Questions & Answers

for

NTSE (Stage-I) 2019-20

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you open the question booklet.

1. Use blue/black ballpoint pen only. There is no negative marking.

2. Part I : MAT : 1 - 100 questions

   Part II : SAT : 101 - 200 questions

3. This test booklet contains 200 questions of one mark each. All the questions are compulsory.

4. Answer each question by darkening the one correct alternative among the four choices on the OMR SHEET with blue/black ballpoint pen.

   Example :

	Q. No.	Alternatives
Correct way :	1	① ② ● ④

	Q. No.	Alternatives
Wrong way :	1	⊗ ⊘ ③ ④

   Student must darkening the right oval only after ensuring correct answer on OMR Sheet.

5. Students are not allowed to scratch / alter / change out an answer once marked on OMR Sheet, by using white fluid / eraser / blade / tearing / wearing or in any other form.

6. Separate sheet has been provided for rough work in this test booklet.

7. Please handover the OMR Sheet to the invigilator before leaving the Examination Hall.

8. Darken completely the ovals of your answer on OMR Sheet in the time limit allotted for that particular paper.

9. Your OMR Sheet will be evaluated through electronic scanning process. Incomplete and incorrect entries may render your OMR Sheet invalid.

10. Use of electronic gadgets, calculator, mobile etc, is strictly prohibited.

PART-I : MENTAL ABILITY TEST (MAT)

Direction- In question no. 1 to 12 each question has four terms. Each terms are alike in some way. One term is different from these others. Find out the correct term which is different from three others and write its alternative number on your answer sheet against the proper question number-

1. (1) R81   (2) L19
    (3) W25   (4) M16
    Answer (2)

2. (1) CJM   (2) PGW
    (3) RBT   (4) SFH
    Answer (4)

3. (1) Z8R   (2) Q13D
    (3) M22K   (4) T14F
    Answer (3)

4. (1) BDG   (2) HJM
    (3) QSV   (4) KMH
    Answer (4)

5. (1) Lion   (2) Deer
    (3) Wolf   (4) Fox
    Answer (2)

6. (1) Labour   (2) Doctor
    (3) Student (4) Tailor
    Answer (3)

7. (1) Deputy Chief Minister
    (2) Governor
    (3) Prime Minister
    (4) Chief Minister
    Answer (3)

8. (1) Kanpur   (2) Lucknow
    (3) Meerut   (4) Mirzapur
    Answer (2)

9. (1) 13, 7   (2) 24, 19
    (3) 36, 27   (4) 45, 29
    Answer (2 or 3)

10. (1) 1980   (2) 1924
    (3) 1946   (4) 1996
    Answer (3)

11. (1) 133   (2) 147
    (3) 182   (4) 234
    Answer (4)

12. (1) 32.5   (2) 43.5
    (3) 58.5   (4) 73.5
    Answer (1)

Direction- Question no. 13 to 24 are based on number/letter series. In each series missing term is indicated by Blank Space (-). Find out the missing term out of the four alternatives given below and write its alternative number against the correct question number on your answer sheet-

13. 1_44_6114_661_446_
    (1) 61416   (2) 16416
    (3) 41416   (4) 64616
    Answer (2)

14. _A_CCA_BC_AABC_
    (1) ABACC   (2) ABACB
    (3) CABCA   (4) AABCC
    Answer (1)

15. 3,8,_,68,_,608,1823
    (1) 25, 199   (2) 29, 205
    (3) 23, 203   (4) 24, 136
    Answer (3)

16. 9, 64, _, 216,49, _, 81
    (1) 20, 72   (2) 25, 512
    (3) 30, 64   (4) 32, 63
    Answer (2)

17. $\dfrac{B}{5},\dfrac{D}{12},-,\dfrac{H}{24},\dfrac{J}{13},\dfrac{L}{36},-,\dfrac{P}{48}$

    (1) $\dfrac{E}{15},\dfrac{N}{18}$ (2) $\dfrac{F}{18},\dfrac{O}{16}$

    (3) $\dfrac{F}{9},\dfrac{N}{17}$ (4) $\dfrac{G}{9},\dfrac{M}{17}$
    Answer (3)

18. 121, 144, 169, 196, _
    (1) 223   (2) 225
    (3) 227   (4) 229
    Answer (2)

19. 216, 343, 512, 729, _, 1331
    (1) 1000　　(2) 894
    (3) 819　　(4) 1211
Answer (1)

20. 78Z, 6C, 15E, _, 30J, 26M
    (1) 24H　　(2) 21G
    (3) 18I　　(4) 16H
Answer (4)

21. F_UR_OU_FO_RF_UR
    (1) OFRUO　　(2) FUOOR
    (3) FROUO　　(4) ROUFO
Answer (1)

22. 0, 2, 6, _, 20, 30, _
    (1) 8　　(2) 10
    (3) 12　　(4) 16
Answer (3)

23. 9, 10, 8, 11, _, 12, 6, _, 5
    (1) 7, 13　　(2) 6, 13
    (3) 7, 12　　(4) 8, 12
Answer (1)

24. CD, XW, _, VU, GH, _, IJ, RQ
    (1) FE, TS　　(2) DE, UT
    (3) FG, ST　　(4) EF, TS
Answer (4)

25. In a certain code language if HUNDRED is written as NUHDDER, what will be code of KITCHEN in same language?
    (1) HENTIKC　　(2) TIKCNEH
    (3) ITKHCNE　　(4) TKICNEH
Answer (2)

26. In a certain code language if POSTMAN is written as OPRTLBM, what will be code of BROTHER in same language?
    (1) ARNTGDQ　　(2) CSNSIRE
    (3) QAPTEIS　　(4) ASNTGFQ
Answer (4)

