

## ONE MARK TEST

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**ENGLISH MEDIUM**

**LESSON – 2**

**TEST - 2**

- 1 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
- 2 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
- 3 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
- 4 If  $A = 2^{65}$  and  $B = 2^{64} + 2^{63} + 2^{62} + \dots + 2^0$  which of the following is true?  
(A)  $B$  is  $2^{64}$  more than  $A$  (B)  $A$  and  $B$  are equal  
(C)  $B$  is larger than  $A$  by 1 (D)  $A$  is larger than  $B$  by 1
- 5 The sum of the exponents of the prime factors in the prime factorization of 1729 is  
(A) 1 (B) 2 (C) 3 (D) 4
- 6 If 6 times of 6<sup>th</sup> term of an A.P. is equal to 7 times the 7<sup>th</sup> term, then the 13<sup>th</sup> term of the A.P. is  
(A) 0 (B) 6 (C) 7 (D) 13
- 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 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

9 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)  $\frac{1}{81}$

10 Euclid's division lemma states that for positive integers  $a$  and  $b$ , there exist unique integers  $q$  and  $r$  such that  $a = bq + r$ , where  $r$  must satisfy.

(A)  $1 < r < b$

(B)  $0 < r < b$

(C)  $0 \leq r < b$

(D)  $0 < r \leq b$