

# MODEL TEST PAPER - 1 (MAT & SAT)

## PART - I : MENTAL ABILITY TEST

Questions: 1 to 100

Time : 90 Minutes

Directions: (Q. 1 to 7)

In each of the following questions, a number series is given which is in accordance with some certain rule. What is the correct answer for the place of sign of interrogation out of given alternatives?

1. 5, 7, 20, 21, 80, 63, ?, 189

- (a) 300
- (b) 305
- (c) 310
- (d) 315
- (e) 320

2. 7, 9, 13, 21, ?

- (a) 30
- (b) 32
- (c) 35
- (d) 36
- (e) 37

3. 2, 9, 28, 65, 126, ?

- (a) 187
- (b) 217
- (c) 242
- (d) 344
- (e) 355

4. 5, 30, 6, 42, 7, 56, ?

- (a) 6

(b) 8

(c) 9

(d) 10

(e) 12

5. 2, 8, 18, 32, ?, 72

(a) 40

(b) 50

(c) 55

(d) 59

(e) 61

6. 51, 44, 37, ?, 23

(a) 32

(b) 28

(c) 30

(d) 26

(e) 24

7. 1, 2, 4, 7, 11, 16, ?

(a) 22

(b) 20

(c) 21

(d) 24

(e) 23

8. In a certain code, MADRAS is coded as NBESBT. How is BOMBAY coded in that code?

(a) CPNCBX

(b) CPNCBZ

(c) CPOCBZ

(d) CQOCBZ

(e) CNPCBX

9. In a certain language NATURE is coded as MASUQE. How is FAMINE coded in that

code?

- (a) FBMJND
- (b) FZMHND
- (c) GANIOE
- (d) EALIME
- (e) FZNJME

**10.** If white is called blue

blue is called red

red is called yellow

yellow is called green

green is called black

black is called violet

and violet is called orange.

what would be the colour of human blood?

- (a) Red
- (b) Green
- (c) Yellow
- (d) Violet
- (e) Orange

**11.** In a certain code '37' means 'which class' and '583' means 'caste and class'. What is the code for 'caste' ?

- (a) 3
- (b) 7
- (c) 8
- (d) Either 5 or 3
- (e) Either 5 or 8

**12.** If DELHI is coded as 73541 and CALCUTTA is coded as 82589662. How will CALI CUT be coded?

- (a) 5279431

- (b) 5978213
- (c) 8251896
- (d) 8543691
- (e) 1694358

13. If INSTITUTION is coded as NOITUTITSNI. How PERFECTION will be coded?

- (a) NOICTEFREP
- (b) NOITCEFERP
- (c) NOITCEFRPE
- (d) NOITCEFREP
- (e) NOITCEFPER

**Directions : (Q. 14 to 17)** In each of the following questions various terms of a letter series are given with one term missing as shown by (?) choose the missing term out of the given alternatives

14. AZ, BY, CX, DW, ?

- (a) EV
- (b) VE
- (c) WE
- (d) VF
- (e) FV

15. A, B, D, G, ?

- (a) M
- (b) L
- (c) K
- (d) H
- (e) N

16. Y, W, U, S, Q, ?

- (a) Nf
- (b) ML
- (c) JR

(d) LM

(e) OM

17. U, O, I, ? A

(a) E

(b) C

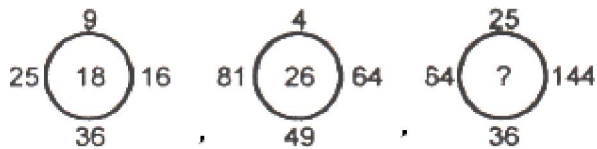
(c) S

(d) G

(e) F

**Direction : (Q. 18 to 23)** The numbers in the first two figures are arranged according to a particular rule. You have to select the correct answer which is to be written at the place of sign of interrogation for third figure.

18.



(a) 19

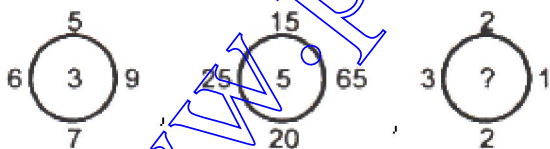
(b) 23

(c) 24

(d) 25

(e) 31

19.



(a) 4

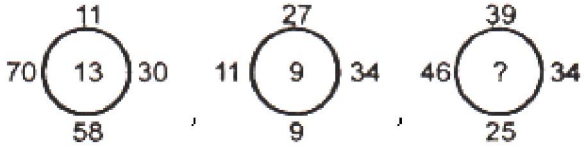
(b) 6

(c) 2

(d) 3

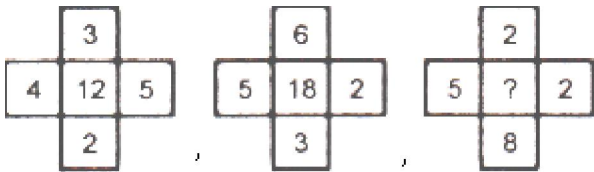
(e) 5

20.



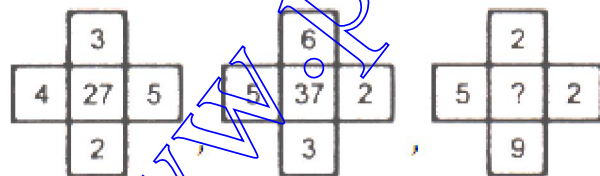
- (a) 12
- (b) 15
- (c) 17
- (d) 18
- (e) 19

21.



- (a) 20
- (b) 16
- (c) 12
- (d) 14
- (e) 18

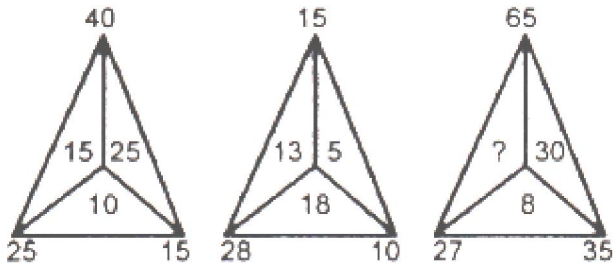
22.



- (a) 37
- (b) 45
- (c) 47
- (d) 55

(e) 57

23.

