

B.Sc. I (With Credits)-Regular-Semester 2012 Sem. I  
**COM-Sci-02 - Computer Science : Paper – II**  
**(Programming Logic and Techniques)**

P. Pages : 2

Time : Three Hours



**GUG/W/16/3306**

Max. Marks : 50

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- Notes :
1. All question are compulsory and carry equal marks.
  2. Draw neat and clean diagram wherever necessary.
  3. Avoid vague answers and write answer relevant and specific to question.

**1. Either :**

- a) Discuss the compilation process in brief. 5
- b) List and explain the generation of languages. 5

**OR**

- c) Briefly explain machine language with suitable example. 5
- d) What is the function of Linker and Loader? Explain. 5

**2. Either :**

- a) Define Pseudo code? Explain characteristics of Pseudo code. 5
- b) Draw the Flow chart for following output. 5

```
*  
* *  
* * *  
* * * *
```

**OR**

- c) What is the need of Algorithm? Explain types of Algorithm in detail. 5
- d) Explain various symbols of flowchart. 5

**3. Either :**

- a) Explain for loop statement. 5
- b) Write a program to Demonstrate the do – while loop. 5

**OR**

- c) What is identifier? What are the rules for writing identifiers. 5
- d) Explain Relational operators in detail. 5

4. **Either :**
- a) What do you mean by Array? Explain inserting an element in to array with suitable example. 5
  - b) Write an algorithm for Transpose of matrix. 5

**OR**

- c) Draw the memory representation of one dimensional Array and explain it. 5
  - d) Write an algorithm to sort an array using bubble sort method. 5
5. All questions are compulsory.
- a) Write a short note on Interpreter. 2½
  - b) Explain Analysis of Algorithm. 2½
  - c) Write short note on Exit and Break. 2½
  - d) List the operations performed on array. 2½

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