U-**5181**

M. C. A. (Sem.-II) Examination, 2021

PAPER - MCA-204

Python Programming

Time allowed : **Three Hours**

Max. Marks : **70**
Min. Pass Marks : **28**

Note : *This question paper will be divided into three sections as under :*

Section-A   **Max. Marks-10**

Will carry 10 marks with 01 compulsory question comprising 10 short answer type questions (Maximum 20 words answer). Each question shall be of one mark.

Section-B   **Max. Marks-25**

Will carry 10 questions, 02 questions from each unit (answer about in 250 words). Students are instructed to attempt five questions by selecting one question from each unit. Each question shall be of five marks.

Section-C   **Max. Marks-35**

Will carry 35 marks with five long answer type questions comprising one compulsory question (question no. 07) of 15 marks and four questions of 10 marks each. Students are instructed to attempt total three questions will one compulsory question (answer about in 500 words) of and any two more question (answer about in 400 words) out of remaining four questions.

SECTION - A

1   (i)   What is interpreter ?

     (ii)   What is ternary operator ?

     (iii)   Write use of break statement.

     (iv)   Write use of continue statement.

     (v)   What is file ?

     (vi)   What is preprocessing of data ?

     (vii)   What is a class ?

     (viii) What is an object ?

     (ix)   Write difference between exception and error.

     (x)   What is Metadata ?

SECTION - B

UNIT - I

2   Discuss important features of python.
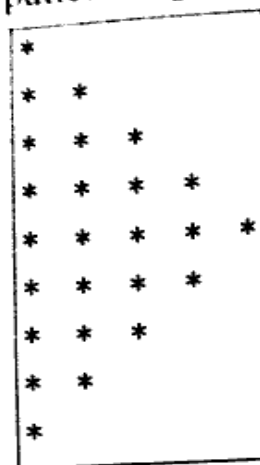
OR

Discuss data types in python.

UNIT - II

3   Write python program to display following pattern e.g. if n 5 or for any n.

```
*
*  *
*  *  *
*  *  *  *
*  *  *  *  *
*  *  *  *
*  *  *
*  *
*
```

OR

Write python program to display Fibonacci series for a given n.

UNIT - III

4   Write python program to transpose a give 3×3 matrix.

OR

Write notes on following :
(a)   Scatter Plot
(b)   Histgram
(c)   Bar Plot

UNIT - IV

5   Write python code for binary search

OR

Write python code for insertion sorting.

UNIT - V

6   Write a python code to convert lower-case letters to uppercase and vice-versa in a text file.

OR

Write a python code to write only vowel letters in an another file while reading from an input text file. https://www.uokonline.com

SECTION - C

7   Discuss various operators in python with their precedence and associativity.

8   Discuss various control statements in python.

9   Write notes on :
   (a)   List
   (b)   Tuploy
   (c)   Dictionary
   (d)   Set

10   Write python codes on :
   (a)   Stacks
   (b)   Queues
   (c)   Linear search

11   Discuss exception model in python with suitable example for handling multiple exceptions.

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