



SRIGAYATRI EDUCATIONAL INSTITUTIONS

ANDHRA PRADESH

CLASS – X

Time: 3 Hr.

NTSE_TEST PAPER-3

Max. Marks: 200

Read the following instructions carefully before answering.

- The question paper contains questions numbered 001 to 200.

Mental Ability	001 to 050
English	051 to 100
Mathematics	101 to 120
Physics	121 to 134
Chemistry	135 to 147
Biology	148 to 160
Social Studies	161 to 200

- All questions are multiple choice questions with single right answer.
- Mark all the answers on the OMR Sheet given to you.
- Each question carries one mark.
- Read the instructions given on the OMR sheet before you bubble the answers.

MENTAL ABILITY TEST

I. Choose the correct answer.

1. A is 3 years older to B and 3 years younger to C, while B and D are twins. How many years older is C to D?
(A) 2 (B) 3 (C) 6 (D) 12
2. The 30 members of a club decided to play a badminton singles tournament. Every time a member loses a game he is out of the tournament. There are no ties. What is the minimum number of matches that must be played to determine the winner ?
(A) 15 (B) 29 (C) 61 (D) None of these
3. In a garden, there are 10 rows and 12 columns of mango trees. The distance between the two trees is 2 metres and a distance of one metre is left from all sides of the boundary of the garden. The length of the garden is
(A) 20 m (B) 22 m (C) 24 m (D) 26 m
4. 12 year old Manick is three times as old as his brother Rahul. How old will Manick be when he is twice as old as Rahul ?
(A) 14 years (B) 16 years (C) 18 years (D) 20 years
5. A tailor had a number of shirt pieces to cut from a roll of fabric. He cut each roll of equal length into 10 pieces. He cut at the rate of 45 cuts a minute. How many rolls would be cut in 24 minutes ?
(A) 32 rolls (B) 54 rolls (C) 108 rolls (D) 120 rolls

6. In a class of 60 students, the number of boys and girls participating in the annual sports is in the ratio 3 : 2 respectively. The number of girls not participating in the sports is 5 more than the number of boys not participating in the sports. If the number of boys participating in the sports is 15, then how many girls are there in the class ?
 (A) 20 (B) 25 (C) 30 (D) Data inadequate
7. There are deer and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there ?
 (A) 20 (B) 30 (C) 50 (D) 60
8. A man wears socks of two colours - Black and brown. He has altogether 20 black socks and 20 brown socks in a drawer. Supposing he has to take out the socks in the dark, how many must he take out to be sure that he has a matching pair ?
 (A) 3 (B) 20 (C) 39 (D) None of these
9. A motorist knows four different routes from Bristol to Birmingham. From Birmingham to Sheffield he knows three different routes and from Sheffield to Carlisle he knows two different routes. How many routes does he know from Bristol to Carlisle ?
 (A) 4 (B) 8 (C) 12 (D) 24
10. Mac has £ 3 more than Ken, but then Ken wins on the horses and trebles his money, so that he now has £ 2 more than the original amount of money that the two boys had between them. How much money did Mac and Ken have between them before Ken's win ?
 (A) £ 9 (B) £ 11 (C) £ 13 (D) £ 15
11. If '+' means '-', '-' means 'x', 'x' means and 'means' '÷', and '÷' mean '+' then $15 \times 3 \div 15 + 5 - 2 = ?$
 (A) 0 (B) 10 (C) 20 (D) 6
12. If $2 * 3 = 12$, $3 * 4 = 20$ and $4 * 5 = 30$, then $2 * 6$ is
 (A) 18 (B) 12 (C) 21 (D) None of these
13. If $x \$ y = (x + y + xy - 1)(x + y + xy + 1)$, then the value of $(4 \$ 10)$ is.
 (A) 2915 (B) 2195 (C) 2951 (D) 2955
14. If * means "is greater than", @ means "is less than"; and \$ means "is equal to" and if a \$ b and b @ c, then
 (A) C * B (B) B * C (C) C * A (D) Both (A) and (C)
15. In a school, there were five teachers.
 A and B were teaching Hindi and English.
 C and D were teaching English and Geography.
 D and A were teaching Mathematics and Hindi
 E and B were teaching History and French.
 Who among the teachers was teaching maximum number of subjects ?
 (A) A (B) B (C) C (D) D
16. In a school, there were five teachers.
 A and B were teaching Hindi and English.
 C and D were teaching English and Geography.
 D and A were teaching Mathematics and Hindi
 E and B were teaching History and French.

Which of the following pairs was teaching both Geography and Hindi ?

