NATIONAL TALENT SEARCH
STATE LEVEL EXAMINATION - 2019
(UTTAR PRADESH)
CLASS - X

MENTAL ABILITY TEST

Time: 120 Minutes ***Maximum Marks: 100***

Direction: In question No. 1 to 10 each question has four Terms. Three terms are alike in some way. One term 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

1. (1) Q 144 (2) M 54
(3) U 16 (4) N 60

2. (1) Poland (2) Korea
(3) U 16 (4) N 60

3. (1) Sound (2) Magnet
(3) Light (4) Heat

4. (1) 14, 9 (2) 60, 6
(3) 37, 30 (4) 53, 23

5. (1) May (2) July
(3) January (4) March

6. (1) 4578 (2) 3721
(3) 2516 (4) 1328

7. (1) T20 (2) IPL
(3) PAC (4) ODI

8. (1) DGLS (2) MPSV
(3) HKPW (4) KNSZ

9. (1) CFIL (2) GIKN
(3) FHKN (4) LORD

10.

W	V	K	T
1	2	3	4

Direction: In Questions 11 to 20 there are four terms in each question. The relationship 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 terms 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

11. Thermometer : Temperature : : Barometer : ?
(1) Atmospheric Pressure (2) Wind speed
(3) Weight (4) Blood Pressure

12. Tree : Root : : Building : ?
(1) Brick (2) Foundation
(3) Door (4) Labour

13. $\begin{matrix} c \\ x \end{matrix}$: 72 :: $\begin{matrix} G \\ U \end{matrix}$: ?
(1) 154 (2) 140
(3) 147 (4) 126

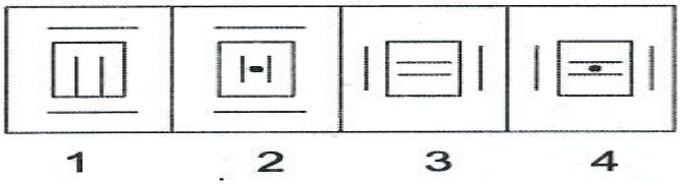
14. Rajghat : Mahatma Gandhi : : Abhayghat : ?
(1) Rajiv Gandhi (2) Indira Gandhi
(3) Ch. Charan Singh (4) Morarji Desai

15. $\frac{18}{3} : 5832 :: \frac{23}{2} : ?$
(1) 46 (2) 184
(3) 92 (4) 529

16. GHIJ : FEDC : : QRST : ?
(1) MNOP (2) PONM
(3) NMPO (4) PNMO

17. BHC : FLG : : JPK : ?
(1) MSP (2) EKF
(3) NTO (4) SYT

18. 5748 : 1120 : : 2186 : ?
(1) 80 (2) 96
(3) 144 (4) 32

19.


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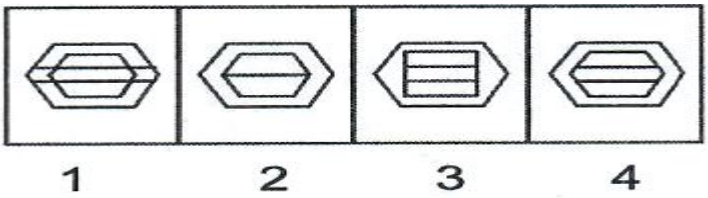


Direction : In question from 21 to 25 the letters in column I are coded in the form of numbers which are written in column II, but the orders of numbers is different. Read carefully code of letters. Find out correct answer in the given alternative and write its alternative number against the corresponding question number on your answer sheet –

Column I	**Column II**
ELN	732
GLR	385
REO	574
MOJ	490
I M N	692

21. What will be the code for word OEL–
(1) 473 (2) 673
(3) 734 (4) 594

22. What will be the code for word JMI –
(1) 098 (2) 089
(3) 096 (4) 069

23. What will be the code for word RGL –
(1) 385 (2) 583
(3) 574 (4) 490

24. What will be the code for word NEJ –

(1) 370 (2) 375
(3) 285 (4) 270

25. What will be the code for word ENM –
(1) 829 (2) 729
(3) 629 (4) 529

Direction – Question 26 to 35 are based on number/letter/figure series. In each series missing term is indicated by question mark (?). 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 –

26. aa_aabb_b_aa_aabb_bb
(1) b b b a a (2) a a b b b
(3) b a b b a (4) b b b a a

27. _sr_tr_srs_r_srst
(1) t s t r t t (2) t s t t t r
(3) t t s s r (4) t s r t s r

