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BCE–C603

B. Tech. SEMESTER VI EXAMINATION, 2021

Subject : DISTRIBUTED SYSTEMS

Time : Three Hours] [*Maximum Marks : 70*

[*Pass Percentage : 40%*

Note : Question paper is divided into two Sections A and B. Attempt both Sections. Answer questions as per instructions given.

Section—A

(Short Answer Type Questions)

Note : Attempt any *five* questions in about 150 words each. Each question carries 6 marks. (5×6=30)

1. Explain how a forwarded observer may be used to enhance the reliability and performance of objects of interest in an event service.

2. Explain in details the various components of RMI in the java with suitable example.
3. Discuss the different API are used in Internet.
4. Describe the architectural models of distributed systems.
5. List the limitations of the Distributed systems.
6. Explain Sun NFS.
7. Discuss the consistency in Ivy.
8. What do you mean by clock skew and clock drift?
9. Explain the synchronization with physical and logical clocks.
10. Explain external data representation and marshalling concepts in detail.

Section—B

(Long Answer Type Questions)

Note : Attempt any *four* questions in detail. Each question carries 10 marks. (4×10=40)

1. What is name service? What are its goals ? How is it implemented ? What is directory service ?
2 Explain the following terms in detail :
   (i) Global start
   (ii) Mutual exclusion
   (iii) Logical exclusion

3. Explain the different consistency models for distributed.
4. Differentiate TCP stream communication and Client Server communication.
5. Describe the various RPC protocols supporting client server communication.
6. Discuss the design and implementation issues of shared memory.
7. Compare and contrast between DNS and GNS with their advantages and disadvantages.
8. Describe CORBA RMI and its services.