1440

Series B : 1, 1, 2, 6, ... 120, 720

(a) 18
(b) 24
(c) 30
(d) 36

40. **Series A :** 4, 6, 12, 30, 90, 315

Series B : 2, 3, ..., ..., 45, 157.5

(a) 6, 12
(b) 6, 15
(c) 4.5, 15
(d) 4.5, 18

Directions (Q. 41-42): *One/two statements are given followed by two conclusions and assumptions I and II. You have to consider the two statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions and assumptions, if any, follow from the given statements–*
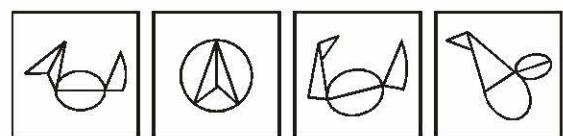
41. **Statement :** All hens are cocks. No cock is black.
Conclusions :
I. All cocks are hens.
II. No hen is black.
(a) Only conclusion I is valid
(b) Only conclusion II is valid
(c) Both the conclusions are valid
(d) Both the conclusions are invalid

42. **Statement :** He is too industrious to be poor.
Conclusions :
I. Very industrious people also can be poor.
II. Very lazy people can also be rich.
(a) Only I is implicit
(b) Only II is implicit
(c) Both I and II are implicit
(d) Neither I nor II is implicit

43. How many squares are there in the given figure ?

(a) 7
(b) 12
(c) 8
(d) 10

44. Among the four answer figures, which figure can be formed from the cut-pieces given below in the question figure ?
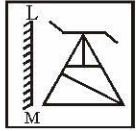**Question Figure :**
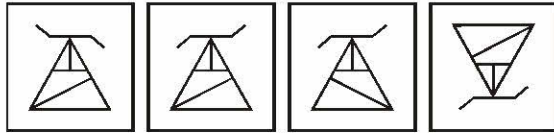

Answer Figures :

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

45. If a mirror is placed on the line LM, then which of the answer figures is the right image of the given question figure ?
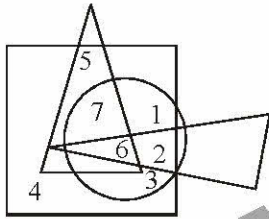
Question Figure :

Answer Figures :

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

46. Which number is present only in one geometrical figure?

   (a) 3   (b) 2
   (c) 5   (d) 4

Directions (Q. 47-49) : *A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.*

47. 436, 382, 337, 238 ?
   (a) 167   (b) 159
   (c) 138   (d) 148

48.

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

49. 13, 40, 122, 369 ?
   (a) 1110   (b) 1111
   (c) 1112   (d) 1113

50. If the given letters are rearranged, it forms a word which belongs to one of the four response options.
LORAMIGD
   (a) Bird   (b) Animal
   (c) Tree   (d) Flower

PART - B

GENERAL AWARENESS

51. The 42nd amendment added which terms to the original preamble ?
   (a) socialist, secular   (b) sovereign, socialist
   (c) secular, democratic   (d) democratic, republic

52. The President of India is elected indirectly by the electoral college consisting of the elected members of–
   (a) Lok Sabha
   (b) Rajya Sabha
   (c) Lok Sabha and Rajya Sabha
   (d) Lok Sabha, Rajya Sabha and state legislative assemblies

53. Which Article of the Indian Constitution abolished untouchability ?
   (a) Article 16   (b) Article 17
   (c) Article 15   (d) Article 18

54. Who discharges the duty of the President of India when both he and Vice-President of India and absent?
   (a) Speaker, Lok Sabha
   (b) Deputy Chairman, Rajya Sabha
   (c) Chief Justice of India
   (d) Prime Minister of India

55. The verdict by the Supreme Court that the original structure of the Preamble, as given in the Constitution, cannot be changed, was given in which case–
   (a) Sajjan Singh   (b) Minerva Mills
   (c) Golaknath   (d) Keshavananda

