∞

ST. LAWRENCE HIGH SCHOOL

A Christian Jesuit minority Institution

Subject: Mathematics **class-X** **Date:14.04.2020**

Worksheet-7

Chapter: Trigonometry :concept of measurement of angles

Topic-Circular measure and sexagesimal measure of angles and their conversion

---

Choose the correct alternative. 1x15=15

a)Sexagesimal measure of 1 radian is i) 57°22' 16" ii) 57° 16'22" iii) 22° 57' 16" iv) none of these

b) Sexagesimal measure of $\frac{2\pi}{3}$ radian is i) 120° ii) 90° iii) 60° iv) none of these

c) Circular measure of the smallest angle of a triangle having the ratio of the angles as 2:5:3 is i) $\frac{\pi}{10}$ ii) $\frac{\pi}{5}$ iii) $\frac{\pi}{2}$ iv) none of these

d) Sexagesimal measure of complementary angle of 65° 35'25" is i) 24°24' 35" ii) 24° 35' 35" iii) 24° 35' 24" iv) none of these

e)Circular measure of each angle of a pentagon is i) $\frac{3\pi}{10}$ ii) $\frac{3\pi}{5}$ iii) $\frac{2\pi}{5}$ iv) none of these

f) Circular measure of -150° is i) $-\frac{5\pi}{6}$ ii)$\frac{5\pi}{6}$ iii) $\frac{2\pi}{3}$ iv) none of these

g) Circular measure of the third angle of a triangle having two other angles as 65° and $\frac{\pi}{12}$ i) $\frac{5\pi}{9}$ ii) $\frac{2\pi}{3}$ iii)$\frac{5\pi}{7}$ iv) none of these

h) Sexagesimal measure of supplementary angle of the angle 75°36'24" is i) 104°36' 23" ii) 104° 23' 36" ii) 103 ° 23' 36" iv) none of theses

i) Circular measure of each interior angle of a hexagon is i) $\frac{2\pi}{3}$ ii) $\frac{3\pi}{4}$ iii)$\frac{\pi}{3}$ iv) none of these

j) Circular measure of supplementary angle of $\frac{3\pi}{8}$ is i) $\frac{3\pi}{5}$ ii) $\frac{5\pi}{8}$ iii) $\frac{3\pi}{8}$ iv) none of these

k) In a right angled triangle difference between the acute angles is $\frac{2\Pi}{5}$,sexagesimal measures of the angles are i) 81° and 9° ii) 80° and 10° iii) 71 ° and 19° iv) none of these

l)In a quadrilateral having 3 interior angles as $\frac{\Pi}{3}, \frac{5\Pi}{6}$ and 90° circular measure of the fourth angle is i) $\frac{\Pi}{3}$ ii)$\frac{2\Pi}{3}$ iii) 60° iv) none of these

m)In an isosceles triangle if the equal angles are 75° each,then circular measure of the third angle is i) Π/3 ii)$\frac{\Pi}{6}$ iii) Π/2 iv) none of these

n) Circular measure of 72° is i) $\frac{2\Pi}{3}$ ii) $\frac{2\Pi}{7}$ iii)$\frac{2\Pi}{5}$ iv) none of these

o)The circular measure the equal angles in an isosceles right angled triangle is i) $\frac{\Pi}{4}$ ii) $\frac{\Pi}{3}$ iii) $\frac{\Pi}{6}$ iv) none of these

Aparajita Mondal