NAAHAR PUBLIC SCHOOL (CBSE) SENIOR SECONDARY, VILLUPURAM
ACADEMIC YEAR (2022-2023)
BYJU'S MOCK TEST **DATE: 17.12.2022**
CLASS: VIII **MARKS: 480**
SUB: SCIENCE & MATHS **DUR: 3 Hrs**

Choose the correct option.

Question 1.
The pressure which is exerted by air around us is known as
(a) force (b) atmospheric pressure (c) muscular force (d) friction

Question 2.
Force acting on per unit area is called
(a) non-contact forces (b) contact forces (c) force (d) pressure

Question 3.
A _____ exerted by an object on another is a force.
(a) Push or pull (b) Contact or non-contact force (c) Pressure (d) Magnitude

Question 4.
The force exerted by the earth to pull the object towards itself is called
(a) electrostatic force (b) gravitational force (c) muscular force (d) contact force

Question 5.
Muscular force is also called _____ force.
(a) non-contact (b) contact (c) gravitational (d) magnetic

Question 6.
The force exerted by a charged body on another char
(a) gravitational force (b) electrostatic force (c) non-contact force (d) contact force

Question 7.
Force changes the
(a) motion of body (b) speed of body (c) shape of body (d) all of these

Question 8.
The force exerted by our muscle is called
(a) electrostatic force (b) muscular force (c) gravitational force (d) non-contact force

Question 9.
1 kilogram weight is equal to
(a) 98 N (b) 9.8 N (c) 0.98 N (d) 0.098 N

Question 10.
A spring balance is used for measuring
(a) mass (b) weight (c) pressure (d) speed

Question 11.
Two boys A and B are applying force on a block. If the block moves towards the boy A, which one of the following statements is correct?
(a) Magnitude of force applied by A is greater than that of B.
(b) Magnitude of force applied by A is smaller than that of B.
(c) Net force on the block is towards B.
(d) Magnitude of force applied by A is equal to that of B.

Question 12.
When two forces act in opposite directions, then net force acting is the
(a) sum of two forces (b) difference between two forces (c) both of these (d) none of these

Question 13.
The strength of force is expressed by its
(a) weight (b) mass (c) magnitude (d) longitudinal force

Question 14.
Leaves fall down on the ground due to
(a) electrostatic force (b) magnetic force (c) gravitational force (d) muscular force

Question 15.
State of motion is described by
(a) Position of rest (b) Position of motion
(c) Both by the state of rest or motion (d) None of these

Question 16.
When the hammer strikes the gong of an electric bell, which of the following force is responsible for the movement of hammer?
(a) Gravitational force alone (b) Magnetic force alone
(c) Electrostatic force alone (d) Frictional force alone

Question 17.
During dry weather, while combing hair, sometimes we experience hair flying apart. The force responsible for this is
(a) force of gravity (b) force of friction (c) electrostatic force (d) magnetic force

Question 18.
A batsman hits the ball for a boundary past the bowler i.e. four runs. The batsman thus
(a) Changes the direction & speed of the ball (b) Does not change the direction but speed only
(c) Does not change the speed but direction only (d) Does not change either direction or speed
Question 19.
Two objects repel each other. This repulsion could be due to
(a) frictional force only (b) electrostatic force only
(c) magnetic force only (d) either a magnetic or an electrostatic force
Question 20.
Which one of the following forces is a contact force?
(a) Force of gravity (b) Magnetic force (c) Force of friction (d) Electrostatic force
Question 21.Gravity is
(a) Repulsive (b) Attraction + Repulsive force (c) Attractive force (d) Not a force
Question 22.
A push or pull on an object is called
(a) Pressure (b) Push-pull (c) Force (d) All of the above
Question 23.
If two forces act in the opposite directions on an object, the net force acting on it is the
(a) Sum of the two forces (b) difference between the two forces
(c) Multiplication of the two forces (d) Division of the two forces
Question 24.
Which of the following is proper example(s) to explain that force on an object may change its shape
(a) A ball of dough rolled into chapatti (b) Pressing a rubber ball kept on table
(c) Making model using clay (d) All of the above
Question 25.
A ball rolling on the ground slows down and finally stops. This is because of
(a) Force (b) Less force applied (c) Friction (d) None of the above
Question 26.
Force of friction always acts on moving objects and its direction shall be ____
(a) On any direction (b) Along the direction of motion
(c) Perpendicular to the direction of motion (d) Opposite to the direction of motion
Question 27.
If In a tug-o-war, when two teams are pulling a rope, and the rope does not move towards any team, it implies that
(a) Equal force is being applied in the same direction
(b) Equal Force is being applied in opposite direction
(c) No force is applied in any direction (d) Cannot be explained
Question 28.
An example of a non- contact force is
(a) Force exerted by us to lift a bucket (b) Push a stationary car
(c) Force exerted by magnet (d) Hit a cricket ball for a 6 run
Question 29.
Pressure =
(a) Area / force on which it acts (b) force / area on which it acts
(c) Volume / force on which it acts (d) Force / volume on which it acts
Question 30.
Reproduction age in women starts when their
(a) menstruation starts (b) breasts start developing
(c) body weight increases (d) height increases
Question 31:
The number of modes by which animals reproduce are
(a) two (b) three (c) four (d) none of these
Question 32.
Binary fission is observed in
(a) Hydra (b) yeast (c) Amoeba (d) human being
Question 33.
Asexual reproduction is observed in
(a) cow (b) buffalo (c) sponge (d) hen
Question 34.
In Hydra, the mode of reproduction is
(a) asexual (b) sexual (c) both (a) and (b) (d) none of these
Question 35.
The animals that produce new young ones are called
(a) viviparous (b) oviparous (c) both (d) none of these
Question 36.
The male gamete or sperm consists of
(a) three parts (b) two parts (c) four parts (d) none of these

