## Subject Code—652-X

## P.G.D.C.A. EXAMINATION

(Second Semester)

(Re-appear)

MS-08

## OPERATING SYSTEM

Time: 3 Hours Maximum Marks: 100

Note: Attempt any Five questions. All questions carry equal marks.

- State the structure of operating systems and also discuss its various types.
- (a) Define a file and also discuss the various allocation methods in brief.
  - (b) State the necessities of file protection and also discuss how files can be protected from unauthorised users.

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- 3. (a) State the importance of file directories.
  - (b) What do you mean by CPU scheduling?

    Discuss it and also name the various CPU scheduling algorithms.
- 4. (a) Name the various page replacement algorithms and discuss one algorithm of your own choice.
  - (b) Explain the following in brief:
    - (i) Thrashing
    - (ii) Swapping.
- 5. (a) What do you know about paging?
  Discuss it and also explain the page fault.
  - (b) Discuss the function of a device management.
- 6. (a) Why does the deadlock problem occur?

  Discuss it and also explain its characterizations.
  - (b) How can deadlock be avoided? Explain it.

- (i) Shared data
- (ii) Linux/Union operating system
- (iii) Block and wake up
- (iv) Mutual Exclusion.

## 8. Write short notes on the following:

- (i) Processor Scheduling
- (ii) Virtual Memory
- (iii) Sector Queuing
- (iv) MS-DOS.