56. Mother Teresa was born in–
   (a) Switzerland   (b) India
   (c) Germany   (d) Albania

57. Through which one of the following group of countries does the Equator pass ?

   (a) Brazil, Zambia and Malaysia

   (b) Colombia, Kenya and Indonesia

   (c) Brazil, Sudan and Malaysia

   (d) Venezuela, Ethiopia and Indonesia

58. According to 2001 Census which Indian State has the lowest population ?

   (a) Lakshadweep   (b) Sikkim

   (c) Arunachal Pradesh   (d) Goa

59. Who among the following Nobel Peace Prize winners had most of her education in New Delhi ?

   (a) Ms. Aung San Suu Kyi

   (b) Rigoberta Menchu

   (c) Mother Teresa

   (d) None of the above

60. Where is the Central Rice Research Institute located ?

   (a) Bengaluru   (b) Kanpur

   (c) Coimbatore   (d) Cuttack

61. Who was the first Indian to be awarded Oscar ?

   (a) Satyajit Ray   (b) Mehboob Khan

   (c) Bhanu Athaya   (d) A. R. Rehman

62. Which among the following is the first feature film produced in India by Dada Saheb Phalke ?

   (a) Alam Ara   (b) Raja Harishchandra

   (c) Shakuntala   (d) None of the above

63. Which of the following towns is not situated along the Grand Trunk Road ?

   (a) Allahabad   (b) Lucknow

   (c) Aligarh   (d) Kanpur

64. What name does the river Ganges acquire in Bangladesh ?

   (a) Alaknanda   (b) Bhagirathi

   (c) Hoogly   (d) Padma

65. The part of the eye having the largest refractive index is–

   (a) Cornea   (b) Aqueous humor

   (c) Lens   (d) Vitreous homor

66. Taj Mahal gets much polluted due to–

   (a) Heavy rush of tourists

   (b) Acidic rain

   (c) Deforestation

   (d) Noise pollution

67. The following instrument is used to convert thermal energy into electrical energy–

   (a) Ammeter   (b) Hydrometer

   (c) Voltmeter   (d) Thermocouple

68. Enzymes are–

   (a) Micro organisms

   (b) Proteins

   (c) Inorganic compounds

   (d) Moulds

69. Match the following–

List-I	List-II
(A) Aquaculture	1. Silk
(B) Floriculture	2. Grapes
(C) Sericulture	3. Flower
(D) Viticulture	4. Fisheries

Codes :

	(A)	(B)	(C)	(D)
(a)	(4)	(3)	(2)	(1)
(b)	(3)	(4)	(1)	(2)
(c)	(3)	(4)	(2)	(1)
(d)	(4)	(3)	(1)	(2)

70. Which one of the following is an unpredictable natural disaster ?

   (a) Earthquake   (b) Cyclone

   (c) Tornado   (d) Hurricane

71. Which one was the first 'Biosphere Reserves' Project Scheme ?

   (a) Sundarbans Biosphere Reserve

   (b) Nilgiris Biosphere Reserve

   (c) Nandadevi Biosphere Reserve

   (d) Gulf of Mannar Biosphere Reserve

72. The eastern coastal plain is also called as–

   (a) Konkan coastal plain

   (b) Gujarat plain

   (c) Coromandal coastal plain

   (d) Malabar coastal plain

73. Volcanic activity is more common in–

   (a) Hawai   (b) Japan

   (c) Colombia   (d) New Zealand

74. The country having the largest rail network in the world is–
 (a) Russia   (b) U.S.A.
 (c) China   (d) India

75. Stainless steel is –
 (a) Metallic Mixture
 (b) Metallic Compound
 (c) Inorganic Compound
 (d) Natural Material

76. The intensity of Tsunami on Richter scale was–
 (a) 6   (b) 9
 (c) 10   (d) 15

77. Which among the following is not a Computer Operating System ?
 (a) Windows   (b) Unix
 (c) Office   (d) Linux

78. RHEA and TETHYS are the names of –
 (a) Moons of Saturn
 (b) Space shuttles sent by USA
 (c) Sachin Tendulkar's pets
 (d) Greek Film Actors

