

Bharati Vidyapeeth's
Institute of Computer Applications and Management (BVICAM)
A-4, Paschim Vihar, New Delhi-63

SECOND SEMESTER [MCA] Internal Examination, May 2023

Paper Code: MA-106

Subject: Python Programming

Time: 2 Hours

Maximum Marks: 45

Note: Attempt THREE questions in all. Question No. 1 is compulsory, and attempt one question from each unit.

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| 1. | Answer all the following questions briefly: - | 1.5 × 10 = 15 |
| | (a) Discuss the role of indentation in python script. | CO1 |
| | (b) Define iterative statements. | CO1 |
| | (c) Discuss anonymous functions | CO2 |
| | (d) State the rules of using default arguments | CO2 |
| | (e) Documentation strings are recommended. Justify. | CO2 |
| | (f) Compare mutable and immutable data types. | CO1 |
| | (g) Differentiate text and binary files. | CO4 |
| | (h) Why a set cannot have list as its member? | CO3 |
| | (i) Discuss utility of range. | CO2 |
| | (j) Differentiate between del and remove() | CO3 |

UNIT - I

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| 2. | (a) Justify the statement – Python has developed as an open source project. | 5 CO1 |
| | (b) Write a program to demonstrate Implicit and Explicit type conversion. | 5 CO1 |
| | (c) Draw a comparison between recursive and iterative techniques for problem solving. | 5 CO2 |
| 3. | (a) Python variable do not have specific types. Justify this statement with the help of an example. | 5 CO1 |
| | (b) When should we use nested if statements. Illustrate your answer with the help of a code example. | 5 CO2 |
| | (c) Explain difference between modules and packages. | 5 CO2 |

UNIT - II

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| 4. | (a) Write a python program to transpose a given 3 X 3 matrix | 5 CO3 |
| | (b) Explain about creation of Tuples and operations which can be performed on them. | 5 CO3 |
| | (c) Discuss file object with its built-in attributes. Also discuss different access modes to open a file. (3 + 2) | 5 CO4 |
| 5. | (a) Explain slice operation with its syntax. Give appropriate code examples to support your answer. | 5 CO2 |

- (b) Discuss dictionary data structure. Demonstrate its creation using dictionary comprehension. 5 CO3
- (c) Write a python code to write only vowel letters in another text file while reading from an input file. 5 CO4