

## OPERATING SYSTEM

[Maximum Marks : 50]

Time : 2:30 Hours]

## NOTES:

- i) Attempt **all** questions. Attempt any two parts of every question.
- ii) Students are advised to specially check the Numerical Data of question paper in both versions. If there is any difference in Hindi Translation of any question, the students should answer the question according to the English version.
- iii) Use of Pager and Mobile Phone by the students is not allowed.

- Q1) a) Explain different types of operating systems. 2  
 b) Explain First Come First Serve (FCFS) scheduling with the help of an example. 2  
 c) Discuss the concept of deadlock prevention. 2

[2×5=10]

- X Q2) a) Write various benefits of a virtual machine.  
 b) What is paging? Discuss the concept of memory paging in detail.  
 c) Explain various methods of allocating disk space.

[2×5=10]

- Q3) a) Write a difference between dedicated and shared devices. 2  
 b) Discuss the following Linux commands:  
 i) Mkdir  
 ii) Who  
 iii) Date  
 c) Write a note on the following:  
 i) Buffering  
 ii) Swapping

[2×5=10]

- Q4) a) Explain the structure of an operating system.  
 b) What do you mean by inter-process communication? Discuss.  
 c) Why is file management important in an operating system? 2

[2×5=10]

- Q5) a) Write a difference between internal and external memory fragmentation. 2  
 b) Write various features of unix operating system.  
 c) What is a system call? Explain different types of system calls. 3

[2×5=10]