

Roll No. ....

Total No. of Questions : 12]  
(1049)

[Total No. of Printed Pages : 4

**UG (CBCS) Ist Year Annual Examination**

**2027**

**B.A. COMPUTER APPLICATION**

(Problem Solving using Computer)

(Core)

(Common with B.Sc. Physical Science)

Paper : COMP101 TH

**Time : 3 Hours]**

**[Maximum Marks : 50**

*Note* :- Attempt *five* questions in all. Part-A is compulsory.  
Attempt *one* question each from Units-I, II, III and  
IV.

**Part-A**

**(Compulsory Questions)**

1 each

*Note* :- Attempt all questions.

1. (i) Define ADDRESS in computer.

(ii) Define Seek Time.

**CH-627**

( 1 )

Turn Over

- (iii) Define Latency Time.
- (iv) List the advantages of magnetic disk over magnetic tape.
- (v) What do you understand by the term Parity ?
- (vi) How many data types are there in Python ?
- (vii) Is python a compiled language or interpreted ?
- (viii) What do you understand by the Word Tuples ?
- (ix) What are the various relational operators used in Python ?
- (x) What do you understand by the word atom in Python ?

### Unit-I

10 each

*Note :-* Attempt any *one* question.

2. Explain the architecture of computer using diagram.
3. Discuss the generation of computer with special reference to modern computers.
4. Explain memory hierarchy in detail.

**CH-627**

( 2 )

## Unit-II

10 each

*Note :- Attempt any one question.*

5. Write the steps involved in identification of problem.
6. Explain the different programming methodologies in detail.
7. Draw a flow chart to print all odd positive numbers upto 100.

## Unit-III

10 each

*Note :- Attempt any one question.*

8. Write the various features of python and discuss its role in modern programming languages.
9. Write a python program to read a positive number and to print its factorial (e.g.  $5! = 5*4*3*2*1$ ).
10. Write a program to print the product of given 10 numbers.

**CH-627**

( 3 )

Turn Over

## Unit-IV

10 each

*Note* :- Attempt any *one* question.

11. What is event driven programming and how is it different from functional programming ?
12. Explain functions in python with example and discuss default arguments.

**CH-627**

( 4 )

Total No. of Questions : 9]  
(2034)

Roll No. ....  
[Total No. of Printed Pages : 4

**UG (CBCS) Ist Year Annual Examination**

**2728**

**B.A. COMPUTER APPLICATION**

(Problem Solving Using Computer)

(Core)

(Common with B.Sc. Physical Science)

Paper : COMP101 TH

**Time : 3 Hours]**

**[Maximum Marks : 50**

*Note* :- Attempt *five* questions in all, selecting one question from each Unit. Question number 1 is compulsory. All questions carry equal marks.

**(Compulsory Question)**

1. (i) Give *two* examples each of primary and secondary memory.
- (ii) What is bitwise operator in Python ?
- (iii) What is the full form of the abbreviation UNIVAC ?

**CH-28**

( 1 )

Turn Over

- (iv) Define class and object.
- (v) How is type casting performed in python ?
- (vi) Discuss the syntax of dictionary built-in data type in Python.
- (vii) What are the steps in program design ?
- (viii) What is atom in python ?
- (ix) What is a regular expression ?
- (x) What is algorithm ?

### Unit-I

- 2. (i) What are characteristics and features of second and fourth generation computer ?
- (ii) Discuss the classification of computers based on size and type.

*Or*

- 3. (i) Draw block diagram of computer and explain the units of a computer system.
- (ii) Write brief note on memory hierarchy and its need.

## Unit-II

4. (i) What is structured programming ? Discuss the rules of structured programming.
- (ii) Explain the types of error in programming.

*Or*

5. (i) Draw a flowchart to print all even numbers less than 200.
- (ii) What is a decision table ? Explain.

## Unit-III

6. (i) Discuss the syntax of for loop. Write a program to calculate the sum of all natural numbers between 25 and 100.
- (ii) What is the difference between pass and continue statement ?

*Or*

7. (i) Write a note on structure of python program.
- (ii) What is a ternary operator ? How is it implemented ?

**CH-28**

( 3 )

Turn Over

## Unit-IV

8. (i) What is a list ? What are the different operations that can be performed in a list ?
- (ii) Write a program in python to search a string ending with 'you' and starting with 'how' ?

*Or*

9. (i) What is inheritance ? How child and parent classes are created in python ? Explain by suitable code.
- (ii) Explain built-in ..... init ..... () function. When is it used ?