- (A) A and B (B) B and C (C) C and A (D) None of these

17. In a school, there were five teachers.
A and B were teaching Hindi and English.
C and D were teaching English and Geography.
D and A were teaching Mathematics and Hindi
E and B were teaching History and French.
More than two teachers were teaching which subject ?

- (A) History (B) Hindi (C) French (D) Mathematics

18. In a school, there were five teachers.
A and B were teaching Hindi and English.
C and D were teaching English and Geography.
D and A were teaching Mathematics and Hindi
E and B were teaching History and French.
D, B and A were teaching which of the following subjects ?

- (A) English only (B) Hindi and English
(C) Hindi only (D) Mathematics and Hindi

19. In a school, there were five teachers.
A and B were teaching Hindi and English.
C and D were teaching English and Geography.
D and A were teaching Mathematics and Hindi
E and B were teaching History and French.
Who among the teachers was teaching less than two subjects ?

- (A) A (B) B (C) D (D) There is no such teachers

20. Madhu and Shobha are good in Dramatics and Computer Science.
Anjali and Madhu are good in Computer Science and Physics.
Anjali, Poonam and Nisha are good in Physics and Mathematics.
Poonam and Shobha are good in History and Dramatics.
Who is good in Computer Science, History and Dramatics ?

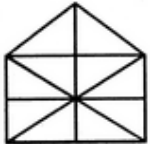
- (A) Anjali (B) Madhu (C) Shobha (D) Nisha

21. Find the number of triangles in the given figure.



- (A) 21 (B) 23 (C) 25 (D) 27

22. Find the number of triangles in the given figure.



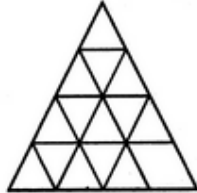
- (A) 10 (B) 19 (C) 21 (D) 23

23. Find the number of triangles in the given figure.



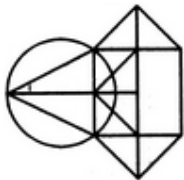
- (A) 5 (B) 6 (C) 8 (D) 10

24. Find the minimum number of straight lines required to make the given figure.



- (A) 9 (B) 11 (C) 15 (D) 16

25. Find the number of triangles in the given figure.



- (A) 10 (B) 12 (C) 14 (D) 16

26. Five boys took part in a race.
Raj finished before Mohit but behind Gaurav. Ashish finished before Sanchit but behind Mohit. Who won the race ?

- (A) Raj (B) Gaurav (C) Mohit (D) Ashish

27. Five men A, B, C, D and E read a newspaper.
The one who reads first gives it to C. The one who reads last had taken from A. E was not the first or last to read. There were two readers between B and A.
B passed the newspaper to whom ?

- (A) A (B) C (C) D (D) E

28. Five men A, B, C, D and E read a newspaper.
The one who reads first gives it to C. The one who reads last had taken from A. E was not the first or last to read. There were two readers between B and A.
Who read the newspaper last ?

- (A) A (B) B (C) C (D) D

29. Seven executives P, Q, R, S, T, U and W reach office in a particular sequence.
U reaches immediately before P but does not immediately follow S. R is the last one to reach office. T follows immediately after P and is subsequently followed by W.
Among the executives, who reaches the office first ?

- (A) Q (B) S (C) U (D) Can't be determined

30. Seven executives P, Q, R, S, T, U and W reach office in a particular sequence.
U reaches immediately before P but does not immediately follow S. R is the last one to reach office. T follows immediately after P and is subsequently followed by W.
Who ranks fourth in the sequence of reaching office ?

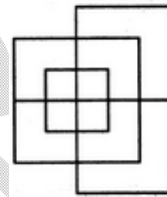
- (A) W (B) U (C) T (D) Can't be determined

31. If A stands for +, B stands for -, C stands for x, then what is the value of
 (10 C 4) A (4 C 4) B 6 = _____
 (A) 60 (B) 56 (C) 50 (D) 46

32. If L stands for +, M stands for -, N stands for x, P stands for $\frac{\quad}{\quad}$, then
 14 N 10 L 4 2 P 2 M 8 = _____
 (A) 153 (B) 216 (C) 248 (D) 251

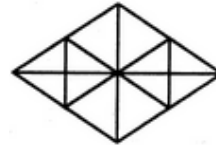
33. $4 - 3 = 7, 5 + 4 = 20, 6 \div 5 = 1, 8 \times 2 = 4$ then $8 - 7 + 8 \div 10 \times 5$.
 (A) 60 (B) 62 (C) 55 (D) 42

34. Find the minimum number of straight lines required to make the given figure.



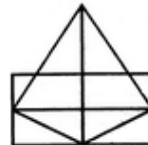
(A) 13 (B) 15 (C) 17 (D) 19

35. Find the number of triangles in the given figure.



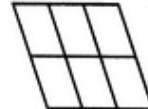
(A) 16 (B) 22 (C) 28 (D) 32

36. Find the number of triangles in the given figure.



(A) 11 (B) 13 (C) 15 (D) 17

37. Count the number of parallelogram in the given figure.



(A) 20 (B) 18 (C) 16 (D) 12

38. In the adjoining figure, if the centres of all the circles are joined by horizontal and vertical lines, then find the number of squares that can be formed.



