

B.C.A. (Part—I) Semester—II Examination**2ST1 : OPERATING SYSTEM**

Time : Three Hours]

[Maximum Marks : 60

Note :—(1) All questions are compulsory.

(2) All questions carry equal marks.

(3) Use suitable data wherever necessary.

1. (a) What is Software ? Explain different types of utility softwares. 6
(b) Explain Unix shell applications. 6

OR

2. (a) What is Operating System ? Explain types of operating system. 6
(b) Explain :
(i) Multitasking
(ii) Multiprogramming. 6
3. (a) Explain the structure of File Allocation Table (FAT). 6
(b) Explain with example :
(i) ATTRIB
(ii) Config.sys.
(iii) FORMAT. 6

OR

4. (a) Explain Booting Process. Also explain its types. 6
(b) Explain the directory structure of DOS. 6
5. (a) Explain Process Control Block (PCB). 6
(b) Explain :
(i) Time slicing
(ii) Batch processing system. 6

OR

6. (a) Explain process scheduling. Explain priority scheduling in brief. 6
(b) Explain :
(i) Suspend and Resume
(ii) Throughput
(iii) Waiting Time. 6

(b) Explain different space allocation techniques.

OR

8. (a) Explain contiguous allocation with example.

(b) What are the basic operations performed on a file ? Explain.

9. (a) What is segmentation ? Explain.

(b) Explain page replacement algorithm.

OR

10. (a) Explain virtual memory management.

(b) Explain demand paging in detail.