

**Roll No.**

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**Total No. of Pages : 02**

**Total No. of Questions : 07**

**BCA (2011 & Onward) (Sem.-4)**

# OPERATING SYSTEMS

**Subject Code : BSBC-403**

**Paper ID : [B0242]**

**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 SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.**

## SECTION-A

**I. Write short notes on :**

- (a) What are Application Programs?
- (b) What is Time Sharing Operating Systems?
- (c) What is Synchronization?
- (d) What do you mean by Thread Scheduling?
- (e) What is Paging and Segmentation?
- (f) List any two I/O devices and controllers.
- (g) What is Address Binding?
- (h) What is VIRUS? What are its types?
- (i) What is Encryption?
- (j) What is the need for Firewall?

## SECTION-B

2. Explain classification of Operating Systems with proper example.
3. Write short notes on :
  - (a) Thread Management
  - (b) Program vs. Process
4. What is Virtual Memory? What is the concept of Virtual Memory? Discuss various advantages and disadvantages of virtual memory.
5. Write short Notes on :
  - (a) Remote File Systems
  - (b) Various Access Methods
6. What is Paging? Explain hardware support for Paging. How it is different from segmentation?
7. Explain the following :
  - (a) Application Security and Attacks.
  - (b) What is the difference between Anti-virus and Firewall?