28. K_MK_LMKKL_KK_MK
(1) L K L M (2) L K M L
(3) L K M K (4) L K M M

29. AC_GA_EG_CEGACE_
(1) D B A G (2) D E A G
(3) E C A G (4) E B D G

30. _BO_C_O_CB_F
(1) C F B F O (2) C F F B O
(3) F C B F O (4) F C F B O

31. _DR_E_R_ED_J
(1) E D J J R (2) E J R J R
(3) E J D J R (4) E D J R J

32. _ ES_F_S_FE_H
(1) H F E H S (2) F H E H S
(3) S H F E S (4) F E H H S

33. _ER_F_R_FE_J
(1) F E J J R (2) J E F R J
(2) E J F R J (4) F J E J R

34. _YL_B_L_BY_E
(1) E B Y E L (2) B E Y E L
(3) L E E B Y (4) Y B E L E

35. _L_F_LY_R_Y
(1) F R L Y R F (2) Y R F L R F
(3) F R Y R F L (4) R Y F R L F

Direction in Question NO. 36 to 45 the equations have become wrong because of the wrong order of signs. Choose the correct order of signs from the four options given below so as to make the equation right. Write the alternative number of the correct option on the answer sheet against the corresponding question number –

36. $61 = 2 \times 200 - 78$
(1) $\times = -$ (2) $- = \times$
(3) $= - \times$ (4) $\times - =$

37. $23 + 11 \div 102 = 3$
(1) $\div = +$ (2) $= \div +$
(3) $+ = \div$ (4) $= + \div$

38. $76 = 2 \div 12 + 50$

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

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

39. $97 = 73 + 144 \times 6$

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

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

40. $16 = 8 \times 7 - 2 \div 12$

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

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

41. $27 \times 6 = 7 - 3$

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

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

42. $85 \times 2 \times 95 = 75$

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

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

43. $108 = 9 \div 9 + 21$

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

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

44. $66 \times 27 = 13 - 3$

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

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

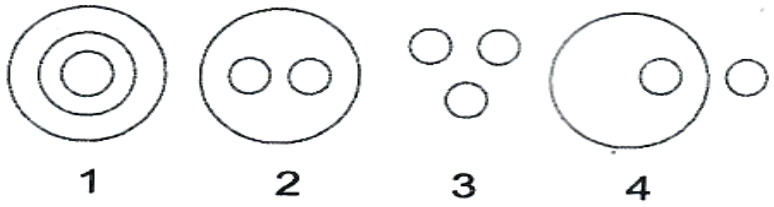
45. $4^3 = 3^2 + 1^2 + 6$

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

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

Direction – For question 46 to 55 four sets of circles has been given below. Three circles of set have some relation with each other. Questions given below have three words each other in some that in one of the sets of circles. Find it out form the four options given below each question and write its serial number against corresponding question number on your answer sheet –

Set



46. Family, Mother, Father

(1) 2 (2) 4

(3) 3 (4) 1

47. Book, Page, Words

(1) 3 (2) 4

(3) 1 (4) 2

48. Math, Alezebra, Geography

(1) 2 (2) 1

(3) 4 (4) 3

49. Hindi, Math, Science
(1) 3 (2) 4
(3) 1 (4) 2

50. House, Door, Window
(1) 3 (2) 4
(3) 1 (4) 2

51. Year, Month, Weather
(1) 3 (2) 4
(3) 1 (4) 2

52. Asia, India, Kerala
(1) 3 (2) 4
(3) 1 (4) 2

53. Mahesh Bupati, Ajiagya Rahare, Sangram
(1) 3 (2) 4
(3) 1 (4) 2

54. Uttar Pradesh, Agra, Tajmahal
(1) 3 (2) 4
(3) 1 (4) 2

55. Raipur, Ranchi, Patna
(1) 3 (2) 4
(3) 1 (4) 2

56. In a code language CFJN is written as EINS. What will be code of GIOT in the same language
(1) L R I Y (2) I L R Y
(3) R I Y L (4) Y R I L

57. In a code language DGJN is written as CEGJ. What will be code of FHOS is the same language
(1) F O E L (2) O F L E
(3) L E F O (4) E F L O

58. In a code language BJMT is written as ELPV. What will be code of EHLR in the same language
(1) H J O T (2) T O J H
(3) O T J H (4) J O H T

