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Total No. of Pages : 02

Total No. of Questions : 09

PGDCA (2014 & Onwards) (Sem.-1)
COMPUTER OPERATING SYSTEM
Subject Code : PDCA-103
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 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. Write briefly :**

- a) What is a real time operating system?
- b) What are the various tasks related to memory management?
- c) What are processes? What are the various states of a process?
- d) Explain best fit and worst fit algorithm of allocation.
- e) What do you mean by inter-process communication?
- f) List four necessary conditions for dead lock.
- g) What is busy waiting?
- h) What do you mean by system threats?
- i) Differentiate between fixed and variable-sized partitions.
- j) What is a system call? Explain with example.

SECTION-B

2. What are the various issues related to memory management?
3. What is virtual memory? What are its various advantages?
4. Explain Deadlock Prevention vs. Avoidance.
5. Discuss the various security measures in operating system.
6. What is file system? Discuss the various file access methods.

SECTION-C

7. What are the various basic components of an OS? Also discuss the general features observed in any modern day OS.
8. What is the difference between I/O mapped input/output and memory mapped input/output. What are the advantages and disadvantages of each?
9. What do you mean by scheduling? Discuss the various process scheduling policies adopted by OS.