

Code No: **R31056**

R10

Set No. 1

III B.Tech I Semester Supplementary Examinations, May - 2017

OPERATING SYSTEMS

(Common to Computer Science and Engineering & Information Technology)

Time: 3 hours**Max. Marks: 75**

Answer any FIVE Questions

All Questions carry equal marks

- 1 a) What are the different kinds of memory supported by a computer system? Classify them based on various parameters such as accuracy, performance, price etc. [8M]
b) What are the functions performed by the operating system? [7M]
- 2 a) How is thread scheduling different from process scheduling? [7M]
b) Explain the working of Round robin scheduling algorithm. [8M]
- 3 a) What is the need for synchronization? How is process synchronization achieved? [7M]
b) What is semaphore? What are the different types of semaphore? [8M]
- 4 a) How segmentation supports user's view of the memory? [8M]
b) What is the need for swapping? Discuss [7M]
- 5 a) What are the problems with the implementation of Optimal page replacement? [7M]
b) Write short notes on working of LRU page replacement algorithm [8M]
- 6 a) What is stagnation? What is aging? Explain with examples. [8M]
b) Define Deadlock. How deadlocks occur? How the performance of system varies with deadlock? Discuss with examples. [7M]
- 7 a) Compare sequential and direct access methods [8M]
b) What is mounting and un mounting of a File system? How is it done in LINUX environment? [7M]
- 8 a) What are the different types of backup devices available? Explain them. [8M]
b) How the swapping between main memory and disk takes place? [7M]

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