27. In a certain code language if BLOCK is written as 43, what will be code of HOUSE in same language?
    (1) 68　　(2) 61
    (3) 67　　(4) 63
Answer (1)

28. In a certain code language if BOUND is written as 112, what will be code of WHITE in same language?
    (1) 132　　(2) 103
    (3) 130　　(4) 123
Answer (3)

29. In a certain code language if ELEPHANT is written as LEPEAHTN, what will be code of QUESTION in same language?
    (1) UQSEITNO　　(2) SEUQNOTI
    (3) UQESTINO　　(4) EUQITSON
Answer (1)

30. In a certain code language if DRIVER is written as RDERVI, what will be code of WINDOW in same language?
    (1) WIWOND　　(2) WIDNOW
    (3) WWOIDN　　(4) WOWDIN
Answer (3)

31. In a certain code language if FROG is written as 2116, what will be code of NEST in same language?
    (1) 3262　　(2) 3364
    (3) 3436　　(4) 4363
Answer (2)

32. In a certain code language if COVER is written as EMXCT, what will be code of BIRTH in same language?
    (1) DJTSJ　　(2) CGSSI
    (3) AGSQI　　(4) DGTRJ
Answer (4)

33. In a certain code language if XDRL is written as 12296, what will be code of NHTV in same language?
    (1) 72511　　(2) 1481022
    (3) 741011　　(4) 7856
Answer (3)

34. In a certain code language if HOCKEY is written as YOKCEH, what will be code of PENCIL in same language?
    (1) LECNIP　　(2) LICNEP
    (3) NCEILP　　(4) LICNPE
Answer (1)

35. In a certain code language if RUBBER is written as BERRUB, what will be code of BUTTER in same language?

    (1) TTBUR   (2) TERBUT

    (3) TUTREB   (4) UBTTRE

Answer (2)

36. In a certain code language if SHARP is written as 58034, what will be code of RASH in same language?

    (1) 3058   (2) 3045

    (3) 3854   (4) 5384

Answer (1)

Direction- In question no. 37 to 48 the equations have become wrong because of the wrong order of signs. Choose the correct order in signs from the four options given below so as to make the equations correct. Write the alternative number of the correct option on the answer sheet against the corresponding question number-

37. $2 + 40 - 92 = 8 \times 20$

    (1) $\times = + -$ (2) $- + = \times$

    (3) $= \times + -$ (4) $+ - \times =$

Answer (1)

38. $34 - 6 = 18 \div 66 + 3$

    (1) $= \div + -$ (2) $\div + - =$

    (3) $+ - = \div$ (4) $+ \div = -$

Answer (3)

39. $2 - 21 \times 7 = 17 \div 11$

    (1) $\times - = \div$ (2) $\times = - \div$

    (3) $= - \times \div$ (4) $\times \div = -$

Answer (4)

40. $7 \times 3 = 4 - 6 + 1$

    (1) $- + = \times$ (2) $+ - = \times$

    (3) $- + \times =$ (4) $+ - \times =$

Answer (2)

41. $63 = 7 \div 44 + 6 - 41$

    (1) $\div + = -$ (2) $= + \div -$

    (3) $\div - = +$ (4) $\div = + -$

Answer (4)

42. $69 \times 25 = 10 + 6 - 9$

    (1) $- + = \times$ (2) $= + \times -$

    (3) $= \times + -$ (4) $\times + - =$

Answer (1)

43. $41 - 32 + 10 = 9 + 54$

    (1) $+ = - +$ (2) $+ - = +$

    (3) $= + + -$ (4) $= + - +$

Answer (2)

44. $15 = 5 + 3 \div 17 \times 8$

    (1) $\times + = \div$ (2) $+ \times \div =$

    (3) $\times \div = +$ (4) $+ = \div \times$

Answer (3)

45. $38 + 2 - 46 = 33 \times 3$

    (1) $= \times + -$ (2) $\times + = -$

    (3) $\times = + -$ (4) $- + = \times$

Answer (3)

46. $15 = 7 \times 2 - 5 + 4$

    (1) $\times - + =$ (2) $\times - + =$

    (3) $- + = \times$ (4) $+ - = \times$

Answer (4)

47. $24 - 6 + 9 \div 2 = 7$

    (1) $\div = + -$ (2) $+ = \div -$
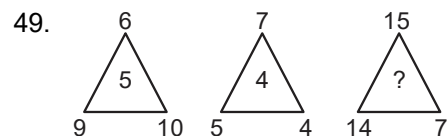
    (3) $+ = - \div$ (4) $+ - = \div$

Answer (1)

48. $5 = 8 - 29 + 4 \times 15$

    (1) $- = + \times$ (2) $+ - \times =$
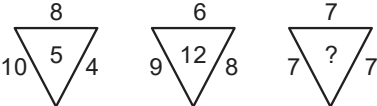
    (3) $\times = - +$ (4) $+ \times = -$

Answer (3)

Direction- In question no. 49 to 58 numbers are placed in figure on the basis of some rules. One place is vacant which is indicated as (?). Find out the correct alternative for the vacant place and write its number against the proper question number on your answer sheet-
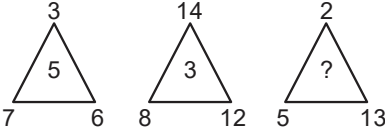
49.

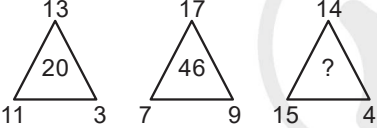   (1) 3   (2) 6

    (3) 8   (4) 10

Answer (2)

50.
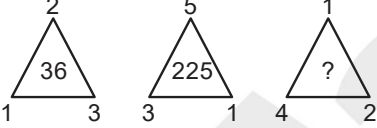
  8   6   7
10 ⟨5⟩ 4   9 ⟨12⟩ 8   7 ⟨?⟩ 7

(1) 19   (2) 13
(3) 7   (4) 4

Answer (3)

51.