59. If in a code language HKOR is written as MORT. What will be code of JLPU in the same language
(1) P S W O (2) S W O P
(3) O P S W (4) W O P S

60. If in a certain code language BREAD is written as 30. What will be code of NURSE in the same language
(1) 82 (2) 63
(3) 72 (4) 77

Direction – Question no. 61 to 65 based on the information given below. Read the information carefully, and find out the correct answer from the four alternative and write its alternative number on your answer sheet against the proper question number -
There are five person P, Q R, S and T. One is football player, one is chess player, and one is hockey player. P and S are unmarried ladies and do not participate in any game. None of the ladies players chess or football. There is a married couple in which T is the husband. Q is the brother of R and is neither a chess player nor a hockey player.

61. Who is the football player
(1) P (2) Q
(3) R (4) S

62. Who is the hockey player
(1) P (2) Q
(3) R (4) T

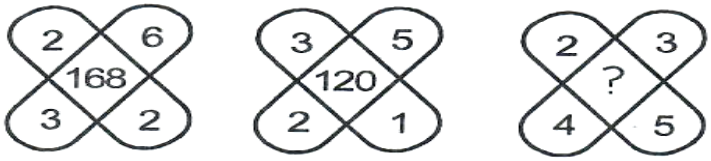
63. Who is the chess player
(1) T (2) S
(3) P (4) Q

64. Who is the wife of T
(1) P (2) Q
(3) R (4) S

65. The three ladies are
(1) P, Q, R (2) Q, R, S
(3) P, Q, S (4) P, R, S

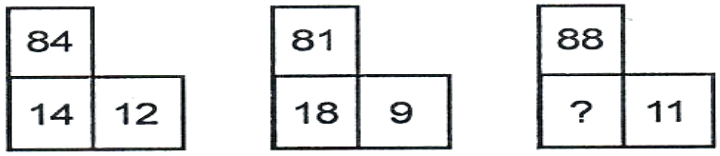
Direction – Question no. 66 to 70 number are placed in figure on the basis of some rules. One place is vacant which is indicated as (?). Find out the correct alternative for the vacant place and write its number against the proper question number on your answer sheet.

66.



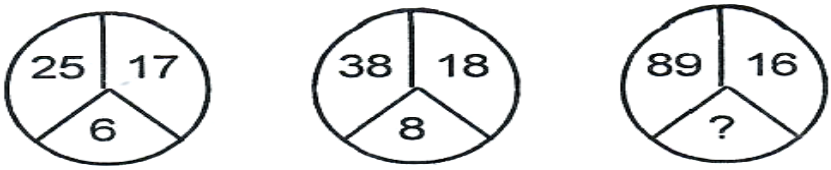
(1) 84 (2) 195
(3) 240 (4) 140

67.



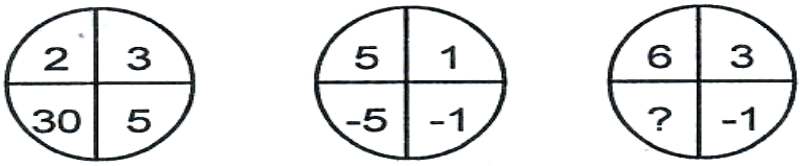
(1) 16 (2) 21
(3) 61 (4) 81

68.



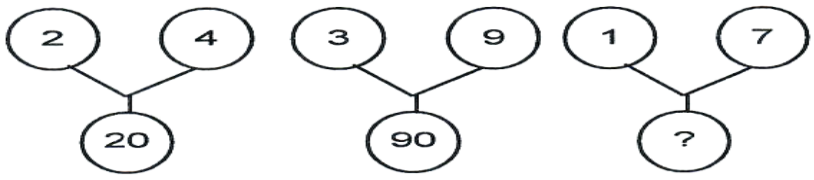
(1) 13 (2) 15
(3) 17 (4) 19

69.



(1) – 9 (2) – 18
(3) 18 (4) 8

70.



