BOARD DIPLOMA EXAMINATION (Inst.), (C-20)

JULY—2023

DCME – FIFTH SEMESTER EXAMINATION

PYTHON PROGRAMMING

Time : 3 hours]

[*Total Marks* : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. List any three features of Python programming.

2. Write the syntax for **if-elif-else** statement in Python.

3. Write a Python program to print numbers from 10 to 50 using while loop.

4. Write the syntax and purpose of return statement in Python.

5. List any three string module functions in Python.

6. List any three basic list operations in Python.

7. List any three dictionary methods in Python.

8. Write the syntax for try, except clauses.

9. Write any three differences between method overloading and method overriding.

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10. What is data hiding? List any two advantages of data hiding.

PART—B

8×5=40

11. *(a)* Explain any four data types of Python with an example.

(OR)

(b) Explain arithmetic operators in Python with a sample program.

12. *(a)* Write the syntax for **for in loop** in Python. Write a Python program to find the prime numbers between the range 10-100.

(OR)

(b) Write the Syntax for **if-elif-else** statement in Python. Write a Python program to read weak number and print week day (1-Monday, 2-Tuesday,..)

13. *(a)* Explain array methods with simple example.

(OR)

(b) Explain string functions in Python with a sample program.

14. *(a)* Write a Python program to create a dictionary {1 : 1, 2 : 4, 3 : 9, 4 : 16, 5 : 25} using dictionary comprehension.

(OR)

(b) Explain sets. Write a Python program to read two sets and display the union of two sets.

15. *(a)* Write the syntax for opening and closing a file. Write a Python program to read a file and print first 4 lines of the file.

(OR)

(b) Explain Python classes and objects with a sample Python program.

PART—C

10×1=10

Instructions : (1) Answer the following question.

(2) The question carries **ten** marks.

(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. *(a)* What is the error in following code? Rewrite the correct code.

```
weather = 'raining'
if weather = 'sunny':
Print ('wear sunblock')
el if weather = 'snow':
Print ('going skiing')
else :
Print ("None of the above")
```

(b) Rewrite the following code fragment using while loop :

```
for i in range (1,10):
    if i%3 == 0:
    Print (i)
```

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