

17635

15162

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Assume suitable data, if necessary.
  - (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
  - (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

**1. Attempt any FIVE :**

**20**

- (a) Write down the goals of distributed operating system.
- (b) Describe basic RPC operations.
- (c) Explain about low level protocol.
- (d) Describe the concept of threads in distributed system.
- (e) Enlist SPI model and describe any one in details.
- (f) What is recursive name resolution ?
- (g) Differentiate between process and threads.

**2. Attempt any FOUR :**

**16**

- (a) Define and illustrate about distributed system.
- (b) Describe about middleware concept.
- (c) Explain different forms of communication in message oriented communication.
- (d) Write three ways to handle code migration.
- (e) Explain how implementation of name space is done.
- (f) State about different cloud deployment models.

- 3. Attempt any FOUR : 16**
- (a) Write down the advantages of distributed operating system over centralized operating system.
  - (b) Explain the process of static Remote Invocation.
  - (c) Explain how quality of service can be achieved in stream oriented communication.
  - (d) What are the various alternatives of code migration ?
  - (e) What is reference listing and reference counting ?
  - (f) Explain the elements of Grid computing system.
- 4. Attempt any FOUR : 16**
- (a) What are the issues concerned with parameter passing in RPC system ?
  - (b) Describe client side software for distribution transparency.
  - (c) Explain client to server binding.
  - (d) Describe the simple solutions for locating entities.
  - (e) Explain Hierarchical location services for locating mobile entities.
  - (f) Describe Grid architecture with neat diagram.
- 5. Attempt any FOUR : 16**
- (a) Describe the concept of Homogenous multicomputer system.
  - (b) Write down the design issues for RMI.
  - (c) Write a note on agent technology.
  - (d) Describe the problem of unreturned objects.
  - (e) Describe the impact of cloud computing on users.
  - (f) Mention difference between cloud computing and grid computing.
- 6. Attempt any FOUR : 16**
- (a) Write down difference between distributed operating system and network operating system.
  - (b) Describe distributed objects with working of client side.
  - (c) Describe general architecture of message queuing system for persistence communication.
  - (d) Describe migration in heterogeneous system.
  - (e) Explain software agents in distributed system.
  - (f) Describe home based approaches for locating Mobile Entities.
-