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

MENSURATIONS – TEST 35

1. The ratio between the length and the perimeter of a rectangular plot is 1:3 and the ratio between the breadth and Perimeter of the plot is 1:6. What is the ratio between the length and area of the plot?

a) 1 : 8 b) 2 : 5
c) 2 : 1 d) Data Inadequate

2. The lengths of diagonals of a rhombous are 24cm and 10cm respectively. What is the area of the rhombus?

a) $240cm^2$ b) $80cm^2$
c) $120cm^2$ d) $100cm^2$

3. Find the costs of carpeting a square room of side 8 meters with carpet at the rate of Rs.44 per meter square?

a) Rs. 400 b) Rs. 500
c) Rs. 2816 d) Rs. 250

4. A room is 8 meters long and 4 meters wide. How many paving stones each measuring 2.5dm by 2dm are required to pave its floor?

a) 700 b) 640
c) 720 d) 810

5. If a full cistern is 3 meters long, 2 meters wide and 1 meter deep, how many litres of water must be thrown out so as to keep the water level 50cm?

a) 5000 litres b) 4000 litres
c) 6000 litres d) 3000 litres

6. If a cone and a sphere have equal radii and have equal volumes, what is the ratio between the height of the cone and the diameter of the sphere?

a) 1 : 8 b) 2 : 5
c) 2 : 1 d) 2 : 3

7. If one side of a cube is doubled, then by what % does the volume of the corresponding cube increase?

a) 150% b) 300%
c) 700% d) 900%

8. Volume of a cube is 512m3 find its surface area?

a) $200m^2$ b) $354m^2$
c) $384m^2$ d) $468m^2$

9. The length of a rectangular plot is 5 1/3, times that of its breadth. If the area of the plot is 270 square metres, then what is its length?

a) 120 m b) 130 m
c) 125 m d) None of these

10. A right angled isosceles triangle is inscribed in a semicircle of radius 7 cm . The area enclosed by the semicircle but exterior to the triangle is

a) 14 sq cm b) 28 sq cm
c) 44 sq cm d) 68 sq cm

11. A baby crawls randomly in a Rectangle shaped room. Mother discovers the dimensions of the room to be 35x25m. To protect the child against fall, parents decide to lay play mat on the floor. Play mat costs Rs.38 per Sq.m. How much

do parents need to spend to make the floor childproof?

a) Rs.46550 b) Rs.23750
c) Rs. 65831.58 d) Rs. 33250

12. A Rectangle shaped wooden plate has a measurement of 20x10m. To Varnish the plate, painter charges Rs.18 Per Sq.m. Find the cost to varnish top side of the plate?

a) Rs.7200 b) Rs.1800
c) Rs. 10182.42 d) Rs. 3600

13. The ratio of the length and the breadth of a rectangle is 4 : 3 and the area of the rectangle is 6912 sq cm. Find the ratio of the breadth and the area of the rectangle?

a) 1 : 96 b) 1 : 48
c) 1 : 84 d) 1 : 68

14. The area of a sector of a circle of radius 36 cm is 72π cm. The length of the corresponding arc of the sector is

a) π cm b) 2π cm
c) 3π cm d) 4π cm

15. How many Spherical bullets can be made out of a lead cylinder 21 cm high and 6 cm radius, each bullet being 1.5 cm in diameter?

a) 1792 b) 1344
c) 1468 d) 1652

16. A cylindrical pencil of diameter 1.2 cm has one of its end sharpened into a conical shape of height 1.4 cm. The volume of the material removed is

a) 1.056 cm^3 b) 4.224 cm^3
c) 42.24 cm^3 d) 10.56 cm^3

17. If the numerical value of the perimeter of an equilateral triangle is times the area of it, then the length of each side of the triangle is

a) 3 unit b) 5 unit
c) 4 unit d) 6 unit

18. 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

19. A man walking at the rate of 6km per hour crosses a square field diagonally in 9 seconds the area of the field is

a) 110sq.m b) 111.5aq.m
c) 112.5sq.m d) 114sq.m

20. A 5 cubic centimeter cube is painted on all its side. If it is sliced into 1 cubic centimeter cubes, how many 1 cubic centimeter cubes will have exactly one of their sides painted?

a) 9 b) 61
c) 98 d) 54

21. A cube of side one meter length is cut into small cubes of side 10 cm each. How many such small cubes can be obtained?

a) 10 b) 100
c) 1000 d) 10000

22. Find the length of a wire required to go 20 times round a square field one hectare in area.

a) 8500 m b) 8000 m
c) 6000 m d) 6500 m

23. The cost of carpeting room 6m broad with a carpet at Rs. 4.50 sq.m is Rs.135. Find the length of the room?

a) 6 m b) 8 m
c) 7 m d) 5 m

24. A hectare of land is divided into plots, each 25 meters long and 10 metres broad. Find the number of plots?

a) 25 b) 50
c) 40 d) 60

25. How many bricks 20cm * 25 cm will be requird to pave the floor of a room 6m and 5mwide?

a) 700 b) 600
c) 800 d) 750