



K21U 0098

Reg. No. :

Name :

VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Improv.)

Examination, April 2021

(2014 – 2018 Admissions)

CORE COURSE IN COMPUTER SCIENCE

6B13CSC : System Software

Time : 3 Hours

Max. Marks : 40

SECTION – A

1. **One** word answer :

(0.5×8=4)

- a) _____ is a rule of grammar which is also known as rewriting rule.
- b) _____ eliminates the need to memorize numeric operation code.
- c) _____ is a software which bridges a specification or execution gap.
- d) Intermediate code generation phase gets input from _____
- e) _____ is a program that converts assembly language into machine code.
- f) _____ is the semantic gap between two specifications of the same task.
- g) _____ is also known as Parsing.
- h) _____ is the gap between the semantics of programs written in different programming languages.

SECTION – B

Write short notes on **any seven** of the following questions :

(7×2=14)

2. Define Language Processor.

3. What is intermediate code ? Explain its advantages.

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4. What is IC ?
5. Define Grammar.
6. What is the role of OPTAB in an assembler ?
7. Define load and go assembler.
8. What is meant by Code Optimization ?
9. What are live variables ?
10. What is dynamic linking ?
11. Define System Software.
12. What is an absolute loader ?
13. What is a parse tree ?
14. What is forward reference ?
15. How is macro defined ?

SECTION – C

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

(4×3=12)

16. Compare machine and assembly languages.
17. Explain compilation of an expression.
18. Differentiate between direct linking and dynamic linking.
19. What is meant by ambiguity in grammar specification ?
20. Which are the different types of Grammar ?
21. Which are the different assembly language statements ?
22. Explain Scanning and Parsing.
23. Which are the basic elements of assembly language programming ?



SECTION – D

(2×5=10)

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

- 24. What is assembler ? Explain the design specification of an assembler.
 - 25. Explain in detail about loaders and linkers.
 - 26. Define Language Processing and explain Language Processing Activities.
 - 27. What is a Compiler ? Explain in detail about compiler and its phases.
 - 28. Explain Derivation, Reduction and Parse tree in detail with example.
 - 29. Define Language Processing and explain the phases and passes of a Language Processor.
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