

**Roll No.**

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**Total No. of Pages : 02**

**Total No. of Questions : 07**

**BCA (Sem.-4)**  
**OPERATING SYSTEMS**

**Subject Code : BSBC-403**

**M.Code : 10068**

**Date of Examination : 17-12-2022**

**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 are System Programs?
- b) What is multiprocessing in operating systems?
- c) Discuss process context.
- d) What is the functioning of Pipe?
- e) Give main objectives of pre-emptive scheduling.
- f) What is address binding?
- g) Define concept of thrashing.
- h) What is remote file system?
- i) Discuss disk storage.
- j) Write the applications of firewalls?

## SECTION-B

2. Explain the following:
  - a) Top Layer Subsystems in OS
  - b) Message passing Model
3. What is use of Thread Management? Explain the applications of thread.
4. Explain the need for CPU scheduling. Which are the different schemes for CPU scheduling?
5. What is the importance of virtual memory in operating system? Explain the basic concept of demand paging?
6. Define the process of file operations? Give the details of access methods in File management?
7. Discuss the need of protection and security of Operating System. What is denial of service attacks?

**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.**