

**HAVE CONTROL → HAVE PATIENCE → HAVE CONFIDENCE ⇒ 100% SUCCESS**

**BEWARE OF NEGATIVE MARKING**

**MENTAL ABILITY**

This section contains **20 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

1. Read the following information and answer the question that follow.

A + B means A is the daughter of B.

A × B means A is the son of B.

A – B means A is the wife of B.

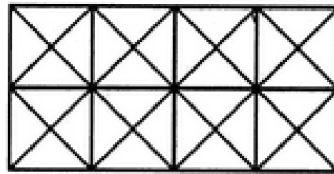
If P × Q – S, which of the following is true ?

- (1) S is the wife of Q
- (2) S is the father of P
- (3) P is the daughter of Q
- (4) Q is the father of P

2. If “PRIVATE” is coded as 1234567 and “RISK” is coded as 2398, how is “RIVETS” coded?

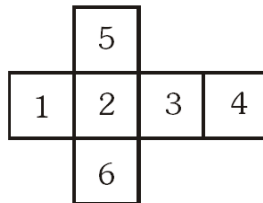
- (1) 234679
- (2) 243769
- (3) 234769
- (4) 234976

3. Count the number of squares in the given figure.



- (1) 11
- (2) 21
- (3) 24
- (4) 26

4. In the following question, the net is folded to get a dice. Numbers 1, 2, 3, 4, 5 and 6 are written on the net of a dice as shown. Which of these is the correct picture of this dice?

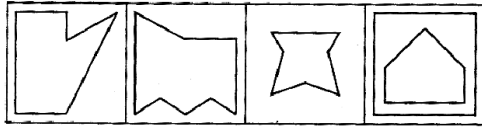
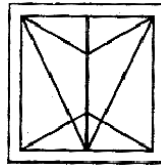


- (1)
- (2)
- (3)
- (4)

5. Bhuli starts walking 4 km towards south then turns and walk 3km towards east. Again he turns and walks 4 km towards north. Then his final position from starting point is in which direction ?

- (1) North
- (2) South
- (3) East
- (4) West

6. In the following question, a question figure and a set of four answer figures (1), (2), (3) and (4) are given. Find out that answer figure in which the question figure is embedded.



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

7. Find the missing number in the following question.

2	3	31
5	7	368
1	4	?

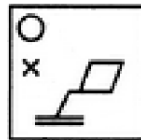
(1) 25 (2) 45 (3) 17 (4) 65

8. In the following question, the given equation becomes correct due to the interchange of two signs. One of the four alternatives under it specifies the interchange of signs in the equation which when made will make the equation correct. Find the correct alternative.

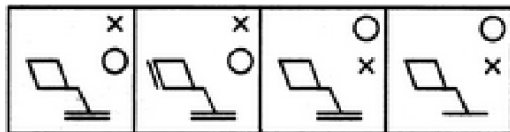
$$5 + 6 \div 3 - 12 \times 2 = 17$$

(1)  $\div$  and  $\times$  (2)  $+$  and  $\times$  (3)  $+$  and  $\div$  (4)  $+$  and  $-$

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



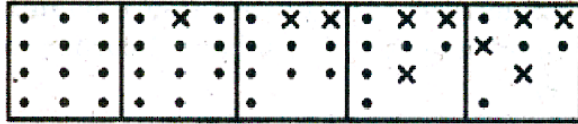
(X)



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

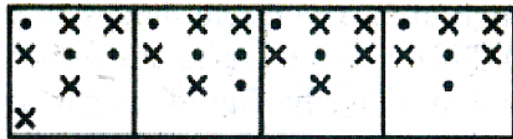
10. In the question given below, it consists of five figures marked A, B, C, D and E called the Problem Figures followed by four other figures marked 1, 2, 3 and 4 called the Answer Figures. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

**Problem Figures**



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

**Answer Figures**



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

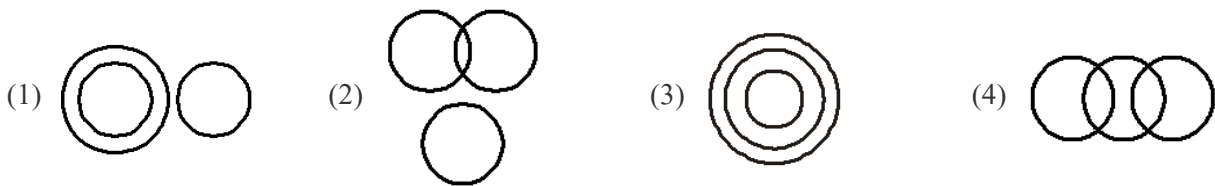
11. How many even numbers are there in the following series of numbers, each of which is immediately preceded by an odd number, but not immediately followed by an even number?

