VIVEK TUTORIALS

VIII (New) (English)

(Prelim)

Mathematics-(11 to 17)

DATE: 16-03-19

TIME: 2 hour

MARKS: 50

SEAT NO:

Q.1 (A) Fill in the blanks. (5)

1) For Simple Interest: $I = \frac{\text{.....}}{100}$

2) Total surface area of cylinder = ...

3) If three sides of a triangle are congruent with three corresponding sides of the other triangle, then the two triangles are congruent : ..... test.

4) Area of right angled triangle = ...

5) If two angles of a triangle and a side not included by them are congruent with corresponding angles and a corresponding side not included
by them of the other triangle then the triangles are congruent with each other : ..... test.

B) Answer the following questions (5)

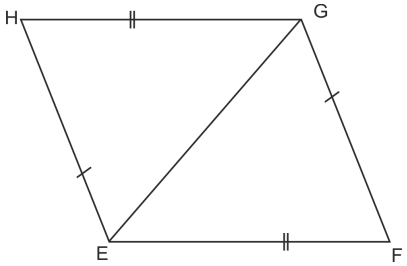
1) $2m + 7 = 9$

2) If base of a parallelogram is 18 cm and its height is 11 cm, find its area.

3) Radii of the circle is 28 cm, find its area.

4) $17p - 2 = 49$

5) In each pair of triangles in the following figures, parts bearing identical marks are congruent. State the test and correspondence of vertices by which triangles in each pair are congruent.



Q.2 Attempt the following questions. (Any five) (10)

1) Find the volume of cylinder whose height is 7 m and radius is 10 m.

2) The diagonals of a rhombus are 18 cm and 24 cm. Find the area.

3) Find the area of a parallelogram whose base is 10 cm and height is 6 cm.

4) $\frac{x-9}{x-5} = \frac{5}{7}$

5) The area of a parallelogram is 700 m^2 and base is 35 m. Find the height.

6) Find the circumference of a circle of radius 4.9 cm.

Q.3 Attempt the following questions. (Any Six) (18)

1) Find the area of the circle if its circumfence is 88 cm.

2) A chord of length 16 cm is drawn in a circle of diameter 20 cm. Calculate its distance from the centre of the circle.

3) Some tickets of Rs. 200 and some of Rs. 100, of a drama in a theatre were sold. The number of tickets of Rs. 200 sold was 20 more than the number of tickets of Rs. 100. The total amount received by the theatre by sale of tickets was Rs. 37000. Find the number of Rs. 100 tickets sold.

4) Find the total surface area of a closed cylindrical drum if its diameter is 50 cm and height is 45 cm. ($\pi = 3.14$)

5) Find the height of the cylinder whose volume is 2.31 m^3 and diameter of the base is 140 cm.

6) Find three consecutive whole numbers whose sum is more than 45 but less than 54.

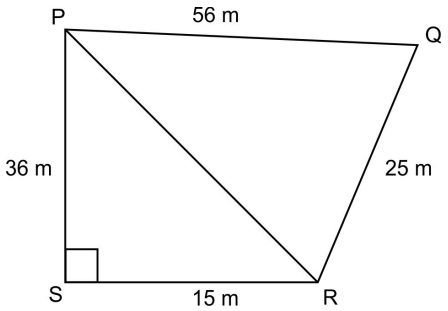
7) In a building there are 36 cylindrical pillars. The radius of each pillar is 21 cm and height is 4 m. Find the total cost of painting the curved surface area of all the pillars at the rate of Rs. 12 per m^2.

Q.4 Answer the following (Any three) (12)

1) If perimeter of a rhombus is 100 cm and length of one diagonal is 48 cm, what is the area of the quadrilateral?

2) The Perimeter of a rhombus is 40 cm and length of one diagonals is 16 cm. Find the length of other diagonal and area.

3) The floor of a building consist of 3000 tiles which are rhombus shaped and each of its diagonals are 45 cm and 30 cm in length. Find the cost of polishing the floor at the rate of Rs. 4 per m^2.

4) 

Look at the measures shown in the adjacent figure and find the area of □PQRS.