D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS)
APTITUDE TEST

AREA – TEST 34

1. The percentage increase in the area of a rectangle, if each of its sides is increased by 20% is:
a)   32%
b)   34%
c)   42%
d)   44%

2. The sides of a rectangle are in the ratio of 6: 5 and its area is 1331 sq.m. Find the perimeter of a rectangle.
a)   120 m
b)   121 cm
c)   121 m
d)   None of these

3. The sides of a rectangle are in the ratio 4:3 and its area is 972sq.m find the perimeter of the rectangle?
a)   120m
b)   122m
c)   124m
d)   126m

4. An error 2% in excess is made while measuring the side of a square. The percentage of error in the calculated area of the square is:
a)   2%
b)   2.02%
c)   4%
d)   4.04%

5. The percentage increase in the area of a rectangle, if each of its sides is increased by 20% is:
a)   40%
b)   42%
c)   44%
d)   46%

6. A rectangular park 60 m long and 40 m wide has two concrete crossroads running in the middle of the park and rest of the park has been used as a lawn. If the area of the lawn is 2109 sq. m, then what is the width of the road?
a)   2.91 m
b)   3 m
c)   5.82 m
d)   None of these

7. If the length and breadth of a rectangular room are each increased by 1 m, then the area of floor is increased by 21 sq. m. If the length is increased by 1 m and breadth is decreased by 1 m, then the area is decreased by 5 sq. m. The perimeter of the floor is :
a)   30 m
b)   32 m
c)   36 m
d)   40 m

8. A metallic sheet is of rectangular shape with dimensions 48 m x 36 m. From each of its corners, a square is cut off so as to make an open box. If the length of the square is 8 m, the volume of the box (in m3) is:
a)   4830
b)   5120
c)   6420
d)   8960

9. In two triangle, the ratio of the areas is 4:3 and that of their heights is 3:4 the ratio of their bases is
a)   16:9
b)   9:16
c)   9:12
d)   16:12

10. Area of four walls of a room is 99 m2. The length and breadth of the room are 7.5 m and 3.5m respectively. The height of the room is:
a)   4.5 Cm
b)   5.5 m
c)   4.5 m
d)   5.5 Cm

11. The length of a rectangular plot of land is three times as much as its breadth. A playground measuring 1200 sq. ft. occupies one-fourth of the total area of the plot. What is the length of the plot in feet?

a) 40
b) 360
c) 120
d) Data inadequate.

12. If the sides of a rectangle are increased by 20% the percentage increase in its perimeter is

a) 80
b) 40
c) 20
d) None of these

13. A man runs a circle of 50 m radius at a speed of 12 km per hour. Find the time taken by him for going around it ten times.

a) 10 min
b) 12.5 min
c) 15.7 min
d) None of these

14. If a diagonal of a square is doubled, how does the area of the square change?

a) Becomes four-fold
b) Becomes three-fold
c) Becomes two-fold
d) None of these

15. If the base of a parallelogram is $(x + 4)$, altitude to the base is $(x - 3)$ and the are is $(x^2 - 4)$, then the actual area is equal to

a) 4 sq units
b) 48 sq units
c) 60 sq units
d) None of these

16. If� area of a triangle whose base is 6 cm is equal to the area of a circle of radius 6 cm, find the height of this triang

a) 10 cm
b) 22 cm
c) 12 cm
d) 18 cm

17. The sides of a triangle are in the ratio 3 : 4 : 5. If its perimeter is 36 cm, area of the triangle is

a) 57 sqm
b) 54 sq m
c) 56.5 sq m
d) None of these

18. A field is in the shape of a parallelogram. Its adjacent sides and one diagonal are 65 m, 119 m and 156 m, respectively. Find the cost of gravelling it at the rate of Rs. 10 per sq m.

a) Rs. 81400
b) Rs. 71400
c) Rs. 91400
d) None of these

19. A hall is 15 m long and 12 m broad. If the sum of the areas of the floor and the ceiling is equal to the sum of the areas of four walls, the volume of the hall is:

a) 720
b) 900
c) 1200
d) 1800

20. What is the area of a square field whose side of length 15 m?

a) 225 sq m
b) 220 sq m
c) 100 sq m
d) 30 sq m

21. A rectangular courtyard 3.78 m long and 5.25 m broad is to be paved exactly with square tiles, all of the same sizes. The minimum number of such

tiles is:

a)   350   b)   450
c)   460   d)   470

22. The radius of the wheel of a vehicle is 70 cm. The wheel makes 10 revolutions in 5 seconds. The speed of the vehicle is

a)   29.46 km/hr   b)   31.68 km/hr
c)   36.25 km/hr   d)   32.72 km/hr

23. If the length of a rectangle is halved and its breadth is tripled, what is the percentage change in its area?

a)   25% increase   b)   25% decrease
c)   50% decrease   d)   50% increase

24. Find the surface area of a 10 cm × 4 cm × 3 cm brick

a)   128 sq. cm   b)   164 sq. cm
c)   194 sq. cm   d)   208 sq. cm

25. A hollow iron pipe is 21 cm long and its external diameter is 8 cm. If the thickness of the pipe is 1 cm and iron weighs 8 g/cm3, then the weight of the pipe is:

a)   3.6 kg   b)   3.696 kg
c)   36 kg   d)   36.9 kg