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BCA (2014 to 2018) (Sem.–4)
OPERATING SYSTEMS
Subject Code : BSBC-403
M.Code : 10068

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**

SECTION-A

1. **Write briefly :**

   a) What do you mean by system programs? Write name of **any two** system programs.

   b) Explain in brief about the term Bootstrap.

   c) Differentiate between pre-emptive and Non-pre-emptive scheduling.

   d) Explain in brief about convoy effect in relation to FCFS CPU scheduling.

   e) Explain the term address binding in brief.

   f) What do you mean by device drivers? Explain

   g) Differentiate between seek time and Latency time in relation to disk storage.

   h) Define the term file. List **any four** file operations.

   i) Differentiate between Protection and Security.

   j) What do you mean by Virus? Explain.

SECTION-B

2. a) Explain in brief about following classification of operating systems :

    i) Multiprogramming

    ii) Time Sharing

    b) Write a detailed note on functions of an operating system.

3. Explain in detail about following :

    a) Multi-processor Scheduling

    b) Thread scheduling

4. Explain the following terms in relation to Inter-process Communication

    a) Pipe

    b) FIFO

5. Explain in detail about Segmentation scheme of Memory Management.

6. Write a detailed note on following terms :

    a) Remote file systems

    b) File Protection

7. Write a detailed note on following terms in relation to protection and security :

    a) Access control

    b) Authentication

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.