   3   14   2
  ⟨5⟩   ⟨3⟩   ⟨?⟩
 7   6   8   12   5   13

(1) 4   (2) 6
(3) 8   (4) 10

Answer (3)

52.

  13   17   14
 ⟨20⟩   ⟨46⟩   ⟨?⟩
11   3   7   9   15   4

(1) 20   (2) 57
(3) 28   (4) 46

Answer (4)

53.

   2   5   1
 ⟨36⟩   ⟨225⟩   ⟨?⟩
1   3   3   1   4   2

(1) 49   (2) 64
(3) 89   (4) 120

Answer (2)
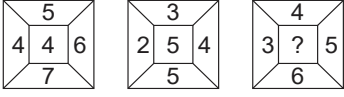
54. | 9 | 8 | 73 | | 6 | 4 | 26 | | 7 | 3 | ? |

(1) 25   (2) 52
(3) 21   (4) 12

Answer (1)
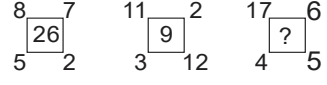
55. | 45 | 5 | 3 | | 36 | 9 | 2 | | 50 | 2 | ? |

(1) 4   (2) 7
(3) 5   (4) 8

Answer (3)

56.
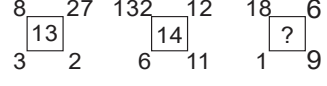
   5   3   4
 4 ⟨4⟩ 6   2 ⟨5⟩ 4   3 ⟨?⟩ 5
   7   5   6

(1) 6   (2) 7
(3) 8   (4) 9

Answer (4)

57.

  8   7   11   2   17   6
  ⟨26⟩   ⟨9⟩   ⟨?⟩
  5   2   3   12   4   5

(1) 18   (2) 28
(3) 38   (4) 48

Answer (3)

58.

  8   27   132   12   18   6
  ⟨13⟩   ⟨14⟩   ⟨?⟩
  3   2   6   11   1   9

(1) 15   (2) 12
(3) 10   (4) 8

Answer (4)

Direction- Question 59 to 63 are based on the following information. Read carefully the information and find out the correct alternative for each question-

Ramesh likes to study Hindi, English and Maths. Suresh like to study Science, English and Hindi. Ahmad like to study English, Maths and Geography. Bobby likes to study Maths, Science and Hindi. Gopal like to study only Hindi.

59. Which subject is liked by most of the boys
   (1) Science   (2) English
   (3) Hindi   (4) Maths

Answer (3)

60. How many boys like English?
   (1) One   (2) Two
   (3) Three   (4) Five

Answer (3)

61. How many boys like Science?
   (1) One   (2) Two
   (3) Three   (4) Five
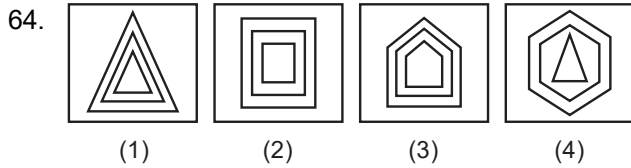
Answer (2)

62. Which subject is liked by least of the boys?
   (1) Geography
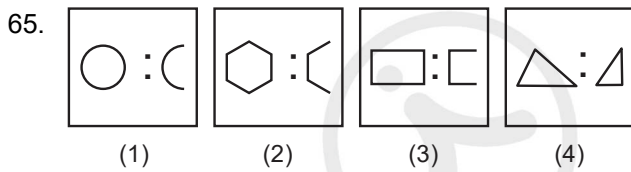   (2) English
   (3) Science
   (4) Maths

Answer (1)

63. How many boys like Maths?
   (1) Four
   (2) Three
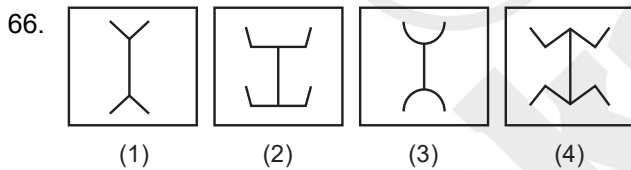   (3) Two
   (4) One

Answer (2)

Direction- In question no. 64 to 68 each question has four terms. Three terms (figure) are alike in some way. One term (figure) is different from three others. Find out the correct term which is different from three others and write its alternative number on your answer sheet against the proper question number-
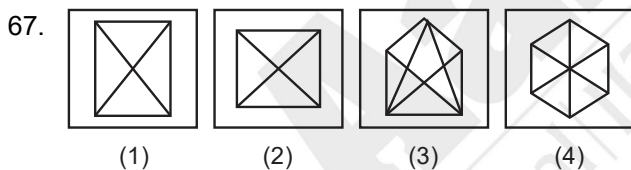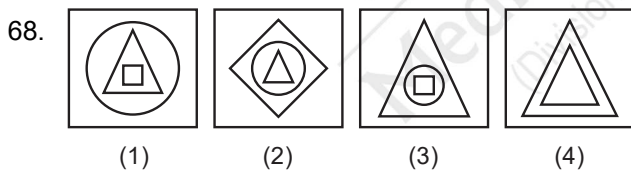
64.

(1) (2) (3) (4)

Answer (4)

65.

(1) (2) (3) (4)

Answer (4)

66.

(1) (2) (3) (4)

Answer (2)

67.

(1) (2) (3) (4)

Answer (3)

68.