79. In which of the following animal while walking, the fore and hind limbs of one side move together ?
 (a) Giraffe   (b) Nilgai
 (c) Deer   (d) Camel

80. In 1866, Dadabhai Naoroji had founded East India Association in the following city–
 (a) Pairs   (b) London
 (c) New York   (d) Tokyo

81. In which of the following sessions did Indian National Congress split into Moderate Party and Extremist Party?
 (a) Nagpur   (b) Allahabad
 (c) Surat   (d) Kolkata

82. Who among the following was the first Governor-General of India ?
 (a) Lord Amherst   (b) Lord William Bentinck
 (c) Sir Metcalfe   (d) Robert Clive

83. After 1957, who among the following had declared, in a court in Allahabad, about transfer of India's administration to the British crown ?
 (a) Lord Canning   (b) Sir John Lawrence
 (c) Lord Mayo   (d) Lord Northbrook

84. Who amongst the following was the brother of Dhritrashtra ?
 (a) Dusshashan   (b) Vidur
 (c) Dhrupad   (d) Jaydrath

85. Which of the following states are famous for tobacco production ?
 (a) Andhra Pradesh and Gujarat
 (b) Maharashtra and Karnataka
 (c) Karnataka and Kerala
 (d) Kerala and Tamil Nadu

86. Which of the following cities of East India was built originally for the workers of 'Sakchi' and named in 1919 as –
 (a) Bandel   (b) Jamshedpur
 (c) Kharagpur   (d) None of the above

87. Which of the following states does not produces wheat?
 (a) Karnataka   (b) Maharashtra
 (c) West Bengal   (d) Tamil Nadu

88. Estimate of national income of India is prepared by the following–
 (a) National Development Council
 (b) National Productivity Council
 (c) National Income Committee
 (d) Central Statistical Organization

89. The best Index of Economic Development is provided by–
 (a) Growth in Per capita Real Income from year to year
 (b) Growth in National Income at Current Prices
 (c) Growth in savings ratio
 (d) Improvement in the Balance of Payments Position

90. How many maximum number of points can a player earn in a single attempt in the game of snooker ?
 (a) 145   (b) 147
 (c) 150   (d) 153

91. Who is said to be father of modern Olympics ?
 (a) Rober Dover   (b) Pierre de Coubertin
 (c) Theodosius I   (d) Earnest Curtis

92. Who is the author of the book 'Shane Warne's Century'?
 (a) Harsha Bhogle   (b) Shane Warne
 (c) Duglus Hense   (d) None of these