5 3 4 8 9 7 1 6 5 3 2 9 8 7 3 5

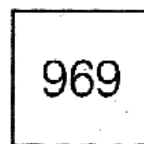
- (1) Nil (2) 1 (3) 2 (4) 3
12. In the given question, a number series is given. Find the number that should come in the place of question mark.

165, 195, 225, ?, 285, 315

- (1) 245 (2) 255 (3) 265 (4) 275
13. Choose from the given diagrams, a diagram that depicts correct relationship among three groups given Man, Husband, Son



14. Find the water image of figure (X)



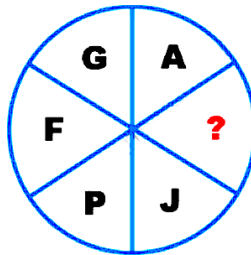
(X)



15. A woman introduces a man as the son of the brother of her mother. How is the man related to the woman ?  
 (1) Nephew (2) Son (3) Cousin (4) Uncle
16. If code of FIVE is 42, then code of ELEVEN is :  
 (1) 65 (2) 63 (3) 66 (4) 67
17. P, Q, R, S and T are five villages situated close to each other. P is 1 Km to the west of Q. R is 1 Km to the South of P. T is 1 Km to the North of Q. S is 1 Km to the East of T. Then R is in which direction with respect to S?  
 (1) North-West (2) South-East  
 (3) South- West (4) Data Inadequate
18. Find the correct mirror image of the given word, when mirror is placed on right side of the figure.

**STOP**

- (1) ƆT0Ɔ (2) Ɔ0TƆ (3) ƆT0Ɔ (4) POTS
19. In a row of girls, Mridula is 18<sup>th</sup> from the right and Sanjana is 18<sup>th</sup> from the left. If both of them exchange their positions, Sanjana becomes 25<sup>th</sup> from the left, how many girls are there in the row?  
 (1) 40 (2) 41 (3) 42 (4) 35
20. Find the missing character.



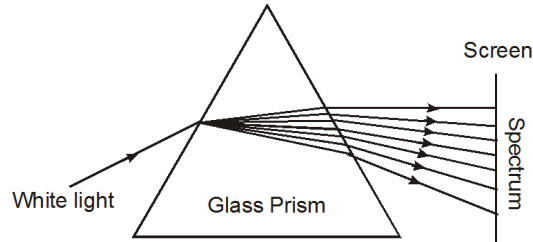
- (1) P (2) K (3) N (4) Q

**PHYSICS**

This section contains **25 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

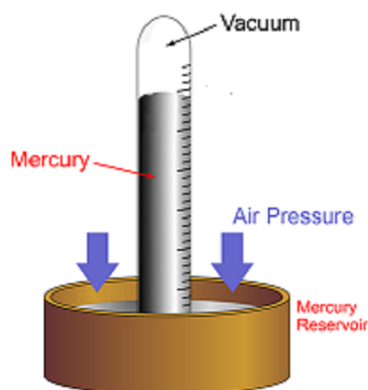
21. Electroplating is the method of coating one metal with another using an electric current, then choose the correct statement :
- (1) In this method object to be coated is made the cathode (connected to negative terminal of the battery) and metal to be deposited is made the anode (connected to positive terminal of the battery)
  - (2) In this method object to be coated is made the anode (connected to negative terminal of the battery) and metal to be deposited is made the cathode (connected to positive terminal of the battery)
  - (3) In this method object to be coated is made the anode (connected to positive terminal of the battery) and metal to be deposited is made the cathode (connected to negative terminal of the battery)
  - (4) In this method object to be coated is made the cathode (connected to positive terminal of the battery) and metal to be deposited is made the anode (connected to negative terminal of the battery)
22. The distance between the object and its image in the plane mirror is '15+x' m. When object is moved towards mirror by 2 m, new distance between the object and its image becomes 14 m, then the value of x is :
- (1) 3 m
  - (2) 4 m
  - (3) 2 m
  - (4) 1 m
23. Which powder is commonly used in carrom board to decrease friction ?
- (1) Chalk Powder
  - (2) Sulphuric Acid
  - (3) Graphite Powder
  - (4) Boric Acid
24. An object of mass 100 kg is accelerated uniformly from a velocity of 5 m/s to 8 m/s in 6 sec. Then the net force acting on the object is :
- (1) 60 N
  - (2) 40 N
  - (3) 55 N
  - (4) 50 N
25. Two sound waves are traveling through a container of unknown gas. Wave A has a wavelength of 1.2 m and Wave B has a wavelength of 3.6 m. The velocity of wave B must be \_\_\_\_\_ the velocity of wave A.
- (1) one-ninth
  - (2) one-third
  - (3) the same as
  - (4) three times larger than
26. India has built and launched several satellites, the first Indian satellite built by ISRO was :
- (1) INSAT - IA
  - (2) Aryabhata
  - (3) Apple
  - (4) Bhaskara - I
27. The instrument which is used to measure and record details of earthquakes is :
- (1) seismograph
  - (2) anemometer
  - (3) seismoscope
  - (4) ammeter

