ONE MARK TEST

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ENGLISH MEDIUM **FULL PORTION** **TEST - 1**

1 If $f(x) = 2x^2$ and $g(x) = \frac{1}{3x}$, then $f \circ g$ is

(A) $\frac{3}{2x^2}$ (B) $\frac{2}{3x^2}$ (C) $\frac{2}{9x^2}$ (D) $\frac{1}{6x^2}$

2 An A.P. consists of 31 terms. If its 16th term is m, then the sum of all the terms of this A.P. is

(A) 16 m (B) 62 m (C) 31 m (D) $\frac{31}{2}$ m

3 The solution of $(2x-1)^2 = 9$ is equal to

(A) -1 (B) 2 (C) -1, 2 (D) None of these

4 If number of columns and rows are not equal in a matrix then it is said to be a

(A) Diagonal matrix (B) rectangular matrix (C) square matrix (D) identity matrix

5 Two poles of heights 6m and 11 m stand vertically on a plane ground. If he distance between their feet is 12 m, what is the distance between their tops ?

(A) 13 m (B) 14 m (C) 15 m (D) 12.8 m

6 (2, 1) is the point of intersection of two lines

(A) $x - y - 3 = 0;\ 3x - y - 7 = 0$

(B) $x + y = 3;\ 3x + y = 7$

(C) $3x + y = 3; x + y = 7$

(D) $x + 3y - 3 = 0; x - y - 7 = 0$

7 $tan\theta cosec^2\theta - tan\theta$ is equal to

(A) $sec\theta$ (B) $\cot^2\theta$ (C) $sin\theta$ (D) $cot\theta$

8 If the radius of the base of a cone is tripled and height is doubled then the volume is

(A) Made 6 times (B) made 18 times (C) made 12 times (D) unchanged

9 Variance of first 20 natural numbers is

(A) 32.25 (B) 44.25 (C) 33.25 (D) 30

10 If a letter is chosen at random from the English alphabets { a, b, … , z } , then the probability that the letter chosen precedes x

(A) $\frac{12}{13}$ (B) $\frac{1}{13}$ (C) $\frac{23}{26}$ (D) $\frac{3}{26}$

LIVEWORKSHEETS