



K17U 0338

Reg. No. : .....

Name : .....

**VI Semester B.Sc. Degree (CBCSS – Regular) Examination, May 2017  
(2014 Admn.)  
CORE COURSE IN COMPUTER SCIENCE  
6B13CSC : System Software**

Time : 3 Hours

Max. Marks : 40

**SECTION – A**

1. **One word answer.** (8x0.5=4)
- a) A program that automate the translation of assembly language into machine language is called \_\_\_\_\_
  - b) In a compiler \_\_\_\_\_ checks every character of the source text.
  - c) \_\_\_\_\_ is a software which bridges a specification or execution gap.
  - d) Recognition of basic syntactic constructs through reductions, this task is performed by \_\_\_\_\_
  - e) A grammar for a programming language is a formal description of \_\_\_\_\_
  - f) Assembler directive which indicates that the end of the source program is \_\_\_\_\_
  - g) \_\_\_\_\_ is a table of literals used in the program.
  - h) Resolution of externally defined symbols is performed by \_\_\_\_\_

**SECTION – B**

Write short notes on **any seven** of the following questions. (7x2=14)

- 2. What is need of OPTAB in an assembler ?
- 3. Define load and go assembler.
- 4. What do you mean by Bootstrap loader ?

P.T.O.



5. Define dynamic linking.
6. What is a loader ? What does loading process do ?
7. What is the output of syntax analysis phase ? What are the three general types of parsers for grammars ?
8. What is phrase level error recovery ?
9. What is intermediate code ? Explain its advantages.
10. Define code optimization and explain its phases.
11. Explain ambiguous grammar.

## SECTION – C

Answer **any four** of the following questions.

(4×3=12)

12. Explain Forward References in an assembler.
13. What are the symbol defining statements generally used in assembler ?
14. What is the use of modification record in program relocation ?
15. How will you define a context free grammar ?
16. Explain the working of language processor.
17. Explain the properties of LR parser and its classification.

## SECTION – D

Answer **any two** of the following questions.

(2×5=10)

18. Explain Machine Independent Assembler features.
19. What is absolute loader ? Explain the algorithm for absolute loader.
20. Explain program linking machine independent loader features with an example.
21. How to convert source program to target machine code by using language processing system ?