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Zonal Institute of Education and Training (ZIET) Bhubaneswar

Multiple Choice Questions (MCQ)
MATHEMATICS
For Class VII (Seventh)



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CLASS VII (MATHEMATICS)

CHAPTER -1. INTEGERS.

Q1.Which of the following is the additive inverse of -27 ?

- (i) -27 (ii) 27 (iii) 0 (iv) 1

Q2.Which of the following is the value of $(-12) \times (-2) \times (-5)$?

- (i) -120 (ii) 120 (iii) 0 (iv) 1

Q3.Which of the following is the value of $(-4) \times [(-5) + (-3)]$?

- (i) -32 (ii) 120 (iii) 32 (iv) -23

Q4.A shop keeper makes a profit of Rs.5 on each pen & incurs a loss of Rs. 2 on each pencil box. What will be his net profit if he sells ten pens & ten pencil boxes?

- (i) 20 (ii) 30 (iii) 50 (iv) 100

Q5.Which of the following is the simplest form of $[(-5) + (-7)] / [(-2) + (-1)]$?

- (i) -12 (ii) 12 (iii) 4 (iv) -4

CHAPTER -2. FRACTIONS & DECIMALS .

Q1. Which of the following is the equivalent fraction of $\frac{3}{4}$ with numerator 18 ?

- (i) $\frac{18}{12}$ (ii) $\frac{18}{20}$ (iii) $\frac{18}{4}$ (iv) $\frac{18}{24}$

Q2. Which of the following is the perimeter of the rectangle of length $\frac{3}{4}$ m
& breadth $\frac{1}{4}$ m?

- (i) 2 m (ii) 1 m (iii) $\frac{3}{8}$ m (iv) 4 m

Q3. In a class of 40 students, $\frac{3}{5}$ of the total number of students are girls. How many students of the class are boys?

- (i) 24 (ii) 20 (iii) 16 (iv) 15

Q4. A car runs 16 km using 1 litre of petrol. How much distance will it cover using 2.5 litres of petrol?

- (i) 16 km (ii) 40 km (iii) 32 km (iv) 50 km

Q5. Which of the following is the value of 0.1×51.7

- (i) 517 (ii) 51.7 (iii) 0.517 (iv) 5.17

Q6. A vehicle covers a distance of 89.1 km in 2.2 hours. What is the average distance covered by it in 1 hour?

- (i) 40.5 m (ii) 40.5 km (iii) 4.05 km (iv) 405 km

CHAPTER -3. DATA HANDLING.

Q1.Which of the following is the mean of first five natural numbers ?

- (i) 2 (ii) 3 (iii) 4 (iv) 5

Q2. Which of the following is the mode of the data 1,1,2,4,3,2,1,2,2,4 ?

- (i) 1 (ii) 2 (iii) 3 (iv) 4

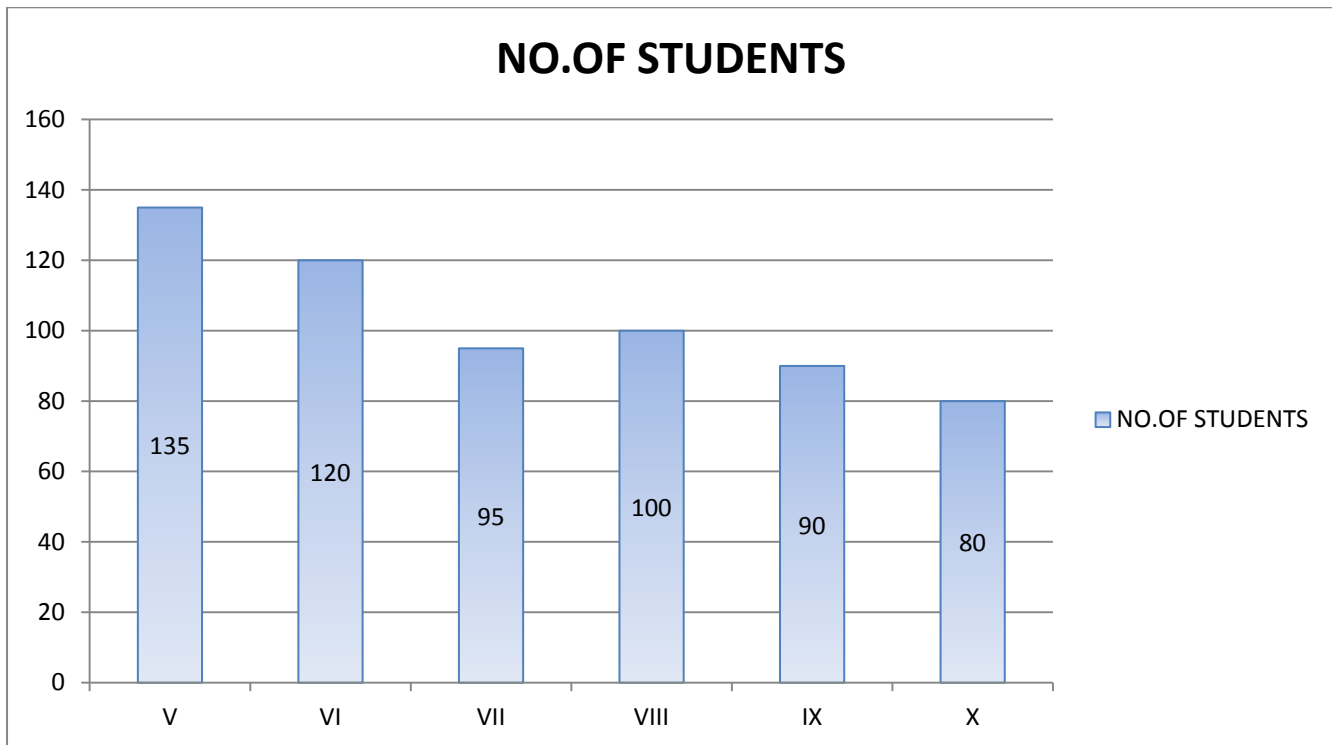
Q3.An unbiased die is tossed once. Which of the following is the probability of getting an even number?

