

## Mathematics Fsc Part 1 Online Test

Sr	Questions	Answers Choice
1	Graphs of trigonometric function within their domains are:	A. line segments B. sharp corners C. broken lines D. smooth curves
2	$\sin 5\theta + \sin 3\theta$ is equal to:	A. $2\cos 2\theta \sin \theta$ B. $-2\cos 4\theta \sin \theta$ C. $-2\sin 4\theta \cos \theta$ D. $2\sin 4\theta \cos \theta$
3	Question Image	
4	Question Image	
5	Question Image	
6	Question Image	
7	$2\sin 12^\circ \sin 46^\circ =$	A. $\cos 34^\circ + \cos 58^\circ$ B. $\sin 34^\circ - \sin 58^\circ$ C. $\sin 34^\circ + \sin 58^\circ$ D. $\cos 34^\circ - \cos 58^\circ$
8	$2\cos \alpha \cos \beta =$	A. $\sin(\alpha + \beta) - \sin(\alpha - \beta)$ B. $\cos(\alpha + \beta) - \cos(\alpha - \beta)$ C. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ D. $\sin(\alpha + \beta) + \sin(\alpha - \beta)$
9	$-2\sin \alpha \sin \beta =$	A. $\sin(\alpha + \beta) + \sin(\alpha - \beta)$ B. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ C. $\cos(\alpha + \beta) - \cos(\alpha - \beta)$ D. $\cos(\alpha - \beta) + \cos(\alpha - \beta)$
10	$2\cos \alpha \sin \beta =$	A. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ B. $\sin(\alpha + \beta) + \sin(\alpha - \beta)$ C. $\sin(\alpha + \beta) - \sin(\alpha - \beta)$ D. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$
11	$2\sin \alpha \cos \beta =$	A. $\sin(\alpha + \beta) - \sin(\alpha - \beta)$ B. $\cos(\alpha + \beta) + \cos(\alpha - \beta)$ C. $\sin(\alpha + \beta) + \sin(\alpha - \beta)$ D. $\cos(\alpha + \beta) - \cos(\alpha - \beta)$
12	Question Image	A. $1 + \cos \theta$ B. $1 - \cos \theta$
13	If $\sin \alpha = \cos \beta$ in any triangle ABC then:	A. $\alpha + \beta = 90^\circ$ B. $\alpha + \beta = 180^\circ$ C. $\alpha + \beta = 360^\circ$ D. $\alpha + \beta$
14	$\cot 1^\circ, \cot 2^\circ, \cot 3^\circ, \dots, \cot 89^\circ =$	A. -1 B. 1 C. $\infty$ D. none
15	$\tan(270^\circ + \theta)$ is equal:	A. $\cot \theta$ B. $\tan \theta$ C. $-\cot \theta$ D. $-\tan \theta$
16	If an angle $\alpha$ is allied to an angle $\beta$ , then $\alpha \pm \beta =$ _____:	A. $90^\circ$ B. multiple of $90^\circ$ C. $180^\circ$ D. multiple of $180^\circ$
17	$\tan(-135^\circ) =$	A. 0 B. 1 D. $\sqrt{2}$
18	$\sec(2\pi + \theta)$ , where $\theta$ is a basic angle will have terminal side in:	A. quad. I B. quad. II C. quad. III

D. quad. IV

19  $\csc(2\pi - \Theta)$ , where  $\Theta$  is a basic angle, will have terminal side in:

- A. quad. I
- B. quad. II
- C. quad. III
- D. quad. IV

20 Question Image