

G 1425

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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Sixth Semester

Branch : Computer Science and Engineering

CS 010 603—SYSTEM SOFTWARE (CS)

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours

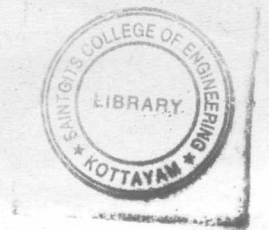
Maximum : 100 Marks

Part A

Answer **all** questions.

Each question carries 3 marks.

1. Explain parameterised macros with an example.
2. Give the format of header, text and end records in assembler output.
3. What is an absolute loader ?
4. What are the capabilities of a debugger ?
5. Define block device driver.



(5 × 3 = 15 marks)

Part B

Answer **all** questions.

Each question carries 5 marks.

6. How can we generate unique labels in a macro ?
7. What is a forward reference ? How is it handled in an assembler with two passes ?
8. What is the need for linking ?
9. Explain text editor user interface.
10. Write notes on general device characteristics.

(5 × 5 = 25 marks)

Part C

Answer **all** questions.

Each full question carries 12 marks.

11. Explain macroprocessor algorithm.

Or

12. Describe how nested macrocalls and recursive macrocalls are handled with the help of examples.

Turn over

13. Give the algorithm for a single pass assembler.

Or

14. Explain the handling of external references by an assembler with the help of examples.

15. Give the algorithm for linking loader.

Or

16. Write notes on UNIX ELF.

17. Explain overall editor structure with a diagram.

Or

18. Explain how the debugger relates with other parts of the system.

19. Give the general design and anatomy of devices.

Or

20. Write notes on character devices and their drivers.

(5 × 12 = 60 marks)