(A) 6 (B) 7 (C) 8 (D) 1

39. If \div means +, $-$ means \div , \times means $-$ and $+$ means \times , then $\frac{(36 \times 4) - 8 \times 4}{4 + 8 \times 2 + 16 \div 1} = ?$
 (A) 0 (B) 8 (C) 12 (D) 16

40. If Q means 'add to', J means 'multiply by', T means 'subtract from' and K means 'divide by' then $30 K 2 Q 3 J 6 T 5 = ?$
 (A) 18 (B) 28 (C) 31 (D) 103

41. If + means $-$, $-$ means \times , \div means + and \times means \div , then $15 - 3 + 10 \times 5 \div 5 = ?$
 (A) 5 (B) 22 (C) 48 (D) 52

42. If 'when' means '×', 'you' means '÷', 'come' means '-' and 'will' means '+', then what will be the value of "8 when 12 will 16 you 2 come 10"?

(A) 45 (B) 94 (C) 96 (D) 112

43. If P means 'division', T means 'addition', M means 'subtraction' and D means 'multiplication', then what will be the value of the expression 12 M 12 D 28 P 7 T 15?

(A) -30 (B) -15 (C) 15 (D) None of these

44. Choose the alternative which is closely resembles the mirror image of the given combination.

247596

(1) 695742 (2) 002542
(3) 247596 (4) 002542

(A) 1 (B) 2 (C) 3 (D) 4

45. Choose the alternative which is closely resembles the mirror image of the given combination.

BR4AQ16HI

(1) IH01QA4RB (2) BR4AQ16HI
(3) BR4AQ16HI (4) IH91QA4RB

(A) 1 (B) 2 (C) 3 (D) 4

46. Choose the alternative which is closely resembles the mirror image of the given combination.

GEOGRAPHY

(1) YHPARGOEG (2) YHPARGOEG
(3) JHPARGOEG (4) YHPARGOEG

(A) 1 (B) 2 (C) 3 (D) 4

47. Choose the alternative which is closely resembles the mirror image of the given combination.

NATIONAL

(1) JANOLAN (2) JANOLAN
(3) JANOLAN (4) LANOLAN

(A) 1 (B) 2 (C) 3 (D) 4

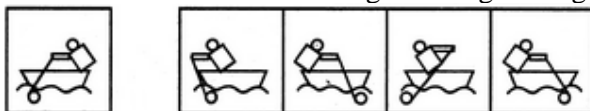
48. Choose the alternative which is closely resembles the mirror image of the given combination.

PAINTED

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

(A) 1 (B) 2 (C) 3 (D) 4

49. Choose the correct mirror image of the given figure (X) from amongst the four alternatives.



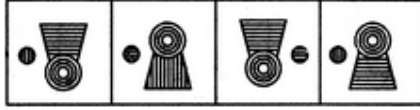
(X) (1) (2) (3) (4)

(A) 1 (B) 2 (C) 3 (D) 4

50. Choose the correct mirror image of the given figure (X) from amongst the four alternatives.



(X)
(A) 1



(1)

(2)

(3)

(4)

(B) 2

(C) 3

(D) 4

ENGLISH

I. Identify the part of the sentence which carries an error in it.

51. This / is going on / for months / day after day.

(A) (B) (C) (D)

52. She / can be able / to speak/ many languages.

(A) (B) (C) (D)

53. This book / is more interesting than / any book / I had read

(A) (B) (C) (D)

54. The train / left / even before / we reached the station

(A) (B) (C) (D)

55. The population of Hyderabad / is / more than / Vizag.

(A) (B) (C) (D)

56. I / have passed / the examination / two years ago.

(A) (B) (C) (D)

57. We / usually have / the lunch / at twelve.

(A) (B) (C) (D)

58. Being / a hot day / we stayed / indoors.

(A) (B) (C) (D)

59. Of all the three brothers/ I /like Vamsi / better.

(A) (B) (C) (D)

60. We / have discussed about / the same issue / till now.

(A) (B) (C) (D)

II Choose the correct meanings of the words.

