College of Administration and Economics   Subject: Set theory
Department: Statistics   Date: 11 / 1 /2020
Stage: 2nd class

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?

Name	**Good Luck**	Name
Lecturer		Head of department
Dr. Awat Sirdar Wahdi		Dr.