

SIXTH SEMESTER B. Sc. DEGREE EXAMINATION, APRIL 2024**(Regular/Improvement/Supplementary)****COMPUTER SCIENCE****GBCS6E01T: SYSTEM SOFTWARE****Time: 2 Hours****Maximum Marks: 60****SECTION A: Answer the following questions. Each carries *two* marks.****(Ceiling 20 Marks)**

1. What are the advantages of compilers over assemblers?
2. Briefly explain any two code optimization techniques.
3. What are the two kinds of parameters used in macro?
4. What is program relocation?
5. Construct intermediate code representation for the expression $a+b*c+d*e+f$ as triples.
6. What is macro expansion?
7. "Absolute Loader will not perform program relocation", explain?
8. How error correcting routines works?
9. Explain the term macro-Processor.
10. Write a note on binders.
11. "System software is -----". Fill in the blanks and justify your answer.
12. How interpreters work as a language processor?

SECTION B: Answer the following questions. Each carries *five* marks.**(Ceiling 30 Marks)**

13. What is macro? How it can be defined and called?
14. What is the purpose of Linker?
15. Explain the concept of Dynamic Loading using Overlays.
16. Explain the pass structure of a two-pass assembler.
17. How nested macros can be implemented? Explain with example.
18. What is loader? Explain any two loader schemes.
19. How LEX support compiler Construction? Explain.

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. Explain the various phases of compiler with neat diagram.
21. What is YAAC? Explain.

(1 x 10 = 10 Marks)