21819 3 Hours / 100 Marks Seat No. Instructions: All Questions are *compulsory*. (1) (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. 1. **Attempt any FIVE:** (a) List any four goals of distributed operating system. Explain any one. (b) Explain any two transport level protocols. (c) List properties of software agents. (d) Define Extended RPC model. (e) List different naming resolutions.

2. Attempt any FOUR:

(f)

(g)

16

Marks

20

(a) Explain general design issues of servers.

List advantages of cloud computing.

- (b) Describe basic steps for RPC operation.
- (c) Describe the local resources for code migration.

Define Heterogeneous multicomputer system.

- (d) Explain reference counting.
- (e) Explain in detail SaaS SPI framework in cloud computing.
- (f) Differentiate between user level & kernel level threads.

[1 of 2] P.T.O.

17635 [2 of 2]

3.	Attempt any FOUR:		16
	(a) Describe message oriented communication.		
	(b)	Explain application layering in client server architecture.	
	(c)	Explain different approaches for code migration?	
	(d)	Compare static V/S Dynamic Romotee invocation.	
	(e)	Define how to identify unreachable entities.	
	(f)	Explain different cloud deployment models.	
4.	Attempt any FOUR:		16
	(a)	Describe how to locate mobile entities.	
	(b)	Describe homogeneous multicomputer system.	
	(c)	Explain parameter passing in Remote procedure call.	
	(d)	Define threads with respect to distributed operating system.	
	(e)	Explain solution for locating entities.	
	(f)	Explain elements of Grid computing system.	
5.	Attempt any FOUR:		16
	(a)	Describe impact of cloud computing on users.	
	(b)	Explain two tier & three tier client server architecture.	
	(c)	Describe message oriented transient communication.	
	(d)	Describe the problem of unreturned objects.	
	(e)	Explain DNS with example.	
	(f)	Define Paas in cloud computing.	
6.	Attempt any FOUR :		16
	(a)	Explain Quality of service for communication.	
	(b)	Define distributed operating system.	
	(c)	Define parameter passing in Remote object invocation.	
	(d)	Explain migration in heterogeneous system.	
	(e)	Explain Reference listing.	
	(f)	Draw Grid architecture with neat diagram	