61. Apprehensive

(A) attentive (B) comprehensive (C) full of knowledge (D) worried

62. Assiduously

(A) cautiously (B) rigorously
(C) shut away from the world (D) maintain distance

63. Disposition
 A) personality (B) general tendency of character (C) self respect (D) pride
64. Creed
 (A) religion (B) system of beliefs or opinions
 (C) caste (D) giving credit
65. It is unlikely that he will finish the work today.
 (A) not possible (B) not similar (C) not at all (D) not ready
66. She cherished the hope that her husband might still be alive.
 (A) continued (B) liked to retain (C) lost for ever (D) enkindled
67. I must go now incidentally. If you want that book I'll bring it next time.
 (A) at this rate (B) however (C) in any case (D) by the way
68. Vioba shuns publicity.
 (A) wants (B) requires (C) avoids (D) rejects

III Choose the alternative the best fits the blank in each sentence.

69. The horse riders _____ the horses and march on.
 (A) mount (B) climb (C) ascend (D) none
70. The wound _____ in a short time.
 (A) cured (B) healed (C) dried (D) none
71. Fresh air is _____ to one's health.
 (A) benefit (B) beneficent (C) beneficial (D) none
72. It is _____ to see a small child suffering on a hospital bed.
 (A) healthy (B) heart rending (C) heartburn (D) none

IV Identify the tense of the underlined verbs.

73. The project has already been completed by him.
 (A) Past continuous (B) Past perfect (C) Present continuous (D) Present Perfect
74. Several songs were being sung by her.
 (A) Past continuous (B) Past perfect (C) Present continuous (D) Simple Present
75. Why does light attract insects?
 (A) Present perfect (B) Past perfect (C) Present continuous (D) Simple Present
76. The task will have been completed by her by tomorrow evening.
 (A) simple past (B) simple future (C) future continuous (D) future perfect
77. Why were you late to the party yesterday?
 (A) auxiliary verb (B) simple present (C) simple past (D) past continuous

V Identify the correct sentence.

78. (A) she said that why did I come late?
 (B) she said that why I came late?

- (C) she asked why had I come late?
 (D) she asked why I had come late?
79. (A) he exclaimed sadly alas they lost the match
 (B) he exclaimed sadly that alas they lost the match
 (C) he exclaimed sadly that they lost the match
 (D) he exclaimed sadly that they had lost the match
80. (A) she said that if he had returned her money.
 (B) she asked if he had returned her money.
 (C) she asked if he returned her money
 (D) she asked if he has returned her money
81. (A) If I wrote well, I will stand first in the class
 (B) If I wrote well, I would have stood first in the class
 (C) If I wrote well, I would stand first in the class
 (D) If I wrote well, I would have stand first in the class
82. (A) No sooner he entered the class than he started teaching
 (B) No sooner he entered the class when he started teaching
 (C) No sooner did he enter the class when he started teaching
 (D) No sooner did he enter the classes than he started teaching.

VI Identify the correct part of speech.

83. I met the boy whose book I borrowed last week.
 (A) pronoun (B) adverb (C) conjunction (D) adjective
84. She asked him why he did not return her books.
 (A) pronoun (B) adverb (C) conjunction (D) adjective
85. To err is human and to forgive is divine
 (A) noun (B) adjective (C) adverb (D) pronoun
86. She hates smoking.
 a) main verb b) adverb c) noun d) adjective
87. The higher we go the cooler we get.
 (A) noun (B) adjective (C) adverb (D) pronoun
88. I think these are all my books.
 (A) pronoun (B) pronoun
 (C) adjective (D) adverb
89. They have already returned home.
 (A) noun (B) pronoun (C) preposition (D) adverb
90. In spite of being weak he attended all the classes.
 (A) noun (B) pronoun (C) preposition (D) adverb

VII Identify the underlined part of the word which is pronounced as that of the the key word.

