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BR—501—2016

FACULTY OF COMPUTER STUDIES

M.Sc. (First Year) (Second Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(CBCS Pattern)

COMPUTER SCIENCE

Paper CS-205

(Elective)

(Distributed Computing)

(Saturday, 26-11-2016) **Time : 10.00 a.m. to 1.00 p.m.**

Time—Three Hours *Maximum Marks*—75

N.B. :— (*i*) *All* questions are compulsory.

(*ii*) Figures to the right indicate full marks.

(*iii*) Assume suitable data, if necessary.

(*iv*) Draw the figures wherever necessary.

1. Attempt any *three* of the following : 15

(*a*) Explain sequential consistency.

(*b*) Explain reasons for replication.

(*c*) Explain Entities.

(*d*) Explain types of transperencies in distributed system.

(*e*) Explain scalability in distributed system.

2. Answer the following (any *three*) : 15

(*a*) Explain client server model.

(*b*) Explain multithreaded clients.

(*c*) Explain Remote Procedure Call (RPC).

(*d*) Explain eventual consistency.

P.T.O.

3. Solve the following (any *three*) : 15

(*a*) What is role of middleware in distributed systems ?

(*b*) Explain conventional procedure call.

(*c*) Explain any *one* example of distributed systems.

(*d*) Explain token ring algorithm.

4. Answer the following (any *three*) : 15

(*a*) Explain higher level protocols.

(*b*) Explain monotonic reads.

(*c*) Explain bully algorithm.

(*d*) Explain reasons for migrating code.

5. Write short notes on (any *three*) : 15

(*i*) Threads

(*ii*) Locating mobile entities

(*iii*) Identifiers and addresses

(*iv*) Lamport's logical clock

(*v*) Consistency verses coherence.