

## **Unit - I**

1. a) Define Real Time System (RTS). (4)
- b) What are the characteristics of R Time System? (4)
- c) What are the characteristics of Real Time System control? (8)

### **OR**

1. a) Explain with example the various timing constrains. (8)
- b) Differentiate, with example, soft & hard RTS. (8)

## **Unit - II**

2. a) What are the functional parameters of Job? Explain. (8)
- b) Explain briefly : (8)
  - i) Dynamic v/s static system
  - ii) Offline scheduling v/s online scheduling

### **OR**

2. a) Explain weighted round robin approach for RTS. (8)
- b) Explain briefly Data Dependency & its type. (8)

### **Unit - III**

**3. Explain following :**

- a) Priority driven Approach for Real Time Scheduling. (4)
- b) General structure of cyclic scheduler. (4)
- c) Rate monotonic (RM) algorithm. (4)
- d) Advantages of clock driven scheduling. (4)

**OR**

**3. Explain following :**

- a) Fixed Priority v/s Dynamic Priority scheduling. (4)
- b) Scheduling spordic jobs. (4)
- c) Deadline monotonic (DM) algorithm. (4)
- d) Disadvantages of clock driven scheduling. (4)

### **Unit - IV**

- 4. a) What is a periodic task scheduling? Explain the assumption for a periodic task scheduling. (8)**
- b) What is flexible application? Explain. rtuonline.com (8)**

**OR**

- 4. a) Explain following : (4×2=8)**
- i) Differ server
  - ii) Simple spordic server
- b) Explain scheduling approaches for periodic task. (8)**

### **Unit - V**

**5. Explain following :**

- a) Basic Priority celling protocol. (4)
- b) Concurrent access of Data objects. (4)
- c) Priority inheritance protocol for task execution. (4)
- d) Priority inversion and how it is related to critical section. (4)

**OR**

- 5. a) Differentiate between basic Priority celling protocol & priority inheritance protocol. (8)**
- b) Give advantages and disadvantages of priority inheritance protocol. (8)**