



# SSC GD CONSTABLE 2023



## सफलता का महामंत्र DAY-24

# TRIGONOMETRY

## त्रिकोणमिति

# MATHS

LIVE 05:00 PM 





Q1. What will be the value of  $\sin(11\pi/6)$

मान ज्ञात करे  $\sin(11\pi/6)$

(1)  $2/\sqrt{3}$

(2)  $1/2$

(3)  $-2/\sqrt{3}$

(4)  $-1/2$



Q2. if  $\tan A = 5/12$  then find the value of  
the  $\frac{\sin A + \cos A - \tan A}{\sec A + \operatorname{cosec} A - \cot A}$

मान ज्ञात करे  $\frac{\sin A + \cos A - \tan A}{\sec A + \operatorname{cosec} A - \cot A}$

(1) 995/1001

(2) 885/43

(3) 432/445

(4) Not



$$Q3. \cos 25^\circ = \frac{1}{\sqrt{5}}$$

then find the value of  
तो मान ज्ञात करे

$$\cos 65^\circ + \tan 25^\circ$$

(1)  $\frac{2+\sqrt{5}}{2\sqrt{5}}$

(2)  $\frac{2+\sqrt{5}}{\sqrt{5}}$

(3)  $\frac{1+\sqrt{5}}{\sqrt{5}}$

(4)  $\sqrt{5}$



Q4.  $\sin 21^\circ = \frac{x}{y}$ , then find the value of  
तो मान ज्ञात करें

$$\sec 21^\circ - \sin 69^\circ$$

- 1)  $\frac{y^2}{x\sqrt{y^2-x^2}}$
- 2)  $\frac{x^2}{x\sqrt{y^2-x^2}}$
- 3)  $\frac{y^2}{x\sqrt{x^2-y^2}}$
- 4) -not



Q5. What will be the value of /  
मान ज्ञात करे  $\sin X - \cos X$

If

$$\sin X + \cos X = 17/13$$

(1)  $5/17$

(2)  $7/17$

(3)  $7/13$

(4)  $3/19$



Q6. What will be the value of / मान ज्ञात करे

$$\frac{2}{3} \operatorname{cosec}^2 58^\circ - \frac{2}{3} \cot 58^\circ \tan 32^\circ$$

$$\frac{5}{3} \tan 13^\circ \tan 37^\circ \tan 45^\circ \tan 53^\circ \tan 77^\circ$$

(1) 0

(2) 2

(3) 1

(4) -1



Q7 .If  $\sec 17^\circ - \sec 73^\circ$

What will be the value of / मान ज्ञात करे

$$\sin 17^\circ = x/y$$

(1)  $\frac{y^2 - x^2}{xy}$

(2)  $\frac{x^2}{\sqrt{y^2 - x^2}}$

(3)  $\frac{x^2}{y\sqrt{y^2 + x^2}}$

(4) not





Q8. What will be the value of / मान ज्ञात करे  $\cos X$

$$\frac{1}{\cos x} - \frac{1}{\cot x} = \frac{1}{p}$$

(1)  $\frac{2p}{p^2+1}$

(2)  $\frac{p}{p^2+1}$

(3)  $\frac{p^2}{p^2+1}$

(4)  $1/p$



Q9. What will be the value of / मान ज्ञात

करे  $\frac{\tan^2 x + 1}{\tan^2 x - 1}$   
 $\frac{\sin x + \cos x}{\sin x - \cos x} = 5/4$

