



GRADE: VII	SUBJECT: MATHEMATICS	DATE: 10.03.2025	TIME: 2HRS	MARKS: 60
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SECTION A

Q.I OBJECTIVE TYPE QUESTIONS.

(10Q× 1M=10M)

- 1) Perimeter of a square = ____.
a) $4 + \text{side}$ b) $2 \times \text{side}$ c) $\text{side} \times \text{side}$ d) $4 \times \text{side}$
- 2) $\frac{1}{5} \div \frac{4}{5}$ equal to:
a) $\frac{4}{5}$ b) $\frac{1}{5}$ c) $\frac{5}{4}$ d) $\frac{1}{4}$
- 3) The product of $\frac{11}{13}$ and 4 is:
a) $17 \frac{2}{5}$ b) $3 \frac{5}{13}$ c) $\frac{44}{13}$ d) $\frac{13}{44}$
- 4) $39.46 \div 1000$
a) 39460 b) 3946 c) **0.03946** d) 3946000
- 5) Circumference of a circle = ____.
a) πd b) $\text{base} \times \text{height}$ c) $2r$ d) $2\pi rd$
- 6) Measure of the supplement of an angle of 75° is
a) **105°** b) 100° c) 15° d) 85°
- 7) The reciprocal of $\frac{-1}{2}$ is
a) **-2** b) -1 c) 2 d) 0
- 8) If diameter of a circle is 10cm then radius = ____.
a) 20cm b) 30cm c) 100cm d) **5cm**
- 9) A Cube has ____ faces and ____ edges.
a) 4,6 b) **6,12** c) 8,16 d) 4,4
- 10) The coefficient of $-x$ is
a) 1 b) 0 c) **-1** d) x

SECTION B

Q.II Fill in the blanks.

(5Q × 1M=5M)

- 1) A line has no end points.
- 2) If $3 - x = -4$ then $x =$ 7.
- 3) The corners of a solid shape are called its **vertices**.
- 4) A Circle has **infinite number** of lines of symmetry.
- 5) $a^m \times a^n =$ a^{m+n} .

Q.III True or False**(5Q × 1M = 5M)**

- 1) Two adjacent angles always form a linear pair. = **False**
- 2) The value of $\pi = \frac{22}{7}$ or 3.14 = **True**
- 3) Area of a Parallelogram is $4 \times \text{side}$. = **False**
- 4) A Square has four lines of symmetry. = **True**
- 5) $2^0 + 5^0 + 7^0 = 14$ = **False**

SECTION C**(5Q × 2M = 10M)****Q.IV Solve the following.**

- 1) Express $7 \times 7 \times 7 \times 7 \times 7 \times 7$ in exponential form. = 7^6
- 2) The side of square is 1.5 cm. What is its area? **Given: side = 1.5 cm., Area = side × side = 1.5 × 1.5 = 2.25 sq. cm**
- 3) State the number of lines of symmetry for i) an isosceles triangle ii) a scalene triangle = **1, no(0)**
- 4) Draw and write the names of 2-D and 3-D shapes. **2-D shapes : square, rectangle, triangle, circle 3-D: Cube, Cuboid, cone, cylinder.**
- 5) Write two equivalent fractions of $\frac{3}{4}$. = $\frac{6}{8}, \frac{9}{12}$

SECTION D**(6Q × 3M = 18M)****Q.V Simplify:**

- 1) Find the value of: i) $(-4) \div \frac{2}{3}$ ii) $\frac{3}{11} \times \frac{2}{5}$ iii) $\frac{-2}{3} + 0$

Ans: i) $-4 \times \frac{3}{2} = -12/2 = -6$ ii) $3 \times 2 / 11 \times 5 = 6/55$ iii) $(-2) + 0/3 = -2/3$

- 2) Circumference of a circle is 88 cm. Find its area.

$$\begin{aligned} 2\pi r &= 88 \text{ cm} \\ r &= \frac{88 \times 7}{2 \times 22} = 14 \text{ cm.} \\ \text{Area} &= \pi r^2 \\ &= \frac{22}{7} \times 14 \times 14 \\ &= 616 \text{ cm}^2 \end{aligned}$$

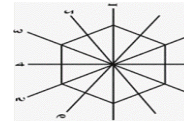
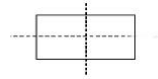
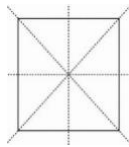
- 3) If $m = 2$, find the value of: i) $m - 2$ ii) $3m - 5$ iii) $9 - 5m$

Ans: i) **0** ii) **1** iii) **-1**

- 4) Find the value of: i) 4^4 ii) $(-8)^2$ iii) $3^3 = 256, 64, 27$

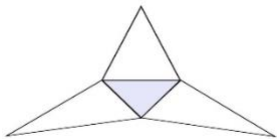
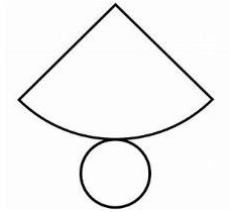
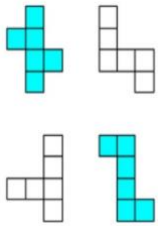
5) Draw diagram and state the number of lines of symmetry for the following figures. = **4,2,6**

i) A square ii) A rectangle iii) A regular hexagon



6) Draw net diagrams for the following:

i) Cube ii) Cone iii) Triangular pyramid



SECTION E

Q.VI Solve the following:

(3Q × 4M=12M)

1) From a circular sheet of radius 6 cm, a circle of radius 4 cm is removed. Find the area of the remaining sheet.
(Take $\pi = 3.14$).

Ans= Given R =6 cm ,r= 4 cm, Area of the outer circle= $\pi R^2=3.14 \times 6^2=3.14 \times 36= 113.04$ sq.cm

Area of the inner circle = $\pi r^2= 3.14 \times 4^2=3.14 \times 16 =50.24$ sq.cm

Therefore, Area of remaining sheet = area of outer circle – area of inner circle = $113.04 – 50.24= 62.8$ sq cm.

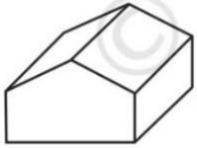
2) Simplify the expressions and find the value if x is equal to 2:

i) $x + 7 + 4(x - 5)$

ii) $3(x + 2) + 5x - 7$

Ans:i) $x + 7 + 4x - 20 = 5x - 13 = 5(2) - 13 = 10 - 13 = -3$ ii) $3x + 6 + 5x - 7 = 8x - 1 = 8(2) - 1 = 16 - 1 = 15$

3) Draw a front view, side view and top view of a given building.



Ans:

