

M.Sc. Examination, 2019
Semester-II
Computer Science
Course : MCSC-23
(Distributed Systems)

Time : 3 Hours

Full Marks : 40

Questions are of value as indicated in the margin

Answer Question No.1 and **any four** from the rest.

1. a) Differentiate between the followings:
i) Weak mobility and strong mobility, ii) Distributed OS and network OS.
b) Briefly describe Bully's algorithm to handle mutual exclusion. 2+2+4=8
 2. a) Briefly describe different types of code migration.
b) What is client-server binding? Why client-server binding is required in distributed system? 4+(2+2)=8
 3. a) Justify that the use of an applet in HTML page is a type of code migration.
b) Write an applet to create a button called "size". The click on this button will increase the size of a text assumed in the applet. 2+6=8
 4. Write a Java program for echo client and echo server. Attach unique session number with each message. 4+4=8
 5. a) Briefly describe CODA file system architecture.
b) How CODA overcomes the drawbacks of the Andrew file system? 5+3=8
 6. a) What is parameter marshaling in RPC?
b) Write down sequentially the steps that occurs in RPC communication. 2+6=8
 7. Briefly discuss on each of the following :
i)Middleware,
ii) Object adapter,
iii) File handle in NFS,
iv) Transparency in Distributed system. 2×4=8
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