Question 37.
Ovum or eggs are formed in
(a) ovary (b) testes (c) penis (d) ovident
Question 38.
Internal fertilisation takes place
(a) inside male body (b) inside female body (c) outside female body (d) outside male body
Question 39.
In humans, the development of fertilised egg takes place in the
(a) ovary (b) oviduct (c) testis (d) uterus
Question 40.
The cell formed after fertilisation is called
(a) embryo (b) foetus (c) zygote (d) egg
Question 41.
The fusion of sperm and ova usually occur in the
(a) ovary (b) uterus (c) testes (d) oviduct
Question 42.
Sets of reproductive terms are given below. Choose the set that has an incorrect combination.
(a) Sperm, testis, sperm duct, penis (b) Menstruation, egg, oviduct, uterus
(c) Sperm, oviduct, egg, uterus (d) Ovulation, egg, oviduct, uterus
Question 43.
Which of the following shows external fertilisation?
(a) Frog (b) Human being (c) Cow (d) Hen
Question 44: Which one of the following is not a part of female reproductive organs?
(a) Uterus (b) Ovary (c) Oviduct (d) Penis
Question 45 .In the list of animals given below, hen is the odd one out.'human being, cow, dog, hen'
The reason for this is
(a) it undergoes internal fertilisation (b) it is oviparous
(c) it is viviparous (d) it undergoes external fertilisation
Question 46.
Animals exhibiting external fertilisation produce a large number of gametes. Pick the appropriate reason from the following
(a) The animals are small in size and want to produce more off springs.
(b) Food is available in plenty in water.
(c) To ensure better chance of fertilisation.
(d) Water promotes production of large number of gametes.
Question 47.
Which is not a viviparous animal?
(a) Human being (b) Cow (c) Dog (d) Butterfly
Question 48.
Budding occurs in
(a) Amoeba (b) dog (c) Paramecium (d) yeast
Question 49.
The female gamete is called
(a) ova (b) sperm (c) zygote (d) uterus
Question 50.
The male gamete is called
(a) sperm (b) ova (c) embryo (d) zygote
Question 51.
Adolescence is the period of
(a) 5 to 10 years (b) 11 to 19 years (c) 22 to 28 years (d) 30 to 40 years
Question 52.
When a sperm having X-chromosome fuses with the ovum, the child born will be
(a) male (b) female (c) male as well as female twin (d) it depends on the chance of fusion
Question 53.
How many pairs of Chromosomes are found in nuclei of their cells?
(a) 22 pairs (b) 23 pairs (c) 24 pairs (d) 25 pairs
Question 54.
Children gain height during
(a) adolescence (b) endocrine (c) balanced food (d) menarche
Question 55.
Testes secrete (a) thyroxin (b) estrogen (c) testosterone (d) iodine
Question 56.
Adam's apple is
(a) enlarged larynx (b) mammary glands (c) apple of adam (d) red apple

