

Tribhuvan University
Institute of Science and Technology

2068

Bachelor Level/ Third Year/ Six Semester/ Science

Full Marks: 80

Computer Science and Information Technology –(Csc.354)

Pass Marks:32

(Real Time System)

Time: 3 hours.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Attempt any Two Questions.

(2x12=24)

1. Explain the hard real time systems and soft real time systems with example.
2. Differentiate between Rate-monotonic and deadline-monotonic algorithms with example.
3. Explain the Greedy Weighted Round Robin (WRR) disciplines and time. Driven Weighted Round-Robin (WRR) disciplines with examples.

Group B

Attempt any Eight Questions.

(8x7=56)

4. Explain the Kalman filter with example.
5. Explain the digital controller with example.
6. Explain with diagram of Radar signal processing and tracking systems.
7. Differentiate between clock-driven scheduling and priority driven scheduling.
8. Explain the schedulability of sporadic jobs in deadline-driven systems.
9. Explain the diagram of real time communication model.
10. What is constant utilization server algorithm? Explain.
11. What is RTCP control protocol? Explain with example.
12. Write down the total bandwidth server algorithm and explain it.
13. Write short notes on:
 - a) Real Time protocol
 - b) IEEE 802. S token ring.