Class XI- MATHEMATICS
Chapter-3 : TRIGONOMETRIC FUNCTIONS
Worksheet of Module 2/3

MCQ / One mark questions

1 If $\tan\theta = -\frac{1}{\sqrt{5}}$, and θ lies in the IV quadrant, then the value of $\cos\theta$ is

a) $\frac{\sqrt{5}}{\sqrt{6}}$ b) $\frac{2}{\sqrt{6}}$ c) $\frac{1}{2}$ d) $\frac{1}{\sqrt{6}}$

2 The value of sin765° is

a) $\sqrt{3}$ b) $\frac{\sqrt{3}}{2}$ c) $\frac{1}{\sqrt{3}}$ d) $\frac{1}{\sqrt{2}}$

3 Range of cosine function is

a) R b) $(-\infty, \infty)$ c) (-1, 1) d) [-1, 1]

4 Period of sine function is

a) π b) 2π c) 3π d) 4π

5 Value of $\sin\frac{\pi}{2} - 3\cos(-\pi) + 3\tan\left(-\frac{\pi}{4}\right)$

a) 1 b) -5 c) -1 d) 2

6 The domain of sine function is

a) (-1, 1) b) [-1, 1] c) $)(0, \infty)$ d) $(-\infty, \infty)$

7 Value of $\sin 2\pi - \text{cosec}\,\pi - 2\cos\left(-\frac{\pi}{4}\right)$ *is* _____

8 Domain of cosec x is _____.

9 Find the value of $\cot^2\frac{\pi}{6} + \text{cosec}\,\frac{\pi}{6} + 3\tan^2\frac{\pi}{6}$

10 The value of $\tan x \sin\left(\frac{\pi}{2} - x\right) . \cos\left(\frac{\pi}{2} - x\right)$ = _____

Two marks Questions

11 Evaluate $\sin 180^\circ + 3\cos 90^\circ - 2\tan 45^\circ + \text{cosec}\,90^\circ$

12 If $\cos\theta = -1/2$ and $\pi < \theta < 3\pi/2$ find the value of $4\tan^2\theta - 3\,\text{cosec}^2\theta$.

13 Find the value of a) cos 150° b) $\tan\frac{19\pi}{3}$

14 Write the domain of i) sec x ii) cot x

Four marks Questions

15 Draw the graph of sine function

16 Draw the graph of cosine function. Also write its domain and range.

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