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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(CSE)/(IT) (2012 to 2017) (Sem.-4)

OPERATING SYSTEMS

Subject Code : BTCS-401

M.Code : 56604

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**Write briefly :**

- 1) Write at least two functions of Operating System.
- 2) Write a brief note on Shell.
- 3) Explain the term PCB.
- 4) Explain in brief about process synchronization.
- 5) Differentiate between External and Internal Fragmentation.
- 6) Write at least two differences between Paging and Segmentation scheme of memory management.
- 7) Why is disk scheduling important?
- 8) Differentiate between protection and security.
- 9) Define the term file. List various attributes of a file.
- 10) Write at least two characteristics of Windows based Operating Systems.

SECTION-B

- 11) Explain the following terms in brief :
 - a) Multiprogramming Systems
 - b) Time Sharing Systems
- 12) Define the term deadlock. Explain the deadlock prevention in detail.
- 13) Explain with an example the concept of shared segments in detail.
- 14) Write a brief note on File System Architecture.
- 15) Differentiate between LINUX and Windows based operating systems.

SECTION-C

- 16) What is disk scheduling? Explain in detail the various algorithms of Disk scheduling with examples.
- 17)
 - a) Explain any five LINUX Operating System commands with example.
 - b) Explain in detail the layered structure of an operating System.
- 18) Write a detailed note on Multiprocessor and distributed operating systems.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.