93. Who was honoured with Lal Bahadur Shastri National Award, 2008 ?

    (a) Er. Shridharan   (b) Ratan Tata

    (c) Sarthak Bahuria   (d) M. Damodaran

94. What is the full form of IRSMI.

    (a) International Railway Strategic Manager Institute

    (b) International Radio Station Managers Institute

    (c) Indian Remote Sensing Management Institute

    (d) Indian Remote Sensing Manufacturing Industry

95. Muhammad Iqbal's song, 'Saare Jahan Se Achchha' was set to music by who of the following ?

    (a) Rabindranath Tagore

    (b) Abanindranath Tagore

    (c) Pt. Ravishankar

    (d) Chitalgarh Ramchandra

96. Who among the following invaded India in 711 ?

    (a) Muhammad-bin-Tughluq

    (b) Muhammad Ghazni

    (c) Muhammad

    (d) Muhammad-bin-Kasim

97. Who among the following was the topmost reformer and devotional sait ?

    (a) Ramanand   (b) Tulsi Das

    (c) Kabir   (d) Namdev

98. Who among the following is known as 'Ashok Second'?

    (a) Samundragupta   (b) Chandragupta Maurya

    (c) Kanishka   (d) Harshvardhan

99. Date of Jalianwala massacre is –

    (a) March 13, 1919   (b) 13th April, 1919

    (c) March 13, 1920   (d) April 13, 1920

100. The nearest city of Mud Island is –

    (a) Port Blair   (b) Chennai

    (c) Kolkata   (d) Mumbai

PART - C

NUMERICAL APTITUDE

101. If $\tan 2\theta . \tan 4\theta = 1$, then the value of $\tan 3\theta$ is:

    (a) $\sqrt{3}$ (b) 0

    (c) 1   (d) $\dfrac{1}{\sqrt{3}}$

102. The value of $\tan 1°. \tan 2°. \tan 3°. \tan 4°......\tan 87°.\tan 88°. \tan 89°$ is:

    (a) $\dfrac{1}{\sqrt{3}}$ (b) $\sqrt{3}$

    (c) 1   (d) undefined

103. If $\sec^2\theta + \tan^2\theta = 7$,

    then the value of θ when $0° \le \theta \le 90°$, is:

    (a) 60°   (b) 30°

    (c) 0°   (d) 90°

104. If A = tan 11° tan 29°,

    B = 2 cot 61° cot 79°, then :

    (a) A = 2B   (b) A = –2 B

    (c) 2A = B   (d) 2A = –B

105. If $\sec^2 \theta + \tan^2 \theta = \dfrac{7}{12}$, then $\sec^4 \theta - \tan^4 \theta =$

    (a) $\dfrac{7}{12}$ (b) $\dfrac{1}{2}$

    (c) $\dfrac{5}{12}$ (d) 1

106. If $\sin\theta + \operatorname{cosec} \theta = 2$, then value of $\sin^{100}\theta + \operatorname{cosec}^{100}\theta$ is equal to :

    (a) 1   (b) 2

    (c) 3   (d) 100

107. The difference between the compound interest and the simple interest on a sum of money for three years at 10% per annum is Rupees 620. The sum is–

    (a) 40,000   (b) 12,000

    (c) 10,000   (d) 20,000

108. Simplify $222 - \left[\dfrac{1}{3} \text{ of } \left\{42 + \left(56 - \overline{8+9}\right)\right\} + 108\right]$

    (a) 87   (b) 78

    (c) 97   (d) 37

109. Umesh sold a watch at a loss of 5%. Had he sold it for Rupees 27 more, he would have gained 7%. Find the cost price of watch–

    (a) 225   (b) 250
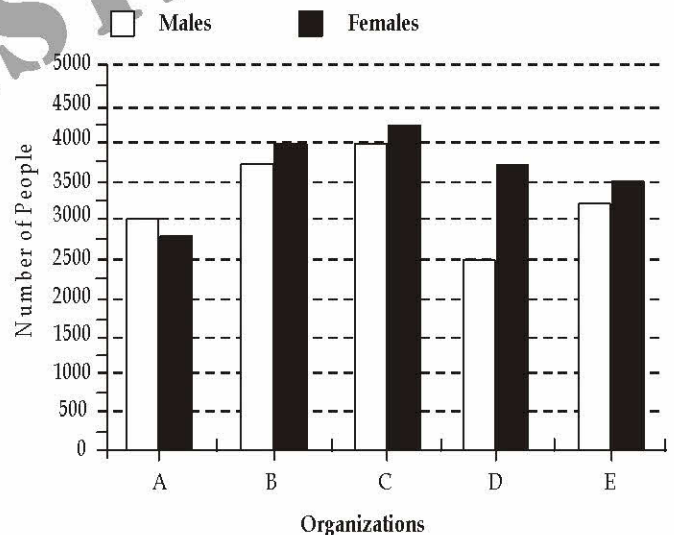
    (c) 275   (d) 325

110. A sum of rupees, 2,400 amounts to rupees 3264 in four year a certain rate of simple interest. If the rate of interest is increased by 1%; then in the same time find the amount of the same sum –

(a) 3260   (b) 3310

(c) 3360   (d) 3460

111. A man sold his book for rupees 891, thereby gaining 1/10 of its cost price. The cost price is–

(a) 850   (b) 800

(c) 810   (d) None of the above

112. A man spent $\frac{3}{5}$th of his savings and was still left with Rs. 2,000. What were his initial savings ?

(a) Rs. 7000   (b) Rs. 3000

(c) Rs. 5000   (d) None of these

113. Walking at 5/7th of his usual speed, a boy reaches school 6 minutes late. Find his usual time to reach school–

(a) 16 minutes

(b) 15 minutes

(c) 14 minutes

(d) Cannot be determined

114. a long distance runner runs 9 laps of a 400 metres track every day. His timings (in minutes) for four consecutive days are 88, 96, 89 and 87 respectively. On an average, how many metres/minute does the runner cover ?

