Discrete Mathematics Quiz Unit 3

***** Required

* This form will record your name, please fill your name.

1. Roll Number *

2. Name *

3. Class *

- ◯ SE First Shift
- ◯ SE Second Shift

4. A box contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be drawn from the box, if at least one black ball is to be included in the draw? *
(2 Points)

- ◯ 32
- ◯ 48
- ◯ 64
- ◯ 96

5. How many 3-digit numbers can be formed from the digits 2, 3, 5, 6, 7 and 9, which are divisible by 5 and none of the digits is repeated? *
(2 Points)

- ◯ 5
- ◯ 10
- ◯ 15
- ◯ 20

6. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done? *
(2 Points)

- ◯ 564
- ◯ 645
- ◯ 735
- ◯ 756

7. A bank has 6 digit account number with no repetition of digits within a account number. The first and last digit of the account numbers is fixed to be 4 and 7. How many such account numbers are possible? *
(2 Points)

- ◯ 10080
- ◯ 5040
- ◯ 890
- ◯ 1680

8. In how many ways can we arrange the word 'FUZZTONE' so that all the vowels come together? *
(1 Point)

- ◯ 1440
- ◯ 6
- ◯ 2160
- ◯ 4320

9. In a room there are 2 green chairs, 3 yellow chairs and 4 blue chairs. In how many ways can Raj choose 3 chairs so that at least one yellow chair is included? *
(1 Point)

- ◯ 3
- ◯ 30
- ◯ 64
- ◯ 84

10. On a railway line there are 20 stops. A ticket is needed to travel between any 2 stops. How many different tickets would the government need to prepare to cater to all possibilities? *
(1 Point)

- ◯ 760
- ◯ 190
- ◯ 380
- ◯ 72

11. Without repetition, using digits 2, 3, 4, 5, 6, 8 and 0, how many numbers can be made which lie between 500 and 1000? *
(1 Point)

- ◯ 70
- ◯ 60
- ◯ 90
- ◯ 147

12. A trekking group is to be formed having 6 members. They are to be selected from 3 girls, 4 boys and 5 teachers. In how many ways can the group be formed so that there are 3 teachers and 3 boys or 2 girls and 4 teachers? *
(1 Point)

- ◯ 55
- ◯ 90
- ◯ 27
- ◯ 144

13. There are 8 routes from London to Delhi. And there are 6 routes from Delhi to Tokyo. In how many different ways can Raj travel from London to Tokyo via Delhi? *
(1 Point)

- ◯ 100
- ◯ 48
- ◯ 24
- ◯ 12

14. In an examination there are 3 multiple choice questions and each question has 4 choices. The number of ways in which a student can fail to get all answers correct is ? *
(1 Point)

- ◯ 11
- ◯ 27
- ◯ 63
- ◯ 84

15. In a crossword puzzle there are 2 solutions to each of the 3 given places and 3 solutions to 1 other place. How many different solutions can be set in ? *
(1 Point)

- ◯ 12
- ◯ 24
- ◯ 36
- ◯ 48

16. A gentleman has got 6 sorts of note papers, 7 different ink-stands and 4 different pens. In how many ways can he begin to write a letter ? *
(1 Point)

- 168
- 176
- 186
- 196

17. The number of different permutations of the word BANANA is *
(1 Point)

- 720
- 120
- 60
- 180

18. Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed? *
(1 Point)

- 25200
- 120
- 21400
- 1050

19. In how many different ways can the letters of the word 'CORPORATION' be arranged so that the vowels always come together? *
(1 Point)

- ◯ 810
- ◯ 1440
- ◯ 2880
- ◯ 50400