(1)  $\frac{40}{41}$

(2)  $\frac{41}{40}$

(3)  $\frac{30}{41}$

(4)  $\frac{39}{41}$



Q10. What will be the value of / मान ज्ञात  
करे  $\tan 3x$

$$\tan 7x \tan 2x = 1$$

(1)  $\frac{1}{\sqrt{3}}$

(2)  $\sqrt{3}$

(3) 1

(4) not



Q11. If ,  $\frac{\sqrt{1-\sin x}}{\sqrt{1+\sin x}}$

What will be the value of / मान  
ज्ञात करे

$$\tan X = \frac{8}{15}$$

(1)  $1/\sqrt{3}$

(2)  $3/5$

(3)  $2/5$

(4) 0



Q11. What will be the value of /  
मान ज्ञात करे

$$7/\sec^2x + 3/(1+\cot^2x) + 4\sin^2x$$

(1) 8

(2) 6

(3) 9

(4) 7



Q12.  $X \sin 45 = y \operatorname{cosec} 30$

Find / ज्ञात करे  $\frac{x^4}{y^4}$

(1)  $4^3$

(2)  $6^3$

(3)  $2^3$

(4)  $8^3$



Q13. What will be the value of /  
मान ज्ञात करे  $\sin x - \cos x$   
 $\sin x + \cos x = 17/13$  ,

(1)  $7/13$

(2)  $13/7$

(3)  $5/13$

(4)  $12/13$



Q14. What will be the value of / मान ज्ञात करे  $\sin x$  If

$$\sec x = 25/24$$

(1)  $24/25$

(2)  $7/25$

(3)  $25/7$

(4)  $24/7$





Q15. What will be the value of /  
मान ज्ञात करे  $\sec x$

if

$$\tan X = \frac{9}{40}$$

(1)  $40/41$

(2)  $41/40$

(3)  $2/5$

(4)  $0$



Q1. What will be the value of /  
मान ज्ञात करे  $\sin X - \cos X$

If

$$\sin X + \cos X = 17/13$$

(1)  $5/17$

(2)  $7/17$

(3)  $7/13$

(4)  $3/19$



Q2. What will be the value of / मान  
ज्ञात करे  $\tan X = ?$

If

$$7\sin^2 X + 3\cos^2 X = 4$$

(1)  $1/\sqrt{3}$

(2)  $\sqrt{3}$

(3) 1

(4) 0



Q3. What will be the value of /  
मान ज्ञात करे  $\cos X$

$$\frac{1}{\cos x} - \frac{1}{\cot x} = \frac{1}{p}$$

(1)  $\frac{2p}{p^2+1}$

(2)  $\frac{p}{p^2+1}$

(3)  $\frac{p^2}{p^2+1}$

(4)  $1/p$



Q4. What will be the value  
of / मान ज्ञात करे

$$\frac{7}{\sec^2 x} + \frac{3}{1 + \cot^2 x} + 4\sin^2 x$$

(1) 8

(2) 6

(3) 9

(4) 7



Q5. What will be the value of  
/ मान ज्ञात करे  $\cos X$   
if  $\operatorname{cosec} X - \cot X = 5$

(1)  $13/15$

(2)  $12/11$

(3)  $11/15$

(4)  $12/13$



Q6. What will be the value of / मान  
ज्ञात करे

$\sin X$

if  $\sec X + \tan X = 4$

(1)  $13/15$

(2)  $15/17$

(3)  $17/15$

(4)  $17/13$



Q7. What will be the value of /

मान ज्ञात करे

$$\sin x + \cos x$$

if

$$\sec x + \tan x = 2 + \sqrt{5} \quad (1) \quad \frac{3}{2}$$

$$(2) \quad \frac{3}{\sqrt{5}}$$

$$(3) \quad 7/9$$

$$(4) \quad \text{not}$$





Q8. What will be the value of /  
मान ज्ञात करे  $\cos^4 X - \sin^4 X + 1$   
if  $\cos^2 X - \sin^2 X = 1/3$

(1) 1

(2) 1/3

(3) 4/3

(4) 5/13



Q9. If/यदि  $\sin x + \operatorname{cosec} X = 2$

then /तो

$\sin^9 x + \operatorname{cosec}^9 X = ?$

(1) 1

(2) 2

(3) 0

(4) -1



Q11. What will be the value  
of / मान ज्ञात करे

$$1/(1+\tan^2x) + 1/(1+\cot^2x)$$

(1) 1

(2) 2

(3) 0

(4) .5



Q12 What will be the value  
of / मान ज्ञात करे  $\sin X$   
If/यदि

$$\cot x + \operatorname{cosec} x = 3$$

(1)  $\frac{3}{4}$

(2)  $\frac{3}{5}$

(3)  $\frac{4}{5}$

(4) 7