(1) (2) (3) (4)

Answer (4)

Direction- In question 69 to 84 there are four terms in each question. The relation that exist between the terms left to the symbol :: is the same between the terms right to the symbol ::. Out of the four terms one term is missing in each question. The missing term is one of the four alternatives given below each question. Find out the correct alternative and write its number on your answer sheet against the proper question -

69. RSTU : YXWV ::GHIJ : ?

(1) NMLK (2) MLKJ

(3) NLMK (4) MKJL

Answer (1)

70. $\dfrac{16}{3} : 4096 :: \dfrac{22}{2} : ?$

(1) 448 (2) 484

(3) 243 (4) 231

Answer (2)

71. DGK : 462 ::NIF : ?

(1) 648 (2) 630

(3) 540 (4) 756

Answer (4)

72. Cold : Hot ::Life : ?

(1) Age (2) Death

(3) Pleasure (4) Health

Answer (2)

73. Lock : Key :: Needle : ?

(1) Cloth (2) Iron

(3) Tailor (4) Thread

Answer (4)

74. Cricket : Run :: Hockey : ?

(1) Field

(2) Goal

(3) Ball

(4) Player

Answer (2)

75. MAN : REHTAF :: WOMAN : ?

(1) RAHTOM

(2) RETHAM

(3) REHTAM

(4) REHTOM

Answer (4)

76. Ice : Water :: Water : ?

(1) Steam

(2) River

(3) Rain

(4) Sea

Answer (1)

77. $\dfrac{2}{6} : 36 :: \dfrac{3}{2} : ?$

(1) 9   (2) 8

(3) 6   (4) 5

Answer (2)

78. Brick : Soil :: Bread : ?

(1) Fire   (2) Cook
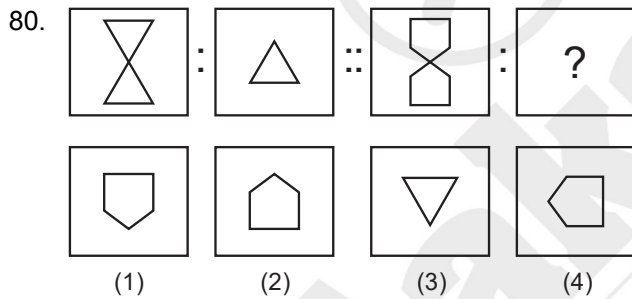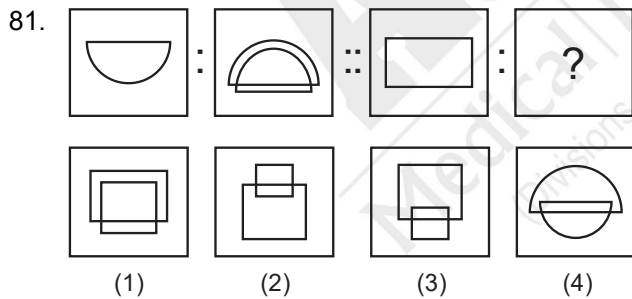
(3) Wheat   (4) Flour
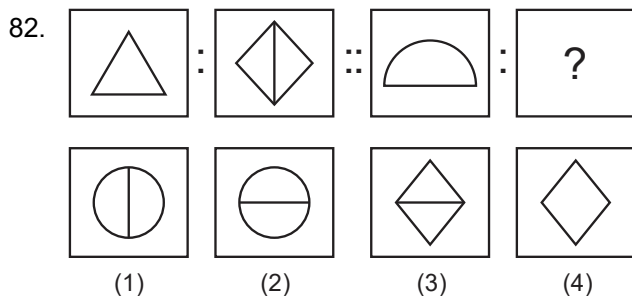
Answer (4)

79. 491 : 7 :: 534 : ?

(1) 6   (2) 9

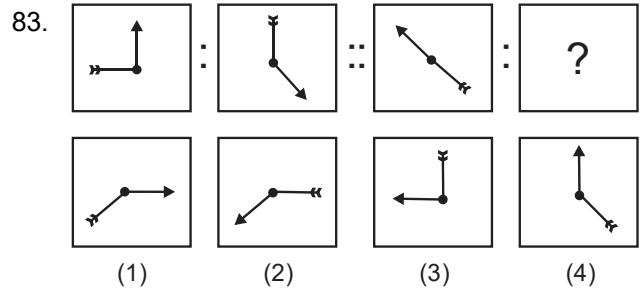(3) 5   (4) 8

Answer (1)

80.

(1)   (2)   (3)   (4)

Answer (2)

81.

(1)   (2)   (3)   (4)

Answer (1)

82.

(1)   (2)   (3)   (4)

Answer (1)

83.

(1)   (2)   (3)   (4)

Answer (1)

84.

(1)   (2)   (3)   (4)
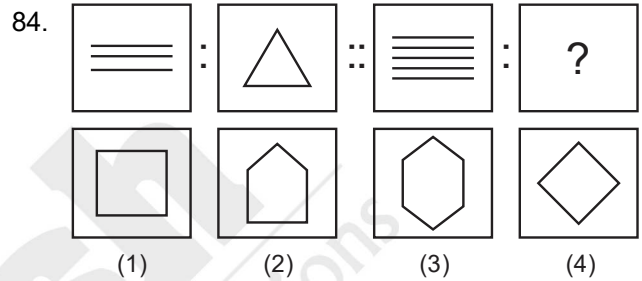
Answer (2)

Direction- For question 85 to 95 four sets of circles has been given below. Three circles of sets have some relation with each other. Questions given below have three words each of which are also related to each other in some way. This relation between words to similar to that in one of the sets of circles. Find it out from the four options given below each question and write its serial number against corresponding question number on your answer sheet-

Set-1   Set-2   Set-3   Set-4
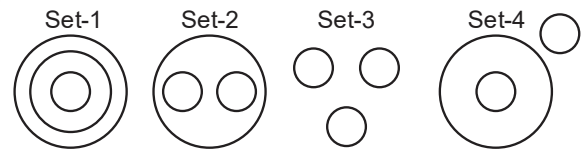
85. Hospital Doctor Nurse

