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**B.Tech (CSE) (Semester – 7th)**  
**DISTRIBUTED OPERATING SYSTEMS**  
**Subject Code: BCSED1-711**  
**Paper ID: [18111139]**

**Time: 03 Hours**

**Maximum Marks: 60**

**Instruction for candidates:**

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

**Section – A**

**(2 marks each)**

Q1. Attempt the following:

- a. Define Distributed Scheduling
- b. What is DFS?
- c. What is Fault Tolerance?
- d. What do you understand by ‘Database Synchronization’?
- e. Define Naming.
- f. Define Recovery on Distributed systems.
- g. What are Nonblocking Commit Protocols?
- h. What is Process Migration?
- i. What is Multiprocessor Synchronization?
- j. Define Deadlock.

**Section – B**

**(5 marks each)**

- Q2. Describe the functions of Lamport’s logical clock in brief.
- Q3. What are the Basic concepts of Distributed Mutual Exclusion?
- Q4. Describe the various procedures used in ‘Distributed Resource Management’.
- Q5. Describe the various types of Commit Protocols?
- Q6. What are “Dynamic Voting Protocols”?

**Section – C**

**(10 marks each)**

- Q7. Explain the various Limitations of Distributed Systems. Give examples.
- Q8. What are Distributed File systems? Compare it with other standard file system.
- Q9. Explain the Multiprocessor Interconnections, Types, Multiprocessor OS functions & its various requirements.