Sixth Semester B.C.A. Degree Examination, September 2020

(CBCS Scheme)

Computer Science

PROGRAMMING USING PYTHON

Time : 3 Hours]   [Max. Marks : 90

Instructions to Candidates : Answer all Sections.

SECTION – A

I. Answer any **TEN** questions :   (10 × 1 = 10)

1. What is Indentation?

2. How to introduce comments in Python?

3. What is triple quote string?

4. Give example for Multiline Assignment.

5. Differentiate between Decision making and Looping.

6. How to find length of list in Python?

7. What is tuple?

8. Define dictionary.

9. What is exception?

10. What is Namespace?

11. What is method in class?

12. What is the purpose of TKinter in Python?

SECTION – B

II. Answer any **FIVE** questions : (5 × 3 = 15)

13. Explain any three standard datatypes in Python.

14. Explain Decision Making Statements in Python.

15. Explain Break, Continue and Pass statements.

16. Explain Basic list operations.

17. Write a Python program to illustrate the dictionary.

18. How to create a class in Python? Explain.

19. Write a python program to generate pythogoran triplets.

SECTION – C

III. Answer any **SIX** questions : (6 × 5 = 30)

20. Explain features of Python.

21. Explain different types of operation in Python.

22. Explain different types of Looping statements in Python.

23. Write a program to illustrate tuple in Python.

24. Explain the different types of inheritances in Python.

25. What is thread? Explain in detail how to implement threads in Python.

26. What is Exception handling? Illustrate with programming example.

27. Write a Python program to calculate the sum of two compatible matrices.

SECTION – D

IV. Answer any **FIVE** questions :   (5 × 7 = 35)

28. Explain Built in list functions and methods in Python.

29. (a) Explain different types of Function arguments in Python.

    (b) Explain different types of User defined functions.   (3 + 4)

30. With programming example, explain how to create user defined modules.

31. (a) What is overloading in Python? Illustrate with an example.

    (b) What is Regular expression? Illustrate with an example.   (3 + 4)

32. Explain following in Python :

    (a) Creating database Tables
    (b) Insert operation in Database
    (c) Read operation in Database
    (d) Update operation in Database
    (e) Delete operation in Database   (2 + 1 + 1 + 2 + 1)

33. (a) Write a python program product of two compatible matrices.   (4)

    (b) Write a note on sets in Python.   (3)

34. Write a python program to calculate the mass M in a chemical reaction. The mass M (in gms) disintegrates according to the formula is $M = 60/(t + 2)$, where 't' is the time in hours. Sketch a graph for t vs M. Where $t \geq 0$.

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