91. Finale (A) feel (B) final (C) fit (D) faith
92. Gibbering (A) gigantic (B) gate (C) tag (D) smudge
93. Gimmick (A) gale (B) pledge (C) regime (D) badge
94. Elite (A) feet (B) fate (D) light (D) fight

95. Alibi (A) above (B) aim (C) gallows (D) across
96. Thorough (A) laugh (B) plough (C) rough (D) leaf
97. Bury (A) pure (B) fuel (C) furry (D) ferry
98. Atmosphere (A) fat (B) fate (C) fumble (D) fair
99. Disease (A) eyes (B) ice (C) song (D) rice
100. Nephew (A) enough (B) cough (C) review (D) few

MATHEMATICS

101. The mean of first n odd natural numbers is $\frac{n^2}{81}$. Find n .
 (A) 9 (B) 81 (C) 27 (D) None of these
102. Find mode of the following discrete series
- | | | | | | | | | |
|-----|---|---|---|---|----|---|---|----|
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| f | 5 | 4 | 6 | 8 | 12 | 3 | 9 | 10 |
- (A) 4 (B) 8 (C) 5 (D) 7
103. The arithmetic mean of 12 observations is 15. If two observations 20 and 25 are removed then the arithmetic mean of remaining observations is
 (A) 14.5 (B) 13.5 (C) 12.5 (D) 13
104. If the ratio of mean and median of a certain data is 2 : 3, then find the ratio of its mode and mean.
 (A) 4 : 3 (B) 7 : 6 (C) 7 : 8 (D) 5 : 2
105. In a class of 14 students, 5 boys brought 12 books each and 6 girls brought 15 books each. Remaining students have atleast one book with them and no two students brought same number of books. If the average number of books brought in the class is a positive integer, then what could be the number of books brought by the remaining students?
 (A) 4 (B) 8 (C) 14 (D) 18

106. The median of the following distribution is

C.I.	0-10	10-20	20-30	30-40	40-50
f	5	8	7	10	20

- (A) 35 (B) 30 (C) 40 (D) 45

107. If mean of the following distribution is 13, then the value of p is

x	5	10	12	17	16	20
f	9	3	p	8	7	5

- (A) 6 (B) 7 (C) 10 (D) 4

108. The mean of the following distribution table is

C.I.	10-15	15-20	20-25	25-30	30-35
f	5	7	3	4	8

- (A) 22 (B) 23.05 (C) 24.05 (D) 27.05
109. Which of the following cannot find graphically?
 (A) median (B) mode (C) mean (D) none of these
110. The relation among mean, median and mode is
 (A) mode = 3 median – 2 mean (B) mode = 3 median + 2 mean
 (C) mode = 2 median – 3 mean (D) mode = 2 median + 3 mean
111. The mean of 10, 12, 16, 20, P and 26 is 17. Then the value of P is
 (A) 18 (B) 28 (C) 32 (D) 36
112. The mean of 20 observations is 12.5. by an error one observation is registered as -15 instead of 15 then correct mean is
 (A) 13 (B) 14 (C) 15 (D) 16
113. The mean of 13 observations is 14. If the mean of the first 7 observations is 12 and that of the last 7 observation is 16 then the 7th observation is
 (A) 12 (B) 14 (C) 16 (D) 18
114. The mean weight of 60 students in a class is 40 kg. The mean weight of boys is 50 kg while that of the girls is 30 kg. The number of boys and girls are
 (A) 30, 30 (B) 35, 25 (C) 25, 35 (D) 20, 40
115. The mean marks scored by 40 students were found to be 60. Later it was observed that a score of 48 was misread as 84. Then the correct mean is
 (A) 58 (B) 58.2 (C) 59.1 (D) 59
116. The difference between the maximum and the minimum observations in the data is called
 (A) frequency (B) class interval (C) range (D) cumulative frequency
117. The number of times of particular item occurs in a class interval is called its
 (A) mean (B) frequency (C) cumulative frequency (D) none of these
118. Observations of some date are $\frac{x}{4}, x, \frac{x}{5}, \frac{x}{3}, \frac{x}{2}$ ($x > 0$). If the median of the data is 5, then x is
 (A) 10 (B) 15 (C) 20 (D) 25
119. The mean of ten items is x and if each item is increased by 4 then its mean will be
 (A) x + 4 (B) 4x (C) 10x (D) 10 + x
120. Then mean of 40 items is 35 and if each item multiplied by 'a' then the mean will be
 (A) 35a (B) 35 + a (C) 40 (D) 40 + a

PHYSICS

121. The maximum limit of magnetization is called
 (A) magnetic permeability (B) magnetic saturation
 (C) magnetic susceptibility (D) magnetic induction
122. If A is the area through which a flux ϕ passes normally, then the magnetic flux density B is given by

