

ONE MARK TEST

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ENGLISH MEDIUM

LESSON – 2

TEST - 3

- 1 Using Euclid's division lemma, if the cube of any positive integer is divided by 9 then the possible remainders are
(A) 0, 1, 8 (B) 1, 4, 8 (C) 0, 1, 3 (D) 1, 3, 5

- 2 Given $F_1 = 1$, $F_2 = 3$ and $F_n = F_{n-1} + F_{n-2}$ then F_5 is
(A)3 (B)5 (C)8 (D)11

- 3 The sum of the exponents of the prime factors in the prime factorization of 1729 is
(A) 1 (B) 2 (C) 3 (D) 4

- 4 The first term of an arithmetic progression is unity and the common difference is 4. Which of the following will be a term of this A.P.
(A) 4551 (B) 10091 (C) 7881 (D) 13531

- 5 In an A.P., the first term is 1 and the common difference is 4. How many terms of the A.P. must be taken for their sum to be equal to 120?
(A) 6 (B) 7 (C) 8 (D) 9

- 6 If the sequence t_1, t_2, t_3, \dots are in A.P. then the sequence $t_6, t_{12}, t_{18}, \dots$ is
(A) a Geometric Progression (B) an Arithmetic Progression
(C) neither an Arithmetic Progression nor a Geometric Progression
(D) a constant sequence

- 7 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) $\frac{31}{2} m$

8 The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is
(A) 2025 (B) 5220 (C) 5025 (D) 2520

9 The value of $(1^3 + 2^3 + 3^3 + \dots + 15^3) - (1 + 2 + 3 + \dots + 15)$ is
(A) 14400 (B) 14200 (C) 14280 (D) 14520

10 If the HCF of 65 and 117 is expressible in the form of $65m - 117$, then the value of m is
(A) 4 (B) 2 (C) 1 (D) 3