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ST. LAWRENCE HIGH SCHOOL

A Christian Jesuit minority Institution

Subject: Mathematics class-X Date:27.02.2021

Worksheet-11

Chapter:Trigonometry:concept of measurement of angles

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

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Choose the correct alternative. 1x15=15

a) $\frac{\Pi}{24}$ **radian is equal to one of the following i)** $9\frac{1}{2}°$ **ii)** $7\frac{1}{2}°$ **iii) 19° 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 1:2:3 is i) $\frac{\Pi}{10}$**radian ii)** $\frac{\Pi}{6}$**radian iii)** $\frac{\Pi}{2}$**radian iv) none of these**

d)Converting 3156" in degree, minute , second we get is i) 24°24' 35" ii) 35' 35" iii) 52' 36" 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 57°47'37" is i) 104°36' 23" ii) 104° 23' 36" ii) 122° 12' 23" 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

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