

M.Sc. Part-II Semester-III (CBCS) Examination
COMPUTER SCIENCE
3 MCS4 (I) DISTRIBUTED OPERATING SYSTEMS (GIS)

Time : Three Hours]

[Maximum Marks : 80

N.B.:— (1) Assume suitable data wherever necessary.

(2) Illustrate your answer with the help of neat sketches.

1. (a) Enlist the goals of distributed system. 6
- (b) Explain remote procedure call and group communication. 7

OR

2. (a) State the advantages and disadvantages of distributed operating system. 6
- (b) Describe client server model with suitable example. 7
3. (a) Explain Election Algorithm with example. 7
- (b) Describe distributed deadlock prevention and detection. 6

OR

4. (a) Explain clock synchronization and mutual exclusion in distributed system. 7
- (b) Describe deadlocks in distributed system. 6
5. (a) Describe three state process model and explain valid transition between them. 7
- (b) Describe fault tolerance in distributed system. 6

OR

6. (a) State the differences between process and threads in operating system. 6
- (b) Explain a modified genetic algorithm for process scheduling in distributed system. 7
7. (a) Describe the implementation of distributed file system. 6
- (b) Explain page based distributed shared memory. 7

OR

8. (a) Explain trends in distributed file system. 7
- (b) Explain object based distributed shared memory model. 6
9. (a) Explain process management in AMOEBA. 8
- (b) Explain the working of Bullet Server. 6

OR

10. (a) Discuss features of AMOEBA. 8
- (b) Explain Boot server in detail. 6
11. (a) Describe communications in MACH. 8
- (b) Explain DCE threads in detail. 6

OR

12. (a) Explain memory management in MACH. 8
- (b) Explain time and directory services in MACH. 6