(1) Set-4   (2) Set-1

(3) Set-2   (4) Set-3

Answer (3)

86. Advocate Female Male

(1) Set-4   (2) Set-1

(3) Set-3   (4) Set-2

Answer (4)

87. City Market Shop

(1) Set-1   (2) Set-4

(3) Set-3   (4) Set-2

Answer (1)

88. Minute Second Gram

    (1) Set-1   (2) Set-2

    (3) Set-3   (4) Set-4

Answer (4)

89. Cricket Hockey Football

    (1) Set-2   (2) Set-3

    (3) Set-1   (4) Set-4

Answer (2)

90. Furniture Chair Table

    (1) Set-1   (2) Set-4

    (3) Set-3   (4) Set-2

Answer (4)

91. Train Car Bicycle

    (1) Set-1   (2) Set-2

    (3) Set-3   (4) Set-4

Answer (3)

92. Garden Plant Leave

    (1) Set-3   (2) Set-1

    (3) Set-4   (4) Set-2

Answer (2)

93. Sky Stars Road

    (1) Set-4   (2) Set-3

    (3) Set-2   (4) Set-1

Answer (1)

94. River Fish Cat

    (1) Set-3   (2) Set-4

    (3) Set-1   (4) Set-2

Answer (2)

95. Pond Water Frog

    (1) Set-3   (2) Set-2

    (3) Set-1   (4) Set-4

Answer (3)

Direction- Question no. 96 to 100 are based on following statement. Read the statement carefully and find out correct alternative given for the question and write correct alternative number on your answer sheet against the corresponding question-

Sam's age is one fourth of Ali's age. Sam is eleven years elder to Rahul but Deepak is five years younger to Rahul then-

96. Who is eldest?

    (1) Ali

    (2) Sam

    (3) Deepak   (4) Rahul

Answer (1)

97. Who is youngest?

    (1) Ali   (2) Sam

    (3) Deepak   (4) Rahul

Answer (3)

98. If Deepak's age is nine years, what is the age of Ali?

    (1) 85 yrs   (2) 90 yrs

    (3) 97 yrs   (4) 100 yrs

Answer (4)

99. What is the difference between the age of Sam and Deepak?

    (1) 16 yrs   (2) 9 yrs

    (3) 11 yrs   (4) 5 yrs

Answer (1)

100. If Deepak's age is eight years, how many years is Ali elder to Deepak?

    (1) 92 yrs   (2) 88 yrs

    (3) 80 yrs   (4) 78 yrs

Answer (2)

PART-II : SCHOLASTIC APTITUDE TEST (SAT)

101. Unit of momentum is

    (1) meter/second   (2) Newton x meter

    (3) kg-meter/second   (4) kg^{-1} meter second^{-1}

Answer (3)

102. Which one of the following physical quantity is constant in simple harmonic motion?

    (1) Restoring force   (2) Kinetic energy

    (3) Potential energy   (4) Total energy

Answer (4)

103. A ray of light passes from glass $\left(\mu = \dfrac{3}{2}\right)$ to water $\left(\mu = \dfrac{4}{3}\right)$. The value of critical angle will be-

    (1) $\sin^{-1}\left(\dfrac{1}{2}\right)$ (2) $\sin^{-1}\left(\sqrt{\dfrac{8}{9}}\right)$

    (3) $\sin^{-1}\left(\dfrac{8}{9}\right)$ (4) $\sin^{-1}\left(\dfrac{5}{7}\right)$

Answer (3)

104. The value of acceleration due to gravity (g) on the earth will be maximum at-

    (1) Surface   (2) Poles

    (3) Equator   (4) Center

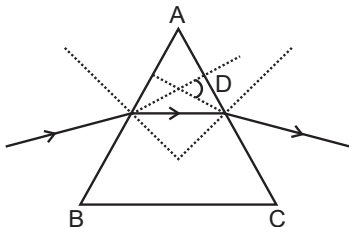**Answer (2)**

105. Which one of the following is an example of Biomass Energy source.

    (1) Nuclear Energy   (2) Sun Energy

    (3) Gobar Gas   (4) Wind Energy

Answer (3)

106. The refraction of light by a prism is shown in the following figure. Then Angle $\angle D$ is-

    (1) Angle of prism   (2) Angle of refraction

    (3) Angle of emergent   (4) Angle of deviation

Answer (4)

107. The unit of power of a lens is dioptre. Then one dioptre (1 dioptre) is equal to-

    (1) 100 cm^{-1} (2) 1 meter^{-1}

    (3) 1 metre   (4) 100 cm

Answer (2)

108. If F be the focal length of a convex lens, then the nature of image of an object placed at a distance of 2F will be-

    (1) Real, inverted and same size

    (2) Virtual, erect and small

    (3) Real, erect and same size

    (4) Virtual, inverted and same size

Answer (1)

109. The power of a plane mirror is-

    (1) Zero (0)   (2) +1

    (3) -1   (4) Infinity (∞)

Answer (1)

110. The resistance of a wire is 4Ω. If length of wire is made double and area of cross section is made half, then the new resistance will be-

    (1) 1Ω (ohm)   (2) 16Ω (ohm)

    (3) 4Ω (ohm)   (4) 12Ω (ohm)

Answer (2)

111. Which one of the following alternating current is supplied in our house hold circuits-

    (1) 110 V and 50 Hz   (2) 220 V and 60 Hz

    (3) 110 V and 60 Hz   (4) 220 V and 50 Hz

Answer (4)

112. How much time will be taken by a 100 watt bulb to consume one unit of energy-

    (1) 1 hour   (2) 10 hour

    (3) 100 hour   (4) 1000 hour

Answer (2)

