

python - I

S0131 / S9053 PROGRAMMING WITH PYTHON I.

Q. P. Code: 12208

(Time: 2½ Hours)

[Total Marks: 75]

- N.B.
- 1) All questions are compulsory.
  - 2) Figures to the right indicate marks.
  - 3) Illustrations, in-depth answers and diagrams will be appreciated.
  - 4) Mixing of sub-questions is not allowed.
  - 5) Assume suitable data wherever required.

Q. 1 Attempt All(Each of 5Marks)

(15M)

(a) Multiple Choice Questions

1. <, >, <= are \_\_\_\_\_ operators  
 i) Arithmetic    ii) Logical    iii) Relational     iv) Assignment
2. Which of the following function converts a string to all lowercase?  
 i) lower()    ii) isdecimal()    iii) swapcase()    iv) title()
3. Python is \_\_\_\_\_ language.  
 i) Compiled    ii) Procedure     iii) Interpreted.    iv) Non-Interactive
4. What is the output of len(["Hello", "world", "Python"])?  
 i) 1    ii) 2     iii) 3    iv) 4
5. What is "Hello".replace("l", "e")  
 i) Heeeo    ii) Hlllo     iii) Heleo    iv) None of these

(b) Fill in the blanks

1. What is the data type of the below object \_\_\_\_\_ ?  
 T = ("PY", 22, 'hello', 1).
2. Ternary operator (?) is used for \_\_\_\_\_
3. The term IDLE stands for \_\_\_\_\_
4. To use in-built mathematical functions we need to import \_\_\_\_\_ module.
5. An instance of a class is called as object

(c) Write answers for the following in few lines

1. Define Assignment statement.
2. Write the use of del statement.
3. What is the output when following statement is executed \_\_\_\_\_ ?  
 >>>"a"+"b"
4. Define Expression statement.
5. Explain the use of "break" statement.

- Q. 2 Attempt the following (Any THREE) (15M)**
- (a) What is the difference between simple and compound statements? Explain with example.
  - (b) What is Datatype? What are the rules and conventions for declaring a variable?
  - (c) Explain any five arithmetic operators in Python.
  - (d) Write a short note on tuple.
  - (e) Define Function. Write the syntax to define function. Give example of function definition.
  - (f) Write a program to calculate Simple Interest. Take Principal amount, rate of interest and number of years from the user. (Hint: Simple Interest = (Principal amount \* Rate of interest \* Number of years) / 100.)
- Q. 3 Attempt the following (Any THREE) (15M)**
- (a) How do we implement if , elif, else condition? Explain with an example.
  - (b) Discuss the difference between local and global variable.
  - (c) What is actual and formal parameter? Explain the difference along with an example.
  - (d) Explain continue statement.
  - (e) What is nested while loop? Explain with example.
  - (f) Write a program to print reverse of a number. Take input from user.
- Q. 4 Attempt the following (Any THREE) (Each of 5Marks) (15M)**
- (a) Discuss Anonymous function.
  - (b) Explain "Dictionary" concept.
  - (c) Define Built-in functions. List any 4 built-in functions. Explain dir() functions.
  - (d) Write a program to create an anonymous function to calculate cube of a number.
  - (e) What is List? Explain with example.
  - (f) Write a short note on class.
- Q. 5 Attempt the following (Any THREE) (Each of 5Marks) (15M)**
- (a) Discuss Operator Precedence along with an example.
  - (b) Explain Time module and its function.
  - (c) What is comment? Why we need it? How do we implement it?
  - (d) Write a python program to take a string from user and count number of vowel present in it.
  - (e) Explain for loop with example.
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