(a) 40   (b) 36

(c) 49   (d) 44

115. On dividing 7865321 by a certain number, the quotient is 33612 and the remainder is 113. Find the divisor–

(a) 243   (b) 234

(c) 423   (d) 432

116. A plates (50 cm × 5 cm) are arranged in such a way that they form a square. Calculate the area of the square.

(a) 1600 sq cm   (b) 1800 sq cm

(c) 2500 sq cm   (d) 2000 sq cm

117. One tap fills up a tank in two hours and the second tap empties it in 3 hours. How long will the tank take to get filled up if both the taps start functioning simultaneously ?

(a) 6.5 hrs   (b) 6 hrs

(c) 8 hrs   (d) None of the above

118. Difference between the length and breadth of a field is 48 metres and its perimeter is of 160 metres. What would be the length of a side of a square whose area is equal to this field ?

(a) 32 metre   (b) 16 metre

(c) 64 metre   (d) 48 metre

119. In a co-educational school there are 600 students. Average age of boys is 12 years and that of girls is 11 years. If the average age of all the students is 11 years 9 months, what would be the number of girls ?

(a) 150   (b) 350

(c) 450   (d) 250

Directions (Q 120 - 124) : *Study the following graph carefully to answer the questions that follow.*

Total number of males and females in five different organizations

120. What is the average number of females of all the Organizations together?

(a) 3800   (b) 3550

(c) 3300   (d) 3650

121. The number of males of Organization A is **approximately** what percent of the total number of males of all the Organizations together?

(a) 18   (b) 28

(c) 11   (d) 31

122. What is the difference between the total number of females and the total number of males of all the Organizations together?

   (a) 1500   (b) 1750
   (c) 1800   (d) 2050

123. What is the respective ratio of number of females of Organization C to the number of females of Organization E?

   (a) 14 : 17   (b) 17 : 14
   (c) 14 : 15   (d) 15 : 14

124. The total number of males of Organizations A & B together are **approximately** how much percent of the total number of males of Organizations C, D and E together?

   (a) 58   (b) 75
   (c) 69   (d) 83

125. A, B and C can complete a piece of work in 10, 15 and 18 days, respectively. In how many days would all of them complete the same work working together?

   (a) $14\frac{1}{3}$ days   (b) 7 days

   (c) $4\frac{1}{2}$ days   (d) None of these

126. If Mohan's salary is 10% more than that of Sohan, then how much percent is Sohan's salary less than that of Mohan ?

   (a) $11\frac{1}{9}\%$ (b) $9\frac{1}{11}\%$

   (c) $\frac{9}{11}\%$ (d) $1\frac{9}{11}\%$

127. Harbans Lal can do a piece of work in 24 days. If Bansi Lal works twice as fast as Harbans Lal, how long would they take to finish the work working together ?

   (a) 8 days   (b) 12 days
   (c) 16 days   (d) 48 days

128. A certain sum is lent out at a certain rate of interest. SI at the end of the period is $\frac{1}{4}$ times that of the Principal. Find the rate of interest if the magnitudes of rate of interest and time period be equal–

   (a) 4%   (b) 5%
   (c) 2%   (d) 6%

129. At what rate of simple interest will a sum double itself in 8 years ?

   (a) 16%   (b) 14%
   (c) 12.5%   (d) 8%

130. The smallest number to be added to 491395 to make the sum a perfect square is –

   (a) 4   (b) 6
   (c) 8   (d) 5

131. Three different qualities of Sugar are in quantities 408 kg, 468 kg and 516 kg. These are to be packed into packets of equal size without mixing. What is the largest size of packet which can be used ?