113. Which one of the following is not a conventional source of energy-

    (1) Coal   (2) Petroleum

    (3) Hydro   (4) Solar energy

Answer (4)

114. Which of the following element is more electro positive?

(1) Br   (2) F

(3) Cl   (4) I

Answer (4)

115. The name of metal which decomposes water in cold is:

(1) Cu   (2) Pt

(3) Ag   (4) Na

Answer (4)

116. On heating camphor in a porcelain dish it got mixed in air without melting. This phenomenon is known as:

(1) Condensation   (2) Sublimation

(3) Suspension   (4) Evaporation

Answer (2)

117. Ethylene and Sulpher monochloride on heating gives:

(1) Chloroethane   (2) Ethylene chloride

(3) Mustard Gas   (4) Ethylene glycol

Answer (3)

118. The H^+ ion concentration of a solution is 2×10^{-8} mol L^{-1}. The PH value of the solution is-

$(\log_{10} 2 = 0.3010)$

(1) 7.699   (2) 7.599

(3) 7.799   (4) 7.899

Answer (1)

119. Which of the following elements exhibit variable valency?

(1) Normal element

(2) Typical element

(3) Transitional element

(4) None of these

Answer (3)

120. Which one is addition reaction:

(1) $Zn + H_2SO_4 \rightarrow ZnSO_4 + H_2$

(2) $2KBr + Cl_2 \rightarrow 2KCl + Br_2$

(3) $2H_2 + O_2 \rightarrow 2H_2O$

(4) $2HgO \rightarrow 2Hg + O_2$

Answer (3)

121. Which compound has both covalent as well as co-ordinate bond?

(1) H_2S (2) CO_2

(3) H_2O (4) SO_2

Answer (4)

122. Complex salt is-

(1) Zinc Sulphate

(2) Sodium Hydrogen Sulphate

(3) Iron Ammonium Sulphate

(4) Tetraammine Copper (II) Sulphate

Answer (4)

123. Calamine is the ore of metal:

(1) Copper   (2) Aluminium

(3) Zinc   (4) Iron

Answer (3)

124. Acid used in Lead Batteries is:

(1) HCl   (2) H_2SO_4

(3) HNO_3 (4) H_2CO_3

Answer (2)

125. Which type of ores are concentrated by Froth floatation process:

(1) Oxide ores   (2) Sulphide ores

(3) Carbonate ores   (4) Nitrate ores

Answer (2)

126. Which of the following is amphoteric oxide:

(1) Na_2O (2) SO_2

(3) Al_2O_3 (4) CaO

Answer (3)

127. In human body temperature control centre is-

(1) Epithalamus   (2) Hypothalamus

(3) Thalamus   (4) Medula oblongata

Answer (2)

128. Which factor is responsible for Green House Effect-

(1) H_2O (2) CO

(3) SO_2 (4) CO_2

Answer (4)

129. Which one of the following element is essential for synthesis of Thyroxin Hormones-

    (1) Zinc   (2) Iodine

    (3) Boron   (4) Nitrogen

Answer (2)

130. Smallest unit of classification is-

    (1) Species   (2) Class

    (3) Order   (4) Kingdom

Answer (1)

131. Which of the following is not a part of the female reproductive system in human beings-

    (1) Ovary   (2) Uterus

    (3) Fallopian tube   (4) Vas deferens

Answer (4)

132. Most powerful digestive enzyme occurs in which cell organelles-

    (1) Mitochondria   (2) Chloroplast

    (3) Golgibody   (4) Lysosome

Answer (4)

133. Causative agent of Kala azar (Black fever) is:

    (1) Bacteria   (2) Virus

    (3) Protozoan   (4) Fungi

Answer (3)

134. Unisexual flowers occur in which of the following plants-

    (1) Mustard   (2) Tomato

    (3) Pea   (4) Watermelon

Answer (4)

135. Biotic components of ecosystem are-

    (1) Producers   (2) Consumers

    (3) Decomposers   (4) All of above

Answer (4)

136. Which one of the following substance is changed into amino acid after digestion-

    (1) Protein   (2) Carbohydrate

    (3) Fat   (4) Nucleic acid

Answer (1)

137. Source of Penicillin antibiotic is-

    (1) Bacteria   (2) Fungi

    (3) Virus   (4) Algae

Answer (2)

138. Testosteron Hormone is produced in-

    (1) Leyding cell   (2) Kupffer cell

    (3) Granulosa cell   (4) None of above

Answer (1)

139. Number of sex chromosomes in human beings are-

    (1) 23   (2) 46

    (3) 1   (4) 2

Answer (4)

140. Which of the following is known as the 'suicide bag' of the cell?

    (1) Plastid   (2) Mitochondria

    (3) Ribosome   (4) Lysosome

Answer (4)

141. The Harappan Civilization was discovered in the year

    (1) 1910   (2) 1921

    (3) 1935   (4) 1942

Answer (2)

142. The First Literary Source is -

    (1) Rigveda   (2) Samveda

    (3) Yajurveda   (4) Atharvaveda

Answer (1)

143. During whose reign Megasthenes visited to India?

    (1) Ashoka

    (2) Harsh Vardhan

    (3) Chandragupta Maurya

    (4) Kumar Gupta

Answer (3)

144. Which dynasty was ruling over North India at the time of Alexander's invasion?

    (1) Nanda   (2) Maurya

    (3) Shunga   (4) Kanva

Answer (1)

145. The Name of Shershah in childhood was-

    (1) Hasan   (2) Farid

    (3) Sher Khan   (4) None of the above

Answer (2)

146. Which sultan of Delhi has also been called 'A mixture of opposites'?

    (1) Balban

    (2) Alauddin Khilji

    (3) Muhammad Tughlaq

    (4) Ibrahim Lodi

Answer (3)

147. The Emperor was called 'Kalandar'-

   (1) Babar   (2) Humayun

   (3) Akbar   (4) Shahjahan

Answer (1)

148. Famous 'Peacock Throne' was taken away out of India by-

   (1) Ahmad Shah Abdali

   (2) Taimur

   (3) Dalhousie

   (4) Nadir Shah

Answer (4)

149. 'Subsidiary Alliance' was implemented during period of-

   (1) Lord Cornwallis   (2) Lord Wellesley

   (3) Sir John Shore   (4) Lord Auckland

Answer (2)

150. Which one of the following writings is <u>Not</u> related to Mahatma Gandhi-

   (1) My Experiments with truth

   (2) Harijan

   (3) Das Capital

   (4) Hind Swaraj

Answer (3)

151. Name the founder of 'Gadar Party'-

   (1) Lala Hardayal

   (2) Subhash Chandra Bose

   (3) Madam Cama

   (4) Madan Lal Dhingra

Answer (1)

152. Who Among the following was <u>not</u> known as Moderate in the Indian National Movement?

   (1) Bal Gangadhar Tilak

   (2) Dadabhai Naoroji

   (3) M.G. Ranade

   (4) Gopal Krishna Gokhale

Answer (1)

153. The Himalayan mountain range is an example of

   (1) Block mountain   (2) Folding mountain

   (3) Volcanic mountain (4) Residual mountain

Answer (2)

154. The forest of Ganga-Brahmputra-delta is known as

   (1) Evergreen Forest   (2) Monsoon Forest

   (3) Sundar Ban   (4) Deciduous Forest

Answer (3)

155. How many districts are in Uttar Pradesh?

   (1) 70   (2) 75

   (3) 80   (4) 85

Answer (2)

156. In which continent the Sahara desert is situated-

   (1) South America   (2) Africa

   (3) Asia   (4) North America

Answer (2)

157. The Blue Revolution is related with

   (1) Food Grain Production

   (2) Fish Production

   (3) Milk Production

   (4) Oil seed Production

Answer (2)

158. The Oil and Natural Gas Commission (ONGC) was set up in

   (1) 1956   (2) 1957

   (3) 1959   (4) 1961

Answer (1)

159. What is the name of Mid Latitude grass land in South America?

   (1) Prairie   (2) Pampas

   (3) Veld   (4) Steppes

Answer (2)

160. Where Thar Desert is located?

   (1) Pakistan

   (2) China

   (3) India

   (4) United State of America

Answer (3)

161. Where Gobind Sagar reservoir is situated?

   (1) Uttar Pradesh

   (2) Haryana

   (3) Himachal Pradesh

   (4) Punjab

Answer (3)

162. When Tourism day is celebrated?

   (1) 5 January   (2) 10 December

   (3) 5 June   (4) 27 September

Answer (4)

163. According to census 2011 the population of U.P. is

   (1) 18.88 Crores   (2) 19.98 Crores

   (3) 24.70 Crores   (4) 30.00 Crores

Answer (2)

164. I.M.F was established by the recommendations of which committee?

   (1) Bretton woods committee

   (2) Goswami committee

   (3) Narsingham committee

   (4) None of them

Answer (1)

165. In which year India devalued its currency for the first time?

   (1) 1949   (2) 1966

   (3) 1991   (4) None of them

Answer (2)

166. The least Population State in India is

   (1) Sikkim   (2) Mizoram

   (3) Uttar Pradesh   (4) Bihar

Answer (1)

167. Where is situated the Headquarters of World Bank?

   (1) Texas   (2) Canada

   (3) Washington   (4) Geneva

Answer (3)

168. Who has first developed the theory of Rent?

   (1) Recardo   (2) Adam Smith

   (3) Marshall   (4) None of them

Answer (1)

169. Which Canal is largest in the world?

   (1) Panama Canal   (2) Ram Ganga Canal

   (3) Kra Canal   (4) Suez Canal

Answer (4)

170. 'Chipko Movement' was basically against

   (1) Water Pollution   (2) Noise Pollution

   (3) Soil Pollution   (4) Deforestation

Answer (4)

171. The President's Rule in a state means that the state is ruled by-

   (1) The President

   (2) The Chief Minister

   (3) The Governor of the State

   (4) The Prime Minister

Answer (3)

172. In which year "The Right to Information Act" was passed

   (1) 2001   (2) 2003

   (3) 2005   (4) 2007

Answer (3)

173. The Constitution of India primarily did not include in its preamble

   (1) Sovereign   (2) Socialist

   (3) Democratic   (4) Republic

Answer (2)

174. Article-370 was associated with

   (1) Uttar Pradesh   (2) Nagaland

   (3) Jammu & Kashmir   (4) Telangana

Answer (3)

175. Who presided over the first meeting of the Indian Constituent Assembly?

   (1) Sachchidanand Sinha

   (2) Dr. Rajendra Prasad

   (3) Dr. B.R. Ambedkar

   (4) H.V. Kamath

Answer (1)

176. Who appoints the Chairman of Union Public Service Commission?

   (1) President

   (2) Prime Minister

   (3) Chief Justice of India

   (4) Vice President

Answer (1)

177. Which of the following appointment is not made by the President of India?

(1) Speaker of the Lok Sabha

(2) Chief Justice of India

(3) Chief of Army

(4) Prime Minister

Answer (1)

178. The first female speaker of Lok Sabha is

(1) Vijay Laxmi Pandit

(2) Sucheta Kriplani

(3) Tarkeshwari Sinha

(4) Meira Kumar

Answer (4)

179. The state in which Panchayati Raj was introduced first-

(1) Uttar Pradesh   (2) Bihar

(3) Rajasthan   (4) Gujrat

Answer (3)

