Mathematics ECAT Pre Engineering Chapter 9 Permutation, Combination and Probability Online Test

Sr	Questions	Answers Choice
1	In school there are 150 students Out of these 80 students enrolled for mathematics class 50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time Find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 20
2	Which one is not defined $\forall n \in Z+$	A. -n! B. n! C. (-n)! D. n!+0!=n!+1
3	Number of combination of zero or more things out of n different things	A. nPn B. nPr C. nCr D. 2n
4	How many comittees of 5 numbers can be chosen from a group of 8 players person when each committee must include 2 particular persons	A. 8! B. 5!3! C. 5! D. 20
5	How many 6-Digit number can be formed without repairing any digit from the digits 0,1,2,3,4,5	A. 720 B. 600 C. 120 D. 6-5!
6	Probability of an impossible event is	A. 0 B. -1 C. 1 D. ∞
7	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
8	The factorial of a positive integers is a (an)	A. Rational number B. Positive integer C. Real number D. None
9	How many different 5-digit even numbers are possible form digit 1,2,4,6,8	A. 4 : 4! B. 4! C. 5! D. 4!+4!
10	If for two events A and B , $P(A \cup B)=1$,then events A and B are	A. Certain events B. Mutually exclusive C. Complementary events D. Independent
11	Number of selections of n different things out of n	A. 1 B. nPr C. n! D. nPr
12	The number of 5-digit number that can be formed from the digits 1,2,4,6,8, when 2 and 8 are never together is	A. 72 B. 48 C. 144 D. 20
13	A box contains 10 red 30 white and 20 black marbles When a marble is drawn at random the probability that it is either red or white is	A. 1/6 B. 1/3 C. 1/2 D. 2/3
14	The number of permutation that can be formed from the letters of the word OBJECT is	A. 700 B. 600 C. 720 D. 620
15	If A is an event then which of the following is true	A. P(A)<0 B. $0 \geq P(A) \leq 1$

		C. P(A)>0 D. None
16	probability of a certain event is	A. 0 B. -1 C. 1 D. ∞
17	Product of any n consecutive positive integers is divisible by	A. n B. √n C. n! D. None
18	The probability that a slip of numbers divisible by 4 is picked from the slips of number 1,2,3,4,.....10 is	A. 1/5 B. 2/5 C. 1/10 D. 3/10
19	If S is a sample space and event set E =Φ then P(E) is	A. >0 B. 1 C. <1 D. 0
20	If S is a sample space and event set E = S then P(E) is	A. >0 B. 1 C. <1 D. 0
21	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
22	nCn-r is equal to	A. n! B. n-1Cr C. nCr D. None of these
23	If A and B are two disjoint events then	A. P(A∪B)=P(A)+P(B) B. P(A∪B)=P(A)-P(A∪B) C. P(A∪B)=P(A)or P(B) D. None
24	An event having more than one sample point is called	A. Certain event B. Compound event C. Simple event D. None
25	How many terms of the A.P 3,6,9,12,15.....must be taken to make the sum 108	A. 8 B. 6 C. 7 D. 36
26	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
27	The sum of all even numbers less than 100 is	A. 2450 B. 2352 C. 2272 D. 2468
28	The sum of all positive integral multiple of 5 less than 100 is	A. 950 B. 760 C. 1230 D. 875
29	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
30	The sum if 1,3,5,7,9..... up to 20 terms is	A. 400 B. 472 C. 563 D. 264