28. Which of the following is not a method of charging a body ?
- (1) Rubbing (or friction) (2) Conduction  
(3) Convection (4) Induction
29. The phenomenon as shown in figure below demonstrates splitting of white light into its constituent colours which is known as “dispersion of light”, then choose the correct option :



- (1) Violet colour is at the top of the spectrum and red colour is at the bottom of the spectrum.  
(2) Green colour is at the top of the spectrum and violet colour is at the bottom of the spectrum.  
(3) Red colour is at the top of the spectrum and green colour is at the bottom of the spectrum.  
(4) Red colour is at the top of the spectrum and violet colour is at the bottom of the spectrum.
30. Which of the following is not a method to decrease friction ?
- (1) Streamlining (2) Treading of tyres  
(3) Using Ball bearings (4) Using lubricants
31. A book of mass 20 g is placed on a table. Then the thrust exerted by the book on the table is :  
(Take acceleration due to gravity ( $g$ ) =  $10 \text{ ms}^{-2}$ )
- (1) 2 N (2) 20 N (3) 0.2 N (4) 0.02 N
32. Vibrations inside the ear are amplified by the three bones namely the \_\_\_\_\_ in the middle ear.
- (1) hammer, anvil and stirrup (2) hammer, anvil and pinna  
(3) hammer, cochlea and stirrup (4) auditory bone, anvil and stirrup
33. Which of the following is a nearest star from the Earth ?
- (1) Sun (2) Pole Star  
(3) Proxima centauri (4) Alpha Centauri
34. The intensity of earthquake is measured on the :
- (1) Richter scale (2) Kelvin scale (3) Mercury scale (4) Seismic scale

35. A person is driving a car from sea-shore to high level hill station. He is carrying a device as shown in figure which is used to measure atmospheric pressure along with him. Then choose the correct statement :



- (1) Name of this device is Sphygmomanometer and height of mercury level in it will remain constant during journey.
- (2) Name of this device is Anemometer and height of mercury level in it will remain constant during journey.
- (3) Name of this device is Barometer and height of mercury level in it will gradually increase during journey.
- (4) Name of this device is Barometer and height of mercury level in it will gradually decrease during journey.
36. Which of the following is used to carry out electrolysis ?
- (1) Voltmeter                      (2) Ammeter                      (3) Voltmeter                      (4) Galvanometer
37. In case of real object, image formed by the plane mirror is always :
- (1) Real and erect                      (2) Real and inverted
- (3) Virtual and erect                      (4) Virtual and inverted
38. A cubical box sliding on a horizontal rough surface comes to rest after some time, then the type of friction acted upon it to stop its motion is :
- (1) Static friction                      (2) Limiting friction
- (3) Rolling friction                      (4) Kinetic friction
39. Magnitude of force acting on a body in C.G.S. system of units is 1000, then the magnitude of same force in S.I. system of units is :
- (1) 0.1                      (2) 0.01                      (3) 10                      (4) 100
40. The echo is heard if the original sound reflected by an obstacle reaches our ears after :
- (1)  $10^{-4}$  s                      (2)  $10^{-3}$  s                      (3)  $10^{-2}$  s                      (4)  $10^{-1}$  s
41. The outermost layer of earth which is composed of crystalline rocks is called :
- (1) Crust                      (2) Mantle                      (3) Outer core                      (4) Inner core
42. The thin transparent tissue or a protective membrane that covers the front of the eye is known as:
- (1) Sclera                      (2) Retina                      (3) Iris                      (4) Cornea

