**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **2BC3142** | Roll No. | Total Printed Pages: 2 |
| **2BC3142** |  |
| BCA II Year III- Semester (Main/Back) End Semester Examination, November 2022  **(Gen)** | |
| **BCACCA3103 : Python Programming** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **1.--------------------------Nil--------------------** **2.------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | What is a python interpreter? Define the difference between intermediate mode and script mode? | **(6)** | **Evaluate** |
|  |  |  |  |  |
|  | **(b)** | Explain briefly constants, variables, expressions, keywords, and statements available in python? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | List the various data types in python. Explain with example | **(6)** | **Analysis** |
|  |  |  |  |  |
|  | **(b)** | The rules for writing an identifier, expressions, a statement, multiline statement, and expression? Explain with example? | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | What is Dictionary? Explain Python dictionaries in detail discussing its operations and methods | **(6)** | **Apply** |
|  |  |  |  |  |
|  | **(b)** | What is the difference between break and continue statement? | **(6)** | **understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.4** | **(a)** | Describe the **is** and **is not** operators and type() function. Also, discuss why Python is called a dynamic and strongly typed language? | **(6)** | **Analysis** |
|  |  |  |  |  |
|  | **(b)** | What are logical operators and Bitwise operators? why do we need an operator in the programming concept? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | Explain the following list of methods with an example. a) append () b) extend() c) insert() d) index() e) sort() ? | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | Write a program to find the sum of all Odd and Even numbers up to a number specified by the user? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
| **Q.6** | **(a)** | What is meant by the selection, iteration, and sequence control structures? Find with example? | **(6)** | **understand** |
|  |  |  |  |  |
|  | **(b)** | Explain string slicing with examples. Explain with each and every example. | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-IV (CO4)** |  |  |
|  |  |  |  |  |
| **Q.7** | **(a)** | What are packages? Give an example of package creation in Python. | **(6)** | **Analysis** |
|  |  |  |  |  |
|  | **(b)** | Describe the need for catching exceptions using try and except statements? | **(6)** | **Evaluate** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | What is the difference between pass, break and continue statements? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Read the marks of a student in four subjects. Then calculate the total and aggregate, and display the grade obtained by the student. (i) If the student scores an aggregate greater than 75%, then the grade is the distinction. (ii) If aggregate is 60 >= and < 75, then the grade is first division. (iii) If aggregate is 50 >= and < 60, then the grade is second division. (iv) If aggregate is 40 >= and < 50, then the grade is third division. (v) Else the grade is fail? | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | Describe the different access modes of the files with an example? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | The elaborate write method is used to read the contents of a file that is already created? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | Write Python Program to Demonstrate Multiple Inheritances with Method Overriding? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | How to open a new file in Python? the use of these functions with Various modes? | **(6)** | **Remember** |