

17635

16117

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) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. a) **Attempt any THREE of the following:** **12**
- (i) Define distributed system. What is multiprocessor system?
- (ii) What is meant by Application layering?
- (iii) What is stream Synchronization? Explain in brief.
- (iv) Explain basic RPG operation.
- (v) Write in brief a note on threads in distributed systems?
- b) **Attempt any ONE of the following:** **6**
- (i) What is meant by message oriented communication?
- (ii) What is a software agent? Explain the role of software agent in distributed system.

P.T.O.

- 2. Attempt any FOUR of the following:** **16**
- a) What is the difference between distributed operating system and network operating system.
 - b) Compare static and dynamic remote invocation.
 - c) What is RMI? Explain with sample code.
 - d) What are object servers? How they are useful?
 - e) What is name space? Give example.
 - f) What is the impact of cloud computing on users.
- 3. Attempt any FOUR of the following:** **16**
- a) Explain client-server Architecture with proper sketch.
 - b) What are layered protocols? Explain.
 - c) What are general design issues of server?
 - d) Compare naming v/s locating entities?
 - e) Compare grid computing and cloud computing.
- 4. a) Attempt any THREE of the following:** **12**
- (i) Write a note on middle ware.
 - (ii) Explain in brief remote object invocation.
 - (iii) What is the criteria of client side software for distribution transparency?
 - (iv) What are the problems of unreferenced object?
- b) Attempt any ONE of the following:** **6**
- (i) What are home based and Hierarchical approaches for locating mobile entities.
 - (ii) Explain an architecture of grid computing.

5. Attempt any TWO of the following:**16**

- a) Explain RPC in detail.
- b) Explain code migration approaches.
- c) Explain SPI framework for cloud computing.

6. Attempt any FOUR of the following:**16**

- a) What are homogeneous and heterogeneous multicomputer system?
 - b) What are the local resources for code migration?
 - c) Write in short on identifying unreachable entities.
 - d) What are the barriers to cloud computer adoption in enterprises?
 - e) Explain implementation of name resolution with advantages and disadvantages.
-