Space for Rough Work

ENGLISH

Roll No.

NMMS - NOVEMBER, 2016

MENTAL ABILITY AND SCHOLASTIC APTITUDE TEST

Time : Part - I : 90 Minutes *Max. Marks* : 90

Time : Part - II : 90 Minutes *Max. Marks* : 90

Instructions to Candidates

Read the following instructions carefully before you answer the questions. Answers are to be SHADED on a SEPARATE OMR Answer Sheet given, with a **HB Pencil**. Read the **Instructions printed on the OMR Sheet carefully before answering the questions.**

1. Please write your Center Code No. and Roll No. very clearly (only one digit in one block) on the OMR Sheet as given in your admission card. Please see that no block is left unfilled and even Zeros appearing in the Center Code No. are correctly transferred to the appropriate blocks on the OMR Sheet as shown in the example given in the OMR Sheet. For all subsequent purposes, your Center Code No. and Roll No. shall remain the same as given on the Admission Card.
2. The Test is in TWO Parts. **Part-I** consists of **90** questions and **Part-II** also consists of **90** questions.
3. All questions in Part-I and Part-II carry **one** mark each.
4. Since **all** questions are **compulsory**, do not try to read through the whole question paper before beginning to answer it.

5. Begin with the first question and keep trying one question after another till you finish both the Parts.

6. If you do not know the answer to any question, do not spend much time on it and pass on to the next one. If time permits, you can come back to the questions which you have left out in the first instance and try them again.

7. Since the time allotted to the two parts of this question paper is very limited, you should make the best use of it by not spending too much time on any question.

8. A blank page is provided for rough work at the end of each part.

9. **REMEMBER, YOU HAVE TO SHADE ANSWERS ON A SEPARATE OMR SHEET PROVIDED.**

10. Answer to each question is to be indicated by **SHADING** the circle having the number of the correct alternative in the OMR Sheet from among the ones given for the corresponding question in the booklet.

11. Now turn to the next page and start answering the questions.

12. After the examination, you should hand over the OMR Sheet to the Invigilator of the room.

13. The candidate **need not return** this Question Paper booklet and can take it after the completion of the examination. No candidate should leave the examination hall before the end of the examination.

PART - I

MENTAL ABILITY TEST

Time : 90 Minutes

Max. Marks : 90

Note :- **SHADE** the correct alternatives in the OMR Answer Sheet provided, from amongst the ones given against the corresponding questions in the Question Booklet. For shading the circles, use a **HB Pencil**.

Direction :
Questions (1 to 10) :
In the number series given below, one number is missing. Each series is followed by five alternatives (1), (2), (3), (4) and (5). One of them is the right answer. Indicate it as per the "Instructions".

1. 1695, 1700, 1710, 1727, 1753, ...
(1) 1760
(2) 1790
(3) 1780
(4) 1770
(5) 1800

2. 55, 66, 187, 200, 369, 386, ...
(1) 675
(2) 575
(3) 475
(4) 875
(5) 975

3. 2, 12, 36, 80, 150, ...
(1) 242
(2) 262
(3) 252
(4) 232
(5) 272

4. 20, 141, 310, 599, 960, 1489, ...
(1) 2430
(2) 2330
(3) 2230
(4) 2130
(5) 2530

5. 0, 10, 34, 78, ...
(1) 135
(2) 148
(3) 156
(4) 102
(5) 124

6. 7, 31, 211, ...
(1) 2311
(2) 2211
(3) 2561
(4) 2781
(5) 2111

7. 24, 60, 96, 132, ...
(1) 126
(2) 152
(3) 144
(4) 168
(5) 135

8. 7, 6, 10, 27, 104, ...
(1) 520
(2) 420
(3) 515
(4) 525
(5) 456

9. 1, 5, 15, 34, 65, ...
(1) 111
(2) 125
(3) 117
(4) 126
(5) 105

10. 0, 7, 26, 63, 124, ...
(1) 126
(2) 135
(3) 215
(4) 211
(5) 256

Direction :
Questions (11 to 20) : Read the following information carefully and answer the questions given below.

11. If code of BOARD is CPBSE, then code of CHAIR is .....
(1) DJBS
(2) DIBJS
(3) DIJSB
(4) DISJB
(5) DJBSI

12. If code of BHOPAL is EERMDI, then the code of NAGPUR is .....
(1) QXJMXO
(2) QXJMXQ
(3) QXMJXO
(4) QXJMXP
(5) QMJXOP

13. MONKEY is coded as XDJMNL, then code of TIGER is .....
(1) QDFHS
(2) SDFHS
(3) SHFDS
(4) OJFHS
(5) SHSFD

14. Code of APPLE is 50, then the code of ORANGE is .....
(1) 60
(2) 70
(3) 80
(4) 50
(5) 40

15. If CIRCLE is coded as DKUFNF, then the code of SQUARE is .....
(1) TSXDFT
(2) TSXDTF
(3) TXSDFT
(4) TXDTFS
(5) TXTDSF

16. If BINARY is coded as DHPZTK, then how will KIDNAP be coded?
(1) MKFPCQ
(2) MHFPZQ
(3) IKFMYO
(4) MHFMCO
(5) MKJKLM

17. If RASCAL is coded as QZRBZK, then how will SOLDER be coded?
(1) RNMEDQ
(2) RPKEDS
(3) TPMEFS
(4) RNKCDQ
(5) RNJEQD

18. If MAPLE is coded as VOKZN, then how will CAMEL be coded?
(1) OVNZF
(2) OUNZX
(3) OVNZX
(4) XZNVO
(5) ZNXOV

19. If CRY is coded as MRYC, then how will GET be coded?
(1) MTFG
(2) MGET
(3) MFGT
(4) METG
(5) MKLN

20. If BURNER is coded as CASOIS, then how will ALIMENT be coded?
(1) BKJLFMU
(2) EKOLIMS
(3) EMONIOU
(4) BRJSFTU
(5) EOKILSM

Direction :
Questions (21 to 30) : These questions involves letter coding, number coding and mixed coding. Each letter in a word is replaced by certain other alphabet number according to a specific rule.