(1) 20 (2) 25
(3) 50 (4) 75

71. Gopal shorter than Krishan, Mohan taller than Girdhar, Gopal taller than Mohan, Krishan shorter than Murli, Respectively who's tallest and shortest.
(1) Murli, Mohan (2) Girdhar, Murli
(3) Murli, Girdhar (4) Gopal, Girdhar

72. A and B respectively brother and sister, If C father of A, D sister of C and E mother of D than what relationship of B to E
(1) grand daughter (2) mother
(3) maternal aunty (4) daughter

73. If 1st October is Sunday, then 1st November will be
(1) Monday (2) Tuesday
(3) Wednesday (4) Thursday

74. How many days will there be from 26th January 2004 to 15th May 2004 (both days included)
(1) 110 (2) 111
(3) 112 (4) 113

75. Two person are working facing one an other. If the face of the first person is towards the east. In which direction will be the right hand of the second person
(1) East (2) West
(3) North (4) South

76. A person is going toward south then turns to the right then turns left, again turns to left now in which direction is he going
(1) East (2) West
(3) North (4) South

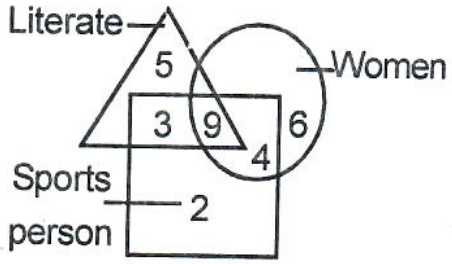
77. A man is going towards the north, then took three left turns now in which direction is he going
(1) East (2) West
(3) North (4) South

78. Two person are sitting back to back. If the first person's face is towards the south. In which direction will be the left hand of the second person.
(1) East (2) West
(3) North (4) South

79. A student walk's 1/2 Km to the left from his school, then turns to the right and walks $1\frac{1}{2}$ Km, then he turns right and walk ½ Km. Now how far is he from his school
(1) ½ Km (2) 1 Km
(3) $1\frac{1}{2}$Km (4) $2\frac{1}{2}$Km

80. Red, Pink, Purple, Yellow and White coloured flowers are put in a garland in a sequential order. Which colour of flower will be there at the 18th place
(1) Red (2) Pink
(3) Purple (4) Yellow

Direction – Question 81 to 85 are based on the following figure. Triangle represents literate person, circle represents women and square represents sports persons. See the picture carefully and find out the correct alternative and write its number on your answer sheet



81. How many persons are literate
(1) 5 (2) 17
(3) 3 (4) 8

82. How many women are literate
(1) 6 (2) 4
(3) 19 (4) 9

83. How many sport women are there
(1) 4 (2) 2
(3) 13 (4) 7

84. How many persons are literate but not women
(1) 9 (2) 8
(3) 12 (4) 17

85. How many sports women are not literate
(1) 6 (2) 10
(3) 4 (4) 19

86. The average of 4.86 gm, 5.69 gm, 5.12 gm, 4.17 gm, 4.94 gm, 5.04 gm is
(1) 5.06 gm (2) 4.96 gm
(3) 5.00 gm (4) 4.59 gm

87. How many times in a day the hands of a clock are straight pointing opposite each other.
(1) 20 (2) 12
(3) 24 (4) 22

88. In a group of cows and hens, the number of legs was 14 more than the twice of the number of heads. The number of cows was
(1) 5 (2) 7
(3) 10 (4) 14

89. The ascending order of the following fractions $\frac{2}{3},\frac{4}{5},\frac{3}{8},\frac{1}{2}$ is
(1) $\frac{2}{3},\frac{4}{5},\frac{3}{8},\frac{1}{2}$ (2) $\frac{2}{3},\frac{4}{5},\frac{1}{2},\frac{3}{8}$
(3) $\frac{4}{5},\frac{2}{3},\frac{1}{2},\frac{3}{8}$ (4) $\frac{3}{8},\frac{1}{2},\frac{2}{3},\frac{4}{5}$

90. Value of $(16)^{\frac{3}{4}}$ is
(1) 12 (2) 16
(3) 48 (4) 8

Direction – The question no, 91 to 95 are based on the logical sequence of the words. In each question is given 4, 5 or 6 words which has to be rearranged in a logical order. The words should be so arranged that they are based on actual meaning and process.

