

**B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2016****Second Semester**

Vocational Subject – Computer Science

**INTRODUCTION TO OPERATING SYSTEM AND OS AS RESOURCE MANAGER**

(For Model II B.Sc. Mathematics)

[2013 Admission onwards]

Time : Three Hours

Maximum Marks : 80

**Part A (Short Answer Questions)***Answer all questions.**1 mark each.*

1. The process of loading the OS is called \_\_\_\_\_.
2. The term "NT" in "Windows NT" stands for \_\_\_\_\_.
3. The information about each process is recorded in \_\_\_\_\_.
4. Define Kernel.
5. Define Device Driver.
6. What is blocked state?
7. What is the expansion of MS DOS?
8. Splitting the program into pieces is called \_\_\_\_\_.
9. NRU algorithm refers to the \_\_\_\_\_ memory management policy.
10. PMT stands for \_\_\_\_\_.

(10 × 1 = 10)

**Part B (Brief Answer Questions)***Answer any eight questions.**2 marks each.*

11. What is Batch processing?
12. Differentiate between multitasking and multiprogramming.
13. What is meant by context switching?
14. Explain the term spooling.
15. Define Swapping.

**Turn over**

16. What is compaction?
17. What is meant by paging?
18. Define safe state.
19. What is a dead lock?
20. What is the difference between pre-emptive and non-pre-emptive scheduling?
21. What is Interrupt Service Routine?
22. What are file attributes?

(8 × 2 = 16)

**Part C (Descriptive/Short Essay Type Questions)**

*Answer any six questions.*

*4 marks each.*

23. Explain different types of OS.
24. Discuss about various process states with diagram.
25. Explain different types of process termination.
26. Discuss multiprogramming with fixed partitioning.
27. Explain the concept of allocation of frames.
28. Explain the concept of segmentation.
29. Explain File allocation methods.
30. Define disk allocation strategies and their demerits.
31. What are the various components of GUI like windows?

(6 × 4 = 24)

**Part D (Long Essay)**

*Answer any two questions.*

*15 marks each.*

32. Explain in detail about various scheduling algorithm.
33. In detail, explain, First fit, Best fit and worst fit for disk space allocations with their merits and demerits.
34. Explain in detail about dead lock detection and recovery.
35. What are the different methods of implementing file storage? Explain.

(2 × 15 = 30)