



Register Number:  
Date: 21/11/2020

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27

BCA - V SEMESTER

SEMESTER EXAMINATION: NOV 2020

CA 5218 – SYSTEM SOFTWARE

Time- 2 1/2 hrs

Max Marks-70

This paper contains ONE printed pages and THREE parts

**Section A**

Answer all the questions

(2 X 10 = 20)

1. Define open and closed sub-routine
2. What does memory address consists of? Illustrate with an example.
3. What is the purpose of OPTAB and SYMTAB?
4. Explain assembly language statement format.
5. What are the two variables introduced in one pass macro processors?
6. What are the uses of macro processor?
7. Define Loaders. Mention any two functions performed by loaders.
8. What are ENTRY and EXTRN statements?
9. What is cross compiler?
10. Define local and global optimization.

**Section B**

Answer any five of the following questions

(6 X 5 = 30)

11. Explain the various registers used in IBM 360/370 machine with a neat diagram.
12. What is bucket sort? Explain with an example.
13. Draw a flowchart to describe the Pass 1 of processing macro definition.
14. Write a short note on Macro Name Table and Macro Definition Table used in pass 1 of two-pass algorithm.
15. Explain compile and go loader scheme with a neat diagram.
16. Explain the types of intermediate form used in compilers with a suitable example.
17. What are the tasks performed by a compiler in the analysis phase? Explain.

**Section C**

Answer any two of the following questions

(10 X 2 = 20)

18. Explain the implementation of macro processor.
19. Write short notes on:  
a. Subroutine linkage  
b. Databases used in syntax phase of a compiler. (4+6)
20. a. Mention any five Assembler Directive (AD) statements and write about its purpose.  
b. Define Linker. What are the functions of a linker? (5+5)

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