BCA/M-21   **1900**

OPERATING SYSTEM–II

Paper–BCA-362

Time Allowed : 3 Hours]   [Maximum Marks : 80

Note : Attempt **five** questions in all, selecting **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Write short notes on the following :   16

   (a) What is Critical section ?

   (b) What is Mutual exclusion ?

   (c) What is difference between Deadlock and Starvation ?

   (d) What is Tree structure ?

   (e) What is Remote File Transfer ?

   (f) What are different types of Files in Linux ?

   (g) Define Disk scheduling.

   (h) What are various File attributes ?

UNIT–I

2. (a) What is the Semaphore ? Explain its types and implementation. 8

   (b) Explain Single level and Two level Directory structure. 8

3. Write short notes on the following :

   (a) The Reader Writer Problem. 8

   (b) The Dining Philosophers Problem. 8

UNIT–II

4. What is Disk structure ? Explain FCFS, SSTF, SCAN, C-SCAN, LOOK disk scheduling algorithms. 16

5. Write short notes on the following :

   (a) Remote File Transfer. 8

   (b) Process Migration. 8

UNIT–III

6. (a) Explain the comparison of Linux with other Operating systems. 8

   (b) Explain the architecture of Linux operating system. 8

7. Explain the purpose, syntax and examples of the following commands :

   (i) clear   (ii) dir
   (iii) mv   (iv) mkdir
   (v) rm   (vi) cat
   (vii) passwd   (viii) cal   16

UNIT–IV

8. (a) Describe various File system components.   8

   (b) Explain various types of File system.   8

9. (a) Describe vi editor and its commands.   8

   (b) Explain the various job control commands.   8