



- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.

1. a) Difference Between Hard and soft Real Time Systems? **6**

b) What is the Hardware requirement for Real time applications. **7**

OR

2. a) What are precedence constraints? Draw the precedence graph for the different tasks. **6**

b) Explain all the Parameters which tell about Job's timing and Behaviour constraints of Real time workload. **7**

3. a) Explain preemptive and Non preemptive priority driven scheduling approach with an example. **7**

b) Write short note on. **6**

i) Task Management.

ii) Inter Task communication.

OR

4. a) Explain EDF scheduling of sporadic Jobs. **6**

b) Explain weighted Round Robin approach for Time shared application. **7**

5. a) Write short note on Petrinets Based Designing for Real time systems. **7**

b) Differentiate between Real time Vs general purpose databases. **6**

OR

6. a) What are the issues, designer have to face while Designing Real time systems. 6
b) Write short note on. 7
i) Concurrency control.
ii) Dish scheduling algorithms.
7. a) Write down & Explain the features of Real time object oriented proگرامing Language. 7
b) Write short note on. 7
i) Data typing.
ii) Multitasking.

OR

8. a) What is the difference between error and exception? Explain how to handle run time error in Real time system. 7
b) Explain types of packages used for Real time system. 7
9. a) Write short note on Fault / Failures state some techniques to avoid them. 7
b) What is the role of Redundancy in fault Tolerance? Explain Hardware redundancy in detail. 7

OR

10. a) Explain the types of faults that can be tolerated and faults that cannot be tolerated. Also explain the situation for that. 7
b) Write short note on of fault detection method. 7
11. a) What problems do we have to face in Unix Real time operating system while handling the real time application. 7
b) Write short note on software Error model. 6

OR

12. a) Write short note on window as a Real time OS. 7
b) What is Non preemptive Kernel in Unix Real time OS. 6
