P131/CMP507/EE/20180115

Time : 3 Hours   **Marks : 80**

Instructions :

1. All Questions are Compulsory.

2. Each Sub-question carry 5 marks.

3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.

4. Question paper of 80 Marks, it will be converted in to your programme structure marks.

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1. Solve any **four** sub-questions.

    a) What are the different conditions for deadlock occurrence?   5

    b) Write short note on: 5

        i)   Swapping

        ii) Protection and Sharing

    c) List different page replacement algorithms. Explain any one of them.   5

    d) Explain Direct Memory Access.   5

    e) What is Multiprogramming system?   5

2. Solve any **four** sub-questions.

    a) Explain multithreading models?   5

    b) What is authentication?   5

    c) What is the difference between paging and segmentation?   5

    d) What is critical section problem? Why executive critical section must be exclusive? Explain.   5

    e) Explain graphical representation of deadlock.   5

3. Solve any **four** sub-questions.

   a) What is Semaphore?   5

   b) Explain various process states.   5

   c) Write note on Multitasking.   5

   d) What is Memory management?   5

   e) What is difference between logical and physical addresses?   5

4. Solve any **four** sub-questions.

   a) What is Process?   5

   b) Under what circumstances do page fault occur? Describe the action taken by operating system when page fault occurs.   5

   c) What is batch system in OS?   5

   d) Write a short note on Evolution of Operating System.   5

   e) What is Process Control Block?   5

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