

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

PGDCA (Sem.-1<sup>st</sup>)  
**COMPUTER OPERATING SYSTEM**  
Subject Code : PDCA-103 (2012 Batch)  
Paper ID : [B0143]

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 has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

**SECTION-A**

**I. Write briefly :**

- a) Explain the difference between a program and a process.
- b) Expand SPOOL.
- c) What are the various memory allocation schemes?
- d) What is a distributed operating system?
- e) Discuss the methods used for authentication.
- f) Explain logical address.
- g) List the three functions of resource management.
- h) What is a kernel?
- i) What do you mean by inter-process communication?
- j) What are the advantages of having a partition?

### SECTION-B

2. The modern day OS are based on following mechanisms: (Briefly Explain)
  - a) Multitasking
  - b) Multiprogramming
3. Differentiate between virtual memory and physical memory.
4. Differentiate between pre-emptive and non-preemptive process scheduling algorithms.
5. Explain TRAP vs INTERRUPT.
6. Explain the process of segmentation with the help of an example.

### SECTION-C

7. *“The modern day operating systems (OS) have evolved after continuous development”*. List the important milestones you observe in the development of modern day OS. [a2zpapers.com](http://a2zpapers.com)
8. What is file system? Explain file protection and allocation methods.
9. What is the difference between I/O mapped input/output and memory mapped input/output? What are the advantages and disadvantages of each?