21. ROMAN : QMONA : : ITALIAN : ....
(1) JUBMJBO
(2) HSZKHZM
(3) HATLIBM
(4) HATILNA
(5) LATPQRS

22. FORMS : FPTPW : : CONVICT : .....
(1) CPPYMHZ
(2) CPOWJDU
(3) CPPXKEV
(4) CPPYLFW
(5) COPJWUD

23. SECOND : ARDBNMC : : FINISH : ...
(1) EHNJRG
(2) EHOJSG
(3) EHMJTI
(4) EHMHRG
(5) EMHGRH

24. DONKEY : XDJMNC : : ZEBRA : ....
(1) YDAQZ
(2) ZQADY
(3) ZDAQB
(4) ZQYDA
(5) ZYQAD

25. WINNER : ZLQQHU : : LOOSER : ...
(1) MPPTFS
(2) MQQUGT
(3) OPPUFT
(4) ORRVHU
(5) ORVRUH

26. SINGAPORE : NISPAGERO : : GUJRAT : .....
(1) UGRJTA
(2) GURJTA
(3) GJURTA
(4) JUGTAR
(5) TARGUJ

27. RADIO : UCHKT : : AUDIO : .....
(1) CVHKT
(2) BWHKT
(3) DXHKT
(4) DWHKT
(5) DKTHW

28. GOLD : SKNV : : SILVER : .....
(1) TJMWFS
(2) RHKUDQ
(3) LISREV
(4) GQNDUH
(5) UKDQRH

29. REGARD : TCIYTB : : THANKS : ....
(1) UIBOLT
(2) SGZMJR
(3) VFCLMQ
(4) VJCPMU
(5) MZJRGS

30. SYSTEM : TAVXJS : : POLICY : ....
(1) QPMJDZ
(2) QQNKEZ
(3) QLOCIE
(4) QQOMIE
(5) PQMJDZ

Direction :

Questions (31 to 40) : In each of the following questions a letter-series is given, in which some letters are missing. The missing letters are given in the proper sequence as one of the alternatives. Find the correct alternative.

31. a _ c _ abb _ a _ bc _ bc _ ab
(1) cbcaa
(2) bcccab
(3) bccac
(4) acbabc
(5) aaabbb

32. b _ ac _ cc _ cb _ ab _ ac
(1) cbaba
(2) bbaac
(3) abbbc
(4) aabba
(5) aaabb

33. c _ ac _ aa _ aa _ bc _ bcc
(1) cabba
(2) ccbbb
(3) bbbbb
(4) cbacb
(5) aaabb

34. abc _ d _ bc _ d _ b _ cda
(1) bacdc
(2) cdabc
(3) dacab
(4) dccdb
(5) dccab

35. ba _ b _ aab _ a _ b
(1) abaa
(2) abba
(3) baab
(4) babb
(5) aaab

36. gfe _ ig _ eji _ fei _ gf _ ii
(1) eifgi
(2) figie
(3) ifgie
(4) ifige
(5) gfiie

37. _ bbca _ bcca _ ac _ a _ cb
(1) abcba
(2) acbab
(3) bacab
(4) bcaajb
(5) abcba

38. a _ ca _ bc _ bcc _ bca
(1) bbaa
(2) bbab
(3) abbb
(4) baba
(5) aaab

39. a _ bbc _ aab _ cca _ bbcc
(1) bacb
(2) acba
(3) abba
(4) caba
(5) aaac

40. ac _ cab _ baca _ aba _ acac
(1) aacb
(2) acbc
(3) babb
(4) bcbb
(5) aaab

Direction :

Questions (41 to 50) : In the following alphabet series a term is missing as shown by question mark (**?**). Choose the missing term from the options.

41. eac, gce, ieg, ?
(1) jhi
(2) jgi
(3) kgi
(4) khi
(5) mhj

42. ejo, tyd, xch, ?
(1) nrw
(2) mrw
(3) msx
(4) nsx
(5) klm

43. 2Z5, 7Y7, 14X9, 23W11, 34V13, ?
(1) 27U24
(2) 47U15
(3) 45U15
(4) 47V14
(5) 36U35

44. 2A11, 4D13, 12G17, ?
(1) 36I19
(2) 48J21
(3) 36J21
(4) 48J23
(5) 47I25

45. C4X, F9U, 116R, ?
(1) K25P
(2) L25P
(3) L25O
(4) L27P
(5) L26P

46. Q1F, S2F, U6D, W21C, ?
(1) Y66B
(2) Y44B
(3) Y88B
(4) Z88B
(5) X77B

47. A, CD, GHI, ?, UVWXY
(1) LMNO
(2) MNO
(3) NOPQ
(4) MNOP
(5) KLMN

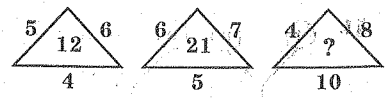
48. D–4, F–6, H–8, J–10, ?, ?
(1) K–12, M–13
(2) L–12, M–14
(3) L–12, N–14
(4) K–12, M–14
(5) K–11, M–15

