

**1 SEM TDC CSCN (CBCS) DSC 1**

**2 0 2 1**

( March )

COMPUTER SCIENCE

( Discipline Specific Course )

Paper : DSC-1

**( Problem Solving Using Computers )**

*Full Marks : 53*

*Pass Marks : 21*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

**1.** Answer the following as directed :  $1 \times 8 = 8$

(a) The basic architecture of computer was developed by

(i) John von Neumann

(ii) Blaise Pascal

(iii) Charles Babbage

(iv) Gordon Moore

( Choose the correct answer )

(b) If the computer displays an error message while executing your program, the program contains a

(i) syntax error

(ii) run-time error

(iii) logical error

(iv) hidden error

( Choose the correct answer )

(c) In computer science, algorithm refers to a pictorial representation of a flowchart.

(i) True

(ii) False

( Choose the correct answer )

(d) Python is an interpreted, high-level and general-purpose programming language.

(i) True

(ii) False

( Choose the correct answer )

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- (e) What is the output of the following code?

```
print 9//2
```

- (i) 4.5
- (ii) 4.0
- (iii) 4
- (iv) Error

( Choose the correct answer )

- (f) What is looping?
- (g) Why do we use quit() in Python?
- (h) What is class in Python?

2. Answer any *eight* of the following questions :

3×8=24

- (a) Write briefly about the characteristics of computer.
- (b) What are three control structures in Python?
- (c) Define algorithm with an example.
- (d) Write the basic programming structure of Python.
- (e) Define keyword with example of 4 keywords.

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- (f) Write the differences between continue and break statements.
- (g) Describe the types of inheritance in Python.
- (h) Write the differences between lists and tuples in Python.
- (i) Describe briefly about relational operators with examples.

3. Answer any *three* of the following questions :

5×3=15

- (a) Draw a flowchart to add three numbers.
- (b) Write a Python program to find whether a number is odd or even.
- (c) Write a Python program using any conditional statement.
- (d) Explain the concept of modify string in Python.
- (e) Write about the event-driven programming of Python.

4. What is computer? Explain the generations of computer.

1+5=6

Or

What is memory hierarchy? Explain with the help of hierarchy diagram.

1+5=6

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