

## 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  $F_9$  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 16<sup>th</sup> 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