17635

21718

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 : **5 × 4 = 20**

(a) Write down Goals of distributed Operating System.

(b) Describe basic RPC Operations.

(c) Explain Barckely socket in detail.

(d) Describe 'D' agent technology.

(e) Write three methods to handle code migration.

(f) Explain reference listing.

(g) Describe Grid architecture with neat diagram.

2. Attempt any FOUR : **16**

(a) Explain application layering in client server architecture.

(b) Explain low level layered protocols.

(c) Describe the concept of threads in distributed Operating System.

(d) Explain how implementation of name space is done.

(e) How to identify unreachable entities, explain ?

(f) State about different cloud deployment models.

3. Attempt any FOUR : **16**

(a) Explain Homogeneous Multicomputer System.

(b) Explain parameter passing in Remote object invocation.

(c) Write general design issues of servers.

(d) Explain client to server bindings.

(e) Describe in detail reference counting with advantages.

(f) Describe the impact of cloud computing on users.

4. Attempt any FOUR : **16**

(a) Explain client server architecture.

(b) Explain how to achieve Quality of Service in stream oriented communication.

(c) Describe the process of Dynamic remote invocation.

(d) Differentiate between user level thread and kernel level thread.

(e) Explain code migration in Heterogeneous system.

(f) Explain domain name system.

(g) Explain in detail IAaS SPI framework for cloud computing.

5. Attempt any FOUR : **16**

(a) Differentiate between cloud computing and Grid computing.

(b) Discuss the problem of unreferenced object in naming.

(c) Explain elements of Grid computing system.

(d) Write the types and properties of software agents.

(e) Explain transport level layered protocols.

(f) Explain Heterogeneous multicomputer system.

6. Attempt any FOUR : **16**

(a) Describe extended RPC model with example.

(b) Explain Network Operating System.

(c) Describe different forms of message oriented transient communication.

(d) Describe general architecture for message Queuing system for persistent communication.

(e) Explain in detail SAaS SPI Framework (Software as a Service) in cloud computing.

(f) Describe simple solutions for locating entities.
