

Vidya Vikas Mandal's  
Ramacrisna Madeva Salgaonkar Higher Secondary School  
Margao Goa

Std: XI Voc -CT

First Term Exam, Oct - 2022

Time: 1hr

Date: 13/10/2022

Sub: Mathematics(Voc)

Marks: 20

Question number 1 to 10 carries 1 mark each.

1.  $\log_a 1$  is \_\_\_\_\_  
a. 1                                      b. 0                                      c. -1                                      d. a
2. Point A=(3,-4) lies in \_\_\_\_\_ quadrant.  
a. First                                      b. Second                                      c. Third                                      d. Fourth
3.  $\log_7 7 =$  \_\_\_\_\_  
a. 0                                      b. 7                                      c. 1                                      d. 14
4. Trigonometric ratio of  $\sin \_\_\_^\circ$  is 1.  
a. 0                                      b. 45                                      c. 90                                      d. 180
5. The point of intersection of all three angle bisectors of a Triangle is called as \_\_\_\_\_  
a. Centroid                                      b. Mid-Point                                      c. Incenter                                      d. Circumcenter
6. Trigonometric ratio of  $\cos 180^\circ =$  \_\_\_\_\_  
a. 0                                      b. -1                                      c. 1                                      d. Not Defined
7. Convert  $270^\circ$  into radians.
8. If P=(8,-2) and Q=(8,6) then find Distance of PQ.
9. Convert  $(4\pi/3)^\circ$  into degrees.
10. How do we check if three points are collinear?

Question number 11 to 15 carries 2 mark each.

11. The sum of the two angles is  $100^\circ$  and the difference is  $2\pi/9^\circ$ , find the angles in degrees.
12. Find the value of  $\log_7 \sqrt[3]{343}$
13. Find the coordinates of the point P which divides Seg AB externally in the ratio 3:5, where A=(2,-5) and B=(-3,-7)
14. Find the centroid of the triangle with vertices (4,-5), (6,2) and (8,9)
15. Find the mid-point of the two points A=(7,7) and B=(14,14)

\*\*\*\*\*All the Best\*\*\*\*\*