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Register Number:
Name of the Candidate:

B.Sc. DEGREE EXAMINATION December 2014

(COMPUTER SCIENCE)

(SECOND YEAR)

220/250/210.OPERATING SYSTEMS

(Common with B.Sc (IT) DD and B.C.A)

Time: Three hours Maximum: 100 marks

SECTION – A (8× 5 = 40)

Answer any EIGHT questions

1. State the difference between Batch operating system and Time sharing operating system.
2. Differentiate pre-emptive from non-premptive scheduling.
3. Explain the four conditions for dead lock.
4. Discus about the Access Methods.
5. Describe the History of unix.
6. Discuss about the I/O system.
7. Explain the system components in Windows NT.
8. Describe about the programmer interface in detail.
9. Explain the Memory Management.
10. Discuss about the security in Linux.

SECTION – B (3× 20 = 60)

Answer any THREE questions.

11. Consider the following five processes, with the length of the CPU burst time give in milliseconds.

Process	Burst time
P1	10
P2	29
P3	3
P4	7
P5	12

Consider the First cum First serve(FCFS), NON Pre-emptive shorted job(SJF) , round Robin (RR) (quantum=10 millisecond) Scheduling algorithms. Illustrate the scheduling using Gantt chart. Which algorithm will give minimum average waiting time? Discuss.

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12. Explain the following:
    i) Multiple partitions (8)
    ii) Paging (4)
    iii) Thrashing (8)
13. Discuss briefly about inter process communication.
14. Explain in detail about the Design Principles of Windows NT.
15. With necessary illustration. Discuss the kernel modules and process management.

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