- (A) $B = \phi / A^2$ (B) $B = \phi$ (C) $B = \phi / A^3$ (D) $B = \phi / A$
123. Two poles of equal strength are separated by a distance of 2 cm repel each other with a force F. If the distance between them is doubled, the force becomes
 (A) 2 F (B) 4 F (C) F / 2 (D) F / 4
124. The force between two magnetic poles reduces to 'a' when the distance between them is increased 'n' times and the force increases to 'b', when the distance is reduced to $\frac{1}{n^{\text{th}}}$ of initial distance. Then a : b is
 (A) $1 : n^2$ (B) $n^2 : 1$ (C) $n^4 : 1$ (D) $1 : n^4$
125. The ratio of magnetic field strengths at the same distance from the centre of a short bar magnet along axial line and equatorial line is
 (A) 1 : 1 (B) 1 : 2 (C) 1 : 3 (D) 2 : 1
126. The magnetic dipole moment is
 (A) a scalar (B) a vector directed from n-pole to s-pole of magnet
 (C) a vector directed from s-pole to n-pole of magnet (D) none
127. Two magnets of magnetic moments M_1 and M_2 are placed over each other to form a cross. The magnetic moment of the system is
 (A) $M_1 + M_2$ (B) $M_1 - M_2$ (C) $M_1^2 + M_2^2$ (D) $\sqrt{M_1^2 + M_2^2}$
128. A bar magnet of magnetic moment M and pole strength 'm' is cut into two equal parts by cutting it along its length. The magnetic moment and pole strength of each half magnet will be
 (A) M/2, m/2 (B) M, m/2 (C) M/2, m (D) M, m
129. The magnetic induction due to a short magnet of moment 0.1 Am^2 at a distance of 10 cm from its centre on its axial line is
 (A) 10^{-5} wb / m^2 (B) $2 \times 10^{-5} \text{ wb / m}^2$ (C) $4 \times 10^{-5} \text{ wb / m}^2$ (D) $8 \times 10^{-5} \text{ wb / m}^2$
130. A bar magnet is kept vertically on a table with its n-pole on table. We will obtain
 (A) one neutral point on south of pole
 (B) one neutral point on north of pole
 (C) two neutral points on east and west of pole
 (D) two neutral points on north and south of pole
131. Among the following, choose the correct paramagnetic pair
 (A) Gadolinium, Cobalt (B) Oxygen, Platinum
 (C) Gold, Mercury (D) Bismuth, Water
132. The susceptibility of the paramagnetic substance
 (A) increases with temperature
 (B) may increase or decrease with temperature
 (C) does not depend on temperature
 (D) decreases with the increases of temperature
133. The S.I unit of intensity of magnetism is
 (A) amp-metre (B) amp / metre (C) amp-metre² (D) amp / metre²
134. Which of the following statements is wrong?
 (A) $\mu_r > 1$ for paramagnetic materials (B) χ_m of a paramagnetic material is +ve
 (C) χ_m of a diamagnetic material is -ve (D) $\mu_r < 1$ for ferromagnetic materials

CHEMISTRY

135. Coconut oil contains
 (A). Acetic acid (B). Oxalic acid (C). Lauric acid (D). Steatic acid
136. Triesters of glycerol are
 (A). Carbohydrates (B). Proteins (C). Oils and fats (D). Ash
137. In hydrogenation of oils
 (A). Unsaturated compounds become saturated
 (B). Saturated become unsaturated
 (C). Fats become oils
 (D). B & C
138. Builder used in soaps may be
 (A). Soda ash (B). Sodium silicate (C). Salt (D). All
139. The substance used to convert alkyl benzene to alkyl benzene sulphonate is
 (A). Fatty alcohol (B). Oleum (C). NaOH (D). CaCl₂
140. Soaps are salts of
 (A). Glycerol (B) Fatty acids (C) Esters (d). Alkyl Benzens
141. The byproducts of alcohol industry is
 (A). Methanol (B). CO₂ (C). H₂O (D). Molasses
142. Molasses is fermented by
 (A). Yeast (B). Bacteria (C) Virus (D). Fungus
143. Starch is tested with
 (A). Tollen's reagent (B). Benedicts reagent
 (C). A & B (D). Iodine
144. Mannose is
 (A). Monosaccharide (B). Disaccheride
 (C). Oligosaccharide (D). Ploysaccharide
145. The bye product of photosynthesis is
 (A). CO₂ (B). O₂ (C). H₂O (D). A & C
146. Fructose is
 (A). Monosaccharide (B). Ketose
 (C). Aldose (D). A & B
147. The main use of denatured Spirit
 (A). Alcoholic beverages (B). motor fuel
 (C). industrial Solvent (D). Lubricants

BIOLOGY

148. Which of these is not a symptom of AIDS?
 (A). Weight gain (B). Skin Rashes
 (c). Swollen lymph glands (d). Fever.
149. The Enzyme responsible for changing forms of HIV is:
 (A). Integrase (B). Protease
 (c). Reverse Transcriptase (d). Amylase
150. Which of these is not a biologically complete proteins?
 (A). Meat (B). Milk (c). Cereals (D). Eggs
151. Essential Amino Acids are:
 (A). Alanine (B). Valine (C). Seline (D). Glycine
152. To prepare a balanced diet chart, which of these factors are to be considered?