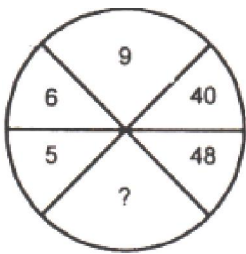


- (a) 20
- (b) 25
- (c) 30
- (d) 38
- (e) 40

**Directions : (Q. 24 to 27)**

In the following questions insert the missing number in place of question mark from the given alternatives

24.



- (a) 54
- (b) 70
- (c) 72
- (d) 80
- (e) 63

25.

3	7	9	13.	17
5	12	15	22	?

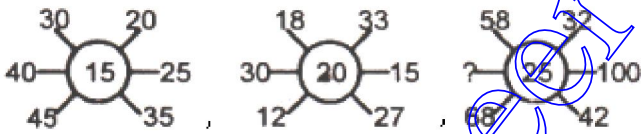
- (a) 25
- (b) 26
- (c) 28
- (d) 29
- (e) 33

26.

4	7	3	2
416	749	309	?

- (a) 204
- (b) 104
- (c) 404
- (d) 401
- (e) 402

27.



- (a) 50
- (b) 0
- (c) 10
- (d) 64
- (e) 69

**Directions :** (Q. 28 to 29)

A shopkeeper uses a code OLISPAH = 28 where

O = Rs 1/-

L = Re 2/-

I = Re 3/-



and so on, Bearing this coding scheme in mind, answer the questions.

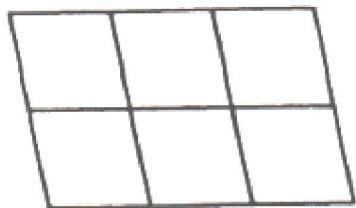
**28.** What price does SOAP denotes?

- (a) Rs. 120
- (b) Rs. 18
- (c) Rs. 16
- (d) Rs.61
- (e) Rs. 71

**29.** What is price of an article marked OIL?

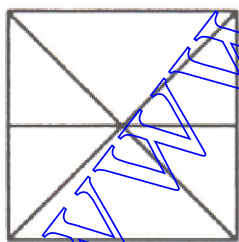
- (a) Rs. 10
- (b) Rs.9
- (c) Rs. 8
- (d) Rs.6
- (e) Rs.4

**30.** How many parallelograms are there in the figure given below?



- (a) 14
- (b) 15
- (c) 16
- (d) 18
- (e) 17

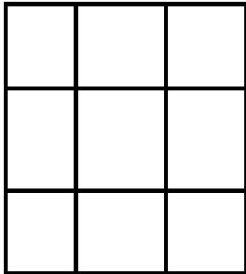
**31.** Count the number of triangles in the following figure.



- (a) 6
- (b) 8

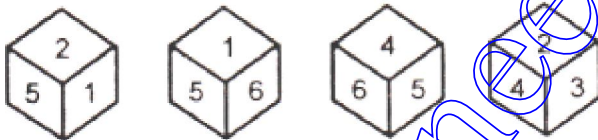
- (c) 12
- (d) 10
- (e) 11

32. How many squares are there in the following figure?



- (a) 9
- (b) 10
- (c) 13
- (d) 15
- (e) 14

33. In the following figures various surfaces of a cube are shown. Which number faces opposite to 4?

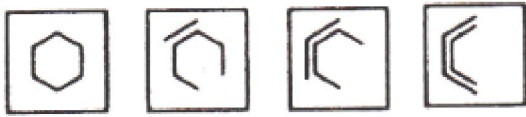


- (a) 2
- (b) 3
- (c) 5
- (d) 1
- (e) 6

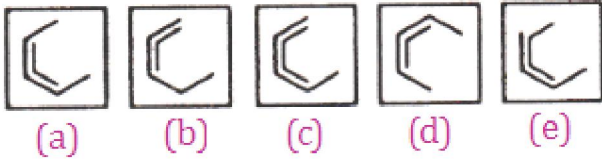
**Directions:** (Q. 34 to 36)

In these questions the four figures are called problem figures and the five figures are called answer figures. You have to find out that if the problem figure continues to change in the same order what could be the fifth figure?

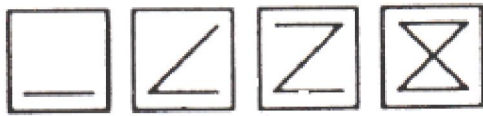
34. Problem Figures



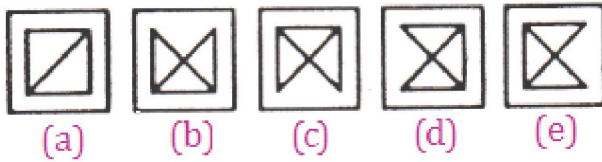
Answer figures



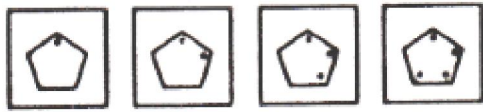
35. Problem Figures



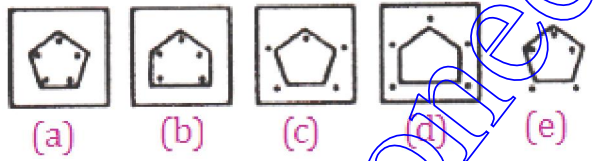
Answer figures



36. Problem Figures



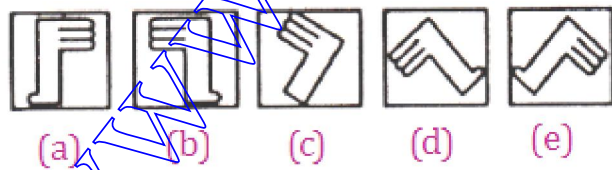
Answer figures



**Directions : (Q. 37 to 38)**

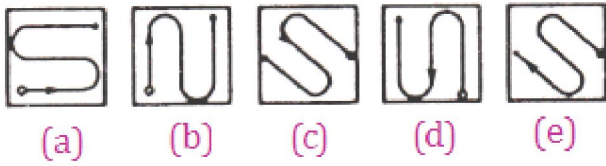
Find the odd man out.

37.



38.





**Directions : (Q. 39 to 41)**

The letters and numbers have been arranged under some rule. Based on that rule find the missing number and letter?

39.

B	D	H	Y	M	?	C	O
2	4	?	25	13	6	3	15

- (a) 8 and F
- (b) 7 and I
- (c) 21 and G
- (d) 18 and A
- (e) 9 and Z

40.