91. 1. Birth 2. Death 3. Funeral 4. Marriage 5. Education

(1) 1, 3, 4, 5, 2
(2) 4, 5, 3, 1, 2
(3) 1, 5, 4, 2, 3
(4) 2, 3, 4, 5, 1

92. 1. Treatment 2. Doctor 3. Disease 4. Diagnose 5. Medicine
(1) 3, 2, 4, 5, 1
(2) 2, 4, 3, 5, 1
(3) 4, 3, 2, 5, 1
(4) 4, 2, 3, 5, 1

93. 1. Hecto 2. Centi 3. Deca 4. Kilo 5. Deci
(1) 1, 3, 4, 5, 2
(2) 1, 5, 3, 4, 2
(3) 2, 5, 3, 1, 4
(4) 5, 2, 1, 4, 3

94. 1. Major 2. Captain 3. Colonel 4. Brigadier 5. Lieutenant General
(1) 5, 4, 3, 1, 2
(2) 5, 1, 4, 2, 3
(3) 2, 5, 3, 1, 4
(4) 5, 2, 1, 4, 3

95. 1. Wall 2. Sail 3. House 4. Room 5. Brick
(1) 5, 2, 1, 4, 3
(2) 2, 5, 4, 1, 3
(3) 2, 5, 1, 4, 3
(4) 1, 2, 3, 4, 5

Direction – In question no. 96 to 100 are based on the following information. Read the information carefully and choose the correct alternative from four alternative given below each question and write its alternative number against proper question number on your answer sheet.
Information – A man has five sons, named A, B, C, D and E, in which 'C' is elder than D but younger than B, 'B' is elder than A and C but younger than E. 'A' is elder than D but younger than C.

96. Who is the younger son
(1) A
(2) D
(3) B
(4) E

97. Who is the eldest son
(1) A
(2) B
(3) E
(4) C

98. Who is the middle order
(1) D
(2) A
(3) E
(4) C

99. From whom 'B' is younger
(1) B – E
(2) A – B
(3) B – D
(4) E – A

100. Who is the at the second last from youngest
(1) B
(2) D
(3) A
(4) E

SCHOLASTIC APTITUDE TEST

Time: 120 Minutes ***Maximum Marks: 100***

Science

101. An object is placed at the centre of curvature of concave mirror. Its image is formed at
(A) infinite (B) cnetre of curvature
(C) principal focus (D) pole of the concave mirror

102. In a conducting wire 15 coulomb charge flows in 5 second. The current flowing in conductor is
(A) 3 Ampere (B) 5 Ampere
(C) 15 Ampere (D) 75 Ampere

103. The image of an object is formed by the human eye at its
(A) cornea (B) iris
(C) pupil (D) retina

104. One Kilowatt hour is equal to
(A) 1 Kilojoule (B) 36 Kilojoule
(C) 3600000 Joule (D) 360000 Joule

105. The device used for producing electric current is called.
(A) generator (B) galvanometer
(C) ammeter (D) motor

106. Light enters from air to glass. If refractive index of glass is 1.5 and speed of light in air 3×10^8 m/s. Then speed of light in glass will be
(A) 4.5×10^8 m/s (B) 3.0×10^8 m/s
(C) 1.5×10^8 m/s (D) 2.0×10^8 m/s

107. An electric bulbs is rated 220 V and 100 W. It is operated on 110 V, then the power consumed will be
(A) 100 watt (B) 75 watt
(C) 25 watt (D) 50 watt

108. The focal length of a convex lenses is 20 cm. Its power is
(A) 20 dioptre (B) 5 dioptre
(C) 1/5 Dioptre (D) 1/20 dioptre

109. An object is placed at a distance of 10 cm from a convex mirror of focal length 15 cm. The distance of image from the mirror is
(A) 15 cm (B) 10 cm
(C) 6 cm (D) 4 cm

110. If the velocity of sound in air is 340 m/sec and x is the minimum distance between sound source and reflecting surface to get echo from general sound, then

(A) x = 17 m (B) 51 m

(C) x = 34 m (D) 68 m

111. Which of the following cell is used in the communication satellite.

(A) Dry cell (B) Solar car

(C) Voltaic cell (D) Daniel cell

112. If V_1 and V_2 are the volume of one gm water at 0^o C and 4^o C respectively, then

(A) $V_1 > V_2$ (B) $V_1 = V_2$

(C) $V_1 < V_2$ (D) $V_1 \leq V_2$

113. A piece of wire of resistance R is cut into 5 equal parts. These parts are then connected in parallel. It the equivalent resistance of this combination is R^1 then the ratio R/R^1 is

