

**MULTIPLE CHOICE QUESTIONS ON SECTIONS 6.2 & 6.3:**

**Note:** 1) Complete each equation to get specific case of an addition or subtraction or double angle or half angle formula  
2) **NOTA**= none of the above

1-  $\sin(-5^\circ) \cos(-7^\circ) - \sin(-7^\circ) \cos(-5^\circ) =$

- a)
- $\sin(-2^\circ)$
- b)
- $\sin 12^\circ$
- c)
- $\sin 2^\circ$
- d)
- $\sin(-12^\circ)$
- e)
- NOTA**

2-  $\cos \frac{\pi}{10} \cos \frac{2\pi}{5} + \sin \frac{\pi}{10} \sin \frac{2\pi}{5} =$

- a)
- $\cos \frac{\pi}{2}$
- b)
- $-\cos \frac{3\pi}{10}$
- c)
- $\cos \frac{3\pi}{10}$
- d)
- $\cos \frac{3\pi}{5}$
- e)
- NOTA**

3-  $\sin(2 + \theta) \cos(\theta - 2) + \cos(\theta + 2) \sin(2 - \theta) =$

- a)
- $\sin 2\theta$
- b)
- $\sin 4$
- c)
- $-\sin 2\theta$
- d)
- $-\sin 4$
- e)
- NOTA**

4-  $\cos\left(\frac{x}{4} - 1\right) \cos\left(\frac{x}{4} + 1\right) - \sin\left(1 - \frac{x}{4}\right) \sin\left(1 + \frac{x}{4}\right) =$

- a)
- $\cos 2$
- b)
- $\cos \frac{x}{2}$
- c)
- $-\cos \frac{x}{2}$
- d)
- $\cos\left(\frac{x}{2} - 2\right)$
- e)
- NOTA**

5-  $\frac{\tan(-75^\circ) + \tan(35^\circ)}{1 + \tan 75^\circ \tan 35^\circ} =$

- a)
- $\tan(-40^\circ)$
- b)
- $\tan(-110^\circ)$
- c)
- $\tan 40^\circ$
- d)
- $\tan 110^\circ$
- e)
- NOTA**

6-  $\frac{\tan\left(-\frac{\pi}{12}\right) - \tan\left(-\frac{\pi}{9}\right)}{1 + \tan\left(-\frac{\pi}{12}\right) \tan\left(-\frac{\pi}{9}\right)} =$

- a)
- $\tan\left(-\frac{7\pi}{36}\right)$
- b)
- $\tan \frac{\pi}{36}$
- c)
- $-\tan \frac{\pi}{36}$
- d)
- $\tan \frac{7\pi}{36}$
- e)
- NOTA**

7-  $2 \sin 40^\circ \cos 40^\circ =$

- a)
- $\sin 20^\circ$
- b)
- $\sin 20^\circ \cos 20^\circ$
- c)
- $\sin 80^\circ \cos 80^\circ$
- d)
- $\sin 80^\circ$
- e)
- NOTA**

8-  $\sin(-10^\circ) \cos(-10^\circ) =$

- a)
- $-\frac{1}{2} \sin 20^\circ$
- b)
- $\sin(-10^\circ)$
- c)
- $\sin(-5^\circ) \cos(-5^\circ)$
- d)
- $-\frac{1}{2} \sin 5^\circ$
- e)
- NOTA**

9-  $1 - 2 \sin^2 4\theta =$

- a)
- $\cos 2\theta$
- b)
- $\frac{1}{2} \cos 4\theta$
- c)
- $\cos 8\theta$
- d)
- $\frac{1}{2} \cos 8\theta$
- e)
- NOTA**

10-  $\sin^2 \frac{\theta}{4} - \cos^2 \frac{\theta}{4} =$

- a)
- $\cos \frac{\theta}{8}$
- b)
- $-\cos \frac{\theta}{2}$
- c)
- $-\cos \frac{\theta}{8}$
- d)
- $-2 \cos \frac{\theta}{4}$
- e)
- NOTA**

11.  $2\cos^2\frac{\theta}{2}-1=$

- a)  $-\sin\theta$    b)  $\cos\frac{\theta}{4}$    c)  $\cos\frac{\theta}{2}$    d)  $-\sin\frac{\theta}{2}$    e) **NOTA**

12.  $\sqrt{\frac{1-\cos 50^\circ}{2}}=$

- a)  $\sin 25^\circ$    b)  $\frac{1}{2}\sin 50^\circ$    c)  $\frac{\cos 50^\circ}{2}$    d)  $\sin 100^\circ$    e) **NOTA**

13.  $\sqrt{\frac{1+\cos(-10^\circ)}{2}}=$

- a)  $\cos 20^\circ$    b)  $\cos 5^\circ$    c)  $\sin 5^\circ$    d)  $\sin 20^\circ$    e) **NOTA**

14.  $\frac{2\tan\frac{\pi}{16}}{1-\tan^2\frac{\pi}{16}}=$

- a)  $\tan\frac{\pi}{32}$    b)  $\frac{1}{2}\tan\frac{\pi}{16}$    c)  $\tan\frac{\pi}{8}$    d)  $2\tan\frac{\pi}{16}$    e) **NOTA**

15.  $\frac{\tan\frac{\pi}{18}}{\tan^2\frac{\pi}{18}-1}=$

- a)  $\tan\frac{\pi}{9}$    b)  $\frac{1}{2}\tan(-\frac{\pi}{9})$    c)  $-\tan\frac{\pi}{9}$    d)  $\frac{1}{2}\tan\frac{\pi}{9}$    e) **NOTA**

16.  $\frac{1-\cos\frac{\pi}{7}}{\sin\frac{\pi}{7}}=$

- a)  $\tan\frac{2\pi}{7}$    b)  $\tan\frac{\pi}{14}$    c)  $\frac{1}{2}\tan\frac{\pi}{7}$    d)  $\tan\frac{7\pi}{2}$    e) **NOTA**

17.  $\frac{\sin\frac{6\pi}{5}}{1+\cos\frac{6\pi}{5}}=$

- a)  $\tan\frac{3\pi}{5}$    b)  $\tan\frac{12\pi}{5}$    c)  $\frac{1}{2}\tan\frac{6\pi}{5}$    d)  $\tan\frac{5\pi}{3}$    e) **NOTA**

$$18. \frac{\cos(-\frac{\pi}{5}) - 1}{\sin \frac{\pi}{5}} =$$

- a)  $\tan(-\frac{\pi}{10})$    b)  $\tan \frac{2\pi}{5}$    c)  $-\tan \frac{2\pi}{5}$    d)  $-\frac{1}{2} \tan \frac{\pi}{10}$    e) **NOTA**

$$19. -\sqrt{\frac{1 + \cos 230^\circ}{2}} =$$

- a)  $\sin 115^\circ$    b)  $\cos 115^\circ$    c)  $-\cos 115^\circ$    d)  $\frac{\cos 115^\circ}{2}$    e) **NOTA**

$$20. \sqrt{\frac{1 - \cos(-\frac{2\pi}{7})}{2}} =$$

- a)  $\sin \frac{\pi}{7}$    b)  $-\sin \frac{\pi}{7}$    c)  $\cos \frac{\pi}{7}$    d)  $\cos(-\frac{\pi}{7})$    e) **NOTA**

$$21. \sqrt{\frac{1 - \cos(-\frac{\theta}{3})}{2}} =$$

- a)  $\sin \frac{\theta}{6}$    b)  $\sin \frac{2\theta}{3}$    c)  $\sin(-\frac{2\theta}{3})$    d)  $\cos \frac{\theta}{6}$    e) **NOTA**