13	E	9	?	5	M
C	11	G	?	K	3

- (a) I and 7
- (b) 7 and I
- (c) 15 and J
- (d) J and 15
- (e) 2 and A

41.

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A	4	C	16	?	F
1	B	?	D	25	36

- (a) 81 and H
- (b) 9 and E
- (c) 9 and H
- (d) 49 and G
- (e) 9 and G

**Directions: (Q. 42 to 44)**

A gold smith has five gold rings, each having different weight.

Statement – 1            Ring A is weighing twice, as much as ring C.

Statement – 2            Ring B is weighing four times as much as ring C.

Statement– 3            Ring C is weighing half, as much as ring D.

Statement –4            Ring D is weighing one third as much as ring E.

**42.** Q. 42. Which of the following represents the descending order of weight of rings

- (a) ABECD
- (b) AEBDC
- (c) CDBEA
- (d) BDCEA
- (e) AEBCD

**43.** Which of the following represents the ascending order of weights of ring

- (a) ABECD
- (b) AEBDC
- (c) CDBEA
- (d) BDCEA
- (e) CDEBA

**44.** Which of the pairs of rings have ratio 1 : 2 in respect of their weights

- (a) A and E
- (b) B and C

- (c) C and D
- (d) C and D as well as D and B
- (e) D and E

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

- (a) Raj
- (b) Gaurav
- (c) Mohit
- (d) Ashish
- (e) Sachin

**Directions : (Q. 46 to 48)**

Read the following information and answer the questions :

Five men ABCD and E read a newspaper. 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 are two readers between B and A.

46. B passed the Newspaper to whom?

- (a) A
- (b) C
- (c) D
- (d) E
- (e) None of these

47. Who reads the newspaper last?

- (a) A
- (b) B
- (c) C
- (d) D
- (e) E

48. Who reads the newspaper after C ?

- (a) A

- (b) D
- (c) E
- (d) B
- (e) C

49. If Kamal says, "Ravi's mother is only daughter of my mother" How Kamal is related to Ravi?

- (a) Grandfather
- (b) Father
- (c) Brother
- (d) Cannot be determined
- (e) None of these

50. Deepak said to Nitin, "that boy playing with football is younger of the two brothers of the daughter of my father's wife". How is the boy playing football related to Deepak?

- (a) Brother
- (b) Father in law
- (c) Meternal Uncle
- (d) Husband
- (e) None of these

51. Pointing out a photograph, a man tells his friend, "She is the daughter of the only son of my father's wife". How is the girl in the photograph related to the man?

- (a) Daughter
- (b) Cousin
- (c) Mother
- (d) Sister
- (e) Niece

52. Pointing out a photograph, a man said, " I have no brother or sister but that man's father is my father's son". Whose photograph was it?

- (a) His Own

- (b) His Son's
- (c) His Father's
- (d) His Nephew's
- (e) None of these

53. Pointing to a man on the stage, Rita says, "He is the brother of the daughter of the wife of my husband". How is the man on the stage related to Rita?

- (a) Son
- (b) Husband
- (c) Cousin
- (d) Nephew
- (e) Brother in law

**Directions : (Q. 54 to 60)**

In each of the following number series, one term is wrong. The correct term is given as one of the five alternatives under it. Find the correct term in each case which will replace the wrong one.

54. 7, 19, 11, 19, 15, 15, 19, 11

- (a) 7
- (b) 13
- (c) 17
- (d) 23
- (e) 19

55. 5, 7, 11, 13, 15, 19, 23

- (a) 17
- (b) 18
- (c) 15
- (d) 16
- (e) 9

56. 1, 2, 9, 28, 60, 126

- (a) 17



(b) 18

(c) 15

(d) 16

(e) 9

57. 3, 5, 9, 17, 36

(a) 35

(b) 32

(c) 29

(d) 30

(e) 33

58. 1, 3, 8, 15, 24, 35

(a) 0

(b) 1

(c) 2

(d) 3

(e) 4

59. 2, 3, 5, 8, 13, 22, 34

(a) 25

(b) 21

(c) 28

(d) 27

(e) 26

60. 1, 2, 6, 24, 119, 720

(a) 20

(b) 21

(c) 120

(d) 22

(e) 122

**Directions :** (Q. 61 to 64) In each of the questions, you are provided with a

combination of alphabets followed by a set of five alternatives 1, 2, 3, 4 and 5. Choose the correct water image of the given combination from these alternatives.

61. MOB

- (a) BOM
- (b) WOB
- (c) WOI
- (d) BOW
- (e) MOB

62. DISCARD

- (a) DRACSID
- (b) DISCARD
- (c) DISARD
- (d) DISCARD
- (e) DISCARD

63. SNACK

- (a) KCANR
- (b) KCANR
- (c) SNACK
- (d) SNACK
- (e) SNACK

64. AFGANISTAN

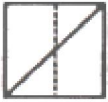
- (a) AFGANIAN
- (b) AFGANISTAN
- (c) AFGANISAN
- (d) AFGANISTAN
- (e) AFGANISTAN

**Directions: (Q. 65 to 70)**

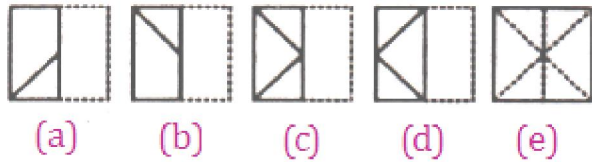
In each of the following problems, a square transparent sheet with a pattern is given. Figure out from amongst the five alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line, choose the correct alternative

out of given response figures.

