F 3523 (Pages : 2) Reg. No.....2.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Fifth Semester

Branch : Computer Science and Engineering

OPERATING SYSTEMS (R)

(Regular / Improvement / Supplementary)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 4 *marks.*

1. What are the functions of shell in a operating systems?
2. Mention the applications of windows 2000.
3. What are threads? Why are they called light weight processes?
4. What is Zombic process?
5. What do you mean by co-operating process?
6. What is a stab? Mention its applications.
7. Explain briefly about overlays.
8. What is virtual memory? Where it is used?
9. Mention the applications of Directories.
10. List out the differences between serial and Direct access devices.

(10 × 4 = 40 marks)

Part B

Answer **all** *the questions.*
Each operation carries 12 *marks.*

11. (a) What are the major subsystems of an operating system? Explain their services and functions.

Or

(b) Briefly enumerate the features of the linux operating system.

Turn over

12. (a) Describe the makeup of the process control block.

Or

(b) Discuss in detail about scheduling algorithms.

13. (a) Write a technical note on procedure graph and critical section problem.

Or

(b) What is a semaphore? What are the different types of semaphores? How do they help in solving the mutual exclusion problem?

14. (a) Write a technical note "paging and fragmentation".

Or

(b) Discuss in detail about the memory management in UNIX.

15. (a) Explain the various types of file organization.

Or

(b) Explain in detail about channels and control units. Also discuss about dish scheduling methods.

(5 × 12 = 60 marks)