43. Analyse the given statements and choose the correct option.

**Statement- I :** Static friction is a self adjusting force.

**Statement-II :** The magnitude of static friction is always less than the applied force.

- (1) Both Statements are true, Statement-II is the correct explanation of Statement-I
- (2) Both Statements are true, Statement-II is not correct explanation of Statement-I.
- (3) Statement-I is true, Statement-II is false.
- (4) Statement-I is false, Statement-II is true.

44. S.I. unit of pressure is :

- (1) bar                                      (2) atm                                      (3) pascal                                      (4) torr

45. Sound can travel through :

- (1) solids only                                      (2) liquids only
- (3) gases only                                      (4) solids, liquids & gases



**CHEMISTRY**

This section contains **25 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

46. Which of the following is not one of the 4R principle.
- (1) Reduce                      (2) Reuse                      (3) Recycle                      (4) Redeem
47. Which one of the following statements is correct?
- Statement 1** : The oxide of sulphur ( $\text{SO}_3$ ) reacts with water to form sulphuric acid  
**Statement 2** : The oxide of nitrogen ( $\text{NO}_2$ ) reacts with water to form sulphuric acid
- (1) Statement 1                      (2) Statement 2  
 (3) Both statements are correct                      (4) Both statements are incorrect
48. Process of conversion of wood into coal by biochemical process over millions of years is called -
- (1) Carbonisation                      (2) Destructive distillation  
 (3) Fractional distillation                      (4) Catenation
49. Goldsmiths use ----- zone of flame to melt gold :
- (1) Lowest blue zone                      (2) Cold zone  
 (3) Luminous zone                      (4) Non luminous zone
50. \_\_\_\_\_ is a commonly used chemical method for purifying polluted water
- (1) Carboxylation                      (2) Fluorination                      (3) Filtration                      (4) Chlorination
51. Full form of PET is
- (1) Polyethane terephthalate                      (2) Polyethylene terephthalate  
 (3) Polyethyne teraphthalate                      (4) Polymethyl terephthalate
52. When steam is passed through zinc then -
- (1) zinc oxide is formed                      (2) zinc hydroxide is formed.  
 (3) HCl is formed                      (4)  $\text{H}_2\text{O}$  is formed.
53. Ammoniacal liquor is :
- (1) Solution of ammonia in any liquid                      (2) Solution of ammonia in water  
 (3) Another name of ammonia gas                      (4) Solution of ammonia in ethanol
54. Which of the following is thermosetting plastic ?
- (1) Polystyrene                      (2) Polyvinylchloride  
 (3) Melamine                      (4) Polythene
55. What is false about non-metals?
- (1) They are bad conductor of electricity                      (2) They have low m.p and b.p  
 (3) They are generally hard                      (4) They are dull in appearance

56. Which of the following is an exhaustible natural resource?  
 (1) Sunlight (2) Petroleum (3) Air (4) Water
57. Middle zone of flame is also known as  
 (1) Non-Luminous zone (2) Luminous zone  
 (3) Blue zone (4) Dark zone
58. Which among the following is not a green house gas ?  
 (1) Carbon dioxide (2) Nitrogen  
 (3) Methane (4) Nitrous oxide
59. Which of the following do not contain polyester fabric ?  
 (1) Terrywool (2) Terrycot (3) Mylar (4) Orlon
60. Which of the following element is not ductile  
 (1) Gold (2) Copper (3) Tin (4) Sulphur
61. Which variety of coal has highest calorific value  
 (1) Peat (2) Lignite (3) Bituminous (4) Anthracite
62. Tetrafluoroethene is the monomer of :  
 (1) Polyethene (2) PVC (3) Teflon (4) Nylon - 66
63. Metal which does not react with dilute HCl is :  
 (1) Ag (2) Mg (3) Al (4) Fe
64. Identify the substance which is tough, porous and black and it is almost a pure form of carbon –  
 (1) Crude oil (2) Coke (3) Coal gas (4) Coal tar
65. In an experiment 5 kg of a fuel was completely burnt. The heat produced was measured to be 20,000 kJ. Calculate the calorific value of the fuel.  
 (1) 5000 kJ/kg (2)  $4 \times 10^6$  J/kg (3) 2000 kJ/g (4)  $4 \times 10^7$  J/kg

