



Seventh Semester B.E. Degree Examination, June/July 2025

Real Time Systems

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain the clock based and event based tasks of real time systems. (10 Marks)
- b. Explain DDC. List the advantages of DDC over analog control. (10 Marks)

OR

- 2 a. Analyze the working of different adoptive control with neat block diagram. (10 Marks)
- b. Explain the sequence control using chemical reactor vessel as an example. (10 Marks)

Module-2

- 3 a. With a neat schematic diagram, explain the general purpose computer. (10 Marks)
- b. Write the block diagram of parallel computers. Explain any two of them. (10 Marks)

OR

- 4 a. With a neat block diagrams, explain interrupt masking. (10 Marks)
- b. Explain the different LAN technologies with help of neat sketches. (10 Marks)

Module-3

- 5 a. Explain the following terms:
 - i) Security
 - ii) Readability
 - iii) Flexibility
 - iv) Simplicity
 - v) Portability.(10 Marks)
- b. Explain the modularity and variables in the real time systems. (10 Marks)

OR

- 6 a. Explain the control structures and exception handling in real time language. (10 Marks)
- b. Explain the scope and visibility of a variable with example code. (10 Marks)

Module-4

- 7 a. Explain various tasks state with the help of state diagram. (10 Marks)
- b. With neat diagrams, explain memory management. (10 Marks)

OR

- 8 a. With a neat diagram, explain multiuser and multi tasking operating system. (10 Marks)
- b. What is code sharing? Explain the two methods of code sharing. (10 Marks)

Module-5

- 9 a. With a neat diagram, explain the planning phase and development phase. (10 Marks)
- b. Describe the Ward and Millor's Methods with neat diagrams. (10 Marks)

OR

- 10 a. Explain single program approach with a neat flow chart. (10 Marks)
- b. Explain the Yourdon Methodology and requirements definition for drying oven. (10 Marks)

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