49. J2Z, K4X, 17V, ?, H16R, M22P
(1) I11T
(2) L11S
(3) L12T
(4) L11T
(5) L13T

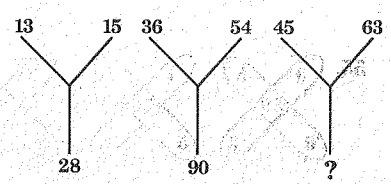
50. KM5, IP8, GS11, EV114, ?
(1) BX17
(2) BY17
(3) CY18
(4) CY17
(5) DY16

Direction :

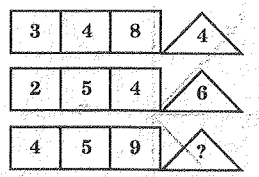
Questions (51 to 60) : In each of the following questions a set of figures carrying certain characters is given. Assuming that the characters in each set follow a similar pattern. Find the missing character in each case.

51. 

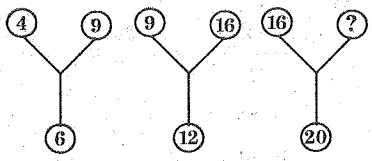
(1) 14
(2) 22
(3) 32
(4) 320
(5) 46

52. 

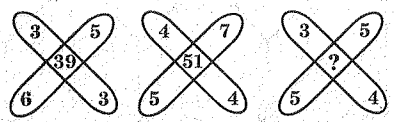
(1) 18
(2) 90
(3) 108
(4) 28
(5) 42

53. 

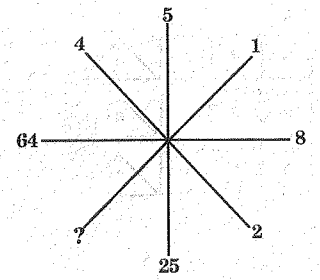
(1) 8
(2) 9
(3) 10
(4) 11
(5) 12

54. 

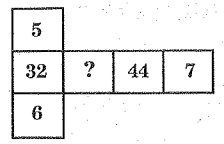
(1) 60
(2) 50
(3) 25
(4) 21
(5) 24

55. 

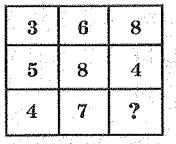
(1) 47
(2) 45
(3) 37
(4) 35
(5) 55

56. 

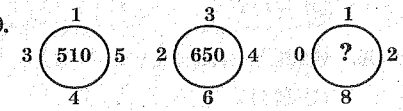
(1) 1
(2) 2
(3) 3
(4) 4
(5) 5

57. 

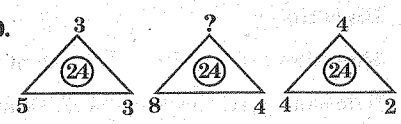
(1) 33
(2) 38
(3) 32
(4) 37
(5) 36

58. 

(1) 6
(2) 7
(3) 8
(4) 9
(5) 10

59. 

(1) 660
(2) 670
(3) 610
(4) 690
(5) 680

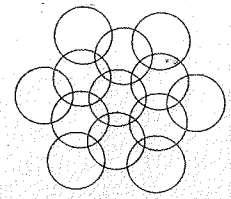
60. 

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

Direction :

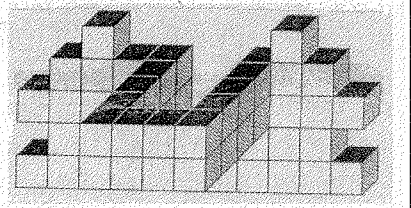
Questions (61 to 70) : Answer the following as per the given instructions in the following questions.

61. How many circles are there in the adjacent figure?



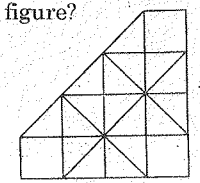
(1) 13
(2) 16
(3) 15
(4) 10
(5) 12

62. Count the cubes in the given diagram.



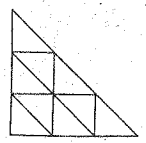
(1) 58
(2) 57
(3) 59
(4) 56
(5) 55

63. How many squares are there in the adjacent figure?



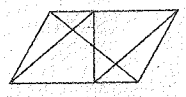
(1) 15
(2) 18
(3) 12
(4) 16
(5) 22

64. How many triangles are there in the adjacent figure?



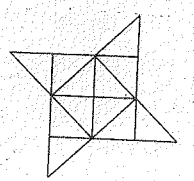
(1) 10
(2) 11
(3) 12
(4) 13
(5) 14

65. Count the number of triangles in the adjacent figure.



(1) 22
(2) 26
(3) 28
(4) 30
(5) 25

66. How many triangles are there in the adjacent figure?



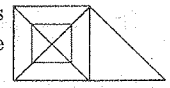
(1) 22
(2) 24
(3) 26
(4) 28
(5) 25

67. How many triangles are there in the adjacent figure?



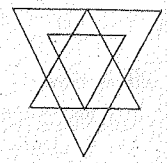
(1) 13
(2) 16
(3) 15
(4) 17
(5) 18

68. How many triangles are there in the adjacent figure?



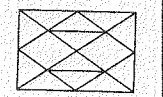
(1) 18
(2) 24
(3) 21
(4) 20
(5) 16

69. Count the number of triangles in the adjacent figure.



(1) 21
(2) 13
(3) 25
(4) 27
(5) 26

70. Count the number of triangles in the adjacent figure.

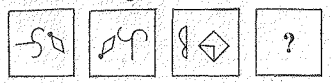


(1) 20
(2) 24
(3) 22
(4) 26
(5) 25

Direction :