66. Choose the correct option :

Column I	Column II
(i) A regenerated fibre	(a) vinyl chloride
(ii) A pure synthetic fibre	(b) Nylon
(iii) A monomer	(c) Silk
(iv) Lustrous natural fibre	(d) Rayon

- (1) (i) – a (ii) – d, (iii) – c, (iv) – b (2) (i) – d, (ii) – b, (iii) – a (iv) – c  
 (3) (i) – b, (ii) – c, (iii) – d, (iv) – a (4) (i) – c, (ii) – a, (iii) – b, (iv) – d
67. Which of the following non-metals have a lustrous appearance ?  
 (1) Phosphorus (2) Iodine (3) Boron (4) Sulphur

68. The petroleum product that has replaced coal tar for metalling the road is \_\_\_\_\_.
- (1) Peat                      (2) Bitumen                      (3) Lignite                      (4) Anthracite
69. Which of the following fuel has maximum calorific value ?
- (1) Wood                      (2) Coal                      (3) Hydrogen                      (4) LPG
70. The phenomenon of marble cancer is caused due to :
- (1) Soot particles                      (2) CFCs                      (3) Acid rain                      (4) Fog

**BIOLOGY**

This section contains **25 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

71. Which of the following is not a part of endomembranous system in cell ?  
 (1) Endoplasmic reticulum (2) Golgi body  
 (3) Centriole (4) Lysosomes
72. What are the important steps in the preparation of soil ?  
 (1) Loosening and sowing (2) Loosening and weeding  
 (3) Turning and sowing (4) Turning and loosening
73. Malaria is caused by—  
 (1) Bacteria (2) Fungi (3) Virus (4) Protozoa
74. Which one of the following species is not included under the 'Red list' ?  
 (1) Vulnerable (2) Endangered (3) Endemic (4) Extinct
75. Budding is seen in—  
 (1) Humans (2) Amoeba (3) Hydra (4) Bacteria
76. A female gamete carries \_\_\_\_\_ sex chromosome(s).  
 (1) One Y (2) One X and One Y  
 (3) Two X (4) One X
77. Kitchen of cell is—  
 (1) Mitochondria (2) Chloroplast (3) Nucleus (4) Ribosomes
78. Which of the following animal is taken care of in animal husbandary ?  
 (1) Rhino (2) Tiger (3) Buffalo (4) Lion
79. Select the disease caused by a bacteria—  
 (1) Chicken pox (2) Tuberculosis (3) Dengue (4) Polio
80. What is the main reason that many species are becoming endangered ?  
 (1) Habitat destruction (2) Diseases  
 (3) Natural selection (4) Acid rain
81. Site of fertilization in human female is—  
 (1) Oviduct (2) Ovary (3) Uterus (4) Vagina
82. During menstrual bleeding, the fluid that comes out of the vagina contain—  
 (1) Embryo (2) Ovum (3) Sperm (4) Zygote
83. Bacteria present in root nodules of pea plant are—  
 (1) E.coli (2) Rhizobium (3) Penicillin (4) Nitrobacter

