

F-1 APR 2019

Code: 20647

B.Sc. (IT) Semester-3
CC-306: Operating System - I

Time: 2 Hours 30 Minutes]

[Total Marks: 70

- Q.1 (a) What do you mean by OS? Explain various functions of operating systems. 07
(b) Explain Multi-programming and time sharing operating system. 07
- OR**
- Q.1 (a) Write note on Batch processing and serial processing operating system. 07
(b) Explain system calls and system programs. 07
- Q.2 (a) Write note on client server architecture. 07
(b) Write note on distributed operating system. 07
- OR**
- Q.2 (a) Write note on monolithic structure. 07
(b) Explain real time operating system. 07
- Q.3 (a) Explain scheduling algorithm with suitable example: SJF (shortest job first) 07
(b) Explain Interrupt Mechanism. 07
- OR**
- Q.3 (a) Explain scheduling algorithm with suitable example: Round Robin 07
(b) What do you mean by process? Explain different process state. 07
- Q.4 (a) What do you mean by Deadlock? Explain deadlock avoidance. 07
(b) What do you mean by Threads? Explain types of threads. 07
- OR**
- Q.4 (a) What do you mean by Deadlock? Explain deadlock Prevention 07
(b) Explain necessary conditions to occur deadlock. 07
- Q.5 (a) What do you mean by address mapping? Explain logical to physical address mapping. 07
(b) What do you mean by paging? Give advantages and disadvantages of paging 07
- OR**
- Q.5 (a) Write note on fragmentation. 07
(b) Write note on hardware support for paging. 07