- (i) 1 (ii) $\frac{1}{2}$ (iii) $\frac{1}{3}$ (iv) $\frac{1}{4}$

Q4.A container contains 3 red & 4 black balls. If one ball is selected at random from the container, what is the probability that it is black?

- (i) $\frac{3}{7}$ (ii) $\frac{4}{7}$ (iii) 1 (iv) zero

Q5.Study the following graph & answer the following questions?



(a)Which class has the maximum number of children ?

- (i) V (ii) VI (iii) VII (iv) VIII

(b)Which class has the minimum number of children ?

- (i) IX (ii) X (iii) VII (iv) VIII

(c) Which of the following is the ratio of students of class VI to the students of class VIII ?

- (i) 4 (ii) 5:6 (iii) 6:5 (iv) VIII

Q6. A number is selected at random from the first five natural numbers. Find the probability that the number is a prime?

- (i) $\frac{3}{7}$ (ii) $\frac{4}{7}$ (iii) $\frac{3}{5}$ (iv) $\frac{2}{5}$

CHAPTER -4.SIMPLE EQUATIONS.

Q1.Which of the following is the value of 'm' in the equation $3m - 14 = 4$

- (i) 4 (ii) 5 (iii) 6 (iv) 7

Q2.Which of the following is the solution of the equation $2x - 3y = 1$

- (i) $x = 1, y = 1$ (ii) $x = 1, y = 2$ (iii) $x = 2, y = 1$ (iv) $x = -1, y = 2$

Q3.The sum of three times a number & 11 is 32. Find the number?

- (i) 6 (ii) 7 (iii) 10 (iv) 21

Q4.The sum of the ages of three persons is 50 years. What will be the sum their

Ages after 5 years?

- (i) 65 (ii) 55 (iii) 150 (iv) 21

Q5. One – fifth of a number minus 4 gives 3. Find which of the following is the number?

- (i) 20 (ii) 7 (iii) 15 (iv) 35

CHAPTER -5.LINES & ANGLES.

Q1. A ray has how many end points?

- (i) one (ii) two (iii) three (iv) zero

Q2. What is the sum of the measures of two supplementary angles?

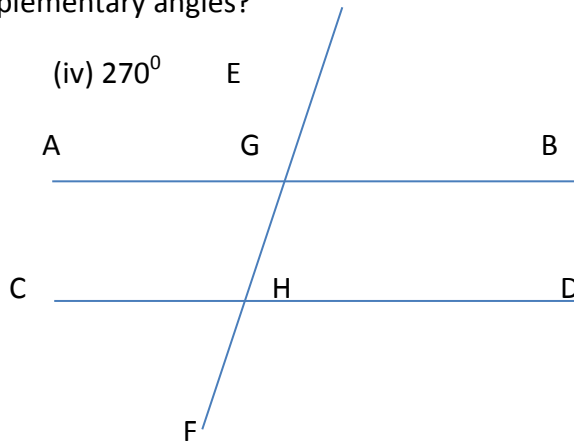
- (i) 90° (ii) 180° (iii) 360° (iv) 270° E

Q3. In the given figure, $AB \parallel CD$

& EF is the transversal. If angle $AGH = 60^\circ$,

what is the measure of angle DHF?