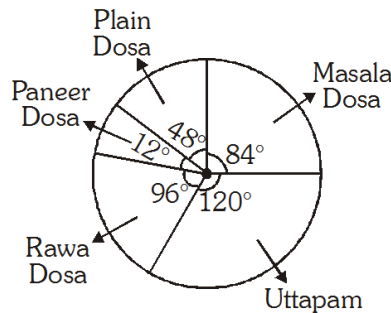
84. Arrange the following agricultural practices in the order in which they are followed.  
 (i) Harvesting (ii) Sowing (iii) Storage (iv) Irrigation (v) Preparation of soil
- (1) v → ii → iv → i → iii (2) i → ii → iii → iv → v  
 (3) v → iv → iii → ii → i (4) ii → iii → v → iv → i
85. Fermentation was discovered by–
- (1) Alexander Fleming (2) Louis Pasteur  
 (3) John Mendal (4) Charles Darwin
86. Cell wall of peptidoglycan is found in–
- (1) Bacteria (2) Fungi (3) Plants (4) Algae
87. The soil fertility can be replenished by–
- (1) Repeated growing of similar crop (2) Using drip irrigation  
 (3) Practicing crop rotation (4) Using chemical fertilizers
88. In order to control dengue, we must take measures to stop the breeding of–
- (1) Aedes Mosquitoes (2) Fleas  
 (3) Fire ants (4) Culex mosquitoes
89. The removal of top layer of soil leads to–
- (1) Desertification (2) Rain fall (3) Snow fall (4) Deforestation
90. Example of double membranous cell organelle is–
- (1) Mitochondria (2) Lysosome (3) Golgi body (4) Centriole
91. Which of the following is a rabi crop ?
- (1) Rice (2) Mustard (3) Soyabean (4) Maize
92. A common preservative used in jam and pickles is–
- (1) Sodium benzoate (2) Nitric acid  
 (3) Sodium chloride (4) Copper sulphate
93. Read the following statements and select the correct ones–  
 (i) Hotspots are those regions of megadiversity which have large number of endemic species.  
 (ii) The Asiatic Lion (Babbar Sher) is endemic to Gir forest in Gujarat.  
 (iii) Increase in atmospheric CO<sub>2</sub> concentration due to deforestation does not affect global temperature.  
 (iv) Silent Valley National park is located in the Nilgiri Hills of Tamil Nadu.
- (1) (i) and (ii) only (2) (ii) and (iii) only  
 (3) (i) and (iv) only (4) (i), (ii), (iii) and (iv)
94. Metamorphosis is not shown by–
- (1) Silkworm (2) Frog (3) Butterfly (4) Lizard
95. Number of ova produce by human female in a month is/are–
- (1) One (2) Two (3) Three (4) Many

**MATHEMATICS**

This section contains **25 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

96. Find the value of  $\left(n + \frac{2}{n}\right) \left(n^2 - \frac{3}{n} + \frac{1}{3}\right)$  at  $n = 1$
- (1) 2                                      (2) -5                                      (3) -4                                      (4) 1
97. For any two rational numbers P and Z, which of the following relationship(s) is/are correct ?
- (i)  $P < Z$     (ii)  $P = Z$     (iii)  $P > Z$
- (1) Only (i) and (ii) are correct.                                      (2) Only (i) and (iii) are correct
- (3) Only (ii) is correct                                      (4) All (i), (ii), (iii) are correct
98. A bag contains x red balls, (x + 5) blue balls and (3x + 10) white balls. If the probability of drawing a white ball is  $\frac{11}{18}$ . Find number of blue balls.
- (1) 15                                      (2) 20                                      (3) 35                                      (4) 55
99. If  $3^{3x-5} = 9^{-x}$  find the value of x :-
- (1)  $\frac{5}{2}$                                       (2) 5                                      (3) 1                                      (4)  $\frac{7}{3}$
100.  $72 - 27$  is divisible by
- (1) 7                                      (2) 9                                      (3) 8                                      (4) 6
101. How many vertices does a pyramid with square base have ?
- (1) 5                                      (2) 4                                      (3) 3                                      (4) 6
102. If  $x \times 15 = 75\%$  of 110, Find x
- (1) 82.5                                      (2) 8250                                      (3) 11                                      (4) 5.5
103. Which of the following numbers by which 9408 must be divided so that the quotient is a Perfect square ?
- (1) 4                                      (2) 3                                      (3) 5                                      (4) 6
104. Four-fifth of a number is more than three-fourth of the number by 4. Find the number :
- (1) 80                                      (2) 60                                      (3) 40                                      (4) 20
105. How many faces a tetrahedron has ?
- (1) 14                                      (2) 12                                      (3) 6                                      (4) 4
106. The side of a cube whose volume is  $32.768 \text{ m}^3$  is :
- (1) 4.2 m                                      (2) 6.2 m                                      (3) 3.2 m                                      (4) 8.2 m
107. The angle sum of all interior angles of a convex polygon of sides 7 is :
- (1)  $180^\circ$                                       (2)  $540^\circ$                                       (3)  $630^\circ$                                       (4)  $900^\circ$