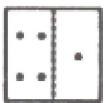
65. Transparent Sheet



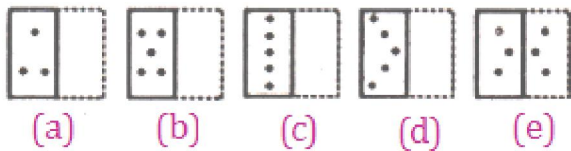
Response Figure



66. Transparent Sheet



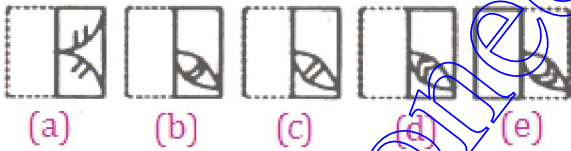
Response Figure



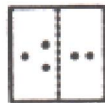
67. Transparent Sheet



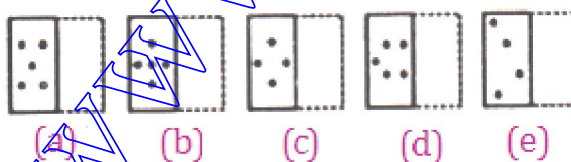
Response Figure



68. Transparent Sheet



Response Figure



69. Transparent Sheet

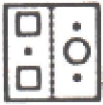


Response Figure

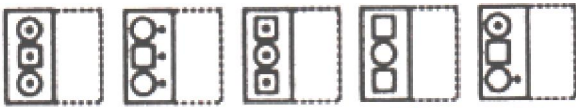


(a) (b) (c) (d) (e)

70. Transparent Sheet



Response Figure

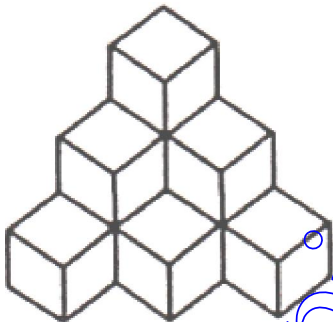


(a) (b) (c) (d) (e)

**Directions : (Q. 71 to 73)**

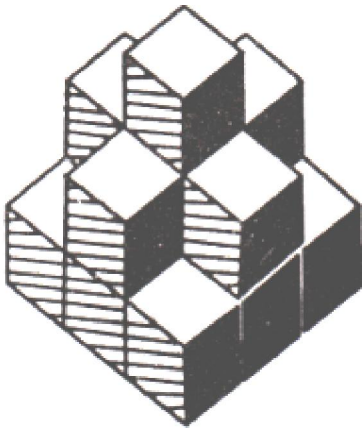
Count the number, of cubes in the given figure and choose the correct answer out of given alternatives

71.



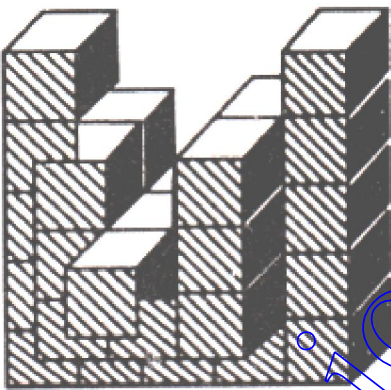
- (a) 8
- (b) 9
- (c) 10
- (d) 11
- (e) 12

72.



- (a) 15
- (b) 12
- (c) 18
- (d) 16
- (e) 14

73.



- (a) 25
- (b) 30
- (c) 32
- (d) 34
- (e) 36

**Directions : (Q. 74 to 75)**

In each of the following questions, arrange the given words in a meaningful

sequence and then choose the most appropriate sequence form given alternatives

74. (a) Family (b) Community (c) Member (d) Locality (e) Country

(a) 31245

(b) 31254

(c) 31425

(d) 31452

(e) 13245

75. 1. Milky way 2. Sun 3. Moon 4. Earth 5. Stars

(a) 43251

(b) 34251

(c) 23451

(d) 14325

(e) 13245

76. If you are eleventh in a queue starting from either end, how many persons in the queue?

(a) 11

(b) 20

(c) 21

(d) 22

(e) 23

77. A is B's daughter, B is C's mother, D is C's brother. How D is related A?

(a) Father

(b) Grandfather

(c) Brother

(d) Son

(e) Daughter

Study the letter series carefully and see, which letters are missing in the series given

from question numbers 78 to 82. Select the correct group of letters from given alternative which complete the series.

78. bc - b - c - b - ccb

- (a) bbcb
- (b) cbbc
- (c) cbc b
- (d) bcbc
- (e) ccbb

79. ab - bc - bc - bc

- (a) abab
- (b) abca
- (c) acca
- (d) caaa
- (e) bcac

80. - ab - c - dd -

- (a) abcd
- (b) addc
- (c) abca
- (d) acba
- (e) abac

81. a - cd - bc - ab - d

- (a) badc
- (b) adab
- (c) cdba
- (d) acdb
- (e) bacd

82. cb - bccba - b -

- (a) aaac
- (b) ccca

(c) bbbc

(d) aaab

(e) bbba

83. If HOTEL is coded as 60. How will you code BORE?

(a) 62

(b) 40

(c) 42

(d) 26

(e) 24

84. If HOTEL is coded as 300. How will you code BORE?

(a) 140

(b) 160

(c) 200

(d) 180

(e) 150

85. If HOTEL is coded as 30. How will you code BORE?

(a) 5

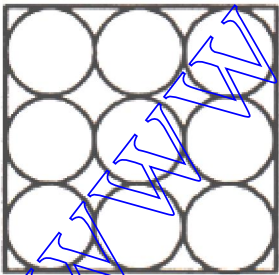
(b) 10

(c) 15

(d) 20

(e) 25

86. The diameter of each circle shown in the given figure is 'd' then the area of the square is given by.



(a)  $9d^2$

(b)  $9d$

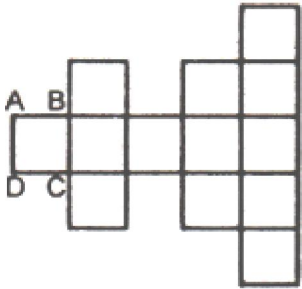


(c)  $3d^2$

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

(e)  $\frac{4}{3}d^2$

87. In the given figure, the area of square ABCD is A. what is the area of whole figure?



(a)  $13A$

(b)  $13A^2$

(c)  $169A^2$

(d)  $169A$

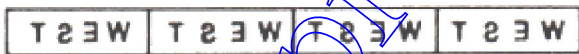
(e)  $5A$

**Directions. (Q. 88 to 93)**

In each one of the following questions choose the correct mirror image of the figure (X) from amongst the alternatives given with it.

88. WEST

(X)



(a)

(b)

(c)

(d)

89. FIX

(X)



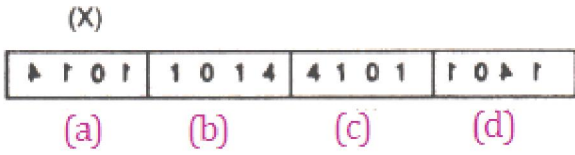
(a)

(b)

(c)

(d)

90. 1014



91.



(X)



(a)



(b)



(c)



(d)

92.



(X)



(a)



(b)



(c)



(d)

93.



