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SIXTH SEMESTER B.C.A. DEGREE EXAMINATION, APRIL 2021
(CUCBCSS-UG)
(Supplementary/Improvement)
CC17U BCA6 B17d - SYSTEM SOFTWARE
(Computer Application – Elective)
(2017 Admissions)

Time: Three Hours   Maximum: 80 Marks

Part A
Answer *all* questions. Each question carries 1 mark.

1. What is system program?

2. Define language processor.

3. Give an example for the use of loops in the macro.

4. How do you find the attribute of a variable in a macro definition?

5. What are the desirable properties of an intermediate representation?

6. Define binary program.

7. What is the use of the mnemonic BC?

8. Give examples for declarative statements.

9. What is parse tree?

10. What is absolute loader?

(10 × 1 = 10 Marks)

Part B
Answer *all* questions. Each question carries 2 mark.

11. What are the different types of macro expansions?

12. Distinguish between language translator and detranslator.

13. What are the components of computing environment?

14. Distinguish between macro and subroutine.

15. What are the different components in the analysis of a source program?

16. Define language processor pass.

17. Give the format of input to YACC.

18. What are the different steps in the execution of a program?

(8 × 2 = 16 Marks)

Part C

Answer any *six* questions. Each question carries 4 marks.

19. What are the goals of system software?

20. Distinguish between specification gap and execution gap of a software.

21. What are the data structures used in the design of a macro preprocessor?

22. Distinguish between local variable and global variable in a macro.

23. Explain the functions of the back-end of the compiler.

24. Write a note on symbol table.

25. Distinguish between derivation and reduction with examples.

26. What is object module? What are the components of it?

27. What are the different assembler directives? Explain.

(6 × 4 = 24 Marks)

Part D

Answer any *three* questions. Each question carries 10 marks.

28. Explain the components of system software.

29. Describe the design of a macro assembler.

30. Describe the design of a linker.

31. What are the different types of optimizing transformations? Explain.

32. Discuss about any two language processor development tools.

(3 × 10 = 30 Marks)

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