108. The area of trapezium is  $720 \text{ cm}^2$ . The ratio of the parallel sides is  $2 : 1$ . If the distance between the parallel sides is  $20 \text{ cm}$ , find the length of the parallel sides.
- (1)  $20, 30 \text{ cm}$                       (2)  $24, 48 \text{ cm}$                       (3)  $42, 46 \text{ cm}$                       (4) None of these
109. The expansion  $(6a + 3b)^2$  can be written as
- (1)  $36a^2 - 36ab + 9b^2$                       (2)  $36a^2 + 36ab + 9b^2$   
(3)  $36a^2 - 9b^2 + 36ab$                       (4)  $6a^2 + 9b^2 + 36ab$
110. Sum of rational number  $\frac{4}{7}$  and its reciprocal is
- (1)  $\frac{28}{25}$                       (2)  $\frac{65}{28}$                       (3)  $-\frac{28}{65}$                       (4)  $-\frac{65}{28}$
111. At a dosa corner, 500 students have visited in three months. Out of those, 20 students have not taken anything. The pie chart for the students who had something is given below :

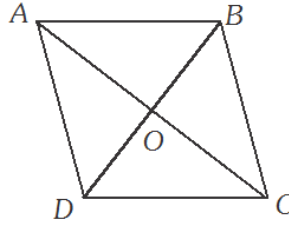


- The number of students who have not taken dosa is :
- (1) 160                      (2) 120                      (3) 180                      (4) 240
112. Find the value of the expression  $(7^\circ - 4^\circ) \times (7^\circ + 4^\circ)$
- (1) 0                      (2) 1                      (3) 2                      (4) 3
113. If  $21z5$  is a multiple of '9', where  $z$  is a digit, then the value of ' $z$ ' is :
- (1) 2                      (2) 3                      (3) 5                      (4) 1
114. A man purchased a table for Rs.1,260, and due to some scratches on the top, he had to sell it for Rs.1197. Find his loss percent.
- (1) 9%                      (2) 8%                      (3) 6%                      (4) 5%
115. The value of  $\sqrt{214 + \sqrt{130 - \sqrt{88 - \sqrt{44 + \sqrt{25}}}}}$  :
- (1) 14                      (2) 15                      (3) 16                      (4) 17
116. Neglecting air resistance other upward velocity of the water in the stream of a particular fountain is given by the formula  $v = -32t + 28$  where  $t$  is the number of seconds after the water leaves the fountain while going upward, the water slows down until at the top of the stream, the water had a velocity of 0 feet per second. How long does it take a droplet of water to reach the maximum height:-
- (1) 0.863 sec                      (2) 0.532 sec                      (3) 0.895 sec                      (4) 0.875 sec

117. 
$$\frac{0.76 \times 0.76 \times 0.76 + 0.24 \times 0.24 \times 0.24}{0.76 \times 0.76 - 0.76 \times 0.24 + 0.24 \times 0.24}$$

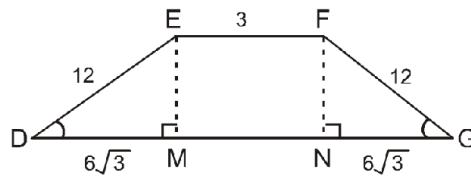
- (1) 1                                      (2) -1                                      (3) 0.01                                      (4) 0.1

118. Find the length of BC of the rhombus when AC = 8cm, DB = 6 cm



- (1) 5 cm                                      (2) 7 cm                                      (3) 10 cm                                      (4) 9 cm

119. In given figure, area of isosceles trapezium DEFG is :



- (1)  $18(1 + \sqrt{3})$                                       (2)  $18\sqrt{3}$                                       (3)  $\sqrt{3} + 1$                                       (4)  $18(1 + 2\sqrt{3})$

120. The original price of a washing machine which was bought for Rs 13,500 inclusive of 8% VAT is :

- (1) Rs 12,420                                      (2) Rs 14,580                                      (3) Rs 12,500                                      (4) Rs 13,492



## SAMPLE PAPER ANSWER KEY

Q.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A.	2	3	3	1	3	1	4	1	3	3	4	2	3	4	3	2	3	2	3	2
Q.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
A.	1	1	4	4	3	2	1	3	4	2	3	1	1	1	4	3	3	4	2	4
Q.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
A.	1	4	3	3	4	4	1	1	4	4	2	1	2	3	3	2	2	2	4	4
Q.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
A.	4	3	1	2	2	2	2	2	3	3	3	4	4	3	3	4	2	3	2	1
Q.	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
A.	1	2	2	1	2	1	3	1	1	1	2	1	1	4	1	2	4	2	3	2
Q.	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
A.	1	4	2	1	4	3	4	2	2	2	3	1	4	4	2	4	1	1	4	3