Code No: **R1642051** **R16** **Set No. 1**

IV B.Tech II Semester Advanced Supplementary Examinations, Aug/Sep - 2022

DISTRIBUTED SYSTEMS

(Common to Computer Science and Engineering and Information Technology)

Time: 3 hours **Max. Marks: 70**

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any FOUR questions from Part-B

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PART–A *(14 Marks)*

1. a) List out challenges of distributed system. [3]
   b) What is meant by interprocess Communication? Give the characteristics. [3]
   c) How does events get notified? [2]
   d) Define process. Compare it with thread. [2]
   e) What is meant by distributed file system? Give its advantages over traditional file system. [2]
   f) Define transaction give an example. [2]

PART–B *(4x14 = 56 Marks)*

2. a) What is Distributes system? Give the Characteristics of distributed system. [7]
   b) Present the fundamental models in system models. [7]

3. a) What is UDP? Explain UDP datagram communication. [7]
   b) What are sockets? How does they used in IPC? [7]

4. a) Explain communication between distributed objects. [7]
   b) How RMI is implemented in Java? Illustrate with a code snippet. [7]

5. a) Explain operating system layer in distributed system. [7]
   b) Describe the process of creation of a new process along with the process life cycle. [7]

6. a) Explain file service architecture with examples? [7]
   b) Focus on the applications of Napster theory in distributed file system. [7]

7. a) Explain concurrency control in distributed transaction. [7]
   b) What is transaction recovery in distributed system? How can it be done? [7]