- (A). Race (B). Sex (C). Age` (D). All of These
153. 2 Grams of fat gives _____ Kilocalories of energy.
 (A). 9.45 (B). 18.90 (C). 8.0 (D). 4.2
154. Which of these are required for maintaining osmotic pressure & for neuronal activity in the body?
 (A). Sodium, Iron (B). Potassium, phosphorus
 (C). Sodium, potassium (D). Iron, Calcium
155. Which of these is a complex carbohydrate?
 (A). Glucose (B). Galactose (C). Ribose (D). Lactose
156. Consumption of which of these in excess may lead to heart attack?
 (A). Saturated fatty Acid (B). Linoleic acid
 (C). Cholesterol (D). Both A & C
157. Proteins are made up of
 (A). C,H,O (B). C,H,O,N (C). C,H,O,N,S (D). C,N,S
158. Which of these nutrients cannot be absorbed directly into blood?
 (A). Glucose (B). Amino acids (C). Starch (D). Fatty acids
159. During HIV infection, to combat the viral load & to prolong the life of infected person, the therapy is
 (A). DOTS (B). Anti-Retroviral therapy
 (C). Using Vaccines (D). Using Antibiotics
160. The skill needed to adjust with situations of life
 (A). Coping skills (B). Interpersonal skills
 (C). Decision making (D). None of these

SOCIAL STUDIES

161. The density of population of Andhra Pradesh per sq. km is
 (A) 263 (B) 275 (C) 276 (D) 280
162. In 1951 the India's population was
 (A) 36.12 crores (B) 36.01 crores (C) 36 crores (D) 36.1 crores
163. The most population state in India
 (A) West Bengal (B) Andhra Pradesh (C) Uttar Pradesh (D) Maharastra
164. As per 2001 census this percent of total population lived in rural areas
 (A) 72.22 (B) 70.30 (C) 71.20 (D) 71.30
165. This is the second most populous country in the world is
 (A) Srilanka (B) Pakistan (C) Bangladesh (D) India
166. The population of India started growing rapidly from the year
 (A) 1911 (B) 1920 (C) 1922 (D) 1921

167. The average density of population in India as per 2001 census was
(A) 478 (B) 350 (C) 324 (D) 328
168. As per 2001 census the population of India was
(A) 100 crores (B) 104.2 crores (C) 103.7 crores (D) 102.7 crores
169. The union territory which has the highest population is
(A) Dadra Nagar Haveli (B) Pondicherry
(C) Andaman and Nicobar (D) Delhi
170. Urbanization means
(A) The number of villages decreasing
(B) The number of villages growing
(C) The number of villages and towns growing
(D) The number of villages and towns decreasing
171. The state with the lowest density of population is
(A) Maharashtra (B) Arunachal Pradesh (C) Uttarpradesh (D) Kerala
172. There was decline in population growth in India during
(A) 1921 – 31 (B) 1911 – 21 (C) 1931 – 41 (D) 1941 – 1951
173. If the population growth is not checked, India is likely to face
(A) increase in rural areas (B) economic inequalities
(C) important of food stuffs (D) mass poverty
174. India's place in the world in geographical area is
(A) Seventh (B) Eighth (C) Tenth (D) Sixth
175. During 1991 – 2001 the lowest growth rate in population was registered in
(A) Uttar Pradesh (B) Assam (C) Nagaland (D) Kerala
176. This denotes the number of persons available per square kilometer of area
(A) density (B) growth rate (C) density rate (D) growth
177. Maharashtra, Uttar Pradesh, Tamilnadu, West Bengal and Andhra Pradesh show this part of Indian Urban population.
(A) more than one fifth (B) more than one fourth
(C) more than half (D) more than three fourth
178. The population growth after independence has been relatively
(A) very high (B) moderate (C) very low (D) marginal
179. The largest proportion of rural population is around in
(A) Nagaland (B) Tripura (C) Himachal Pradesh (D) Lakshadweep
180. The state with the highest density of population is
(A) Andhra Pradesh (B) Uttar Pradesh (C) Arunachal Pradesh (D) West Bengal
181. The countries which became super powers after second world war were
(A) England & France (B) The USA & Russia
(C) Japan & China (D) Russia & Poland

