Reg. No. : ....

Name : ....

I Semester M.C.A. Degree (C.B.S.S. – Reg./Supple./Imp.)
Examination, November 2021
(2020 Admission Onwards)
MCA1C03 : PYTHON PROGRAMMING

Time : 3 Hours

Max. Marks : 60

SECTION – A

Answer **all** questions. **Each** question carries two marks.

1. What is a variable in Python ? How to assign values to variables ?

2. What is the use of def in Python ?

3. Briefly explain the syntax of for loop with an example.

4. Discuss the use of "in" operator with an example.

5. Differentiate between del statement and pop() method of list.

6. Explain nested dictionaries with an example.

7. Identify the primary differences between a list and a tuple.

8. Briefly explain the slice operation of tuples with an example.

9. What are the different types of access modes of files in Python ?

10. What is the use of pickle module in Python ?

SECTION – B

Answer **all** questions. **Each** question carries **eight** marks.

11. a) Explain various type conversion functions available in Python with examples.

    OR

    b) Briefly explain binary left shift and binary right shift operators with examples.

P.T.O.

12. a) Differentiate the syntax of if...else and if...elif...else with an example.

OR

b) Explain with syntax, the range() function in Python. Demonstrate range() in a program to check whether a given number is prime or not.

13. a) What are functions ? Explain its advantages with examples. Explain the advantages of *args and **kwargs with examples.

OR

b) Write a program that has the dictionary of your friends' names as keys and phone numbers as its values. Print the dictionary in a sorted order. Prompt the user to enter the name and check if it is present in the dictionary. If the name is not present, then enter the details in the dictionary.

14. a) Describe with an example how to read and write to a binary file and copy the content of one file to another.

OR

b) Describe with an example how to read and write to a csv file and copy the content of one file to another.

15. a) Write a function which receives a variable number of strings as arguments. Find unique characters in each string.

OR

b) Write a program that reads the contents of the file and counts the occurrences of each letter. Prompt the user to enter the filename.

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