(X)



(a)



(b)



(c)



(d)

**Directions: (Q. 94 to 100)**

In each one of the following questions choose the correct water image of the figure (X) given with it.

94. DISC

(X)

C S I D    O Z I D    D I Z C    D I S C

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

95. FRUIT

(X)

E B U I L    E B U I L    T I U B E    E B U I T

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

96. A1M3b

(X)

V I N Z P    V I N Z P    V J N Z P    V J N E P

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

97.



(X)

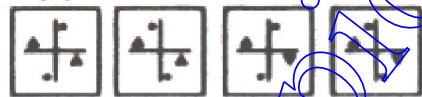


(a)            (b)            (c)            (d)

98.



(X)



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

99.



(X)



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

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100.



(x)



(a)



(b)



(c)



(d)

PART - II

SCHOLASTIC APTITUDE TEST

Questions : 101 to 200

Time : 90 Minutes

101. The two gases responsible for 'acid rain' are

- (a)  $\text{SO}_2 + \text{N}_2$
- (b)  $\text{SO}_2 + \text{NO}_2$
- (c)  $\text{SO}_2 + \text{CO}$
- (d)  $\text{NO}_2 + \text{O}_2$

102. The Correct formula of washing soda is

- (a)  $\text{Na}_2\text{CO}_3 \cdot 4\text{H}_2\text{O}$
- (b)  $\text{Na}_2\text{CO}_3 \cdot 6\text{H}_2\text{O}$

(c)  $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$

(d)  $\text{NaHCO}_3$

**103.**  $\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$

The substance oxidized is

(a)  $\text{H}_2$

(b)  $\text{Cu}$

(c)  $\text{CuO}$

(d)  $\text{H}_2\text{O}$

**104.** A person affected by carbon mono - oxide poisoning, should be given.

(a) Carboxy haemoglobin

(b) Carbogen

(c) Carbon dioxide

(d) Nitrogen

**105.** 96 grams of Magnesium on complete burning with Oxygen gives.

(a) 100 grams of Mgo

(b) 120 grams of Mgo

(c) 140 grams of Mgo

(d) 160 grams of Mgo

**106.** The percentage of water in oceans to the whole of water on earth is.

(a) 90.00

(b) 97.41

(c) 90.41

(d) 95.00

**107.** On mixing two solutions we get an insoluble salt. The two solutions are.

(a)  $\text{KCl} + \text{NaNO}_3$

(b)  $\text{Na}_2\text{SO}_4 + \text{KCl}$

(c)  $\text{AgNO}_3 + \text{NaCl}$

(d)  $\text{NaCl} + \text{H}_2\text{SO}_4$

**108.** The main constituent of natural gas is.

- (a) Ethane
- (b) Methane
- (c) Propane
- (d) Butane

**109.** Solution of Sodium Chloride is.

- (a) Acidic
- (b) Basic
- (c) Neutral
- (d) None of the above

**110.** Which of the following substance on heating does not liberate Carbon dioxide.

- (a) Calcium Carbonate
- (b) Copper (II) Carbonate
- (c) Sodium Hydrogen Carbonate
- (d) Sodium Carbonate

**111.** Epsom salt is.

- (a)  $\text{CuSO}_4$
- (b)  $\text{MgSO}_4$
- (c)  $\text{NH}_2\text{CONH}_2$
- (d)  $(\text{NH}_4)_2\text{SO}_4$

**112.** The properties of diamond was listed as.

- (a) Bad Conductor
- (b) Good Conductor
- (c) Used in Jewellery
- (d) Soft

The correct properties are

- (a) A and B
- (b) B and C
- (c) A and C

(d) A and D

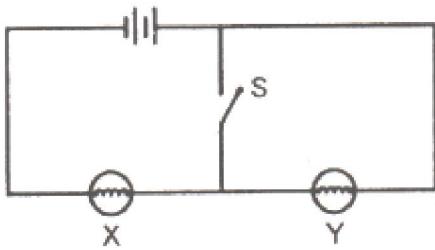
113. Which of the following is also called methanoic acid,

- (a) Vinegar
- (b) Formic acid
- (c) Tannic acid
- (d) Tartaric acid

114. A metallic utensil which is most suitable for cooking, should have.

- (a) Low thermal conductivity and low specific heat.
- (b) High thermal conductivity and high specific heat.
- (c) Low thermal conductivity and high specific heat.
- (d) High thermal conductivity and low specific heat.

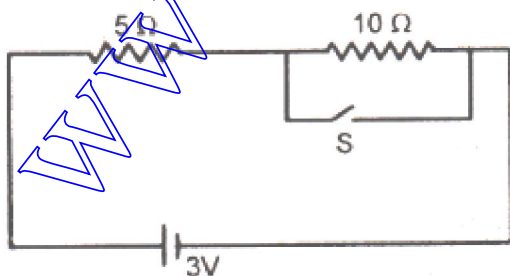
115. Two identical light bulbs X and Y are connected as shown in figure. How will brightness of bulb changes, if switch is closed.



- (a) X brighter, Y brighter
- (b) X dimmer, Y dimmer
- (c) X brighter, Y not lit up
- (d) X not lit up, Y brighter

116. Consider the circuit shown in figure. Find the current through  $5\Omega$  resistor when

- (a) open
- (b) closed.



- (a) 0.6A, 0.6A
- (b) 0.2A, 0.6A
- (c) 0.6A, 0.4A
- (d) 0.3A, 0.6A

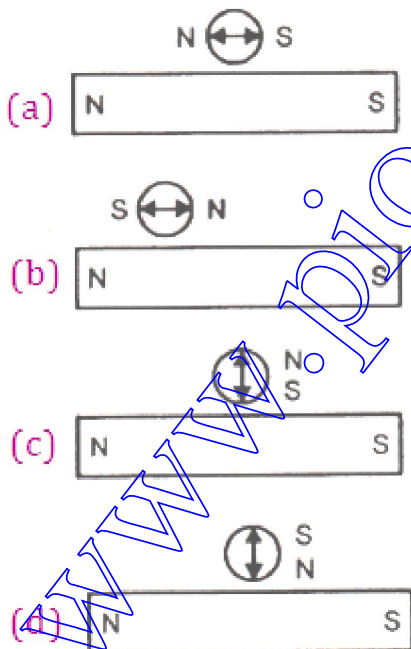
**117.** When we slide a bar magnet into a coil, the magnitude of induced current depends on

