## ONLINE COACHING DAY 82- (27-6-2019)

Mensuration


Name of the candidate *
M3

Place of the candidate *
Thiruvananthapuram $\nabla$

## Phone number of the candidate *

Xxxx

Please watch the following videos and answer the questions that follow. Also please go through all the formulae related to this chapter.
https://youtu.be/BE3uOY3S2Gk
https://youtu.be/dY55PUSFvIw https://youtu.be/acEAoropWPU https://youtu.be/WlekBwZ9Hus

1. What is the area of an equilateral triangle of side 16 cm ? *$48 \sqrt{ } 3 \mathrm{~cm}{ }^{\wedge} 2$$128 \sqrt{ } 3 \mathrm{~cm}{ }^{\wedge} 2$$9.6 \sqrt{ } 3 \mathrm{~cm}^{\wedge} 2$
(-) $64 \sqrt{ } 3 \mathrm{~cm}^{\wedge} 2$
2. If the sides of a triangle are $26 \mathrm{~cm}, 24 \mathrm{~cm}$ and 10 cm , what is its area? *$120 \mathrm{~cm}^{\wedge} 2$$130 \mathrm{~cm}^{\wedge} 2$$312 \mathrm{~cm}^{\wedge} 2$$315 \mathrm{~cm}^{\wedge} 2$
3. Find the area of a parallelogram with base 24 cm and height 16 cm . *$262 \mathrm{~cm}{ }^{\wedge} 2$$384 \mathrm{~cm}^{\wedge} 2$$192 \mathrm{~cm}^{\wedge} 2$$131 \mathrm{~cm}^{\wedge} 2$
4. 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? *
(1) 1:96$1: 48$$1: 84$$1: 68$
5. The area of the square formed on the diagonal of a rectangle as its side is 108 $1 / 3 \%$ more than the area of the rectangle. If the perimeter of the rectangle is 28 units, find the difference between the sides of the rectangle? *8126
(-) 2
6. The length of a rectangular plot is thrice its breadth. If the area of the rectangular plot is 867 sq m , then what is the breadth of the rectangular plot? *8.5 m17 m51 m
7. The length of a rectangular floor is more than its breadth by $200 \%$. If Rs. 324 is required to paint the floor at the rate of Rs. 3 per sq $m$, then what would be the length of the floor? *27 m24 m
○ 18 m21 m
8. An order was placed for the supply of a carpet whose breadth was 6 m and length was 1.44 times the breadth. What be the cost of a carpet whose length and breadth are $40 \%$ more and $25 \%$ more respectively than the first carpet. Given that the ratio of carpet is Rs. 45 per sq m ? *Rs. 3642.40Rs. 3868.80Rs. 4216.20Rs. 4082.40
9. What will be the cost of building a fence around a square plot with area equal to 1 point 289 sq ft , if the price per foot of building the fence is Rs .58 ? *Rs. 3944Rs. 3828Rs. 4176Option 5Cannot be determined
10. The area of a square is equal to five times the area of a rectangle of dimensions 1 point $125 \mathrm{~cm}^{*} 64 \mathrm{~cm}$. What is the perimeter of the square? *600 cm
( 800 cm400 cm1000 cm
11. A wire in the form of a circle of radius 3.5 m is bent in the form of a rectangule, 1 point whose length and breadth are in the ratio of $6: 5$. What is the area of the rectangle? *$60 \mathrm{~cm}{ }^{\wedge} 2$
( $30 \mathrm{~cm}^{\wedge} 2$$45 \mathrm{~cm}{ }^{\wedge} 2$$15 \mathrm{~cm}{ }^{\wedge} 2$
12. The area of a square is 4096 sq cm . Find the ratio of the breadth and the length of a rectangle whose length is twice the side of the square and breadth is 24 cm less than the side of the square. *18:5$7: 16$$5: 14$$5: 32$
() None of these.
13. The parameter of a square is double the perimeter of a rectangle. The area of the rectangle is 480 sq cm . Find the area of the square. *200 sq cm72 sq cm162 sq cm
( Cannot be determined
14. The circumferences of two circles are 264 meters and 352 meters. Find the difference between the areas of the larger and the smaller circles. *4192 sq m4304 sq m4312 sq m4360 sq m
15. 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? *10100100010000
16. The dimensions of a room are 25 feet * 15 feet * 12 feet. What is the cost of white washing the four walls of the room at Rs. 5 per square feet if there is one door of dimensions 6 feet * 3 feet and three windows of dimensions 4 feet * 3 feet each? *Rs. 4800Rs. 3600Rs. 3560
( Rs. 4530
17. The radius of a wheel is 22.4 cm . What is the distance covered by the wheel in making 500 resolutions. *252 m704 m352 m808 m
18. The volumes of two cones are in the ratio 1: 10 and the radii of the cones are in the ratio of 1:2. What is the length of the wire? *
(-) $2: 5$$1: 5$3:5$4: 5$
19. A metallic sphere of radius 12 cm is melted and drawn into a wire, whose radius of cross section is 16 cm . What is the length of the wire? *45 cm18 cm90 cm180 cmNone of these
20. The ratio of the volumes of two cubes is $729: 1331$. What is the ratio of their total surface areas? *
(-) $81: 121$$9: 11$$729: 1331$$27: 121$
21. A rectangular ground 16 m long and 10 m breadth. It has a gravel path 2.5 m wide 1 point all around it on the outside. What is the area of the path? *$159 \mathrm{~m}^{2}$$155 \mathrm{~m}^{2}$$187 \mathrm{~m}^{2}$$183 \mathrm{~m}^{2}$
22. A ladder is resting with one end in contact with the top of the wall of height 15 m and the other end of the ground is at a distance 8 m from the wall. The length of the ladder is? *

○ 17 m18 m16 m$15 m$10 m
23.The length of a rectangle wall is $3 / 2$ times of its height. If the area of the wall is 1 point $600 \mathrm{~m}^{2}$. What is the sum of the length and height of the wall? *40605070
24. One side of rectangular ground is 8 m and its diagonal is 17 m . Find the area of

1 point ground? *150140130
120
25. A cylindrical cistern whose diameter is 14 cm is partly filled with water. If a rectangular block of iron 22 cm in length, 14 cm in breadth and 7 cm in thickness is wholly immersed in water, by how many centi metre will the water level rise? *10 cm12 cm14 cm15 cm

Thank you!!! !

