DEPARTMENT OF PUBLIC INSTRUCTION - CHIKKAMAGALURU

MULTIPLE CHOICE QUESTIONS FOR PRACTICE

SUBJECT: MATHEMATICS **UNIT: TRIGONOMETRY** **CLASS:10**

STUDENT NAME:

SCHOOL NAME:

Four alternative /choices are given for each incomplete statement or a question. Click the correct answer.

1. $\sin\theta$ =----------

a) $\frac{adj}{hyp}$ b) $\frac{0pp}{hyp}$ c) $\frac{0pp}{adj}$ d)) $\frac{adj}{opp}$

2.If $13\cos\theta=5$ then $\tan\theta$=----------

a) $\frac{5}{13}$ b) $\frac{13}{5}$ c) $\frac{5}{12}$ d) $\frac{12}{5}$

3. If $\text{cosec}\theta=\frac{13}{5}$ then $\frac{5}{13}$ =----------

a) $\sin\theta$ b) $\cos\theta$ c) $\tan\theta$ d)$\sec\theta$

4. If $\tan\theta=\frac{3}{4}$ then $\sin\theta+\cos\theta$----------

a) $\frac{9}{5}$ b) $\frac{5}{9}$ c) $\frac{7}{5}$ d) $\frac{5}{9}$

5. Reciprocal of $\sec\theta$ is ----------

a) $\sin\theta$ b) $\cos\theta$ c) $\tan\theta$ d)$\text{cosec}\theta$

6. $\sin45^0$=----------

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

7. $\sin30^0$ is equal to---------

a) $\cos60^0$ b)$\cos30^0$ c)$\sin60^0$ d)$\tan30^0$

8. $\sin30^0+\cos60^0$=----------

a) $\frac{1}{2}$ b) 1 c) $\frac{1}{4}$ d) 2

9.The value of $\frac{tan65^0}{cot25^0}$ is----------

a) $\sqrt{2}$ b)0 c) 1 d) $\frac{1}{\sqrt{2}}$

10. The Value of $cos48^0$-$sin42^0$ is----------

a) $\frac{1}{2}$ b)0 c)1 d) $\frac{1}{\sqrt{2}}$

11. The value of $cos^2 17^0$-$sin^2 73^0$is----------

a) 1 b) $\frac{1}{3}$ c)0 d)-1

12. $\frac{cos37^0}{sin53^0}$ is----------

a)0 b)1 c)2 d)3

13. value of $\frac{cosec32^0}{sec58^0}$ is--------

a) 1 b) 0 c) $\frac{1}{2}$ d) 2

14. $\sin(90-20)^0$is ---------

a) $\sin 20^0$ b) $\cos 20^0$ c)$\cos 70^0$ d)$\sin 90^0$

15. complementary angle of secθ is----------

a) cosθ b)sinθ c)cosecθ d)secθ

16. In triangle ABC angle B is right angle and angle c isθ then $\sin(90-\theta) = - -$

a) $\frac{AB}{AC}$ b) $\frac{BC}{AC}$ c) $\frac{BC}{AB}$ d) $\frac{AB}{Bc}$

17. In the following which one of the following is not true----------

a) $sin^2\theta^0+cos^2\theta^0=1$ b) $\sin\theta=\sqrt{1-cos^2\theta}$ c) $\sin\theta=\sqrt{1+cos^2\theta}$ d) $\cos\theta=\sqrt{1-sin^2\theta}$

18.$(sin\theta + cos\theta)^2$=----------

a)1+2sin$\theta cos\theta$ b) 1-2sin$\theta cos\theta$ c) 1+sin$\theta cos\theta$ d) 1-sin$\theta cos\theta$

19. $sin^2 60^0$=---------

a) $\frac{3}{4}$ b) $\frac{4}{3}$ c) $\frac{\sqrt{3}}{2}$ d) $\frac{2}{\sqrt{3}}$

20. which one of the following is equal to cosec60^0--------

a)sin60^0 b)sec60^0 c)sec30^0 d)cos30^0

21. $sin^2 45^0$x$cos^2 45^0$=-----

a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{1}{\sqrt{2}}$ d) 4

22. If sec4A =cosec(A-20^0) and 4A is acute then the value of A is-------

a) 32^0 b) 70^0 c) 22^0 d) 42^0

23. sin20^0sec70^0+cos25^0cosec65^0=----------

a)0 b)1 c)4 d) 2

24. In the following which one of the following is both complementary and reciprocal to each other ?---------

a) tanθ*and* cotθ b) sinθ and cosθ c) sin$\theta$and cosecθ d) secθ and cosecθ

25) $9sec^2 A^0$-$9tan^2 A^0 = - - -$

a) 9 b)0 c) 1 d)-9