- (a) The number of turns in the coil
- (b) The speed with which the magnet moves
- (c) Strength of that bar magnet
- (d) All the above

**118.** The difference in number of magnetic lines entering and leaving a bar magnet is always

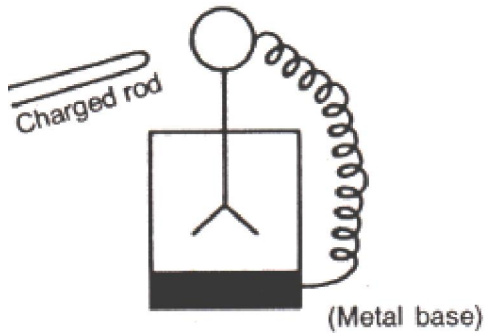
- (a) Zero
- (b)  $>1$
- (c)  $\infty$
- (d)  $<1$

**119.** From the following figures which is showing the correct deflection of compass



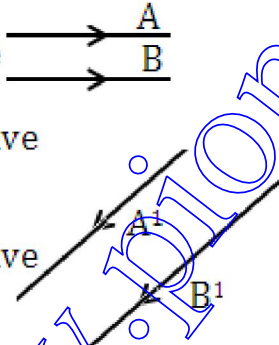
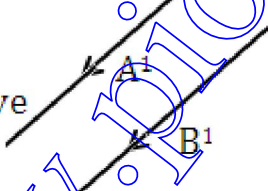


120. In gold leaf electroscope, if a conducting wire is connected between disc and case as shown, the divergence of leaves

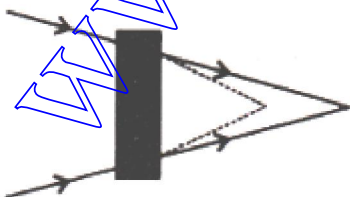


- (a) Increases
  - (b) Decreases
  - (c) Zero
  - (d) None of the above
121. Colour blindness is a
- (a) Genetic disorder
  - (b) Disease
  - (c) Fever
  - (d) None of these
122. Figure show that two rays A and B are reflected by a mirror and going as A<sup>1</sup> and B<sup>1</sup>.

The mirror is

- (a) Plane 
- (b) Concave
- (c) Concave 
- (d) May be any spherical mirror

123. Name the type of optical medium inside the box



- (a) Convex lens
- (b) Concave lens
- (c) Glass Slab
- (d) Prism

**124.** A geostationary satellite seem to be fixed above a point on the earth is because

- (a) It is not rotating around the earth
- (b) It's velocity is zero
- (c) It has the same time period as earth has about its own axis.
- (d) None of above

**125.** Loudness sound is more in

- (a) CO<sub>2</sub>
- (b) H<sub>2</sub>
- (c) O<sub>2</sub>
- (d) O<sub>3</sub>

**126.** If refractive index of water with respect to air  $\frac{4}{3}$  and refractive index of glass

with respect to air is  $\frac{3}{2}$ . The refractive index of glass with respect to water will be

- (a) 2
- (b)  $\frac{9}{8}$
- (c)  $\frac{8}{9}$
- (d)  $\frac{7}{6}$

**127.** For nuclear fusion to take place, the necessary condition is

- (a) Nuclei is low mass number and high temp
- (b) Nuclei is high mass number and high temp
- (c) Nuclei is mass number and low temp
- (d) Nuclei is high mass number and low temp

**128.** In plants the respiration process occurs in

- (a) Roots
- (b) leaves
- (c) Stems
- (d) All of the above

**129.** Vegetative reproduction is a common phenomenon in

- (a) Plants
- (b) Mammals
- (c) Microbes
- (d) Reptiles

**130.** Ascorbic acid is also called as

- (a) Vit D
- (b) Vit K
- (c) Vit E
- (d) Vit C

**131.** Disease like dysentery and loose motion are due to

- (a) Protozoan's
- (b) Bacteria
- (c) Internal disturbance
- (d) All of the above

**132.** 99 percent of cytoplasm by weight is made up of compounds of four elements.

These :

- (a) C, H, O, N
- (b) C, Fe, O, H
- (c) C, H, I, O
- (d) C, Fe, S, O

**133.** Removal of an organ from the body affects the

- (a) Community
- (b) Population

(c) Individual

(d) Society

**134.** Which of the following disease is caused by viruses?

(a) Chicken Pox

(b) Malaria

(c) T.B.

(d) Typhoid

**135.** The process of obtaining back the entire individual form a body fragment is

(a) Germination

(b) Fertilization

(c) Regeneration

(d) All of the above

**136.** The smallest cell is

(a) RBC

(b) Amoeba

(c) Neuron

(d) Micoplasma

**137.** Which component of soil gets deficient due to the excess supply of water?

(a) Nutrients

(b) Air

(c) Minerals

(d) Manure

**138.** Which of the following decompose the organic matter to produce manure?

(a) Protozoa

(b) Bacteria & Fungi

(c) Only Bacteria

(d) Only Fungi

**139.** Which set of diseases spread through the air?

(a) Common Cold, Pneumonia, Tuberculosis

- (b) Plague, Small Pox, Polio
- (c) Typhoid, AIDS, Syphilis
- (d) Malaria, Dysentery, Rabies

**140.** The phenomenon by which aquatic weeds utilize most of the  $O_2$  dissolved in water but their thick growth also prevents sun light to penetrate the water bodies is the

- (a) Eutrophication
- (b) Water pollution
- (c) Water conservation
- (d) All of the above

**141.** Given below are some of characteristics of a 'Sphere'

- (a) It is very dynamic in nature
- (b) It provides a setting in which all forms of life are created and sustained
- (c) It has several layers which protect us

Which of the following regions have all these features?

