



12. a) Explain paging with the help of neat diagram. **8**
b) What is thrashing ? Explain the methods used to deal with thrashing. **2**
13. a) What is Dining philosophers problem ? Explain the solutions by using monitors. **7**
b) Write a brief note on deadlock prevention. **3**
14. Explain Disk scheduling algorithm with an example. **10**
15. a) Explain process scheduling in LINUX. **5**
b) Explain environmental subsystem in WINDOWS-XP. **5**
16. a) Explain Banker's Algorithm for Deadlock avoidance. **5**
b) Discuss about file allocation methods. **5**
17. Write short notes on **any two** of the following : **10**
a) UNIX file system
b) Access matrix
c) DMA.
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Code No. : 6108/S

FACULTY OF ENGINEERING
B.E. 3/4 (CSE) I Semester (Suppl.) Examination, July 2014
OPERATING SYSTEMS

Time: 3 Hours]

[Max. Marks: 75

Note : Answer **all** questions of Part – A and answer **any five** questions from Part – B.

PART – A

(25 Marks)

1. List the methods used for inter process communication. 2
2. Discuss the criterion used to evaluate CPU scheduling algorithms. 3
3. Define Internal and External fragmentation with an example. 3
4. Give a short note on free space management. 3
5. What is critical section ? 2
6. Define the necessary conditions for Deadlocks to occur. 3
7. Define seek time and Rotational latency. 2
8. Draw a neat diagram for the levels of RAID. 3
9. What are the design principle of LINUX ? 2
10. What is the use of plug-and-play manager in Windows-XP ? 2

PART – B

(50 Marks)

11. a) Explain the role of schedulers with the help of process transition diagram. 5
- b) Explain CPU scheduling Algorithms :
 - i) FCFS
 - ii) SJF
 - iii) Priority
 - iv) RR for the following example. 5

Process	Burst Time	Arrival Time	Priority
P ₁	25	0	3
P ₂	5	2	1
P ₃	10	3	2

Timeslice = 2 ms.