Roll No……..….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

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.