- (a) Hydrosphere
- (b) Atmosphere
- (c) Lithosphere
- (d) Biosphere

**142.** Given below are some definitions. Which of the following is not correct?

- (a) A layer of loose material on earth surface is called soil
- (b) Dark coloured substance changed by action of bacteria is -Humus
- (c) Inorganic particles of weathering rocks is Alluvial
- (d) A river of ice which moves very slowly down hills is glacier

**143.** The bottom of Mariana Trench is the lowest on the earth. It is below the mean sea level

- (a) 10034m
- (b) 11134m
- (c) 11034m
- (d) 11043m

**144.** Which is not Igneous rock out of the following rocks

- (a) Granite
- (b) Gabbro
- (c) Basalt
- (d) Grawel

**145.** halite is the mineral name for

- (a) Gold
- (b) Salt
- (c) Basalt
- (d) Lava

**146.** Read the following

- (a) It occupies 78% of the total volume and the most plentiful in air
- (b) When we inhale, we take some amount of it but exhale it
- (c) Plants take it with the help of Bacteria

Which of the following, best explains all of the above

- (a) Oxygen
- (b) Nitrogen
- (c) Carbon dioxide
- (d) Air pollutants

**147.** Match the following grass fields and area

Grass Fields	Area
A. Compos	1. South America
B. Savana	2. Eurosia
C. Veld	3. Australia
D. Pampas	4. South Africa
E. Downs	5. Africa
F. Steppes	6. Brazil

- (a) A-5, B-4, C-3, D-6, E-2, F-1
- (b) A-5, B-6, C-4, D-1, E-3, F-2

(c) A-2, B-3, C-4, D-5, E-6, F-1

(d) A-6, B-5, C-4, D-1, E-3, F-2

**148.** When the sea water moves continuously in a particular direction it is called

(a) Wave

(b) Tide

(c) Current

(d) Tsunami

**149.** What is called 'Laddaks' in their local language

(a) Chan-kha-Pa

(b) Chan-Pa-kha

(c) Kha-Pa-chan

(d) Pa-kha-chan

**150.** Who is called literate person in India as per census of 2001

(a) Person of the age group 15 years or above, who can read and write any one language

(b) Person of age group of six years who can read, write and understand any language

(c) Person of age group of seventy or above who can read, write general statement in any language

(d) Person of the age group of 7 years or above who can read, write and understand any language

**151.** Read carefully the following facts about multi - national companies

(a) They bring large foreign investment and better technology

(b) These companies were raised before independence

(c) They produce standard products at low cost

(d) They have monopoly in the market

Which pair is correct out of the following facts

(a) A, B

(b) A, C

(c) A, D

(d) B, C

**152.** One fact is wrong about rice cultivation

- (a) It is the staple food in the mid- latitudinal and dry subtropical regions
- (b) It requires good temperature, good rainfall and good soil
- (c) It needs cheap and huge labour
- (d) It is obtained from paddy

**153.** One pair is wrong out of the 'following

<b>Minerals</b>	<b>States</b>
(a) Petroleum	Assam
(b) Coal	Jharkhand
(c) Bauxite	Madhya Pradesh
(d) Copper	Goa

**154.** According to the Constitution, on 26 January 1950, India was declared.

- (a) A sovereign state
- (b) A Democratic State
- (c) A Republic
- (d) All the above

**155.** Fundamental Rights given by constitution of India can be suspended by

- (a) President
- (b) Vice President
- (c) Prime Minister
- (d) Chief Justice of Supreme Court

**156.** The Supreme Commander of the Indian Armed Forces is

- (a) The Chief of the Army Staff
- (b) The President of India
- (c) The Prime Minister of India
- (d) Defence Minister of India

**157.** Under the Indian Constitution the residuary Powers are enjoyed by

- (a) The Centre
- (b) The States



- (c) The Local Government
- (d) The District Administration

**158.** The Constitution of India was passed by Constituent Assembly of India on

- (a) 26th January, 1950
- (b) 26th November, 1949
- (c) 15th August, 1947
- (d) 30th January, 1948

**159.** In which State of India there is bicameralism

- (a) Punjab
- (b) Haryana
- (c) Uttar Pradesh
- (d) Rajasthan

**160.** Green strips in the National Flag stand for

- (a) Life, Fertility & Prosperity
- (b) Beckons us to inculcate high qualities of patriotism and sacrifice in our character
- (c) Inspires us to be truthful, pure and simple
- (d) All the above

**161.** Sustainable development means

- (a) High rate of economic development
- (b) Development without damaging -environment
- (c) Development with personality development
- (d) High rate of quality life index

**162.** At present, total numbers of the U.N. membership is

- (a) 181
- (b) 178
- (c) 192
- (d) 196

- 163.** Who said “we can change history, not geography, we can change our friends but not neighbours”
- (a) Indira Gandhi
  - (b) Rajiv Gandhi
  - (c) L.K.Advani
  - (d) A.B.Vajpayee
- 164.** Which organ of U.N. is responsible for maintaining World peace
- (a) The U.N. Secretariat
  - (b) International Court of Justice
  - (c) The General Assembly
  - (d) The Security Council
- 165.** Which is not true about terrorism
- (a) Terrorists help the Govt by using violence
  - (b) Terrorism challenges the administration and territorial integrity
  - (c) Terrorism has succeeded in many parts of world
  - (d) Violence is essential part of terrorism
- 166.** In December 1986 the permanent secretariat of SAARC was established at
- (a) New Delhi (India)
  - (b) Kathrnandu (Napal)
  - (c) Dhaka (Bangla Desh)
  - (d) Islamabad (Pakistan)
- 167.** The Vijay Nagar/Kingdom was founded by
- (a) Raj Krishan Dev Rai
  - (b) Hari Har and Bukka
  - (c) Sada Shiv
  - (d) Chander Chur
- 168.** The work of Qutab Minar was completed by
- (a) Qutub – ud – din Aibak
  - (b) Iltutmish

(c) AaramShah

(d) BehramShah

**169.** The Jataka tales are

(a) Great epics

(b) Religious work (Book)

(c) Folk Stories

(d) Great work of Sanskrit literature

**170.** Canon was used first time in India by

(a) French

(b) Britishers

(c) Spanish

(d) Babur

**171.** Widow remarriage act was passed in

(a) 1774

(b) 1779

(c) 1801

(d) 1856

**172.** The meaning of muting is

(a) A revolt with limited Area

(b) A revolt with Vast Area

(c) A revolt in which all people participated

(d) None of these

**173.** The Bhisham Pitamah (grand old man) of India was

(a) Maha Dev Govind Ranade

(b) Bal Ganga Dhar Tilak

(c) Surender Nath Banerjee

(d) Dada Bhi Naoroji

**174.** The slogan 'Delhi Chalo' was given by

(a) Pt. J. L. Nehru

- (b) Ras Bihari Bose
- (c) Mohan Singh
- (d) Subhash Chander Bose

**175.** 'Dandi' is situated in the state of

- (a) Uttar Pradesh
- (b) Gujarat
- (c) Maharashtra
- (d) Meghalya

**176.** Who said that "Cripps Proposal is a Post dated Cheque on a Cash Bank"?

- (a) Mahatma Gandhi
- (b) Dr. Rajender Prasad
- (c) Dr. B. R. Ambedkar
- (d) Pt.J.L.Nehru

