

Mid-West University
Examinations Management Office
End-Semester Examinations -2080

Bachelor level/ B.E. Computer/6th Semester
Time: 3 hours

Full Marks: 50
Pass Marks: 25

Subject: Distributed System (CO516)

- *Attempt all the questions*
 - *Figures in the margin indicate full marks.*
 - *Assume suitable values, with a stipulation, if necessary.*
 - *Candidates are required to answer the questions in their own words as far as possible.*
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1. Define distributed system. "Distributed system acts as a single coherent system to its end user", justify the statement with its futures and challenges. 4
 2. a) Differentiate between RPCV and RMI. Explain the operation of RPC in client server Communication in distributed system. 4
b) Explain in detail about the distributed file service architecture. 4
 3. What is distributed operating system and what are the core functionality of operating system. 3
 4. What do you mean by Heterogeneity in distributed system? Also discuss about the IDL. 3
 5. a) Explain Berkeley's method for synchronization of physical clock.. 4
b) Write Chandy and Lamport algorithm to capture consistent global state of a distributed system. 4
 6. Explain in detail about Central Coordinator algorithm for mutual exclusion. 4
 7. Why the replication of file is done in distributed system? And what are the major problems of replication? 4
 8. a) When a client transaction becomes distributed? Discuss the distributed transaction structure. 4
b) What are the solutions for distributed deadlock? Explain. 4
 9. What is distributed commit? Explain. 4
 10. Explain briefly about the TIB and list the goal of JINI. 4

The End