

## Mathematics FA Part 1 Online Test

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | If <sup>n</sup> P <sub>2</sub> = 30 then n = :  | A. 5<br>B. 6<br>C. 2<br>D. 3  |
| 2  | Numbers are formed by using all the digits 1, 2, 3, 4, 5, 6 on digit being repeated, then the numbers which are divisible by 5 are: | A. 110<br>B. 120<br>C. 122<br>D. 124  |
| 3  | How many different number can be formed by taking 4 out of the six digits 1, 2, 3, 4, 5, 6:   | A. 360<br>B. 120<br>C. 366<br>D. none of these  |
| 4  | Number of digits multiple of 5 made from the digits 2, 3, 5, 7, 9 is:   | A. 5<br>B. 24<br>C. 20<br>D. none   |
| 5  | No. of signals made by 4 flags of different colors using 2 flags at a time:   | A. 6<br>B. 12<br>C. 60<br>D. none   |
| 6  | No. of signals made by 5 flags of different colors using 3 flags at a time is:  | A. 60<br>B. 15<br>C. 10<br>D. None  |
| 7  | No. of arrangements of the letters of the word plane taking all letters at a time:  | A. 5<br>B. 1<br>D. none   |
| 8  | In how many ways two places can be filled by n objects:   | A. n(n-1) B. 2! C. n(n+1) D. None   |
| 9  | No. of selection of n different things out of n is:   | A. 1<br>B. n<br>C. n!<br>D. none  |
| 10 | The factorial of positive integer is:   | A. rational no. B. positive integer C. real no. D. none   |
| 11 | For a positive integer n:   | A. $(n+1)! = (n+1)n!$<br>B. $(n+1)! = (n+1)(n-1)!$<br>C. $n! = n(n+1)!$<br>D. none of these               |
| 12 | n! stands for:  | A. product of first natural numbers B. sum of n natural numbers C. product of n integers D. none of these |
| 13 | Zero cannot be a term of:   | A. A.P and G.P B. G.P and H.P C. A.P and H.P D. only H.P  |
|    |   | A10<br>B. 10  |
| 14 | If S is the H.M between 2 and b then b = :  | C. 7<br>D. 5  |
| 15 | The reciprocal of the terms of A.P. form:   | A. A.P<br>B. G.P<br>C. H.P<br>D. none of these  |
|    |   |   |

| 16 | A sequence of numbers whose reciprocal form an arithmetic sequence, is known as: | A. arithmetic sequence     B. geometricsequence     C. harmonicsequence     D. none of these |
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| 17 | The series 2 + 2 + 2 is:   | A. divergent B. convergent C. oscillatory D. none of these                                   |
| 18 | A geometric series is convergent only if:  | A.   r   > 1 B.   r   < 1 C.   r   = 1 D. none of these                                      |
| 19 | The product of three G.Ms between 1 and 16 is:                                   | A. 32<br>B. 64<br>C. 128<br>D. 16  |
| 20 | If there are six G.Ms between 3 and 284 then $G_4$ =                             | A. 24<br>B. 48<br>C. 12<br>D. 6  |