

Time: 2½ hrs.

Marks:75

- Note:**
1. All questions are compulsory with internal options.
 2. Figures to the right indicate full marks.
 3. Draw neat diagram wherever necessary.

- Q.1 Answer the following (any Four) (20)**
- (a) List the naming rules to write a python identifier.
 - (b) Elaborate the features of python.
 - (c) Write a program to find the area of a rectangle.
 - (d) What is the role of indentation in python? Provide example to support your answer.
 - (e) Elucidate the return statement in Python with example.
 - (f) Explain the If...Else statement in Python with example.
- Q.2 Answer the following (any Four) (20)**
- (a) What is a function in Python? Explain with example.
 - (b) Explain the various operators in Python.
 - (c) Write a python program to calculate the factorial of a number entered by the user.
 - (d) Write a program to check if the number is positive or negative.
 - (e) Explain the various array operations in python.
 - (f) What is a lambda function in Python? Explain with an example.
- Q.3 Answer the following (any Four) (20)**
- (a) Explain a List in Python with an example.
 - (b) Illustrate any five built-in functions in Python with suitable examples.
 - (c) What is a Tuple in Python? How does a Tuple is created in Python? Explain any three Tuple operators.
 - (d) Explain any five List operations in Python with example.
 - (e) Write a short note on string formatting.
 - (f) Explain the creation of a Dictionary in Python with an example.
- Q.4 Answer the following (any Five) (15)**
- (a) How does the lambda function used with filter() function in Python? Explain with an example.
 - (b) Explain the size attribute in array with example.
 - (c) How does a function return multiple values in Python? Explain with example.
 - (d) What do you mean by aliasing array? Explain.
 - (e) Explain nested list in Python with example.
 - (f) Explain python Interpreter.

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