

IX - Mathematics Assignment No.-06 - Heron's Formula - Area.Multiple choice Questions (M.C.Q.) (Pg 1-5)

Choose the correct answer from the four given answers.

Q1. The area of a  $\Delta$  of sides 3cm, 4cm, 5cm is

- (i)  $6 \text{ cm}^2$
- (ii)  $10 \text{ cm}^2$
- (iii)  $\frac{15}{2} \text{ cm}^2$
- (iv)  $8 \text{ cm}^2$

Q2. The area of an equilateral  $\Delta$  of side  $4\sqrt{3} \text{ cm}$  is

- (i)  $4 \text{ cm}^2$
- (ii)  $3 \text{ cm}^2$
- (iii)  $\sqrt{3} \text{ cm}^2$
- (iv)  $\frac{\sqrt{3}}{4} \text{ cm}^2$

Q3. The area of an isosceles  $\Delta$  of equal side 4cm and base 6cm is

- (i)  $5 \text{ cm}^2$
- (ii)  $10 \text{ cm}^2$
- (iii)  $3\sqrt{7} \text{ cm}^2$
- (iv)  $25 \text{ cm}^2$

Q4. In a right angled  $\Delta$  of sides 5cm, 12cm and 13cm, The length of perpendicular on hypotenuse from the opposite vertex is

- (i)  $\frac{60}{17} \text{ cm}$
- (ii)  $\frac{60}{15} \text{ cm}$
- (iii)  $\frac{60}{12} \text{ cm}$
- (iv)  $\frac{60}{13} \text{ cm}$

Q5. If the diagonal of a square is  $100\sqrt{2} \text{ cm}$  then the area of square in hectare is

- (i) 1 hectare
- (ii) 10 hectare
- (iii) 100 hectare
- (iv)  $100 \times 100$  hectare

Cont Pg-2

Pg-2

- (Q6) Two adjacent sides of a rectangle are 4cm and 3cm. The length of the diagonal is  
 (i) 4cm (ii) 5cm (iii) 6cm (iv) 7cm
- (Q7) Two parallel sides of a trapezium are 8cm and 6cm and distance between them is 5cm. Its area is  
 (i)  $40\text{ cm}^2$  (ii)  $45\text{ cm}^2$  (iii)  $35\text{ cm}^2$  (iv)  $65\text{ cm}^2$
- (Q8) Length of two diagonals of a rhombus are 6cm and 8cm. The side of a rhombus is  
 (i) 8cm (ii) 7cm (iii) 6cm (iv) 5cm
- (Q9) The area of a right-angled  $\triangle$  with hypotenuse 25cm and base 7cm is  
 (i)  $84\text{ cm}^2$  (ii)  $64\text{ cm}^2$  (iii)  $107\text{ cm}^2$  (iv)  $175\text{ cm}^2$
- (Q10) The perimeter of an isosceles  $\triangle$  (right-angled) having an area  $20\text{ cm}^2$  is  
 (i) 58.2 cm (ii) 68.2 cm (iii) 100cm (iv) 20cm

Cont-Pg-3

Q11. The area of a right-angled  $\triangle$  Pg-3 if the radius of its circumcircle is 5cm and the altitude drawn to the hypotenuse is 4cm. is

- (i)  $10\text{ cm}^2$
- (ii)  $15\text{ cm}^2$
- (iii)  $20\text{ cm}^2$
- (iv)  $25\text{ cm}^2$

(Q12) The area of an isosceles  $\triangle$  is  $60\text{ cm}^2$  and each equal side is 13cm. The base of the  $\triangle$  is

- (i) 6cm
- (ii) 12cm
- (iii) 18cm
- (iv) 24cm

(Q13) Area of a rectangular plot is  $180\text{ m}^2$ . The length is 18m. The perimeter of rectangle is

- (i) 56m
- (ii) 50m
- (iii) 44m
- (iv) 38m.

(Q14) A hall  $20\text{ m} \times 16\text{ m}$ . The area of four walls is equal to the area of floor and ceiling together. The height of the hall is

- (i) 7.90m
- (ii) 8.90m
- (iii) 8.89m
- (iv) 9.89m.

ContPg-4

(Q15) The area of floor of a length Pg-4 60m in  $960\text{ m}^2$ . Carpets of size  $6\text{ m} \times 4\text{ m}$  are available. Find how many carpets are required to cover the hall.

- (i) 60
- (ii) 60
- (iii) 50
- (iv) 70

(Q16) The base of a parallelogram whose area is  $45\text{ cm}^2$  and height  $4.5\text{ cm}$  is.

- (i)  $100\text{ cm}$
- (ii)  $10\text{ cm}$
- (iii)  $10\text{ cm}$
- (iv)  $5\text{ cm}$

(Q17) The perimeter of a rhombus  $\text{ABCD}$  is  $100\text{ m}$ . Diagonal  $\text{AC} = 14\text{ m}$ . Find diagonal  $\text{BD}$ .

- (i)  $48\text{ m}$
- (ii)  $40\text{ m}$
- (iii)  $36\text{ m}$
- (iv)  $24\text{ m}$

(Q18) Find the area of a quadrilateral  $\text{ABCD}$  in which  $\text{AC}$  and  $\text{BD}$  intersect each other at right angles and are of length  $15\text{ cm}$  and  $12\text{ cm}$  respectively.

- (i)  $88\text{ cm}^2$
- (ii)  $90\text{ cm}^2$
- (iii)  $92\text{ cm}^2$
- (iv)  $94\text{ cm}^2$

ContPg-5

(Q19) The diagonals of a rhombus are 15cm and 36cm. The perimeter of rhombus is

- (i) 58cm
- (ii) 68cm
- (iii) 78 cm
- (iv) 88cm

(Q20) The diagonal of a quadrilateral whose area is  $495 \text{ m}^2$  and whose offsets are 19m and 11m is

- (i) 63m
- (ii) 53m
- (iii) 43m
- (iv) 33m

### ANSWERS.

(Q1) (i)	(Q6) (ii)	(Q11) (iii)	(Q16) (IV)
(Q2) (ii)	(Q7) (iii)	(Q14) (IV)	(Q17) (i)
(Q3) (iii)	(Q8) (IV)	(Q13) (i)	(Q18) (ii)
(Q4) (IV)	(Q9) (i)	(Q14) (iii)	(Q19) (iii)
(Q5) (i)	(Q10) (ii)	(Q15) (ii)	(Q20) (iv)