180. Who was the first Muslim President in India?

(1) Fakhruddin Ali Ahmed

(2) Dr. Zakir Hussain

(3) Salman Khursheid

(4) Dr. Abdul Kalam Azad

Answer (2)

181. Which of the following statement is true?

(1) $\left(\frac{1}{2}\right)^{\frac{1}{2}} = \left(\frac{1}{3}\right)^{\frac{1}{3}}$

(2) $\left(\frac{1}{2}\right)^{\frac{1}{2}} < \left(\frac{1}{3}\right)^{\frac{1}{3}}$

(3) $\left(\frac{1}{2}\right)^{\frac{1}{2}} > \left(\frac{1}{3}\right)^{\frac{1}{3}}$

(4) $\left(\frac{1}{2}\right)^{\frac{1}{2}}$ and $\left(\frac{1}{3}\right)^{\frac{1}{3}}$ are rational numbers

Answer (3)

182. The mean of 15 observations written in some order is 50. If the mean of first eight observations and last eight observations are 48 and 53 respectively then the eighth observation is

(1) 35   (2) 80

(3) 72   (4) 58

Answer (4)

183. The point on the y-axis, which is equidistant from points A(6,5) and B(–4,3) is

(1) (9, 0)   (2) (0, 9)

(3) (0, 4)   (4) (0, 3)

Answer (2)

184. If, $(\sec\theta - \tan\theta) = k$, where $k \neq 0$ then the value of $(\sec\theta + \tan\theta)$ is-

(1) $1 - \frac{1}{k}$ (2) $1 - k$

(3) $1 + k$ (4) $\frac{1}{k}$

Answer (4)

185. The value of k for which the system of linear equation x+2y=5 and 3x+ky = 15 has no solution, is:

(1) 6   (2) -6

(3) $\frac{3}{2}$ (4) $\frac{2}{3}$

Answer

186. If x=1 is a common root of the equations $ax^2+ax+3=0$ and $x^2+x+b=0$ then the value of ab is:

(1) 3   (2) 3.5

(3) 6   (4) –3

Answer (1)

187. If points (a, 0), (0, b) and (1, 1) are collinear, then the value of $\left(\frac{1}{a} + \frac{1}{b}\right)$ is:

(1) 1   (2) 2

(3) 0   (4) –1

Answer (1)

188. If the centroid of the triangle formed by points (a, b), (b, c) and (c, a) is at the origin, then $a^3+b^3+c^3$ is equal to:

(1) abc   (2) 0

(3) a+b+c   (4) 3abc

Answer (4)

189. The distance between the point $(\cos\theta, \sin\theta)$ and $(\sin\theta, -\cos\theta)$ is:

(1) $\sqrt{3}$ (2) $\sqrt{2}$

(3) 2   (4) 1

Answer (2)

190. If 35% of income of A is equal to 25% of income of B then the ratio of incomes of A and B is:
   (1) 3 : 4   (2) 5 : 7
   (3) 7 : 5   (4) 4 : 3

Answer (2)

191. If the ratio of volumes of two cubes is 27 : 64 then the ratio of their surface area is:
   (1) 3 : 4   (2) 4 : 3
   (3) 9 : 16   (4) 16 : 9

Answer (3)

192. If the base of a triangle is decreased by 30% and its height is increased by 25% then the percentage decrease in area of triangle is:
   (1) 20%   (2) 15%
   (3) 22.5%   (4) 12.5%

Answer (4)

193. The equation of the base of an equilateral triangle is x+y–2=0. If one of its vertex is (2, –1) then area of triangle is
   (1) $\dfrac{1}{2\sqrt{3}}$ sq. unit   (2) $\dfrac{\sqrt{3}}{12}$ sq. unit
   (3) $\dfrac{2}{3}$ sq. unit   (4) $\dfrac{3\sqrt{3}}{4}$ sq. unit

Answer (1)

194. The lengths of chords AB and AC of a circle are
   6 cm and 8 cm respectively. If ∠BAC=90° then the radius of the circle is:
   (1) 2.5 cm   (2) 3 cm
   (3) 4 cm   (4) 5 cm

Answer (4)

195. If $\cos 43° = \dfrac{x}{\sqrt{x^2 + y^2}}$, then the value of tan47° is
   (1) $\dfrac{y}{x}$ (2) $\dfrac{y}{\sqrt{x^2 + y^2}}$
   (3) $\dfrac{x}{y}$ (4) $\dfrac{x}{\sqrt{x^2 + y^2}}$

Answer (3)

196. If the quadratic equations $2x^2+4x+(a+5)=0$ have equal roots and $(a+4)x^2+ax-3b=0$ have distinct real roots then which of the following is true:
   (1) $a = -3, b < \dfrac{3}{4}$
   (2) $a = 3, b > \dfrac{3}{4}$
   (3) $a = -3, b > \dfrac{3}{4}$
   (4) $a = 3, b < \dfrac{3}{4}$

Answer

197. The value of tan1° tan2°……….. tan89° is
   (1) 0   (2) 1
   (3) $\dfrac{1}{\sqrt{3}}$ (4) Not defined

Answer (2)

198. The digit at the unit place in $(3157)^{2020}$ is
   (1) 1   (2) 3
   (3) 7   (4) 9

Answer (1)

199. A metallic cuboid of dimension 9cm×11cm×12cm is melted and recasted into spherical balls of diameter 0.3 cm. The number of balls will be
   (1) 84000
   (2) 10500
   (3) 78000
   (4) 86000

Answer (1)

200. The length of tangent drawn from a point Q to a circle is 24 cm and distance from Q from the centre of circle is 25 cm. The radius of circle is
   (1) 7 cm   (2) 12 cm
   (3) 15 cm   (4) 24.5 cm

Answer (1)

❑   ❑   ❑