**Department of Computer Science**

**Final Exam Summer 2020**

Subject: **Data Sciences Time: 9 Am to 12:00 Am**

**BS (CS,SE)** Instructor: M.Ayub Khan

***Note:***

***At the top of the answer sheet there must be the ID, Name and semester of the concerned Student.***

***Students must have to provide the output of their respective programs. Students have same answers or programs will be considered fail. Programs in Python and codes should be explained clearly.***

***As this assignment is online so incase of any ambiguity my Whatsapp no. is 03449121116.***

Q1. a. What are variables in python explain with help of Python coded examples?

 b. What are the rules to define a variable in python?

Q2. a. What are data types, how many data types are used in python explain with

 the help of Python coded examples ?

 b. Write a program in python in which integer value is changed in to string

 data type as well as explain in detail.

Q3. Why print() and type functions are used in python explain with the help of

 python coded examples for each function and explain in detail as well ?

Q4. How addition operator is used to update the values of variables explain with

 the help of Python coded example as well as explain the program?

Q5. What type of errors do occur in Python, write the a program with different

 types of errors as well as write separate correction code in python as well as

 explain the errors?