K21U 0196

Reg. No. : .....

Name : .....

VI Semester B.C.A. Degree (CBCSS – Reg./Supple./Improv.) Examination, April 2021
(2014-2018 Admissions)
Core Course
6B21BCA : SYSTEM SOFTWARE

Time : 3 Hours Max. Marks : 40

PART – A
(Short Answer)

1. One word answer : (8×0.5=4)

a) _____ is a system program that bridges a specification or execution gap.

b) _____ directive defines a symbolic name to represent either a value or another symbolic name.

c) An _____ provides components of a memory address.

d) A _____ in the program is an invocation of the new operation.

e) A _____ is the facility for extending a programming language.

f) A _____ is the system program that loads a binary program in memory for execution.

g) The translator generates a program form called _____ of the program.

h) _____ performs the interpretation of source program.

PART – B
(Short Essay)

Answer **any 7** questions : (7×2=14)

2. Write note on language processing.

3. What is system software ?

P.T.O.

4. What is assembler directives ?
5. Define forward references.
6. What is the use of stack in designing a macro preprocessor ?
7. Write note on macro definition.
8. Write note on self relocating programs.
9. What is object module ?
10. What are the steps in execution of a program ?
11. What are the components of programming language specification ?
12. Explain about ambiguity in grammars with example.
13. What are the benefits of interpretation ?
14. Write note on the data structures used in compilers.
15. Define expression tree with example.

PART – C
(Essay)

Answer **any 4** questions : (4×3=12)

16. Explain about the data structures for language processing.
17. Write note on elements of assembly language programming.
18. Explain in detail about advanced assembler directives.
19. Write note on OPTAB, SYMTAB and LITTAB.
20. Write note on nested macro calls.
21. Define loader. Explain its types.
22. Explain about code optimization.
23. Compare static and dynamic memory allocation.

PART – D
(Long Essay)

Answer **any 2** questions : (2×5=10)

24. Explain in detail about language processing activities.

25. Write and explain the algorithm for pass 2 of a two-pass assembler.

26. Explain the different types of macro expansion.

27. Design and explain the linker for MS DOS.

28. Explain in detail about the compilation of expression.

29. Explain in detail about program relocation and linking.