

## ONE MARK TEST

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ENGLISH MEDIUM

LESSON – 2

TEST - 1

- 1 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
- 2  $7^{4k} \equiv \underline{\hspace{2cm}} \pmod{100}$   
(A) 1 (B) 2 (C) 3 (D) 4
- 3 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
- 4 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
- 5 Given  $F_1 = 1$ ,  $F_2 = 3$  and  $F_n = F_{n-1} + F_{n-2}$  then  $F_6$  is  
(A) 3 (B) 5 (C) 8 (D) 11
- 6 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
- 7 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

- 8 The next term of the sequence  $\frac{3}{16}, \frac{1}{8}, \frac{1}{12}, \frac{1}{18}, \dots$  is
- (A)  $\frac{1}{24}$                       (B)  $\frac{1}{27}$                       (C)  $\frac{2}{3}$                       (D)  $\frac{1}{81}$
- 9 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
- 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