B. C. A. (Sem. IV) Examination

March - 2019

BCA - 404 : Operating System

(Elective - 2)

Time : 3 Hours]   [Total Marks : 70

1 (A) Attempt the following :   **6**
   (1) What is Multithreading ?
   (2) Define : Operating System.
   (3) What is Batch Processing ?
   (4) What is Kernel ?
   (5) What is System Cell ?
   (6) What is Spooling ?

(B) Attempt the following. (Any **Two**)   **12**
   (1) Discuss the Client Server Model.
   (2) What is Monolithic System ? Explain Layered System of Operating System.
   (3) Explain any three type of Operating System.

2 (A) Attempt the following :   **5**
   (1) What is PROCESS ?
   (2) What is Context Switch ?
   (3) Define CPU Brust.
   (4) Define Race Condition.
   (5) What is Starvation ?

(B) Attempt the following (Any **Two**)   12
     (1) What is Scheduler ? Explain types of Schedulers in detail.
     (2) Explain Round Robin Algorithm with example.
     (3) Explain PCB in detail.

3   (A) Attempt the following :   6
     (1) What is Thread ?
     (2) What is Reflection ?
     (3) Give the types of Semaphore.
     (4) Define : Critical Section.
     (5) What is Multi Tasking ?
     (6) Define : Deadlock Prevention.

   (B) Attempt the following. (Any **Two**)   12
     (1) What is Semaphore ? Explain types of Semaphore.
     (2) Explain Deadlock Detection in detail.
     (3) Explain Thread Synchronization in detail.

4   (A) Attempt the following :   5
     (1) What is ATU ?
     (2) Define : Page Fault.
     (3) What is Swapping ?
     (4) What is MMU ?
     (5) What is Memory Management ?

   (B) Attempt the following. (Any **Two**)   12
     (1) Give difference between Segmentation and Fragmentation.
     (2) What is Paging ? Explain Paging in detail.
     (3) Explain Memory Management Scheme in detail.