17U634 (Pages: 2) Name: ……..…….

Reg. No……..……

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCBCSS-UG)

CC17U BCS6 B16a - SYSTEM SOFTWARE

Computer Science - Elective

(2017 Admissions - Regular)

Time: Three Hours Maximum: 80 Marks

PART I

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

1. Mention any two examples for system software.
2. Differentiate between interpreter and compiler.
3. What is a Macro instruction?
4. What are nested macros?
5. What is the use of Bootstrap loader?
6. What do you mean by dynamic loading?
7. What is the function of symbol table in scanning?
8. What are the advantages of intermediate code generation?
9. Define code optimization.
10. Give any two examples for compiler construction tools.

(10 x 1 = 10 Marks)

PART II

Answer ***all*** questions. Each question carries 3 marks.

11. Explain the function of assembler, loader and linker.
12. Differentiate between token, pattern and lexeme.
13. What is the output of syntax analysis in compiler design? Give an example.
14. Explain the concept of dynamic linking.
15. What are the different sections in a YACC file?

(5 x 3 = 15 Marks)

PART III

Answer any ***five*** questions. Each question carries 5 marks.

16. Explain five advanced assembly directives.
17. Write short note on utility software.
18. What are Expansion time variables? Give example.
19. How will you define and call a macro? Explain with an example.

20. Give a brief comparison of various loading schemes.
21. Explain the concept of overlays.
22. Describe the activities in semantic analysis.
23. Briefly explain various functions of Operating System.

(5 x 5 = 25 Marks)

PART IV

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

24. How a software is different from hardware? Explain the different classification of software?
25. Explain the design of Assembler with algorithm.
26. Explain various phases of a compiler in detail.
27. What are the functions of binders? Differentiate between static binding and dynamic binding.
28. What is LEX? Discuss the usage of LEX in Lexical Analyzer generation. Also, explain the structure of a LEX file.

(3 x 10 = 30 Marks)

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