K18U 0092

VI Semester B.Sc. Degree (CBCSS-Reg./Supple./Imp.) Examination, May 2018
CORE COURSE IN COMPUTER SCIENCE
6B13CSC : System Software
(2014 Admn. Onwards)

Time : 3 Hours

Marks : 40

SECTION – A

1. **One** word answer. (8×0.5=4)

   a) When a computer is first turned on a special type of absolute loader called _____ is executed.

   b) _____ is generated as output of scanning phase (Lexical Analyzer) in a compiler.

   c) The assembler in first pass reads the program to collect symbols defined with offsets in a table _____.

   d) After compilation of the program the operating system of computer activates _____.

   e) _____ type of errors are not detected by assemblers.

   f) Compiler should report the presence of _____ in the source program, in translation process.

   g) A top down parser generates _____ derivation.

   h) _____ is the most general phase structured grammar.

SECTION – B

Write short notes on **any seven** of the following questions. (7×2=14)

2. What are the three different records used in an assembler ?

3. What is a literal ? What is the use of LTORG directive ?

P.T.O.

4. What are the basic function of loaders ?

5. Define direct linking loader ?

6. What do you mean by formal language ?

7. Define Code optimization and explain its phases.

8. Explain basic functions of an assembler.

9. Explain compile and go loader.

10. What do you mean by forward references in an assembler ?

11. What do you mean by Bootstrap Loader ?

SECTION – C

Answer **any four** of the following questions. (4×3=12)

12. What are the two different techniques used for relocation in a loader ?

13. Explain linking loader and linkage editor. What are their differences ?

14. Explain the lexical phase of compiler.

15. Explain the properties of LR parser and its classification.

16. Explain ambiguity of grammatical statements.

17. Explain overlay structure in detail.

SECTION – D

Answer **any two** of the following questions. (2×5=10)

18. Explain different ways of intermediate code representation ? Explain advantages of intermediate code representation.

19. Explain in detail Two pass assembler algorithm. Explain the data structures used.

20. What do you mean by dynamic Linking ? Explain how it is performed.

21. What do you mean by parsing ? Explain the categories with example.

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