**D1ACS2102** **(1 Page)** **Name.....**
**Reg.No.....**

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2022**
**(Regular/Improvement/Supplementary)**

**COMPUTER SCIENCE**
**FCSS2C07-OPERATING SYSTEM CONCEPTS**

**Time: 3 Hours** **Maximum Weightage: 30**

**Section A: Short answer questions. Answer any *four* questions. Each carries 2 weightage.**

1. Define PCB.
2. Explain the objectives and functions of operating system.
3. What are the necessary conditions of deadlock?
4. Define granularity.
5. Compare multilevel and feedback queue scheduling.
6. Define thrashing.
7. What are the characteristics of mobile operating system?

**(4 × 2 = 8 weightage)**

**Section B: Short essay questions. Answer any *four* questions. Each carries 3 weightage.**

8. What are threads? List and explain different types of threads.
9. Summarize dining philosopher problem.
10. Define monitors. Explain its use in process synchronization.
11. Write about Thread scheduling.
12. Briefly explain paging.
13. Explain overlays.
14. Write a short note about distributed message passing.

**(4 × 3 = 12 weightage)**

**Section C: Essay questions. Answer any *two* questions. Each carries 5 weightage.**

15. Discuss UNIX SVR4 process management.
16. Explain different deadlock avoidance algorithms.
17. With the help of a diagram explain Three-Tier Client Server architecture.
18. Explain various page replacement algorithms with suitable example.

**(2 × 5 = 10 weightage)**