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Total No.of Pages:01

BSC(IT),2ND SEM,MAY –2014

OPERATING SYSTEM

Paper Code (BS-203)

Paper Id. [B0410]

Time Allowed: 3 Hrs.

Max. Marks: 60

Note: Section A is compulsory. Attempt any four questions from Section B.**Section-A****Q 1** Answer briefly

- a What is a system call and what is its use?
- b Draw and explain process state diagram.
- c What is Belady's anomaly?
- d Define locality of reference.
- e What is a semaphore?
- f What is a partition?
- g What is the seek time?
- h What are the necessary conditions for a deadlock?
- i How two level directory structures differ from single level directory?
- j Differentiate between system threats and program threats? (10 x 2 = 20)

Section-B

- Q 2** What is operating system? Explain different types of the operating systems. (10)
- Q 3** Explain different page replacement techniques in virtual memory. (10)
- Q 4** What is disk scheduling? Explain the procedure of selection of best scheduling algorithm. (10)
- Q 5** What is a deadlock? Discuss the deadlock avoidance method and algorithm? Illustrate with the examples. (10)
- Q 6** What is process synchronization? Explain different 2 process algorithms for the process synchronization. (10)
- Q 7** Differentiate between CPU scheduling and job scheduling. How can we measure the performance of a scheduling algorithm? (10)

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