

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Seventh Semester

Branch: Electronics and Communication Engineering EC 010 706 L06 – SYSTEM SOFTWARE (Elective II) [EC]

(New Scheme - 2010 Admission onwards)

[Regular/Supplementary]

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

- 1. What is semantic analysis?
- 2. Identify the important tasks of memory allocation.
- 3. What are the functions of the basic task of batch monitors?
- 4. What is garbage collection?
- 5. What is authentication?

 $(5 \times 3 = 15 \text{ marks})$

Part B

Answer all questions.

Each question carries 5 marks.

- 6. Write a note on the different kinds of assembly language statements.
- 7. What are the different types of optimizing transformations used in compilers?
- 8. Identify the actions taking place in a typical interrupt processing routine.
- 9. Write a note on DAT.
- 10. Compare ACL with Clists.

 $(5 \times 5 = 25 \text{ marks})$

Part C

Answer all questions.

Each question carries 12 marks.

11. Draw the schematic of an LPDT and discuss any two widely used LPDTS.

Or

12. Briefly describe the approach to develop the design specification for an assembler.

Turn over

13. What is program relocation? With an example, explain how relocation is achieved.

Or

- 14. Identify the functions of control flow analysis and data flow analysis.
- 15. Briefly describe the main events related to scheduling.

Or

- 16. Write a note on different approaches used for handling deadlocks.
- 17. Identify the practical issues identified in contiguous memory allocation and describe how they are overcome.

Or

- 18. Describe the different methods in which the File System reliability is maintained.
- 19. What is encryption? Write a note on different encryption techniques you are familiar with.

Or

20. Identify the techniques used for protection of user files.

 $(5 \times 12 = 60 \text{ marks})$

