

# AE-1217

B.Sc. (Part - I)  
Term End Examination, 2016-17

## COMPUTER SCIENCE

Paper - II

Computer Software

*Time* : Three Hours]                      [*Maximum Marks* : 50

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**Note** : Answer **all** questions. All questions carry equal marks.

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### Unit-I

1. (a) Answer the following questions :
  - (i) What do you understand by testing of Programs ?
  - (ii) Write rules for arithmetic expression and hierarchy of operation.
- (b) Define the following terms :
  - (i) Constants
  - (ii) Keywords
  - (iii) Tokens
  - (iv) Variables

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**Unit-II**

2. (a) Explain Web Security Firewall and its types.  
(b) Explain Mail Merge in MS-Word documents.

**OR**

- (a) Write a short note on latest MS-Office packages and its advantages.  
(b) Explain the applications of Internet.

**Unit-III**

3. (a) What is the range of various data types in 'C' language? Discuss the primary data types in detail.  
(b) What is Function? Why is it important in 'C' language? Explain with the help of a suitable example.

**OR**

- (a) Write and explain the action of WHILE Statement. Develop a program in 'C' language to compute the average of every third integer number lying between 1 and 100 include appropriate documentation.  
(b) What is the difference between pass by value and pass by reference.

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**Unit-IV**

4. (a) How are value initialized in one dimensional array? Should the entire array be initialized in the definition?
- (b) Explain with examples the relationship of one dimensional array with pointers.

**OR**

- (a) Define an Array. Write a program for 2-D Matrix multiplication using arrays.
- (b) Define Pointers and discuss the advantages and disadvantages of pointers.

**Unit-V**

5. (a) Write the different built-in (library) functions provided by 'C' language for handling I/O operations on files.
- (b) Define a structure for a student having name, roll number and marks obtained in six subjects. Write a program to input the details for 20 students and print the details of the students who have scored more than 70% marks overall.

**OR**

( 4 )

- (a) Explain in detail most commonly used Dynamic Memory Allocation functions.
  - (b) Explain file handling functions.
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