

GANPAT UNIVERSITY
M. TECH SEM- I (CE) REGULAR EXAMINATION NOV-DEC 2015
3CE 104: Distributed Computing

MAX. TIME: 3 HRS

MAX. MARKS: 60

Instructions: (1) This Question paper has two sections. Attempt each section in separate answer book.
(2) Figures on right indicate marks.
(3) Be precise and to the point in answering the descriptive questions.

SECTION: I

Q.1 Answer the following.

- (A) Define the following terms: [5]
(i) Transparency
(ii) Parallel Computing.
- (B) Describe the key features of DCE RPC. [5]

OR

Q.1 Answer the following.

- (A) Describe the registry components of SUN RPC and Java RMI. [5]
(B) Explain the various steps of RPC programming. [5]

Q.2 Answer the following.

- (A) Compare CORBA architecture with Java RMI architecture in brief. [5]
(B) Write various steps to implement Echo service using Java RMI. [5]

OR

Q.2 Answer the following.

- (A) What is Live Process migration? Define various models for Code Migration. [5]
(B) Describe the steps for developing a CORBA application. [5]

Q.3 Answer the following.

- (A) How virtualization is achieved in distributed systems? [5]
(B) Explain different methods of Code mobility in distributed systems. [5]

[P.T.O]

SECTION: II

Q.4 Answer the following.

- (A) Explain Lamport's Clock Synchronization algorithm for logical clock. [5]
- (B) Discuss design principles of Coda file system. [5]

OR

Q.4 Answer the following.

- (A) Describe the working principle of Election algorithms of Distributed systems. [5]
- (B) Define Clock Synchronization principles and explain Cristian's algorithm. [5]

Q.5 Answer the following.

- (A) Explain main components of SOAP-based Web Service. [5]
- (B) Discuss the key features of SUN NFS. [5]

OR

Q.5 Answer the following.

- (A) Describe the steps required to implement SOAP-based Web services. [5]
- (B) Define the Mutual Exclusion algorithms of Distributed systems. [5]

Q.6 Answer the following.

- (A) Discuss the design principles of Hadoop Distributed File System (HDFS). [5]
- (B) Explain RESTful Web services in detail. [5]

-----**END OF PAPER**-----