Question 57.
The chemical substances which are secreted from endocrine glands are called
(a) puberty (b) hormones (c) estrogen (d) adolescence
Question 58.
Out of these which one determines the sex of the baby?
(a) Hormones (b) Chloroplast (c) Chromosomes (d) Pituitary gland
Question 59.
What is the stoppage of menstruation called?
(a) Menarche (b) Menopause (c) Gametes (d) Insulin
Question 60.
Which hormone is secreted by adrenal glands?
(a) Adrenalin (b) Insulin (c) Testosterone (d) Estrogen

MATHEMATICS

61: The number of terms in the expression $2x^2+3x+5$ is
(a) 1 (b) 2 (c)3 (d)5
62:The coefficient of x in the expression -7x +5 is
(a) 5 (b) -7 (c)7 (d)x
63:The numerical coefficient of y in the expression 2x+3y+7z is
(a) 2 (b) 3 (c)7 (d)3y
64:The expression y+z+100 is a
(a) monomial (b) literal number (c) binomial (d) trinomial
65:The expression 7xy has the factors
(a) 7,x,y (b) x,y (c) 7,x (d) 7,y
66:The common factors of the terms 2y. 22xy is
(a) 2 (b) 2y (c) y (d) xy
67: '2' is common factor of the expressions
(a) 12a2b, 15ab2 (b) 5xy, 10x (c)10x2, -18x3, 14x4 (d)33y, -22z
68: The factorization of $7a^2+14a$ is
(a) 7(a+z) (b) 21a (c) 7(a+1) (d)7a(a+2)
69:The addition of ab-bc, bc-ca, ca-ab is
(a) 3ab+3bc+3ca (b) 0 (c) ab+bc+ca (d) ab-bc+ca
70:One of the example of binomial is
(a) 3xyz (b) 3xy+z (c)3x+y+z (d)3+x+y+z
71. On what a discount is calculated?
a. SP b. MP c. Marked price d. None of these
72. On which figure the VAT of a product is calculated?
a. SP b. CP c. Market price d. None of these
73. On which of the following percentage profit or profit loss is calculated?
a. SP b. CP c. Market price d. None of these
74. If an article sold for Rs 100 then there is a gain of Rs 20, which of the following is the gain percent?
a. 25% b. 22% c. 20% d. 16 %
75. An article is at 10% more than the CP. If discount of 10% is allowed then which of the following is right?
a. 1% gain b. 1% loss c. no gain no loss d. 1.1% loss
76. Convert the 3:4 ratios to percentages.
a. 45% b. 50% c. 75% d. 25%
77. If MP of a box is Rs 10 and a discount of 10% is allowed then what should be the sale price?
a. Rs 10 b. Rs 9 c. Rs 11 d. None of these
78. What should be the rate of interest per annum if interest is calculated quarterly?
a. Reduced to half b. Reduced to one fourth c. Is doubled d. Becomes four times
79. What time period is taken when interest is calculated half yearly?
a. Twice as much as the number of given years b. Half as much as the number of given years
c. Same as the number of given years d. None of these
80. What should be percent gain on a product when it is sold for Rs120 with a gain of Rs 20.
a. 20% b. 25% c. 22% d. 16.25%
81. Which of the following is correct?
I. Cube of a negative number is always positive. II. Cube of a negative number is always negative.
III. Cube of a negative number may be positive or negative. IV. All of the above
82. If the digit in one's place of a number is 2, then the last digit of its cube will be:
a. 2 b . 4 c. 6 d. 8

83. If the digit in one's place of a number is 3, then the last digit of its cube will be:

I. 3 II. 6 III. 7 IV. 9

84. If the digit in one's place of a number is 6, then the last digit of its cube will be:

I. 6 II. 3 III. 2 IV. 8

85. The volume of a cubical box is 64 cm3. Which of the following is its side?

I. 2 cm II. 4 cm III. 6 cm IV. 8 cm

86. Which of the following is a perfect cube?

I. 10000 II. 243 III. 343 IV. 270000

87. If a number is doubled then which of the following is a correct statement?

I. Its cube is two times the cube of the given number.

II. Its cube is three times the cube of the given number.

III. Its cube is six times the cube of the given number.

IV. Its cube is eight times the cube of the given number.

88. Which of the following is equal to its own cube?

I. -1 II. -2 III. -3 IV. -9

89. Which of the following is the cube root of 27000?

I. 30 II. 300 III. 3000 IV. None of these

90. Which of the following is the cube root of -64/243?

I. 7/4 II. -7/4 III. 4/7 IV. -4/7

91. (o, y) are the co-ordinates of a point lying on which of the following?

