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Seat No.	

B.E. (CSE) (Semester - VII) Examination, May - 2019
DISTRIBUTED SYSTEMS (Revised)
Sub. Code : 67542

Day and Date : Thursday, 02 - 05 - 2019 **Total Marks : 100**

Time : 02.30 p.m. to 05.30 p.m.

Instructions :
1) **Question 4 & 8 are compulsory, attempt any two questions from Questions 1 to 3 in section-I and Questions 5 to 7 in section- II.**
2) **Figures to the right side indicate full marks.**

SECTION - I

Q1) a) Explain distributed system architecture. [8]

b) Explain role of TP monitor in distributed systems. [8]

Q2) a) What is a socket? Explain different socket primitives for TCP/IP that are used in Berkeley Sockets. [8]

b) Compare two phase commit and three phase commit in distributed transaction. [8]

Q3) a) Explain basic RPC2 subsystem in Coda file system. [8]

b) How nested directories mount from multiple servers in NFS. [8]

Q4) Write notes on : [3 × 6 = 18]

a) Goals of distributed systems.

b) Berkeley Algorithm for clock synchronization in distributed system.

c) UNIX semantics and session semantics to share files in distributed systems.

SECTION - II

Q5) a) What do you mean by virtualization? What are the benefits of virtualization? [8]

b) Explain in detail different levels at which virtualization is implemented. [8]

P.T.O.

Q6) a) Explain-bare metal virtualization along with its benefits and drawbacks. [8]

b) Discuss various data-related challenges that occur in the cloud. [8]

Q7) a) Explain different primary mechanisms used for virtualization of the systems. [8]

b) How data confidentiality and encryption play important role in cloud? Explain in detail. [8]

Q8) Write Short notes (attempt any three) : [3 × 6 = 18]

a) Software as a service (SaaS).

b) Database as a Service (DbaaS).

c) Paravirtualization with compiler support.

d) Virtualization of CPU, Memory, and I/O devices.

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