6229

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BOARD DIPLOMA EXAMINATION, (C–16)
OCT/NOV—2018
DCME—THIRD SEMESTER EXAMINATION

OPERATING SYSTEMS

Time : 3 hours]　　　　　　　　　　　　　[*Total Marks* : 80

PART—A　　　　　　　3×10=30

Instructions :　(1)　Answer **all** questions.

(2)　Each question carries **three** marks.

(3)　Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. (a) Define operating system.

   (b) List any three goals of operating system.

2. What is swapping?

3. (a) Define process.

   (b) What are the different states of a process?

4. Define semaphore.

5. When is process terminated?

6. What is thrashing?

7. What is fragmentation?

8. What is the need for secondary storage?

9. What is working set model?

10. What is the need of file protection?

Instructions :   (1)   Answer *any* **five** questions.

               (2)   Each questions carries **ten** marks.

               (3)   Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

11. Explain the compontes of an operating system in detail.

12. Explain the process creation and termination.

13. (a) State the necessary conditions for arising deadlock.

      (b) Write about the deadlock prevention.

14. Explain about round-robin cpu scheduling algorithm with an example.

15. Explain segmentation scheme for memory management. Give the segmentation hardware.

16. (a) Describe FIFO as a page replacement algorithm.

      (b) Explain about demand paging.

17. Explain free space management in detail.

18. Explain various file protection implementations.

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