**177.** The process of education to the Indian through English was started by

- (a) Lord Macalay
- (b) Charles Wood
- (c) David Hare
- (d) William Jones

**178.** The dynasty that ruled the southern India during 11<sup>th</sup> to 12<sup>th</sup> century was

- (a) Pallas
- (b) Palavas
- (c) Cholas
- (d) Rashtrakutas

**179.** Slavery was abolished in America by

- (a) William Wilber
- (b) David Living Stone
- (c) Marie Curie
- (d) Abraham Lincon

**180.** The first session of Indian National Congress was held at

- (a) Pune
- (b) Delhi
- (c) Bombay (Mumbai)
- (d) Calcutta (Kolkata)

**181.** The smallest number by which 2880 must be divided in order to obtain a perfect square

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

**182.** A machine was sold at a profit of 10% Had it been sold for Rs 400 less, there would have been a loss of 10% The cost price of machine is

- (a) Rs.2000
- (b) Rs. 20000
- (c) Rs.1000
- (d) Rs. 1800

**183.** Certain number of persons can complete a work in 100 days. If 10 persons were less, it would have taken 10 days more for the work to be completed. Number of persons in the beginning is

- (a) 100
- (b) 90
- (c) 110
- (d) None of these

**184.** The compound interest on a certain sum of money for 2 years at 5% per annum is RS. 102.50. Compound interest on the same sum of money for the same period at 4% per annum is

- (a) Rs. 80.60
- (b) Rs. 81.60
- (c) Rs. 82.60

(d) Rs. 82.66

185.  $\sqrt{xy}$  is irrational then  $\sqrt{x} + \sqrt{y}$  will be

(a) Natural

(b) Rational

(c) Integer

(d) Real

186. Four watches are ringing alarm bells in the interval of 6, 12, 15 and 18 seconds. If they start at same time, how many times they will ring together in 4 hrs

(a) 80 times

(b) 81 times

(c) 20 times

(d) 21 times

187. Total percentage by which  $\frac{5}{7}$  of 122 less than  $\frac{4}{5}$  of 70

(a) 42%

(b) 30%

(c) 24%

(d) 36%

188. In a right angled triangle ABC, right angled at B. P is midpoint of AC. Which one is true?

(a)  $PA = \frac{AC}{2}$

(b)  $PB = \frac{AC}{2}$

(c)  $PA = PB$

(d) All of these

189. Value of  $1 + \frac{1}{1 + \frac{1}{1 + \frac{1}{9}}}$

(a)  $\frac{19}{9}$

(b)  $\frac{29}{10}$

(c)  $\frac{8}{19}$

(d)  $\frac{19}{8}$

190. If radius of a sphere is doubled, how many times its volume will be affected

(a) 2 times

(b) 4 times

(c) 6times

(d) 8 times

191. polygon in which sum of interior angles is equal to half the sum of exterior angles is a

(a) Pentagon

(b) Hexagon

(c) Quadrilateral

(d) None of these

192. If  $a = \frac{2b + 13}{5}$   $(b = \frac{30}{a})$  then  $125 a^3 - 8 b^3$  is equal to :

(a) 2197

(b) 9503

(c) 13897

(d) 21897

193. Between two positive integers, there are K integers, then K is

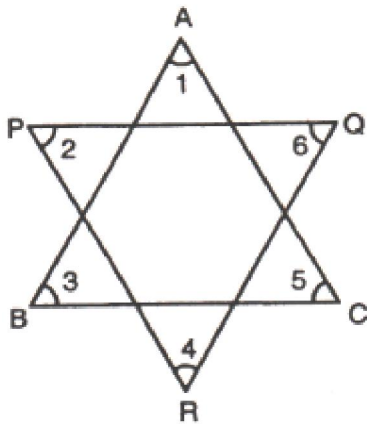
(a) Finite

- (b) Infinite
- (c) Finite under some conditions
- (d) Infinite under some conditions

**194.** If diagonals of a quadrilateral are perpendicular to each other then it is

- (a) Square only
- (b) Rhombus only
- (c) Square and Rhombus only
- (d) Quadrilateral other than square and Rhombus is also possible

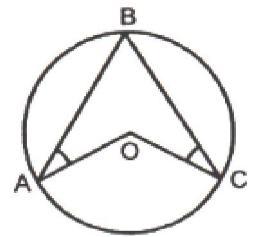
**195.** Sum of angles in the figure will be i.e.  $\angle 1 + \angle 2 + \angle 3 + \angle 4 + \angle 5 + \angle 6$



- (a)  $\pi$
- (b)  $2\pi$
- (c)  $\frac{3\pi}{2}$
- (d) None of these

**196.** If O is centre of circle and  $\angle OAB = 25^\circ$  and angle  $\angle OCB = 40^\circ$ . Then angle  $\angle AOC$  will be

- (a)  $130^\circ$
- (b)  $65^\circ$
- (c)  $175^\circ$
- (d) None of these





**197.**  $X^4 + X^2 + 1$  can be factorized into

- (a) Two quadratic factors
- (b) One linear factor and one cubic factor
- (c) Four linear factors
- (d) None of these

**198.** Two identical jars filled with acid solution are mixed together. Ratio of the volume of acid to the volume of water in Jar - I is  $p : 1$  and in Jar - II is  $q : 1$ . In the mixture ratio of acid to water is

- (a)  $\frac{p+q+2}{p+q+2pq}$
- (b)  $\frac{p+q+2q}{p+q+1}$
- (c)  $\frac{p+q+2pq}{p+q+2}$
- (d)  $\frac{p+q+pq}{p+q+2}$

**199.** If P is a point on side CD of a square ABCD such that  $PC = 5$  cm. If area of the triangle ADP is  $42 \text{ cm}^2$  then length of side of square is

- (a) 10 cm
- (b) 24 cm
- (c) 12 cm
- (d) 16 cm

**200.** The Sum of seven consecutive natural numbers is 1617. How many of these numbers are not prime

- (a) 4
- (b) 2
- (c) 5
- (d) 7
- (e) None of these