- (i) 90° (ii) 120° (iii) 180° (iv) 105°



Q4. A line has how many end points?

- (i) one (ii) two (iii) three (iv) zero

Q5. What is the sum of the measures of two complementary angles?

- (i) 90° (ii) 120° (iii) 180° (iv) 105°

CHAPTER -6.THE TRIANGLE & ITS PROPERTIES &

CHAPTER -7. CONGRUENCE OF TRIANGLES.

Q1.How many altitudes can a triangle have ?

- (i) one (ii) two (iii) three (iv)four

Q2.The exterior angle of a triangle is 120° & one of its interior opposite angles is 70° .Find the measure of its other interior opposite angle ?

- (i) 90° (ii) 50° (iii) 60° (iv) 100°

Q3.The angles of a triangle are in the ratio 2:3:5 . What is the largest angle of the triangle?

- (i) 54° (ii) 36° (iii) 90° (iv) 100°

Q4. ΔABC is right-angled at C. If $AC = 5\text{cm}$ & $BC = 12\text{ cm}$, what is the length of AB ?

- (i) 7cm (ii) 17 cm (iii) 13cm (iv) 20cm

Q5.What is the perimeter of the rectangle whose length is 40cm & a diagonal is 41cm?

- (i) 164cm (ii) 162 cm (iii) 81cm (iv) 98cm

Q6.Among two congruent angles, one has a measure of 70° . What is the measure of the other angle?

- (i) 140° (ii) 35° (iii) 70° (iv) 110°

Q7. $\Delta ABC \equiv \Delta DEF$. If $AB = 7\text{cm}$, what is the length of DE ?

- (i) 14cm (ii) 16 cm (iii) 7cm (iv) 18cm

CHAPTER -8. COMPARING QUANTITIES.

Q1.Which of the following is the ratio of 3Km to 300m?

- (i) 10:1 (ii) 1:10 (iii) 100 : 1 (iv) 1:100

Q2.If $5:x = 3:4$, what will be the value of 'x'

- (i) $3/20$ (ii) $15/4$ (iii) $20/3$ (iv) $4/15$

Q3.In a computer lab, there are 3 computers for every 6 students. How many computers will be needed for 24 students?

- (i) 18 (ii) 12 (iii) 4 (iv) 8

Q4.Out of 32 students, 8 are absent. What per cent of the students are absent?

- (i) 40% (ii) 8% (iii) 4% (iv) 25%

Q5.In a city, 30% are females, 40% are males & remaining are children. What per cent are children?

- (i) 40% (ii) 30% (iii) 60% (iv) 70%

Q6.Ram saves Rs. 400 from her salary. If this is 10% of her salary, what is her salary?

- (i) 40000 (ii) 9000 (iii) 4000 (iv) 10000

Q7.An article purchased for Rs.1000 is sold for Rs.1100.What is his gain percentage?

- (i) 40% (ii) 30% (iii) 20% (iv) 10%

Q8.You have Rs.2400 in your account & the interest rate is 5% per annum. After how many years would you earn Rs.240 as interest?

- (i) 1yr. (ii) 2yrs. (iii) 4yrs. (iv) 8yrs.

Q9.The population of a city decreased from 25000 to 24500. Find the percentage decrease in population?

- (i) 4% (ii) 3% (iii) 2% (iv) 1%

Q10.What rate gives Rs. 280 as interest on a sum of Rs.56000 in 2 years?

- (i) 2.5% (ii) 0.25% (iii) 25% (iv) 0.025%

CHAPTER -9.RATIONAL NUMBERS.

Q1.Which of the following is the standard form of $36/-24$?

- (i) $-3/2$ (ii) $3/2$ (iii) $2/3$ (iv) $2/-3$

Q2.What is the value of $(-7/5) + (-2/3)$

- (i) $-31/15$ (ii) $31/15$ (iii) $15/31$ (iv) $15/-31$

Q3.Which of the following is the additive inverse of $-4/7$?

- (i) $-4/7$ (ii) $4/7$ (iii) zero (iv) $7/4$

Q4.Which of the following is the multiplicative inverse of $-4/5$?

