

Roll No. ....

Total Pages : 03

**BCA/M-20** **1900**  
**OPERATING SYSTEM-II**  
**BCA-362**

Time : Three Hours]

[Maximum Marks : 80

**Note :** Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory.

**Compulsory Question**

1. (a) Define Concurrency. **16**  
(b) Define Seek Time and Access Time.  
(c) Explain disk structure.  
(d) What are different types of semaphores ?  
(e) What is Remote Login ?  
(f) What is Linux Shell ?  
(g) What are different types of commands in linux ?  
(h) What are differences between Linux and Windows ?

**Unit I**

2. What is Critical Section problem ? Discuss single and two-process solution. **16**

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3. Write short notes on the following :
- (i) Deadlock and Starvation
  - (ii) The Bounded buffer problem. **16**

**Unit II**

4. Explain various Disk Scheduling algorithms. **16**
5. Write short notes on the following :
- (i) Network Operating System
  - (ii) Distributed Operating System. **16**

**Unit III**

6. (a) Write are advantages and disadvantages of Linux Operating System ? **8**
- (b) Explain Linux Architecture and its features. **8**
7. Explain the purpose, syntax and examples of the following commands : **16**
- (i) cat
  - (ii) cp
  - (iii) cal
  - (iv) mv
  - (v) cd
  - (vi) rm
  - (vii) mkdir
  - (viii) dir

#### **Unit IV**

- 8.** (a) Explain the features of Linux file system. **8**  
(b) Explain the various types of files in linux. **8**
- 9.** (a) What is an editor ? Explain various modes of vi editor. **8**  
(b) What are the components of file system ? **8**