   (a) 36   (b) 24
   (c) 50   (d) 12

132. A mixture of 45 litres of spirit and water contains 20% of water in it. How much water must be added to it to make the water 25% in the new mixture ?

   (a) 22 lit   (b) 5 lit
   (c) 4 lit   (d) 3 lit

133. Two buses started simultaneously from the same place and for the same destination at the speeds of 75 km/hr and 57 km/hr, respectively. What would be the distance between the buses after 3 hrs and 2 min ?

   (a) 63.5 km   (b) 61.5 km
   (c) 60.5 km   (d) 70.5 km

134. The least number that must be subtracted from 1856, so that the remainder when divided by 7, 12 and 16 leaves the same remainder 4 is–

   (a) 137   (b) 1361
   (c) 140   (d) 172

135. The average marks percentage of one class of 20 students is 66% and that of another class of 15 students is 70%. Find the average marks percentage of the two classes taken together–

   (a) 65%   (b) 67.71%
   (c) 72.17%   (d) 75.5%

136. In a mixture of 60 liters, the ratio of milk and water is 3 : 1. How much water should be added to make the ratio 2 : 1 ?

   (a) 5   (b) 7.5
   (c) 10   (d) 15

137. There are 30 socks in a drawer. 60% of the socks are red and the rest are blue. What is the minimum number of socks that must be taken from the drawer without looking, in order to be certain that atleast two blue socks have been chosen ?
    (a) 12   (b) 13
    (c) 16   (d) 20

138. If $175 \times 1.24 = 217$, then the value of 1.75×124 is –
    (a) 217   (b) 2.17
    (c) 0.0217   (d) 21.7

139. $172.23 - ? = 63.83 + 22$
    (a) 130.4   (b) 86.40
    (c) 108.18   (d) 85.83

140. $15.60 \times 0.30 = ?$
    (a) 4.68   (b) 0.458
    (c) 0.468   (d) 0.0468

141. $7.83 - (3.79 - 2.56) = ?$
    (a) 4.04   (b) 1.48
    (c) 6.06   (d) 6.60

142. $\dfrac{3420}{19} = \dfrac{?}{0.01} \times 7$
    (a) $\dfrac{35}{9}$ (b) $\dfrac{63}{5}$

    (c) $\dfrac{18}{7}$ (d) None of these

143. 6 : 1 is the ratio of the age of Amar and that of Ajay. After 7 years, this ratio becomes 7 : 2. What is present age of Ajay ?
    (a) 9 years   (b) 7 years
    (c) 5 years   (d) 11 years

144. Some amount of money has to be distributed among A, B and C in the ratio 3 : 7 : 6. Rs. 2700 is the difference between the shares of A and B. The share of C will be –

(a) Rs. 4050   (b) Rs. 3900
(c) Rs. 4200   (d) Rs. 4500

145. If the selling price of bananas falls by 20%, we get 5 more bananas for Rs. 10. What was the previous price of one banana ?
    (a) 30 paise   (b) 50 paise
    (c) 40 paise   (d) 60 paise

146. In $\triangle ABC$, O is the centroid and AD, BE, CF are three medians and the area of $\triangle AOE = 15$ cm^2 then area of quadrilateral BDOF is
    (a) 20 cm^2 (b) 30 cm^2
    (c) 40 cm^2 (d) 25 cm^2

147. The radius of two concentric circles are 9 cm and 15 cm. If the chord of the greater circle be a tangent to the smaller circle, then the length of that chord is
    (a) 24 cm   (b) 12 cm
    (c) 30 cm   (d) 18 cm

148. In $\triangle ABC$, AD is the internal bisector of $\angle A$, meeting the side BC at D. If BD = 5 cm, BC = 7.5 cm, then AB : AC is
    (a) 2 : 1   (b) 1 : 2
    (c) 4 : 5   (d) 3 : 5

149. Each interior angle of a regular polygon is 144°. The number of sides of the polygon is
    (a) 8   (b) 9
    (c) 10   (d) 11

