# **A-846**

**Total Pages : 3** 

Roll No.

# MCS-E5/MCA-E5

Python Programming

(MCA)

4th Semester Examination, 2024 (June)

Time : 2:00 Hrs.

Max. Marks: 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates* should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

### Section-A

# (Long Answer Type Questions) 2×19=38

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

A-846/MCS-E5/MCA-E5 (1) P.T.O.

- Explain the Identifiers, Keywords, Statements, Expressions, and Variables in Python programming language with examples.
- 2. What type of conditional structures is present in programming language ? How many of them are supported in Python ? Explain with example.
- 3. Write the algorithm, pseudocode and draw the flowchart for the finding minimum in a list.
- Explain the need for continue and break statements.
  Write a program to check whether a number is prime or not. Prompt the user for input.
- 5. Explain the term Exception in Python. List some few common Exception types and explain when they occur.

#### Section-B

### (Short Answer Type Questions) 4×8=32

- *Note* :- Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.
- Explain the purpose of Joop structure in a programming language. Describe the syntax and semantics of any two loop structures provided by Python.

A-846/MCS-E5/MCA-E5 (2)

- 2. Explain in detail about Python Files, its types, functions and operations that can be performed on files with example.
- Describe the need for catching exceptions using try and except statements with examples.
- 4. What is Dictionary ? Explain Python dictionaries in detail discussing its operations and methods.
- Write Pythonic code to multiply two matrices using nested loops and also perform transpose of the resultant matrix.
- 6. What is the difference between intermediate mode and script mode ?
- 7. What is the difference between tuples and lists in Python?
- 8. Describe about Handling Exceptions in detail with examples.

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