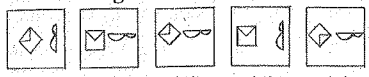
Questions (71 to 80) : Each of the following questions consists of two sets of figures A, B, C and D constitutes the problem set while figures 1, 2, 3, 4 and 5 constitutes the answer set. Select a suitable figure from the answer figure that would replace the question mark (?).

71. Problem Figures



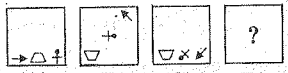
(A) (B) (C) (D)

Answer Figures



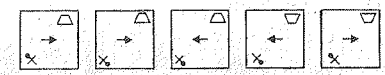
(1) (2) (3) (4) (5)

72. Problem Figures



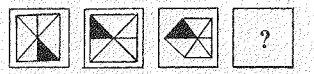
(A) (B) (C) (D)

Answer Figures



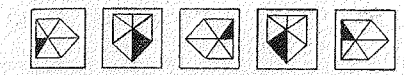
(1) (2) (3) (4) (5)

73. Problem Figures



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

Answer Figures



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

74. Problem Figures



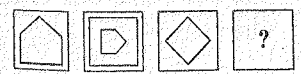
(A) (B) (C) (D)

Answer Figures



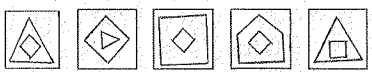
(1) (2) (3) (4) (5)

75. Problem Figures



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

Answer Figures



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

76. Problem Figures



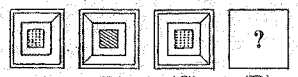
(A) (B) (C) (D)

Answer Figures



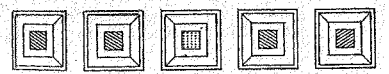
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77. Problem Figures



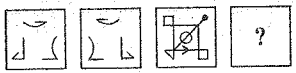
(A) (B) (C) (D)

Answer Figures



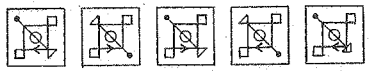
(1) (2) (3) (4) (5)

78. Problem Figures



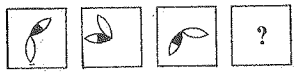
(A) (B) (C) (D)

Answer Figures



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

79. Problem Figures



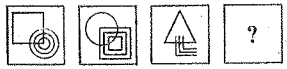
(A) (B) (C) (D)

Answer Figures



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

80. Problem Figures



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

Answer Figures

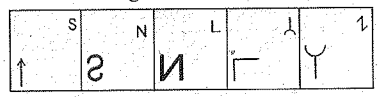


(1) (2) (3) (4) (5)

Direction :

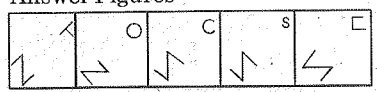
Questions (81 to 90) : In the following questions, there are 5 problem figures A, B, C, D and E. Which among the five answer figures should be the sixth figure of the problem figures to continue the sequence?

81. Problem Figures



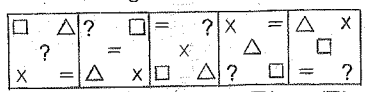
(A) (B) (C) (D) (E)

Answer Figures



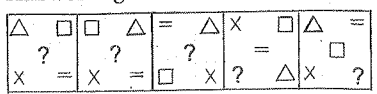
(1) (2) (3) (4) (5)

82. Problem Figures



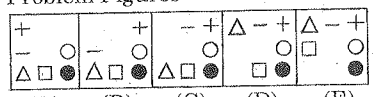
(A) (B) (C) (D) (E)

Answer Figures



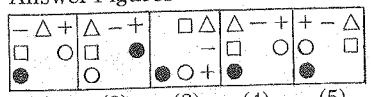
(1) (2) (3) (4) (5)

83. Problem Figures



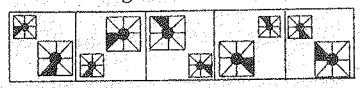
(A) (B) (C) (D) (E)

Answer Figures



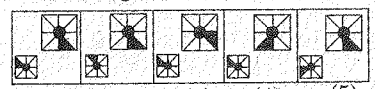
(1) (2) (3) (4) (5)

84. Problem Figures



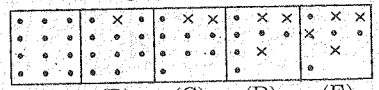
(A) (B) (C) (D) (E)

Answer Figures



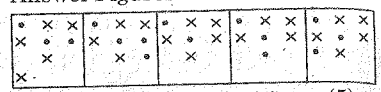
(1) (2) (3) (4) (5)

85. Problem Figures



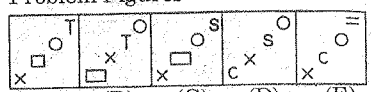
(A) (B) (C) (D) (E)