(A) $\frac{1}{25}$ (B) 5

(C) $\frac{1}{5}$ (D) 25

114. The formulae of an oxide of an element M is MO. The formulate of its phosphate is

(A) $M_3(PO_4)_2$ (B) MPO_4

(C) $M_2(PO_4)_3$ (D) M_3PO_4

115. Dry ice is

(A) Freon (B) Liquid Chlorine

(C) Solid Carbondioxide (D) Plaster of Paris

116. Which of the following has the maximum electronegativity

(A) Cl (B) F

(C) Br (D) I

117. The metal oxide which decomposes on heating

(A) ZnO (B) Al_2O_3

(C) MgO (D) HgO

118. Cinnabar is an ore of which metal

(A) Al (B) Cu

(C) Hg (D) Zn

119. The functional group of ethanal is

(A) > C = O (B) – CHO

(C) – OH (D) – COOH

120. The pH value of pure water is

(A) 0 (B) 14

(C) 1 (D) 7

121. The IUPAC name of C_2H_5OH is

(A) Ethanol (B) Methanol

(C) Methanal (D) Ethanal

122. In which of the following oxalic acid is found naturally

(A) Curd (B) Tamarind

(C) Tomato (D) Lemon

123. 15 ml of NaOH solution gets completely neutralized with 10 ml of HCl solution. What volume of the same HCI solution will be required to neutralized 30 ml of the same NaOH solution -

(A) 5 ml (B) 10 ml

(C) 15 ml (D) 20 ml

124. The chemical formulae of baking Soda is

(A) NH_4Cl (B) $NaHCO_3$

(C) Na_2CO_3 (D) NaCl

125. $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$ The type of the above reaction is

