

Trigonometric Functions - Class XI

Related Questions with Solutions

Questions

Question: 01

General solution of $\sin x = \frac{1}{2}$

A. $x = (-1)^n \frac{\pi}{4} + \pi n (n \in \mathbb{Z})$

B. $x = (-1)^n \frac{\pi}{6} + \pi n (n \in \mathbb{Z})$

C. $x = (-1)^n \frac{\pi}{6} + 2\pi n (n \in \mathbb{Z})$

D. $x = \frac{\pi}{6} + \pi n (n \in \mathbb{Z})$

Solutions

Solution: 01

$$\sin x = \frac{1}{2} = \sin \frac{\pi}{6}$$
$$\Rightarrow x = n\pi + (-1)^n \frac{\pi}{6}; n \in \mathbb{Z}$$

Correct Options

Answer:01

Correct Options: B