Answer Figures



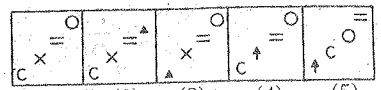
(1) (2) (3) (4) (5)

86. Problem Figures



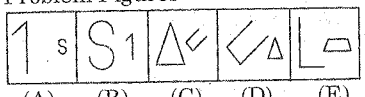
(A) (B) (C) (D) (E)

Answer Figures



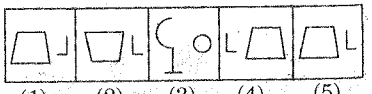
(1) (2) (3) (4) (5)

87. Problem Figures



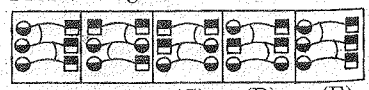
(A) (B) (C) (D) (E)

Answer Figures



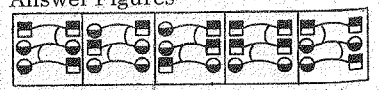
(1) (2) (3) (4) (5)

88. Problem Figures



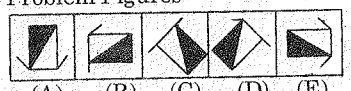
(A) (B) (C) (D) (E)

Answer Figures



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

89. Problem Figures



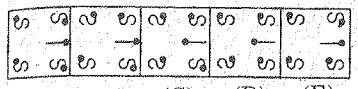
(A) (B) (C) (D) (E)

Answer Figures



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

90. Problem Figures



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

Answer Figures



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

[Turn Over]

Space for Rough Work

PART - II

SCHOLASTIC TEST

Time : 90 Minutes
Max. Marks : 90

Notes :-

(i) Subjects, Question Sr. No. and Marks allotted :

(1)	Physics	91 to 102 questions	12 Marks
(2)	Chemistry	103 to 113 questions	11 Marks
(3)	Biology	114 to 125 questions	12 Marks
(4)	Mathematics	126 to 145 questions	20 Marks
(5)	History	146 to 155 questions	10 Marks
(6)	Geography	156 to 165 questions	10 Marks
(7)	Political Science	166 to 175 questions	10 Marks
(8)	Economics	176 to 180 questions	05 Marks

(ii) **SHADE** the circle having the correct alternative in the OMR Sheet provided, from amongst the ones given against the corresponding question in the Question Paper Booklet. For shading the circles, use a **HB Pencil**.

PHYSICS

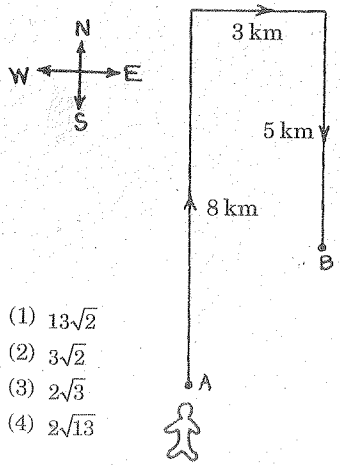
91. Which one of the following is NOT a field force (acting at a distance)?

(1) Magnetic force
(2) Muscular force
(3) Electrostatic force
(4) Gravitational force

92. Which one of the following relatively is having maximum speed value?

(1) 26 m/s
(2) 90 km/s
(3) 1.5 km/minute
(4) 25 m/s

93. A boy travelled towards north 8 km from point *A*, as shown in the figure, then he took a turn to east and travelled further 3 km and again he took a turn to south and reached '*B*' by travelling 5 km. The displacement of the boy from *A* to *B* journey is .....km.



(1) $13\sqrt{2}$
(2) $3\sqrt{2}$
(3) $2\sqrt{3}$
(4) $2\sqrt{13}$

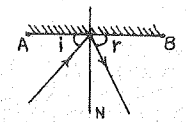
94. When a thermometer is placed in warm water, the mercury thread rises by $\frac{2}{5}$ part of divisions from 0^0 to 100^0 (length) on celsius scale, the temperature of water in fahrenheit scale is .....

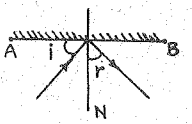
(1) 40^0
(2) 80^0
(3) 212^0
(4) 104^0

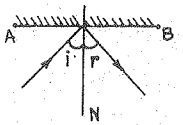
95. The frictional force exerted by the fluids is generally called as .....

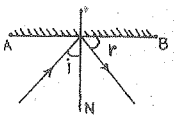
(1) drug
(2) rag
(3) drag
(4) grad

96. If *AB* is representing reflecting surface such as mirror, then which of the following represents CORRECT? (Where *i* is angle of incident, *r* is angle of reflection and *N* is normal line)

(1) 

(2) 

(3) 

(4) 

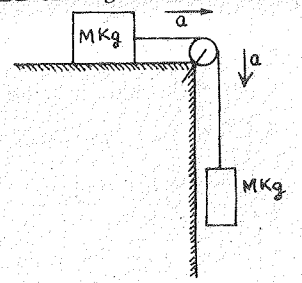
97. The average velocity of an athelete, completing one revolution with 20 kmph with constant speed along a circular track of radius 14 m is .....