(A) Addition reaction (B) Double displacement reaction

(C) Dissociation reaction (D) Displacement reaction

126. Aluminium carbide is treated with water, we get

(A) Ethylene (B) Ethane

(C) Methane (D) Acetylene

127 Number of male gametes present in pollen tube are

(A) 1 (B) 2

(C) 3 (D) 4

128. Which of the following is an animal hormone

(A) Auxin (B) Gibberellin

(C) Insulin (D) Abscisic Acid

129. The source of Oxygen released during photosynthesis is

(A) Carbon dioxide (B) Water

(C) Glucose (D) Chlorophyll

130. Which of the following is known as ‘Currecy of Energy’

(A) DNA (B) RNA

(C) ATP (D) NAD

131. Food synthesized in leave is transported by

(A) Xylem (B) Phloem

(C) Cambium (D) Epidermis

132. This organ controls the reflex actions

(A) Spinal Cord (B) Heart

(C) Liver (D) Kidney

133. In herbaceous plants ‘guttation’ takes place by

(A) Stomata (B) Hydathodes

(C) Root hair (D) Flowers

134. Which of the following is also known as the Master gland

(A) Thyroid gland (B) Parathyroid gland

(C) Adrenal gland (D) Pituitary gland

135. Which of the following group of plants are also called as naked seeded plants

(A) Algae (B) Ferns

(C) Gymnosperms (D) Moss

136. Which of the following is the genetic material

(A) Protein (B) Carbohydrate

(C) Vitamin (D) Nucleic Acid

137. Who is known as ‘father of genetics’

(A) Johan Gregor Mendel (B) Lamarck

(C) Charles Darwin (D) Hugo de Varies

138. Which of the following food material is made up of fungi

(A) Chilgoza (B) Mushroom

(C) Papaya (D) Mango

139. How many chambers are there in frog's heart

(A) 1 (B) 2

(C) 3 (D) 4

140. Which of the following phytohormone helps in fruit ripening

(A) Auxin (B) Gibberallin

(C) Cytokinin (D) Ethylene

Social Science

141. The sixteen Mahajanpadas are menxianed in

(A) Mahabharat (B) Ramayana

(C) Anguttar Nikaya (D) Lalit Vistar

142. Who was the first muslim President of Indian National Congress

(A) Abul Kalam Azad (B) Shaukat Ali

(C) Mohammad Ali Jinna (D) Badruddin Tyabji

143. The author of 'Hind Swaraj' was

(A) B. G. Tilak (B) Mahatma Gandhi

(C) Bankim Chandra Chatterji (D) Subhas Chandra Bose

144. Father of history is called

(A) Dymekus (B) Talmy

(C) Herodotus (D) None of the above

145. Ashtadhyayi is composed by

(A) Patanjali (B) Panini

(C) Kalhar (D) Kalidas

146. Satyamav Jayate is taken from

(A) Vedas (B) Mundkopanishad

(C) Aranyak (D) Smrities

147. Old name of Mahabharat is

(A) Vijay Samhita (B) Parajay Samhita

(C) Jay Samhita (D) None of the above

148. 'The capital of Vatsamahajanpad was

(A) Champa (B) Ujjain

(C) Kaushambi (D) Patliputra

149. Red Planet is called

(A) Mercury (B) Mars

(C) Venus (D) Jupiter

150. Which state has largest coastal line

(A) Maharashtra (B) Tamilnadu

(C) Kerla (D) Gujrat

151. Inkalab Jindabad slogan given by

(A) Jawahar Lal Nehru (B) Mahatma Gandhi

(C) Sardar Bhagat Singh (D) Subhash Chandra Bose

152. In which year planning commission transfarm in Niti Commission

(A) 2014 A.D (B) 2015 A.D

(C) 2013 A.D (D) 2016 A.D

153. National Song is taken by

(A) Geetanjali (B) Anandmath

(C) Kamayani (D) None of the above

154. National farmer commission established on

(A) 2004 A.D (B) 2006 A.D

(C) 2001 A.D (D) 2008 A.D

155. State flower of Uttar Pradesh is

(A) Bramh Kamal (B) Palash

(C) Rose (D) Burans

156. Siraj of east is called

(A) Varanasi (B) Gorakhpur

(C) Baliya (D) Jaunpur

157. National Youth day associated with

(A) Rajiv Gandhi (B) Swami vivekanand

(C) Dara Singh (D) Devanand

158. Green revolution associated with

(A) Dr. Verghese Kurien (B) Dr. M. S. Swaminathan

(C) Dr. Salim Ali (D) Dr. Yashpal

159. Fibre of gold is called

(A) Silk (B) Jute

(C) Cotton (D) None of the above

160. Smallest National highway is

(A) N. H – 7 (B) N. H – 47 A

(C) N. H – 76 (D) N. H – 30

161. Dudhawa National Park is situated at

(A) Uttrakhand (B) Bihar

(C) Jharkhand (D) Uttar Pradesh

162. Total Number of Rajya Sabha members is

(A) 245 (B) 230

(C) 260 (D) 255

163. Which Highcourt has highest number of Judges

(A) Allahabad (B) Jabalpur

(C) Patna (D) Kolkata

164. How many state has legislative council

(A) 5 (B) 6

(C) 7 (D) 4

165. Annapurana scheme when started

(A) 2002 A.D (B) 2000 A.D

(C) 2003 A.D (D) 1998 A.D

166. Article-356 associated with

(A) National Emergency (B) Financial Emergency

(C) State Emergency (D) International Emergency

167. Chilka lake is situated in

(A) Uttar Pradesh (B) Karnatka

(C) Tamilnadu (D) Oddisa

168. Domodar is a tributary river

(A) Ganga (B) Hugli

(C) Yamuna (D) Suravan Rekha

169. Titan is the largest moon or satellite of

(A) Mars (B) Venus

(C) Jupiter (D) Saturn

170. The richest bio-diversity is found in

(A) Kashmir Vally (B) Silant Vally

(C) Surma Vally (D) Vally of flowers

171. International ozone day is celebrated on

(A) 16th September (B) 7th December

(C) 21st March (D) 22nd April

172. When the wild life protection Act was passed

(A) 1965 (B) 1970

(C) 1972 (D) 1977

173. The coast areas of which of the following oceans are called ring of fire

(A) Atlantic Ocean (B) Pacific Ocean

(C) Indian Ocean (D) None of the above

174. As per 2011 census the dencely populated state of India is

(A) Arunachal Pradesh (B) Sikkim

(C) Mizoram (D) Bihar

175. Which state grow more soyabeen

(A) Kerala (B) Maharashtra

(C) Madhya Pradesh (D) Punjab

176. Green revolution mainly associated with

(A) Millets Production (B) Pulse Production

(C) Wheat Production (D) Oil Seed (Tilhan) Production

177. The President of India can nominate

(A) 10 Members to Rajya Sabha (B) 02 Members to Rajya Sabha

(C) 15 members to Rajya Sabha (D) 12 members to Rajya Sabha

178. The 52nd amendment to the constitution of India deals with

(A) Reservation (B) Defection

(C) Election (D) Protection of Minorities

179. Who among the following belived in Blood and Iron policy

(A) Aibak (B) Balban

(C) Razia (D) Iltutmish

180. The department of public work was established for the first time by

(A) Alauddin Khaliji (B) Balban

(C) Firozshah Tughlag (D) Iltutmish

Maths

181. Find the zeroes of the polynomial $2x^3 + 5x^2 - 9x - 18$ if it is given that the product of its two zeroes is 3 -

(A) $2, \frac{-3}{2}$ (B) $1, \frac{1}{3}$

(C) $3, -1$ (D) $3, -\frac{1}{3}$

182. If $x = a,\ y = b$ is the solution of the equation $x - y = 2$ and $x + y = 4$ then the values of a and b are respectively

