EXERCISE # 1

A. Short Answer Type Questions

- Q.1 Express in sq cm : (i) 12 sq m (ii) 35 sq m (iii) 15.5 sq m
- Q.2 Express in sq mm : (i) 34 sq cm (ii) 15 sq cm (iii) 9.5 sq cm
- Q.3 Express 0.076 sq km in : (i) sq cm (ii) sq mm
- Q.4 Express in sq cm : (i) 500 sq mm (ii) 4500 sq mm (iii) 65 sq mm
- Q.5 Express in sq m : (i) 7500 sq cm (ii) 3800 sq cm (iii) 690 sq cm
- Q.6 Express in sq km : (i) 7500000 sq m (ii) 430000 sq m (iii) 50000 sq m
- Q.7 The area of a rectangle region is 22.05 acre. If its breadth is 35 meters find its length.
- **Q.8** Find the area of the following parallelograms:



- Q.9 Find the area, in square metres of the parallelogram whose base and altitude are as under : (i) base = 12 dm, altitude = 100 dm
 - (ii) base = 124 dm, altitude = 10 dm.
- **Q.10** Find the missing values in the following table:

S.	Base	Height	Area	of	the
No.			paralle	elogr	am
(i)		5.2 cm	78 sq	cm	

(ii)	3.6 cm		6.84 sq cm
(iii)	21.7 cm	13.6 cm	

- Q.11 Find the area of a square each of whose sides measures 10.5 cm.
- Q.12 Find the area of a rectangle whose dimensions are : (i) Length = 14.5 dam, breadth = 18 m (ii) Length = 16.8 cm, breadth = 25.5 m.
- Q.13 The area of a rectangular field is 6597 m² and its length is 36 m. A boy runs around the field. How much distance will he cover in 10 rounds?
- Q.14 The area of a square plot is 6400 m^2 . Find the length of wire which can go six times along the boundary of the plot.
- **Q.15** The length and breadth of a rectangular piece of land are in the ratio 5 : 2. If the total cost of fencing it at j = 12.5 per meter is j = 25000, find its length and breadth.
- Q.16 The perimeter of a rectangle is 350 m. If the length of the rectangle is 100 m, find its breadth. Also find the area of rectangle.
- Q.17 Find the breadth of a rectangular field, if its area is 1725 sq m and the length is 75 m. Also find its perimeter.
- **Q.18** The perimeter of a rectangular sheet is 125 cm. If the breadth is 21.4 cm find its length. Also find the area.
- Q.19 The area of a square park is same as that of a rectangular park. If the side of the square park is 64 m and length of the rectangular park is 80 m, find the breadth of the rectangular park.
- **Q.20** The area of a square and a rectangle are equal. If the side of the square is 80 cm and breadth of the rectangle is 25 cm, find the length of the rectangle. Also find the perimeter of the rectangle.
- Q.21 A wire is in the shape of a rectangle. Its length is 42.7 m and breadth is 21.8 m. If the same wire is re-bent in the shape of a square, what will be the measure of each side ? Also find which enclosed more area ?
- Q.22 The perimeter of a rectangle is 170 cm. If the breadth of the rectangle is 45 cm, find its length. Also find the area of the rectangle.
- Q.23 A door of length 1.32 m and breadth 0.75 m is on a wall. The length of the wall is 6.5 m and breadth is 4.2 m. Find the cost of white washing the wall, if the rate of white washing the wall is j 20 per sq m.

Power by: VISIONet Info Solution Pvt. Ltd		
Website : www.edubull.com	Mob no. : +91-9350679141	1

- Q.24 The area of a square plot is 256 sq m. Find the length of the wire that can go 4 times round the boundaries of this plot.
- Q.25 One side of a parallelogram is 20 cm and the corresponding altitude is 15 cm. Find the area of parallelogram.
- **Q.26** Area of a parallelogram is 450 cm² and its altitude is 20 cm. Find the length of the corresponding side of the parallelogram.
- Q.27 One side of a parallelogram is 30 cm and the corresponding altitude is 18 cm. Find the length of the adjacent side of the parallelogram if the height of the altitude to the adjacent side is 20 cm.
- Q.28 Find the area of a triangle whose base is 40 cm and corresponding altitude is 8 cm.
- Q.29 Find the area of a right triangle in which two sides containing the right angle measure 160 cm and 75 cm.
- Q.30 Calculate the area of shaded region in the given figure.



- Q.31 The perimeter of a right triangle is 30 cm. Its hypotenuse is 13 cm and base is 5 cm. Find the area of the triangle.
- **Q.32** In the given figure, ABCD is a rectangle with sides 24 cm and 7 cm. Find the area of \triangle ABD and \triangle BDC.



Q.33 Triangle ABC is a right-angled triangle right angle at B and BD perpendicular to AC. If AB = 8 cm, BC = 15 cm and AC = 17 cm, find the area of the triangle ABC. Also find the length of BD.



Q.34 ABC is an isosceles triangle with AB = AC = 12.5cm and BC = 15 cm. The height from A to BC is 7.5 cm i.e. AD is 7.5 cm. Find the area of $\triangle ABC$. What will be the height from C to AB i.e., CE ?