150. In $\triangle ABC$, $\angle BAC = 90°$ and $AB = \dfrac{1}{2} BC$. Then the measure of $\angle ACB$ is :
    (a) 60°   (b) 30°
    (c) 45°   (d) 15°

PART - D
ENLGLISH COMPREHENSION

Directions: *In questions no. 151 to 155, some of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the rectangle corresponding to the appropriate letter (A, B, C). If a sentence is free from errors, blacken the rectangle corresponding to (d) in the Answer Sheet.*

151. (a) The charges in this hospital
     (b) are less than
     (c) the hospital near my house.
     (d) No error

152. (a) When he was asked what is wrong with him.
     (b) he said that he was not well.
     (c) and asked for leave of absence for one day.
     (d) No error.

153. (a) Remember that you are part of
     (b) the team and your success depends on the support
     (c) you are able to give and get from your other team members.
     (d) No error.

154. (a) That house
     (b) is costing me
     (c) ten thousand rupees
     (d) No error.

155. (a) Happily, zoos were
     (b) unwilling to cooperate
     (c) in a scheme that was potentially harmful to animal welfare
     (d) No error.

Directions: *In questions no. 156 to 160, sentences are given with blanks to the filled in with an appropriate word. Four alternatives are suggested for each question. Choose the correct alternative out of the four and indicate it by blackening the appropriate rectangle in the Answer Sheet.*

156. In spite of her other_____, Kasthuri still managed to find time for her hobbies.
     (a) occupations　　　(b) preoccupations
     (c) predilections　　(d) business

157. Success comes to those who are vigilant not to permit_____ from the chosen path.
     (a) distraction　　　(b) deviation
     (c) alienation　　　(d) diversion

158. After a short holiday Rajni came back totally_____.
     (a) rejuvenated　　(b) reborn
     (c) refurbished　　(d) revamped

159. The members were_____ of the date of the meeting well in advance.
     (a) communicated　(b) conveyed
     (c) ignorant　　　(d) inform

160. I had not expected to meet him; it was quite an _____ meeting.
     (a) organised　　(b) intentional
     (c) undesirable　(d) accidental

Directions: *In questions no. 161 to 165, out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer Sheet.*

161. BLITHE
     (a) joyless　　　(b) grudging
     (c) somnolent　(d) cheerful

162. CAPTIVATE
     (a) repel　　　(b) subjugate
     (c) dangerous　(d) fascinate

163. REDEEM
     (a) extend　　　(b) fulfil
     (c) reconsider　(d) recover

164. BLAND
     (a) unpleasant　(b) irritating
     (c) affable　　(d) tasteless

165. VISIONARY
     (a) dreaming　(b) savant
     (c) philosopher　(d) saint

Directions: *In question no. 166 to 170, out of the four alternatives, choose the word opposite in meaning to the given word and mark it in the Answer Sheet.*

166. PARTICIPATE
     (a) precipitate　(b) change
     (c) disengage　(d) boycott

167. EGALITARIAN
     (a) unequal　　(b) socialist
     (c) capitalist　(d) liberal

168. DEFICIENCY
     (a) abundance　(b) deficit
     (c) ill　　　　(d) profit

169. FLOURISH

    (a) improve   (b) retard

    (c) hamper   (d) stop

170. VENEER

    (a) exterior   (b) interior

    (c) impression   (d) armour

Directions: *In questions no. 171 to 175, four alternatives are given for the meaning of the given Idiom/phrase. Choose the alternative which best expresses the meaning of the Indian/Phrase and mark in the Answer Sheet.*