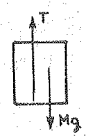
(1) zero
(2) 10 km/hour
(3) 40 km/hour
(4) 72 m/s

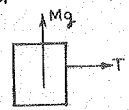
98. In which one of the following conditions, the net force on a body is nonzero?

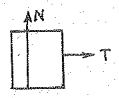
(1) If the body is in nonuniform motion
(2) If the body is in uniform motion
(3) If the body is at rest
(4) In all the above 3 situations

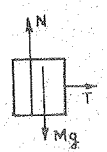
99. As shown in the figure, the system is given. Which one of the following is the CORRECT representation of *FBD* of *M* kg block?



(1) 

(2) 

(3) 

(4) 

100. As shown in the figure, 3 forces acting on a block, so that the net force on the block is zero. Then the value of x is .....



(1) 17 N
(2) 34 N
(3) 8.5 N
(4) zero

101. Which one of the following is NOT a characteristic of mercury, which is used in thermometers?

(1) It do not sticks to the sides of the wall of thermometer
(2) It is a good conductor of heat
(3) It is having metallic shining
(4) It is transparent like glass

102. In a 4 hours journey by a car, it travelled with 50 kmph constant speed for first 2 hours and with 37.5 kmph constant speed for the next two hours. Then what is the total distance travelled by the car in that total 4 hours journey?

(1) 175 m
(2) 1,75,000 m
(3) 1,86,000 m
(4) 186 km

CHEMISTRY

103. Which is the most common substance that can be used to put out fire?

(1) Wood
(2) Petrol
(3) Sand
(4) Kerosene

104. Why is Rayon used as a fabric for dress materials?

i) Soft
ii) Silky
iii) Moisture absorbent
iv) Do not catch fire

(1) i, ii, iii and iv
(2) i, ii, iv only
(3) ii, iii only
(4) i, ii, iii only

105. What kind of combustion is undergone by ignition of a cracker?

(1) Explosive combustion
(2) Spontaneous combustion
(3) Rapid combustion
(4) Slow combustion

106. A coating of melamine, plastic used for which of the following purposes?

(1) Fireproof plastic
(2) Good conductor of heat
(3) Remouldable
(4) Strong and flexible

107. Aluminium is a metal, but which one of the following metallic properties is NOT exhibited by Aluminium?

(1) Malleability
(2) Ductility
(3) High density
(4) Good conductor of heat and electricity

108. Study the characteristics of a fuel given below :

* Highest calorific value
* Forms water vapour on combustion
* Nonpolluting
* Limited use as liquid fuel

Among the following fuels, which one has the above characteristics?

(1) Kerosene
(2) Petrol
(3) LPG
(4) Hydrogen

109. Why is a flame always pointed upwards?

i) Gases produced in flame are cold

ii) Gases produced in flame are hot

iii) Hot gases are lighter and rise up

iv) Because the wick of the flame is always directed upwards

(1) i and ii only

(2) ii and iii only

(3) iii and i only

(4) i, ii and iii

110. Match the following

a) Venigar	i) Oxalic acid
b) Orange	ii) Tartaric acid
c) Tamarind	iii) Acetic acid
d) Tomato	iv) citric acid

(1) a – iv, b – ii, c – i, d – iii

(2) a – iii, b – iv, c – ii, d – i

(3) a – iii, b – ii, c – iv, d – i

(4) a – i, b – ii, c – iii, d – iv

111. CNG is now-a-days used as a fuel for transport vehicles and is much preferred over petrol or diesel, because :

(1) It is a renewable source of energy

(2) It is less polluting than petrol and diesel

(3) It can be compressed under high pressure

(4) It undergoes complete combustion

112. A FALSE statement among the following is :

(1) Plastics are eco friendly

(2) Teflon is a special plastic on which oil and water do not stick

(3) PVC is mainly used for electrical and sanitary fittings

(4) Nylon fibre is strong, elastic and light in weight

113. Name the chemical used to test the presence of CO_2 in exhaled air :

(1) Lime water

(2) Lemon juice

(3) Lime stone

(4) Quick lime

BIOLOGY

114. History of science written by .....

(1) Robert Hooke

(2) F. Cajori

(3) Karl Popper

(4) Einstein

115. Amoeba keeps on changing its shape varying protruding out of its body. These are called .....

(1) tentacles

(2) cilia

(3) pneumatophore

(4) pseudopodia

116. Match the item in column–I with column–II

Column–I	Column–II
a) Virus	i) Some skin diseases
b) Bacteria	ii) Malaria
c) Fungi	iii) AIDS
d) Protozoans	iv) Typhoid

Select the correct answer

(1) a – iii, b – iv, c – i, d – ii

(2) a – ii, b – iii, c – i, d – iv

(3) a – i, b – iv, c – ii, d – iii

(4) a – iv, b – ii, c – iii, d – i

117. Pasteurization led to the invention of.....

(1) transpiration

(2) inoculation

(3) vaccination

(4) sterilization

118. Method employed by childless couple to have baby .....

(1) in vivo fertilization

(2) in vitro fertilization

(3) oviparous method

(4) viviparous method

119. Identify the secondary sexual characters not found in girls from the following :

(1) Ovary enlarges

(2) Development of breast

(3) Facial hair

(4) Releasing mature eggs

120. Now-a-days we find animals intruding into our living places. Because of.....

(a) lack of dwelling place.

(b) lack of sufficient food.

(c) lack of interest to live in wild.

(d) lack of predators.

Choose the correct answer.