- (i) $4/5$ (ii) $-5/4$ (iii) zero (iv) $5/4$

Q5.What is the value of $(-7/5) \times (-15/14)$

- (i) $-3/2$ (ii) $3/2$ (iii) $2/3$ (iv) $-2/3$

Q6.How many rational numbers are there between 2 & 4 ?

- (i) zero (ii) one (iii) two (iv) uncountable

Q7. What is the value of $(-7/15) \div (-14/15)$?

- (i) $-1/2$ (ii) $1/2$ (iii) $98/225$ (iv) -2

CHAPTER -10.PRACTICAL GEOMETRY &

CHAPTER-11.PERIMETER & AREA.

Q1.The circumference of a circle is 44 cm. What is its radius ?

- (i) 42cm (ii) 21cm (iii) 7cm (iv) 14cm

Q2.What is the area of the circle of radius 7cm ?

- (i) 49cm^2 (ii) 22cm^2 (iii) 154cm^2 (iv) 308cm^2

Q3.Diameter of a circular garden is 9.8cm.Which of the following is its area?

- (i) 75.46cm^2 (ii) 76.46cm^2 (iii) 74.4cm^2 (iv) 76.4cm^2

Q4.If each side of a square is 1m, which of the following is its area?

- (i) 10cm^2 (ii) 100cm^2 (iii) 1000cm^2 (iv) 10000cm^2

Q5.What is the area of a rectangle of dimensions 12cm x 10cm?

- (i) 44cm^2 (ii) 120cm^2 (iii) 1440cm^2 (iv) 1200cm^2

CHAPTER -12 & 13. ALGEBRAIC EXPRESSIONS & EXPONENTS AND POWERS.

Q1.Which of the following is the coefficient of 'x' in $3x^3 - 4x^2 + 7x - 8$?

- (i) 3 (ii) -4 (iii) 7 (iv) -8

Q2.What is the sum of $(3x - 7y + 5z)$ & $(-2x + 3y)$?

- (i) $5x - 4y$ (ii) $x - 4y + 5z$ (iii) $5x - 4y + 5z$ (iv) $x - 10y + 5z$

Q3.What is the value of $(24ab - 10b - 18a) - (30ab + 12b + 14a)$?

- (i) $-(6ab + 22b + 32a)$ (ii) $-54ab - 12b$ (iii) $6ab + 22b + 32a$ (iv) $6ab - 22b$

Q4.What should be added to $-5x + 3y$ to get $3x - 2y$?

- (i) $5x - 4y$ (ii) $8x - 5y$ (iii) $-8x - 4y$ (iv) $2x - 10y$

Q5.What is the value of $(3x^2 - 5x + 6)$ at $x=1$?

- (i) 3 (ii) 4 (iii) -8 (iv) 14

Q6.Which of the following is the exponential form of '243'

- (i) 3^2 (ii) 2^3 (iii) 3^5 (iv) 5^3

Q6.Which of the following is the simplest form of $(-3)^2 \times (-4)^3$

- (i) 576 (ii) -576 (iii) -64 (iv) -36

Q7.Which of the following is the simplest form of $[(2)^{20} \div (2)^{18}] \times 2^3$

- (i) 8 (ii) -8 (iii) -32 (iv) 32

Q8.Which of the following is the standard form of 12700 ?

- (i) 1.27×10^4 (ii) 12.7×10^4 (iii) 127×10^2 (iv) 1270×10

Q9.Which of the following is the simplest form of $9 \times 10^3 + 2 \times 10^2$?

- (i) 9000 (ii) 9002 (iii) 9200 (iv) 209

Q10.Which of the following is the value of $(-1)^{100} \times (-1)^{200}$?

- (i) 20000 (ii) -1 (iii) 1 (iv) 2

CHAPTER -14 & 15. SYMMETRY & VISUALISING SOLID SHAPES.

Q1.A regular pentagon has how many lines of symmetry ?

- (i) 3 (ii) 4 (iii) 5 (iv) 6

Q2.Which of the following letters of the English alphabet has reflectional symmetry about a vertical mirror?

- (i) A (ii) B (iii) C (iv) D

Q3.What is the order of rotational symmetry of a square?

- (i) 3 (ii) 4 (iii) 5 (iv) 6

Q4.How many edges are there in a cuboid?

- (i) 3 (ii) 4 (iii) 5 (iv) 6

Q5.Which of the following represents the sum total of the number of dots on the opposite faces of a die ?

- (i) 9 (ii) 8 (iii) 7 (iv) 6

Q6.Three cubes each with 2cm edge are placed side by side to form a cuboid. What will be the length of the cuboid?

- (i) 8cm (ii) 4cm (iii) 6cm (iv) 9cm