171. To hit the nail right on the head

    (a) To do the right thing

    (b) To destroy one's reputation

    (c) To announce one's fixed views

    (d) To teach someone a lesson

172. To set one's face against

    (a) To oppose with determination

    (b) To judge by appearence

    (c) To get out of difficulty

    (d) To look at one steadily

173. To leave someone in the lurch

    (a) To come to compromise with someone

    (b) Constant source of annoyance to someone

    (c) To put someone at ease

    (d) To desert someone in his difficulties

174. To play second fiddle

    (a) To be happy, cheerful and healthy

    (b) To reduce importance of one's senior

    (c) To support the role and view of another person

    (d) To do back seat driving

175. To leave someone in the lurch

    (a) To come to compromise with someone

    (b) Constant source of annoyance to someone

    (c) To put someone at ease

    (d) To desert someone in his difficulties

Directions: *In questions no. 176 to 180, a sentence or underlined part thereof is given which may need improvement. Alternatives are given at (a), (b) and (c) below, which may be a better option. In case no improvement is needed, your answer is (d). Darken the appropriate rectangle in the Answer Sheet.*

176. Due to these reason we are all in favour of universal compulsory education.

    (a) Out of these reasons

    (b) For these reasons

    (c) By these reasons

    (d) No improvement

177. It will be no good trying to find an excuse next time.

    (a) to try to find

    (b) to try finding

    (c) trying finding

    (d) No improvement

178. There is no more room for you in this compartment.

    (a) there is no more seat

    (b) there is no more space

    (c) there is no more accommodation

    (d) No improvement

179. If you had attended the meeting, you would have benefited a great deal.

    (a) could benefit

    (b) would benefit

    (c) benefited

    (d) No improvement

180. If he would have tried he would have succeeded.

    (a) is tried

    (b) was tried

    (c) had tried

    (d) No improvement

Directions: *In questions no. 181 to 185, out of four alternatives, choose the one which can be substituted, for the given words/sentence and indicate it by blackening the appropriate rectangle in the Answer Sheet.*

181. A place where bees are kept

    (a) aviary   (b) artifice

    (c) diadem   (d) apiary

182. Something short-lived

    (a) ephemeral   (b) Epicurean

    (c) interim   (d) illusory

183. Interested only in money

    (a) marmoreal   (b) mordant

    (c) mercenary   (d) munificent

184. Scientific study of birds

   (a) aviation   (b) ornithology

   (c) microbiology   (d) supersonics

185. A very light and thin material

   (a) gossamer   (b) gazelle

   (c) coterie   (d) poultice

Directions: *In question no. 186 to 190, groups of four words are given. In each group, one word is correctly spelt. Find the correctly spelt word and mark your answer in the Answer Sheet.*

186. (a) Eflorescence   (b) Efllorescence

   (c) Efflorescence   (d) Efflorascence

187. (a) Exterminatte   (b) Inexpliccable

   (c) Offspring   (d) Reffere

188. (a) Occasion   (b) Occassion

   (c) Ocasion   (d) Ocassion

189. (a) Entrepreneur   (b) Entrapreneur

   (c) Entrepraneur   (d) Enterprenuer

190. (a) Equanimity   (b) Equannimity

   (c) Equanimmity   (d) Equinimity

Directions: *In the following passage (question no. 191 to 200), some of the words have been left out. First read the passage over and try to understand what is about. Then fill in the blanks with the help of the alternatives given. Mark your answer in the Answer Sheet.*

PASSAGE(Q. Nos.191-200)

Recent discoveries ...(191)... that Indians of early days ...(192)... to have been ...(193)... civilised ...(194)... many ways. They had massive public buildings and comfortable dwelling houses ...(195)... mostly of brick. They had ...(196)... arrangements ...(197)... good sanitation, and an elaborate drainage system. They knew how to write ...(198)... their language, which has not yet been ...(199)... was not alphabetic but syllabic ...(200)... the Sumerian language.

191. (a) shown   (b) derived

   (c) investigated   (d) seen

192. (a) intend   (b) decided

   (c) behave   (d) appear

193. (a) intermittently   (b) highly

   (c) positively   (d) rarely

194. (a) on   (b) under

   (c) through   (d) in

195. (a) designed   (b) formulated

   (c) built   (d) construct

196. (a) less   (b) ignored

   (c) made   (d) started

197. (a) in spite   (b) against

   (c) by   (d) for

198. (a) but   (b) because

   (c) while   (d) since

199. (a) written   (b) deciphered

   (c) formed   (d) talked

200. (a) across   (b) closely

   (c) before   (d) like