

FD-323

M.Sc. 1st Semester Examination, Dec.-Jan., 2021-22

COMPUTER SCIENCE

Paper - II

Advanced Operating System

Time: Three Hours] [Maximum Marks: 100 [Minimum Pass Marks: 40]

Note: Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

- **1.** (a) What is Operating System? Explain multiprogramming, time sharing and real time operating system in brief.
 - (b) Write the functions of memory management and process management.
 - (c) Write short note on job control language.

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(Turn Over)

Unit-II

- **2.** (a) Explain the architecture of Multithreaded Operating System.
 - (b) Describe preemptive and non-preemptive scheduling with their advantages and disadvantages.
 - (c) Write the features of Hard and Soft real time operating system.

Unit-III

- **3.** (a) Describe the architecture of pentium processor.
 - (b) Explain the role of Translation Lookaside Buffer (TLB).
 - (c) Write the difference between user process and kernel process.

Unit-IV

- **4.** (a) Classify device and their drivers.
 - (b) Explain dynamic loading and unloading of device driver.
 - (c) Write short note on device switch table.

Unit-V

5. (a) Explain v-node architecture in brief.

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(3)

(b) Describe distributed file system.

(c) Write short notes on the following:

(i) Network File System

(ii) Remote Procedure Call (RPC)