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.

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

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.