(1) (a), (b) and (d)

(2) (a), (b) and (c)

(3) (a), (c) and (d)

(4) (b), (c) and (d)

121. Choose the CORRECT statement as per Priestley's demonstration.

(1) Plants were making the air impure, animals were making it pure

(2) Animals were making the air impure, plants were making it pure.

(3) Plants exchange gases with their surrounding air.

(4) The plant grows because of the pure water it gets.

122. Choose the INCORRECT pair.

(1) Fish – Gill

(2) Tadpole – Gill

(3) Cockroach – Tracheal Tubes

(4) Earth Worm – Gill

123. Which one of the following is an unisexual flower?

(1) Datura

(2) Cucumber

(3) Hibiscus

(4) Ipomea

124. To conserve soil, which method do you choose?

(1) Leave the lands vacant

(2) Avoid crop rotation

(3) Use more chemical fertilizers

(4) Use vacant lands to grow grass

125. To avoid constipation, which type of food do you prefer?

(1) Junk food

(2) Cakes

(3) Roughages

(4) Oil food

MATHEMATICS

126. $\sqrt{(1\times2\times3\times4)+1} = 5$,

$\sqrt{(2\times3\times4\times5)+1} = 11$,

$\sqrt{(3\times4\times5\times6)+1} = 19$

etc, then the value of

$\sqrt{(50\times51\times52\times53)+1}$ = ...

(1) 2751

(2) 2651

(3) 2431

(4) 2851

127. $4x2 + 236 = 7y8$, $4x2$ and $7y8$ are three digit numbers, $7y8$ is a multiple of 3, then the value of x = ...

(1) 7

(2) 6

(3) 4

(4) 3

128. If $2^x + 2^{x+1} + 2^{x+2} + ... + 2^{x+7} = 255$, then the value of x = ...

(1) 0

(2) 1

(3) 2

(4) -1

129. If $x^2+1=2x$, then the value of $x^9+x^7+x^{-9}+x^{-7}$ =.....

(1) 5

(2) 6

(3) 4

(4) 3

130. If $888889^2+666667^2-111112^2-333334^2 = K$, then the sum of the digits in K is .....

(1) 10

(2) 14

(3) 12

(4) 15

131. If $s = 1^1, 2^2, 3^3, 4^4, 5^5, ... 9^{90}$, then the number of perfect cubes in s = ...

(1) 33

(2) 45

(3) 19

(4) 26

132. The altitudes of a triangle are 12, 15 and 20. What is the measure of the largest angle in this triangle?

(1) 60^0

(2) 45^0

(3) 90^0

(4) 70^0

133. The sum of 13 consecutive integers is 2015. What is the smallest of these integers?

(1) 149

(2) 152

(3) 124

(4) 165

134. If $x+\frac{1}{y+\frac{1}{z}}=\frac{10}{7}$ x, y and z are positive integers, then find the value of $x+y-z=$ .....

(1) 1

(2) 0

(3) 5

(4) 4

135. If $\frac{3^x}{1+3^x}=\frac{1}{3}$, then the value of $\frac{27^x}{1-27^x}$ is .....

(1) $\frac{1}{7}$

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

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

(4) $\frac{5}{7}$

136. If $x^2+x+xy=8$ and $y^2+y+xy=12$, then the possible value of $x+y=$ .....

(1) –5

(2) 4

(3) –5 or 4

(4) 6

137. The number of digits in the product $2^{2005}\times 5^{2001}$ is .....

(1) 2016

(2) 2017

(3) 2014

(4) 2015

138. A printer numbers the pages of a book starting with 1 and uses 3189 digits in all. How many pages does the book have?

(1) 1506

(2) 1074

(3) 1244

(4) 1008

139. The sum of two positive integers is 52 and their LCM is 168, then the difference of the numbers is .....

(1) 4

(2) 6

(3) 12

(4) 17

140. The number of 5 digit numbers which are divisible by 3 and ended with 6 is .....

(1) 3,000

(2) 34,000

(3) 5,695

(4) 7,102

141. The unit digit of $3^{2015}.7^{2016}.6^{2017}$

(1) 7

(2) 6

(3) 4

(4) 3

142. The largest integer n for which $n^{200}<5^{100}$ is .....

(1) 11

(2) 10

(3) 15

(4) 14

143. If a and b are positive numbers such that $a^b=b^a$ and $b=9a$, then the value of a is .....

(1) 9

(2) 1/9

(3) $3\sqrt{9}$

(4) $4\sqrt{3}$

144. The product

$$\left[1-\frac{1}{2^2}\right]\left[1-\frac{1}{3^2}\right]\left[1-\frac{1}{4^2}\right].....\left[1-\frac{1}{2016^2}\right]$$

is equal to .....