182. Cold war continued for a long period between the big powers
 (A) Russia – China (B) China – Japan
 (C) America – Russia (D) America – Japan
183. Reason for the cold war between USA and USSR is
 (A) Economic differences (B) Ideological Differences
 (C) Political differences (D) All of these
184. Truman Doctrine was the proposal of
 (A) USSR (B)UK (C)USA (D)Belgium
185. North Atlantic treaty was signed in
 (A) San Francisco (B) Chicago (C)Washington (D)New York
186. Brussels treaty of 1948 held in the country
 (A) Balgeria (B) Brazil (C)Belgium (D) USA
187. In opposition to the NATO Russia formed a agreement called
 (A) Marshall Plan (B)Brussels treaty (C) Warasa pact (D)USA
188. Number of African and Asian countries participated in the bandung conference of 1955
 (A) 28 (B) 27 (C) 26 (D)29
189. North korea attacked South korea in the year
 (A)1950 (B) 1951 (C)1960 (D)1961
190. Building of Answan Dam linked with
 (A) Sadat (B)Nasser (C)Mao (D)Stalin
191. First President of North Vietnam was
 (A) Sukarno (B)Mao (C)Hoc-hi-min (D)Stalin
192. Congo crisis was solved in the year
 (A) 1950 (B)1955 (C)1960 (D)1965
193. Marshall Tito was a states of
 (A) Yugoslavia (B) Vietnam (C)Egypt (D) China
194. The 32nd President of America was
 (A)Wilson (B)Harding (C) Roosevelt (D)Eisenhower
195. The 34th president of America was
 (A) Roosvelt (B) Eisen Hower (C) Wilson (D)Churchill
196. The name of Mao’s Army
 (A) Red Shirts (B) Black Shirts (C) Brown Shirts (D) Red Army
197. Mao defeted the armies of
 (A) Chiang-kai-shek (B) Yuan Shekai
 (C) Dr Sun Yet-sen (D) Japan

198. Winstone Churchill was a statesman of
(A) USA (B) England (C) France (D) Yugoslavia
199. Sukarno was the statesman of
(A) Dutch (B) Indonesia (C) Egypt (D) Russia
200. The Person removed stalin's body from Lenin side was
(A) Khrushchev (B) Gorbachev (C) Breznov (D) Maltove

SRIGAYATRI

KEY

NTSE

ICAP – 6

Date: 14.09.2013

MENTAL ABILITY TEST

1.	C	2.	B	3.	C	4.	B	5.	D
6.	C	7.	D	8.	A	9.	D	10.	C
11.	B	12.	C	13.	A	14.	D	15.	B
16.	D	17.	B	18.	C	19.	D	20.	C
21.	D	22.	C	23.	D	24.	B	25.	C
26.	B	27.	B	28.	D	29.	B	30.	D
31	C	32	A	33	B	34	A	35	C
36	C	37	B	38	C	39	A	40	B
41	C	42	B	43	D	44.	D	45.	A
46.	A	47.	B	48.	B	49.	D	50.	D

ENGLISH

51	B	52	B	53	C	54	B	55	C
56	B	57	B	58	A	59	D	60	B
61	D	62	A	63	B	64	B	65	A
66	B	67	D	68	C	69	A	70	B
71	C	72	B	73	D	74	A	75	D
76	D	77	C	78	D	79	D	80	B
81	C	82	D	83	A	84	C	85	A
86	C	87	C	88	C	89	D	90	C
91	C	92	D	93	A	94	A	95	C
96	B	97	D	98	A	99	A	100	C

MATHEMATICS

101.	B	102.	C	103.	B	104.	D
105.	D	106.	A	107.	B	108.	B
109.	C	110.	A	111.	A	112.	B
113.	B	114.	A	115.	C	116.	C
117.	B	118.	B	119.	A	120.	A

PHYSICS (121–134), CHEMISTRY (135–147), BIOLOGY (148–160)

121	B	122	D	123	D	124	D	125	D
126	C	127	D	128	A	129	B	130	A
131	B	132	D	133	B	134	D	135.	C
136.	C	137.	A	138.	D	139.	B	140.	B
141.	B	142.	A	143.	D	144.	A	145.	B
146.	D	147.	C	148.	A	149	C	150	C
151	B	152	D	153	B	154	C	155	D
156	D	157	C	158	C	159	B	160.	A

SOCIAL STUDIES

161	B	162	B	163	C	164	A	165	D
166	D	167	C	168	D	169	D	170	A
171	B	172	B	173	D	174	A	175	D
176	A	177	C	178	A	179	C	180	D
181	B	182	C	183	B	184	C	185	C
186	C	187	C	188	D	189	A	190	B
191	C	192	C	193	A	194	C	195	B
196	D	197	A	198	B	199	B	200	A