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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ECE) (2012 to 2017) (Sem.-6)

**OPERATING SYSTEMS**

Subject Code : BTCS-401

M.Code : 71120

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A****1. Answer briefly :**

- a) List two main functions of an operating system.
- b) What is the difference between local page replacement and global page replacement?
- c) Define the concept of external fragmentation.
- d) What do you mean by inter-process communication?
- e) Define the concept of dynamic linking.
- f) What is compaction and why it is used?
- g) What is critical section?
- h) What is Spooling?
- i) What is context switching?
- j) Give two examples of Multi tasking operating Systems.

### SECTION-B

2. What is a scheduler? Explain the primary objectives of scheduling.
3. What are the various memory management techniques? Discuss with example.
4. Explain Dining Philosopher problem in process synchronization.
5. What is the primary goal of Authentication and how can you achieve that through the password mechanism?
6. Explain the different states of process. What is the purpose of process control block?

### SECTION-C

7. What do you mean by page faults? When do page faults occur? Describe the action taken by Operating System when page fault occurs.
8. What is the need of file management? List different types of access methods available in files.
9. What is Operating System? Discuss various classification of operating system.

**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.**