

***Department of Computer Science and Engineering***

**Subject Name: Distributed Operating System**

**Subject Code: MR22-1CS0159**

**Year & Semester: III-II**

Unit-Wise Question Bank

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| **Q.No** | **Question** | | **Marks** | **Section** | **UNIT** |
| 1 | What is Distributed Operating system? Explain the key advantages of Distributed Operating system? | 8 | | Section-I | 1 |
| 2 | Write some of the examples of Distributed operating system and distributed system software? | 8 | | Section-I | 1 |
| 3 | Explain in detail about loose coupled operating system? | 8 | | Section-I | 1 |
| 4 | Explain in detail about tight coupled operating system? | 8 | | Section-I | 1 |
| 5 | Illustrate about Hardware concepts in distributed operating system? | 8 | | Section-I | 1 |
| 6 | Illustrate about software concepts in distributed operating system? | 8 | | Section-I | 1 |
| 7 | Outline about multiprocessor bus based with a neat diagram? | 8 | | Section-I | 1 |
| 8 | Outline about switch based with a neat diagram? | 8 | | Section-I | 1 |
| 9 | What is MIMD and MISD with a neat diagram? | 8 | | Section-I | 1 |
| 10 | Illustrate about major Issues in distributed operating system? | 8 | | Section-I | 1 |
| 11 | Explain the challenges in Distributed operating system? | 8 | | Section-II | 2 |
| 12 | Briefly discusses about the Communication in distributed system? | 8 | | Section-II | 2 |
| 13 | What is client stub? What are the techniques used in client stub? | 8 | | Section-II | 2 |
| 14 | What is server stub? What are the techniques used in server stub? | 8 | | Section-II | 2 |
| 15 | Elaborate about the advantages of Layered Protocol in distributed operating system? | 8 | | Section-II | 2 |
| 16 | Illustrate about asynchronous transfer mode? | 8 | | Section-II | 2 |
| 17 | Explain about client-server model in distributed operating system? | 8 | | Section-II | 2 |
| 18 | Briefly discusses about remote procedure call in DOS? | 8 | | Section-II | 2 |
| 19 | Elaborate about different group communication in distributed operating system? | 8 | | Section-II | 2 |
| 20 | What is meant by distributed shared memory in DOS? | 8 | | Section-II | 2 |
| 21 | What is Synchronization in distributed operating system and explain briefly about it? | 8 | | Section-III | 3 |
| 22 | Explain about mutual exclusion in distributed operating system? | 8 | | Section-III | 3 |
| 23 | Explain about token concept in distributed operating system? | 8 | | Section-III | 3 |
| 24 | What is election algorithm and write its advantages? | 8 | | Section-III | 3 |
| 25 | Briefly discuss about atomic transactions in distributed operating system? | 8 | | Section- III | 3 |
| 26 | Explain about partially committed, committed concepts in DOS? | 8 | | Section- III | 3 |
| 27 | Explain key differences between failed state and aborted state in DOS? | 8 | | Section- III | 3 |
| 28 | Outline about ACID properties in Distributed System? | 8 | | Section- III | 3 |
| 29 | Explain the strategies used to handle deadlocks? | 8 | | Section- III | 3 |
| 30 | Elaborate about deadlocks in Distributed System? | 8 | | Section-III | 3 |
| 31 | Explain about process tasks and processor tasks in Distributed System threads? | 8 | | Section-IV | 4 |
| 32 | Elaborate about program counter in Distributed System? | 8 | | Section-IV | 4 |
| 33 | Explain in detail about stack pointer in Distributed System threads? | 8 | | Section-IV | 4 |
| 34 | Elaborate about data register in Distributed Operating System? | 8 | | Section-IV | 4 |
| 35 | Outline about System Models in distributed system? | 8 | | Section-IV | 4 |
| 36 | Summarize about Processors allocation in distributed system? | 8 | | Section-IV | 4 |
| 37 | Outline about the topic scheduling in distributed system? | 8 | | Section-IV | 4 |
| 38 | Explain in detail about fault tolerance in DOS? | 8 | | Section- IV | 4 |
| 39 | Summarize about real-time distributed system in DOS? | 8 | | Section- IV | 4 |
| 40 | Explain in detail about Distributed file systems and its design in DOS? | 8 | | Section- IV | 4 |
| 41 | What is shared memory and explain about its advantages? | 8 | | Section-V | 5 |
| 42 | Elaborate about consistency model in distributed system? | 8 | | Section-V | 5 |
| 43 | Provide an overview of page based distributed shared memory? | 8 | | Section-V | 5 |
| 44 | What is meant by variable in distributed shared memory? | 8 | | Section-V | 5 |
| 45 | Explain the process of object based distributed shared memory? | 8 | | Section-V | 5 |
| 46 | Explain the difference between process and threads in distributed system memory? | 8 | | Section-V | 5 |
| 47 | Explain the difference between Decentralization and Centralization in DOS? | 8 | | Section-V | 5 |
| 48 | Explain about the implementation of distributed file system? | 8 | | Section-V | 5 |
| 49 | Explain about the trends in distributed file system? | 8 | | Section-V | 5 |
| 50 | What is the difference between token based and non-token based concept in DOS? | 8 | | Section-V | 5 |