(i) origin (ii) x-axis (iii) y-axis (iv) none of these.

92. The point (3, 2) is nearer to:

(i) x-axis (ii) y-axis (iii) origin (iv) none of these.

93. The point (–5, 6) is nearer it:

(i) x-axis (ii) y-axis (iii) origin (iv) none of these.

94. The point (–3, –3) is

(i) nearer to x-axis (ii) y-axis (iii) near to origin (iv)equidistant from x-axis and y-axis.

95. The point (0, 4) lies on which of the following:

(i) x-axis (ii) y-axis (iii) origin (iv) none of these.

96. The point (–3, 0) livs on which of the following?

(i) x-axis (ii) y-axis (iii) origin (iv) none of these.

97. The poits (–3, 2) and (2 , –3) represent:

(i) different points (ii) same point (iii) the origin (iv) none of these.

98. By joining (–1, –1), (0, 0) and (3, 3) represent:

(i) a triangle (ii) a curved line (iii) a straight line passing through origin

(iv) a straight line not passing through origin.

99. By joining (–3 , 2) , (–3 , –3) and (–3, 4), which of the following is obtained?

(i) a triangle (ii) A straight line not passing through origin

(iii) A straight line passing through origin (iv) none of these.

100. Which of the following points lies on y-axis?

(i) (–4 , 0) (ii) (4 ,0) (iii) (0 , –4) (iv)(–4 , 4)

101. How many number of faces does a solid sphere has?

I. 1 II. 2 III. Many IV. None

102. How many number of vertices does a cone has?

I. 1 II. 2 III. 3 IV. None of these

103. How many number of faces does a hemisphere has?

I. 1 II. 2 III. Many IV. None of these

104. Which of the following is a triangular pyramid having all the faces as equilateral triangle?

I. Rectangular pyramid II. Square pyramid III. Tetrahedron IV. None of these

105. Which of the following is the number of vertices of sphere?

I. 0 II. 1 III. 2 IV. 4

106. Which of the following can be other name of a cylinder?

I. A triangular prism II. A rectangular prism III. A vertical prism IV. A circular prism

107. If the base of a prism is a polygon of □n□ sides, then which of the following is the number of faces of the prism?

I. n+2 II. n+1 III. N IV. n-1

108. If F, E and V represent the faces, edges and vertices respectively of a polyhedral then which of the following is the Euler□s formula?

I. F - V + E = 2 II. F + V + E = 2 III. F + V - E = 2 IV. F + V =2 - E

109. Which of the following is the base of a tetrahedron?

I. A square II. A rectangle III. A circle IV. A triangle

110. Which of the following is the other name of a cube?

I. A tetrahedron II. A regular hexahedron III. A square antiprism IV. A cuboctanedron

111.The value of 'x' in 3x – 4 = 7 is

(A) 1 (B) 11/3 (C) 3/11 (D) 7/12

112.On solving x/2 + 5/3 = -1/2, we get x =

(A) -13/3 (B) -3/13 (C) 13/3 (D) 3/13

113-In 15/4 – 7x = 9, x=

(A) 4/3 (B) ¾ (C) -4/3 (D) -3/4

114-Sum of two numbers is 84. One of the numbers is 20 more than the other. The smaller number is

(A) 12 (B) 22 (C) 32 (D) 42

115-What should be added to thrice the rational number -5/2 to get 2/7?

(A) 107/5 (B) 5/107 (C) 14/109 (D) 109/14

116-The perimeter of a rectangle is 30cm. If its breadth is 3cm then its length is

(A) 4.5cm (B) 5cm (C) 5.5cm (D) 6cm

117-The present age of Sonu is 1/3rd of his father's present age. After 4 years the sum of their ages will be 60 years. The present age of Sonu is

(A) 11 years (B) 12 years (C) 13 years (D) 14 years

118-Salim has 4 times as many one rupees coins as he has five rupees coins. If he has a total of 81 rupees then the denomination of one rupee coin he has

(A) 30 (B) 36 (C) 42 (D) 46

119-The sum of three consecutive multiple of 9 is 81. The smallest number is

(A) 9 (B) 18 (C) 27 (D) 36

120-The difference between two numbers is 44. The ratio of these numbers is 3:5. The smaller number is

(A) 22 (B) 44 (C) 66 (D) 88