(A) 3 and 5 (B) 3 and – 1

(C) 5 and 3 (D) – 3 and – 1

183. Two vertices of a triangle are $(-1,4)$ and $(5,2)$ if the centroid $(0,-3)$, find the third vertex

(A) (1, 4) (B) (4, 15)

(C) $(-1,-4)$ (D) $(-4,-15)$

184. If $\tan\theta + \text{Sin}\theta = m$ and $\tan\theta - \text{Sin}\theta = n$ then find the value of $m^2 - n^2$

(A) $4\sqrt{m.n}$ (B) 4mn.

(C) $2\sqrt{m.n}$ (D) $\sqrt{m.n}$

185. Mean of 35 observation is 75. The mean of first 18 observation is 70 and the mean of last 18 observation is 80 find the 18^{th} observation.

(A) 80 (B) 70

(C) 68 (D) 75

186. If $x = \frac{1}{3-2\sqrt{2}}$ and $y = \frac{1}{3+2\sqrt{2}}$ then find the value of $x + y$

(A) 3 (B) 0

(C) 6 (D) 1

187 The edges of a plane surface are

(A) Lines (B) Points

(C) Angles (D) Planes

188. If each exterior angle of a regular polygon is 18^o find the number of sides of the polygon.

(A) 10 (B) 15

(C) 20 (D) 8

189. Find mean of $x+1, x+3, x+4, x+8$ is

(A) $(x+1)$ (B) $(x+3)$

(C) $(x+4)$ (D) $(x+8)$

190. The distance of the point $P(-6,8)$ from the origin is

(A) 8 (B) 10

(C) $2\sqrt{7}$ (D) 6

191. The ratio of incomes of two persons A and B is 9:4 and the ratio of their expenditure is 3:1. If each of them manages to save Rs. 1000, then the income of B is

(A) Rs. 3000 (B) Rs. 4000

(C) Rs. 9000 (D) Rs. 2000

192. The sum of areas of two squares is 468 cm^2. If the sum of their perimeters is 120 cm, then the difference of their side is

(A) 1.5 cm (B) 2 cm

(C) 4 cm (D) 6 cm

193. The areas of two similar triangles ΔDEF are 48 cm^2 and 12 cm^2 respectively. If EF = 3 cm then BC is

(A) 6 cm (B) 4 cm

(C) 2 cm (D) 12 cm

194. A parallelogram has sides 6 cm and 4 cm and one of its diagonals is 8 cm, then its area is

(A) 36 cm^2 (B) $3\sqrt{15}$ cm^2

(C) $6\sqrt{15}$ cm^2 (D) $12\sqrt{210}$ cm^2

195. The radii of a right circular cone and a right circular cylinder are in the ratio 4:3 and their heights are in the ratio 2:3. The ratio of their volumes is

(A) 32 : 27 (B) 32 : 9

(C) 32 : 81 (D) 27 : 32

196. If $\sin\theta = \frac{3}{5}$, then the value of $\sin 2\theta$ is

(A) $\frac{6}{5}$ (B) $\frac{4}{5}$

(C) $\frac{12}{25}$ (D) $\frac{24}{25}$

197. If a and b are odd integers, then which of the following is an even integer

(A) *ab* (B) *2a + b*

(C) *ab + I* (D) *a + 2 b*

198. The sum of $0.\bar{6}$ and $0.\bar{7}$ is

(A) $1.\bar{3}$

(B) 1.3

(C) $1.\ \bar{4}$

(D) an irrational number

199. If $x+\frac{1}{x}=\sqrt{3}$, then the value of $x^3+\frac{1}{x^3}$ is

(A) $2\sqrt{3}$

(B) $\sqrt{3}\left(\sqrt{3-1}\right)$

(C) $3\sqrt{3}$

(D) 0

200. If $5^{x+1}+5^{2-x}=126$ then x is equal to

(A) $-2,-1$

(B) $1,-2$

(C) $-1,3$

(D) $2,-1$