F.Y. B.Sc. (CS) (Sem-I) April-2023

Q.P.Code: 00000258

Programming with Python I

[Time:2.30 Hrs] [Marks:75]

Please check whether you have got the right question paper.

N.B: 1. All question are compulsory.

- 2. Figures to the right indicate full marks.
- 3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English.

Q1. Answer the Following: (Any 4)

(20 marks)

- a) What are the features of Python programming language?
- b) Explain expression evaluation in Python.
- c) Explain various operators used in Python.
- d) Write a Python program using Math Expressions.
- e) Explain the use of Built-in type function with an example.
- f) Explain operator precedence with an example.

Q2. Answer the Following: (Any 4)

(20 marks)

- a) What is a Dictionary? How to create and access values in a dictionary?
- b) With the help of an example, explain Break and Continue statements.
- c) Explain while loop with an example.
- d) Write a program to calculate factorial of a number using if-elif-else statement.
- e) Explain Global and local variables with an example.
- f) Define Functions and list advantages of using them.

Q3. Answer the Following: (Any 4)

(20 marks)

- a) Explain the concept of Anonymous functions?
- b) Explain list comprehension with an Example.
- c) State and explain any 5 string functions.
- d) State and explain any 5 tuple functions.
- e) State and explain any 5 list functions.
- f) Explain with example the use of Anonymous function with filter().

Q4. Answer the Following: (Any 3)

(15 marks)

- a) What is difference between mutable and immutable?
- b) Write the difference between Dynamic Typing and Static Typing.
- c) What are the built-in Python functions?
- d) Explain recursive function with an example.
- e) State and explain any 5 dictionary functions.
- f) Explain with example the use of Anonymous function with map().