- Q.36 Find the height of a triangle whose area is 65 sq cm and whose base is 13 cm.
- Q.37 Find the base of a triangle whose altitude is 10 cm and area is 0.5 sq m.
- Q.38 Find the base of a triangle whose area is 3.9 sq m and whose height is 260 cm.
- Q.39 A field is in the form of a right triangle with hypotenuse 50 m and one of the perpendicular sides is 40 m. Find the area of the field.

Power by: VISIONet Info Solution Pvt. Ltd		
Website : www.edubull.com	Mob no. : +91-9350679141	2

- Q.40 A field is in the form of a triangle. If its area is 2 ha and the lengths of its base is 200 m, then find its altitude.
- Q.41 The base of a triangular field is 540 m and its height is 230 m. Find the cost of levelling the field at \downarrow 25 per acre.

B. Long Answer Type Questions

- Q.42 A sheet of paper measures 30 cm by 20 cm. A strip of 4 cm wide is cut from it all around. Find the area of the remaining sheet and also the area of the cut-out strip.
- Q.43 A 3m wide path runs around outside a rectangular park of dimension 125 m by 65m (or 125 m × 65 m). Find the area of the path.
- Q.44 A verandah 1.25 m wide is constructed all along the outside of a room 5.5 m long and 4m wide, find :

ANSWER KEY

|--|

- (ii) the cost of cementing the floor of the verandah at the rate of j = 25 per sq m.
- Q.45 A rectangular field has dimensions of $25 \text{ m} \times 16.4 \text{ m}$. Two paths run parallel to the sides of the rectangle through the centre of the field. The width of the longer path is 1.7 m and that of the shorter path is 2 m. Find :
 - (i) the area of the paths
 - (ii) the area of the remaining portion of the field.
- Q.46 A path 1m wide is built along the border inside a square garden of side 30 m. Find :
 - (i) the area of the path.
 - (ii) the cost of planting grass in the remaining portion of the garden at the rate of j=2.40per sq m.

1.	(i) 120000 sq cm	(ii) 350000 sq cr	n (iii) 155000 sq cm	20.	256 cm,	562 cm
2.	(i) 3400 sq mm	(ii) 1500 sq mm	(iii) 950 sq mm	21.	32.25 m	² , square enclosed more area than rectangle
3.	(i) 76000000 sq	cm (ii) 7600000	0000 sq mm	22.	40 cm, 1	1800 sq cm
4.	(i) 5 sq cm	(ii) 45 sq cm	(iii) 0.65 sq cm			
5.	(i) 0.75 sq m	(ii) 38 sq m	(iii) 0.06 sq m			
6.	(i) 7.5 sq km	(ii) 0.43 sq km	(iii) 0.05 sq km		23.	j- 526.20
7.	63 m				24.	256 m
8.	(i) 84 sq cm	(ii) 600 sq cm	(iii) 26.4 sq cm (iv)	25.	300 cm^2
35	2 sq cm				26.	22.5 cm
	(v) 36 sq cm	(vi) 180 sq cm			27.	27 cm
9.	(i) 12 sq m	(ii) 12.4 sq m			28.	160 cm^2
10	. (i) 15 cm	(ii) 1.9 cm	(iii) 295.12 sq cm	ı	29.	6000 cm ²
11	$\cdot 110.25 \text{ cm}^2$				30.	750 cm^2
12	• (i) 2610 m^2	(ii) 4.284 m ²			31.	30 cm^2
13	. 4385 m				32.	84 cm^2
14	. 1920 m				33.	60 sq cm, 7.06 cm
15	• 714.2857 m, 28	5.71429 m			34.	CE = 9 cm
16	• 75 m, 7500 m^2				35.	24 sq cm
17	• 23 m, 196 m				36.	10 cm
18	• 41.1 cm, 879.54	sq cm			37.	1000 cm
19	• 51.2 m				38.	300 cm
Po	wer by: VISIONet Inf	o Solution Pvt. Ltd				

Website : www.edubull.com

Mob no. : +91-9350679141

	-	

- **39.** 1000 sq m
- **40.** 200 m
- **41.** j 15525
- **42.** 264 sq cm, 336 sq cm
- **43.** 1176 sq m

- **44.** (i) 30 sq m
 (ii) j- 750

 45. (i) 71.9 sq m
 (ii) 338.1 sq m

 46. (i) 116 sq m
 (ii) j- 278.40
- EXERCISE # 2
- Q.1 A wire is in the shape of a square whose each side is 80 m. If the same wire is rebent in the shape of rectangle, whose length is 120 m, find the area of rectangle, also find the cost of ploughing this rectangular field if cost of ploughing the field is $\frac{1}{5}$ 5/m².
- Q.2 A door of length 5 m and breadth 2 m is fitted in a wall. The length of the wall is 6.5 m and breadth 4.5 m. Find the cost of whitewashing the wall, if the rate of whitewashing the wall is \dot{j} 50 per m².
- Q.3 In the figure given below, ACTS is a square with side 50 cm. Find the area of $\triangle AOC$, $\triangle COT$, $\triangle SOT$ and $\triangle AOS$.



