C16-**CM-303**

6229

BOARD DIPLOMA EXAMINATIONS

SEPTEMBER/OCTOBER - 2020

DCME – THIRD SEMESTER

OPERATING SYSTEMS

Time: 3 hours Max. Marks: 80

PART – A **3 X 10 = 30**

***Instructions**:* *1. Answer **all** questions.*
*2. Each question carries **Three** Marks.*
3. Answer should be brief and straight to the point and should not exceed Five simple sentences.

1. Write any three differences between distributed systems and real time systems.
2. What is spooling?
3. List any three differences between program and process.
4. What are the necessary conditions for arising deadlocks?
5. List any five fields in process control block.
6. List any three differences between paging and segmentation.
7. What is thrashing?
8. Write any three advantages of contiguous allocation of disk space.
9. What is linked allocation of disk space?
10. Define file. List any four file types.

[cont..,

PART – B 5 X 10 = 50

Instructions: *1. Answer any **Five** questions*
*2. Each question carries **TEN** Marks.*
3. Answer should be comprehensive and Criteria for Valuation is the content but not the length of the answer.

11. Explain the operating systems services in detail.

12. Explain SJF scheduling algorithm with an example.

13. Explain in detail about Semaphores and its operations.

14. Explain the various mechanisms of inter process communications.

15. Explain single partition and multiple partition techniques.

16. Explain Demand Paging with example.

17. Explain C – SCAN and LOOK disk scheduling algorithms.

18. Explain various file access methods.