Gurudas College

Semester 5 (HONS)

Internal Assessment 2021

Sub: DSE-B-2

Time: 1 hour   **Full marks:30**

Answer Question 1 and any four from Question 2 to 9

1. **Answer any 4 questions : (4*1.5)**
   a. What is the difference between list and tuples in Python?
   b. Python an interpreted language. Explain.
   c. What does [::-1} do?
   d. How can you randomize the items of a list in place in Python?
   e. What are the built-in types of python?
   f. What is map function in Python?
   g. What is PEP 8 and why is it important?

2. a. Describe some key features of Python.   3+3
   b. What is type conversion in Python? Give examples

3. a. How can you generate random numbers in Python?   2+4
   b. Accept a list of names from the user. Write a program in Python that will print the names from the list randomly.

4. a. What is lambda in Python? Why is it used?   4+2
   b. What is pass in Python?

5. a. What is list comprehension? How do we generate integer numbers in a list using list comprehension by accepting all the numbers using split() function?   3

   b. Write a program in Python that will find prime numbers between 1 and 100 using list comprehension format only.   3

6. a. What is the difference shallow and deep copy? Give an example to show the difference.
   b. How do you copy an object in Python?   4+2

7. a. Write a Python program to unzip a list of tuples into individual lists.   2+4
   b. Give an example to describe the function of find(), ljust(), remove(), reversed().

8. Write a program in Python to verify whether the entered input is a number or not.

                                                                                         6
9. a. How to create singleton tuple? Also mention the different ways we can represent it.
   b. Differentiate between packing and unpacking of tuples.
   c. What is the use of * operator in range() function?   1+3+2