Roll No. | | | | | | | | | | | | | **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.