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Total No. of Pages : 02

Total No. of Questions : 16

BCA (2014 to 2018) (Sem.-4)

OPERATING SYSTEMS

Subject Code : BSBC-403

M.Code : 10068

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

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

SECTION-A**Write briefly :**

1. Differentiate between application programs and system programs.
2. What are Threads? What are its applications?
3. What is Context Switching?
4. What is CPU - I/O Burst Cycle?
5. What is the difference between FIFO and Socket?
6. Write two major advantages of Round Robin Scheduling.
7. What is Demand Paging?
8. Briefly discuss any one page replacement algorithm.
9. What are the objectives of file management?
10. What is a Firewall? What is its purpose?

SECTION-B

11. Define Operating system. Why an operating system is called a resource - manager? What are various types of operating systems? Which one you feel is better and why?
12. Define a Process. How it is different from a program? What is the relation between a process and a program? Explain various processes states.
13. Define Thrashing. What are the reasons of thrashing and what are the solutions of handling thrashing?
14. What is segmentation technique of memory management and discuss how it implemented? Also differentiate between paged segmentation and segmentation with paging.
15. Discuss in detail the various disk scheduling algorithms.
16. Discuss in detail the various directory structures.

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.