C16-**CM-303**

6229

BOARD DIPLOMA EXAMINATIONS

OCT/NOV-2019

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. What is buffering?
2. List the services provided by an operating system.
3. What is the difference between thread and process?
4. Define deadlock.
5. Write about process synchronization.
6. What is thrashing?
7. Define Virtual memory.
8. What is bit Vector.
9. What is swapping?
10. List various file accessing methods.

[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 (a) Multiprogramming. 5M

    (b) Time sharing. 5M

12. (a) Write about Inter process communications. 4M

    (b) Explain IPC mechanisms (i) Pipes (ii) FIFOS. 6M

13. Explain (a) First come first server (FCFS) scheduling algorithm. 5M

    (b) Multilevel queue scheduling algorithm. 5M

14. Explain various techniques for deadlock prevention.

15. Explain the concept of paging in detail.

16. (a) Explain Least recently used page replacement algorithm with an example. 5M

    (b) Explain multiple partition allocation. 5M

17. List and Explain File allocation methods.

18. Explain about directory structure.