ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	A class contains nine boys and three girls, in how many ways can the teacher choose a committee of four?	A. 60 B. 460 C. 495 D. 272
4	Number of combination of zero or more things out of n different things	A. nPn B. nPr C. nCr D. 2n
5	Question Image	
6	The number of significant numbers which can be formed by using any number of the digits 0, 1, 2, 3, 4 but using each not more than once in each number is	A. 260 B. 356 C. 410 D. 96
7	Question Image	A. 0 B. 20 C. 90 D. 80
8	A die is rolled. What is the probability that the dots on the top are greater than 4?	A. 1/4 B. 1/2 C. 1/3 D. 1/33
9	The value of n, when ${}^{n}P_{2}= 20$ is	A. 3 B. 4 C. 6 D. 5
10	If $4\ {}^{6}P_{r}= {}^{6}P_{r+1}$, then r is equal to	A. 4 B. 3 C. 2 D. 1
11	Number of permutations of n distinct objects taken r(<n - 3) at a time which exclude 3(<n) particular objects is	A. 3! P(n, r - 3) B. P(n, 3) P(n, r - 3) C. P(r, r)P(n, r - 3) D. P(n - 3, r)
12	A bag contains 3 white, 4 black and 2 red balls. If 2 balls are drawn at random, then the probability that both the ball are white is	A. 1/18 B. 1/12 C. 1/36 D. None of these
13	If two balls are drawn from a bag containing 3 white, 4 black and 5 red balls. Then the probability that the drawn balls are of different colours is	A. 1 / 66 B. 3 / 66 C. 19 / 66 D. 47 / 66
14	Question Image	
15	In a 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. 60
16	Six boys and 3 girls are to be seated at random, in a row, for a photograph. The probability that no two girls will sit together is	A. 1/12 B. 1/6 C. 5/12 D. 7/12
17	5 unbiased coins coins are tossed simultaneously. The probability of getting at least one head is	A. 1 / 32 B. 31 / 32 C. 1 / 16 D. None of these

18	6! = _____	A. 360 B. 720 C. 6.5.4 D. None of these
19	Riaz, Saba. Maria, Shehzad are to give speeches in a class. The teacher can arrange the order of their presentation in	A. 4 ways B. 12 ways C. 256 ways D. 24 ways
20	A coin is tossed. If head comes up, a die is thrown but if tail comes up, the coin is tossed again. The probability of obtaining a head and an even number is	A. 1/8 B. 2/8 C. 3/8 D. None of these