

B.Sc. (I.T.) Semester -3 Examination

Paper No.: 301

Subject: Operating System

Duration: 150 Minutes.

NOV - 2014
code 4730

Total Marks: 70

- Q-1: (a) Explain Operating System as a Resource Allocator. [07]
Q-1: (b) Explain various types of system calls in detail. [07]
OR
Q-1: (a) Explain special purpose operating systems. [07]
Q-1: (b) Write note on Multiprocessor Operating Systems. [07]
Q-2: (a) Explain process concept and explain various process states. [07]
Q-2: (b) Explain RR (Round Robin) scheduling Algorithm in detail with example. [07]
OR
Q-2: (a) Explain FCFS (First Come First Served) scheduling algorithm with its merits and demerits. [07]
Q-2: (b) Explain Process Control Block. [07]
Q-3: (a) Explain resource allocation graph.. [07]
Q-3: (b) Which are the conditions under which deadlock can occur? [07]
OR
Q-3: (a) Explain Safety Algorithm and Resource-Request algorithm. [07]
Q-3: (b) How can we recover from deadlock? Explain. [07]
Q-4: (a) Differentiate between logical address space and physical address space. Also explain address binding. [07]
Q-4: (b) Write short notes on: Swapping and Fragmentation. [07]
OR
Q-4: (a) What is pure demand paging? Explain demand paging in detail. [07]
Q-4: (b) Explain in detail : Segmentation. [07]
Q-5: (a) Enlist and explain : File attributes. [07]
Q-5: (b) Explain various file types. [07]
OR
Q-5: (a) Explain various directory operations. [07]
Q-5: (b) Explain : Tree-structured Directories. [07]