College of Administration and Economics

Department: Statistics

Stage: 2<sup>nd</sup> class

Subject: Set theory
Date: 11 / 1 /2020

## First Trial 2019 – 2020

- **Q1.** How many words, with or without meaning can be made from the letters of the word "**Function**", assuming that no letter is repeated, **if**:
- a) Four letters are used at a time?
- b) Five letters are used but first letter is a vowel?
- c) Five letters are used begin with F and end in a consonant?
- d) Five letters are used contain the latter T?
- **Q2.** How many **4 digit** numbers **greater than 5000** can be formed using numbers **2,3,4,5,6,7,8** with the following conditions:
- (i) Without repetition of digits. (ii) **Odd numbers** without repetition.
- Q3. Five cards are drawn from a pack of playing cards. Find the probability of :
- (i) Three aces and two king? (ii) At least one queen of the red is drawn?
- (iii)**Two** pictures of **red card** and **others** are **black** cards?
- Q4. Three unbiased dice are thrown Find the probability of getting:
- a) Sum less than 8?
- b) Sum odd numbers?

Good Luck

Name Head of department