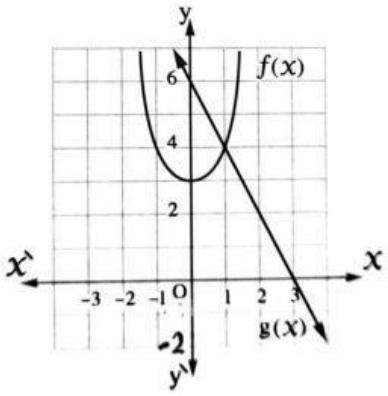
lim Mathematics department Grade : S2

Name : ..... Class : .....

Quiz (2)

Choose the correct answer :

1) The opposite figure represents two curves f (x) and g (x) , then (g o f) (1) = ...



(a) - 2 (b) 2

(c) 4 (d) 5

2) From the following functions , the even functions is f : f (x) = ...

(a) sin x (b) sin 30°

(c) x cos x (d) x^2 + tan x

3) Range of the function f : f (x) = $\frac{|x-2|}{x-2}$ is .....

(a)] 2 , ∞ [(b)] - ∞ , 2 [

(c) R – { 2 } (d) { - 1 , 1 }

4) All the following relations represent function y in terms of x except .....

(a) y = 3 x + 1 (b) $y = x^2 - 4$

(c) $x = y^2 - 2$ (d) y = sin x

5) If $f(x) = x^3$, then the image of the curve of f by reflection in x – axis and translation 3 units in the direction of $\overrightarrow{OX}$ and two units in the direction of $\overrightarrow{OY}$ is .....

(a) $-(x-3)^3 - 2$ (b) $-(x+3)^3 + 2$

(c) $-(x+3)^3 - 2$ (d) $-[(x+3)^3 + 2]$

6) $\lim_{x \to 1} \frac{x^2 - k^2}{x+2}$ = - 1 , then k = ...

(a) 2 (b) - 2 (c) 4 (d) ± 2

7) $\lim_{x \to 16} \frac{\sqrt{x}-1}{x-16}$ = ...

(a) zero (b) $\frac{1}{2}$ (c) 1 (d) does not exist

8) $\lim_{x \to \infty} (\frac{3}{5})^{\frac{1}{x}}$ = ...

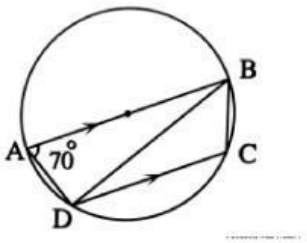
(a) 1 (b) - 1 (c) $\frac{3}{5}$ (d) ∞

9) In the opposite figure :

If BC = 10 cm , then the perimeter of Δ BDC = ... cm

(a) 60 (b) 62

(c) 64 (d) 67



10) In Δ ABC , m ($\angle$ A) : m ($\angle$ B) : m ($\angle$ C) = 3 : 4 : 3 , If a = 5 cm , then the Circumference of the circle passing through the vertices of Δ ABC = ... cm

(a) 17 (b) 18 (c) 19 (d) 15