- Q.4 Find the area of an isosceles triangle whose perimeter is 32 cm and its base is 12 cm.
- Q.5 The two sides of the parallelogram ABCD are 12 cm and 8 cm. The height corresponding to base CD is 6 cm. Find (i) The area of the ||gm. (ii) The height corresponding to base AD.



Q.6 In \triangle ABC, AC = 25 cm, BC = 7 cm, AE = 10 cm. Find :



- Q.7 The sides of a rectangular field are in the ratio 3 : 2. If the area of the field is 3456 sq m, find the cost of fencing the field at j 3.50 per metre.
- **Q.8** A square of side 6 cm is given. Find how many squares of side 2 cm are required to cover it.
- **Q.9** Draw a square of side 9 cm. Find how many squares of side 3 mm are required to cover it.
- Q.10 How many squares of side 5 cm are required to cover a rectangle measuring 45 m by 25 m?
- Q.11 How many rectangles of side 3 cm by 2 cm are required to cover a rectangle measuring 1 m by 90 cm ?





(i) (ii)



- **Q.13** ABCD is a parallelogram. CE is the height from C to AB and CF also the height from C to AD. If AB = 12.9 cm and CE = 8.7 cm. Find :
 - (i) the area of the parallelogram ABCD
 - (ii) CF, if AD = 6.3 cm.



- Q.14 The height of parallelogram is one-third of the base. If the area is 108 sq cm, find the base and height.
- Q.15 Find the altitude of a parallelogram one of whose sides is 6.5 cm, the area being 26 sq cm.
- **Q.16** Two sides of a parallelogram are 20 cm and 25 cm. If the altitude corresponding to the sides of length 25 cm is 10 cm, find the altitude corresponding to the other pair of sides.
- Q.17 The base and the corresponding altitude of a parallelogram are 10 cm and 12 cm, respectively. If the other altitude is 8 cm find the length of the other pair of parallel sides.
- **Q.18** A floral design on the floor of a building consists of 2800 tiles. Each tile is in the shape of a parallelogram of altitude 3 cm and base 5 cm. Find

the cost of polishing the design at the rate of 50 paise per sq cm.

Q.19 In the adjoining parallelogram AF and CF are the altitudes corresponding to sides AB and BC respectively. If the area of the parallelogram is 885.60 sq cm and AB = 36 cm and BC = 48 cm, find the length of CE and AF.



- Q.20 The legs of a right triangle are in the ratio 3:4 and its area is 1014 sq cm. Find its hypotenuse.
- **Q.21** ABCD is a parallelogram. The height from B to DC i.e., BE = 8.5 cm. If the area of the parallelogram is 204 sq cm then find the area of the ΔABD . Also find the AP, if BD = 17 cm.



Q.22 Find the area of following shaded parts :



Power by: VISIONet Info Solution Pvt. Ltd	
Website : www.edubull.com	Mob no. : +91-9350679141



Q.23 A painting is painted on a cardboard 8 cm long and 5 cm wide such that there is a margin of 1.5 cm along each of its side. Find the total area of the margin.

- Q.24 A 115 m long and 64 m broad lawn has two crossroads at right angles, one 2 m wide running parallel to its length, and the other 2.5 m wide, running parallel to its breadth. Find the cost of gravelling the roads at j 4.60 per sq m.
- Q.25 A 110 m \times 80 m rectangular plot has two crossroads, each 4 m wide, running through its middle, one parallel to the length and the other parallel to the breadth. Find the total expense involved in cementing the roads at j-15 per sq m and laying grass in the remaining part at j-1.25 per sq m.
- Q.26 The length and breadth of a park are in the ratio 2 : 1 and its perimeter is 240 m. A path 2 m wide runs inside it, along its boundary. Find the cost of paving the path at j=3 per sq m.

1.	4800 m ² , j− 24000	2. j 962.50
3.	625 cm^2	4. 48 cm^2
5.	(i) 72 cm^2	(ii) 9 cm
6.	(i) 35 cm^2	(ii) 2.8 cm
7.	j- 840	8. 9 squares
9.	900 squares	10. 450000 squares
11.	1500 rectangles	
12.	(i) 244 sq cm	(ii) 10.84 sq m (iii) 305.25 sq cm
13.	(i) 112.23 sq cm	(ii) $CF = 17.8 \text{ cm}$
14.	18 cm, 6 cm	15. 4 cm
16.	12.5 cm	17. 15 cm
18.	j- 21000	19. $CE = 24.6 \text{ cm}, \text{ AF} = 18.45 \text{ cm}$
20.	65 cm	21. 102 sq cm, 12 cm
22.	(i) 22.5 sq cm	(ii) 18 sq m (iii) 68 sq cm (iv) 123 sq cm
23.	30 sq m	24. j 1771
25.	÷ 21230	26. ⊢ 1392

ANSWER KEY

Power by: VISIONet Info Solution Pvt. Ltd		
Website : www.edubull.com	Mob no. : +91-9350679141	6