

## ONE MARK TEST

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## KOLIYANUR – VILLUPURAM DISTRICT

## 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)  $0 < r \leq b$