(1) $\frac{2017}{4032}$

(2) 1

(3) 0

(4) $\frac{1}{4}$

145. How many primes less than 100 have 7 as the ones digit?

(1) 4

(2) 5

(3) 6

(4) 7

HISTORY

146. Find the one who was NOT a part of Cabinet Mission during 1946.
(1) Straford Crips
(2) Pethick Lawrence
(3) Atley
(4) Alexander

147. Find the WRONGLY matched.
(1) Establishment of congress party – 1885
(2) Hindu Maha Sabha – 1915
(3) Muslim league – 1919
(4) None of these

148. Who quoted "Idea of liberation was not that of a state of inert bliss but rather the pursuit of active life with a strong sense of social commitment"?
(1) Guru Nanak
(2) Kabir
(3) Basavanna
(4) Chokhamela

149. Who constructed the Kandariya Mahadeva Temple?
(1) Dhangadeva
(2) Dantidurga
(3) Raja Raja I
(4) Narasimha Varma II

150. Who granted the sole right to the East India Company to trade with the East Countries?
(1) Queen Victoria
(2) Queen Elizabeth
(3) Henry VII
(4) James I

151. Zabt means .....
(1) military system
(2) foreign policy
(3) revenue system
(4) none of these

152. The portuguese traveller who visited Krishnadevaraya's court was .....
(1) Abdul Razak
(2) Nicolo Conti
(3) Domingo Paes
(4) Nuniz

153. Which Indian king said the words "winning people over through Dhamma is much better than conquering them through force"?
(1) Gauthamiputra Satkarni
(2) Chandra Gupta II
(3) Kanishka
(4) Ashoka

154. Buddhists believe this as a symbol of universe.
(1) Stupa
(2) Dome of the Stupa
(3) Pillar of the Stupa
(4) Harmika

155. Jataka stories are related to this religion .....
(1) Buddhism
(2) Hinduism
(3) Jainism
(4) All of these

GEOGRAPHY

156. Lowest temperature recorded on the earth, -89.2^0C is in this place.
(1) Azizia
(2) Drass
(3) Vostok
(4) Alaska

157. On which day does the sun shine directly over the equator?
(1) June 21st
(2) December 22nd
(3) September 23rd
(4) May 21st

158. The most commonly accepted meaning of Eskimo is .....
(1) snow shoe-melter
(2) iceman
(3) nomadic man
(4) the real people

159. Limestone is used as a raw material in this industry.
(1) Cement
(2) Iron and steel
(3) Fertilizer
(4) All of these

160. Which of these rivers do not join Black Sea?
(1) Dnieper
(2) Don
(3) Danube
(4) Volga

161. Lake Tanganyika is in the continent of.....
(1) Europe
(2) Asia
(3) Africa
(4) North America

162. 0^0 longitude DOES NOT pass through this continent.
(1) Asia
(2) Europe
(3) Africa
(4) Antarctica

163. Which of these soils are called "self-ploughing soils"?
(1) Red soils
(2) Black soils
(3) Alluvial soils
(4) Laterite soils

164. Which colour is used in thematic maps to show boundaries?
(1) Yellow
(2) Brown
(3) Black
(4) Light red

165. Which of these cities face intensive sun's rays?
(1) Bengaluru
(2) Hyderabad
(3) Delhi
(4) Bhopal

POLITICAL SCIENCE

166. Which year recorded the highest percentage of voters for Lok Sabha General Elections?
(1) 1985 (2) 2004
(3) 2009 (4) 2014

167. Find the WRONG statement.
(1) Any ordinary law needs to be passed by both the houses
(2) Lok Sabha exercises more powers in money matters
(3) Lok Sabha controls the council of ministers
(4) None of these

168. Identify the CORRECT statements from the following.
i) The Constitution defines powers of the legislative houses
ii) The Constitution cannot be changed under any circumstances
iii) Ideals that are in the preamble are reflected in the design of institutions
iv) Laws for the entire country are designed centrally
(1) i, ii, iii, iv (2) ii, iii, iv
(3) i, iii, iv (4) i, iv

169. Which of these subject is NOT under concurrent list?
(1) Electricity
(2) Labour
(3) Irrigation
(4) Industries

170. Who established Kalakshetra Institute and struggled for the revival of Bharatnatyam?
(1) Rukmini Devi
(2) Balasaraswati
(3) E. Krishna Iyer
(4) Bangalore Nagarathnamma

171. In which year was the First World Cup Cricket conducted?
(1) 1971 (2) 1975
(3) 1981 (4) 1984

172. How much part of members is there in the Legislative Council, those are elected by graduates?
(1) $\frac{1}{3}$ (2) $\frac{1}{12}$
(3) $\frac{1}{6}$ (4) $\frac{1}{24}$

173. What is the minimum age to contest for MLA?
(1) 21 yrs (2) 25 yrs
(3) 30 yrs (4) 35 yrs

174. Who was the first woman loco driver in India?
(1) Surekha Yadav
(2) Sarla Thakral
(3) Archana Patnaik
(4) Padmavathy Bandopadhyay

175. How many seats are reserved for women in Gram Panchayat Institutions?
(1) $\frac{1}{5}$ (2) $\frac{1}{4}$
(3) $\frac{1}{3}$ (4) $\frac{1}{2}$

ECONOMICS

176. Identify the major stage in the process of paper making.
(1) Chipping
(2) Making of wood pulp
(3) Spreading the pulp
(4) Cutting

177. When were the mobile phone facilities introduced in India?
(1) 1995
(2) 1992
(3) 2001
(4) 1998

178. In India, who is responsible for printing and circulating the money.
(1) Finance ministry
(2) President
(3) Reserve Bank of India
(4) Parliament

179. Expand ATM.
(1) Any Time Money
(2) Any Time Medicine
(3) Automatic Teller Machine
(4) Automatic Teller Mobile

180. Identify the CORRECT option related to early bankers.
(1) Jagat Seth – Bengal
(2) Chettiar – Madras
(3) Shah – Patna
(4) All of these