Code No: 07A60501 $\boxed{\textbf{R07}}$ $\boxed{\textbf{Set No. 2}}$

III B.Tech II Semester Regular/Supplementary Examinations,May 2010
Operating Systems
Computer Science And Engineering

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. (a) Explain the flaws in one-way encryption of password strategy.
   (b) Write a brief note on intrusion detection.
   (c) Write about intruders.   [8+4+4]

2. Explain the following allocation algorithms:
   (a) First fit
   (b) Best fit
   (c) Worst fit.   [5+5+6]

3. What is a semaphore? Explain its usage in readers - writers problem.
                                                                                  [16]

4. Consider the following snapshot of a system. Answer the following questions using the bankers algorithm.

	Allocation A B C D	Max A B C D	Available A B C D
P0	0012	0012	1520
P1	1000	1750	
P2	1354	2356	
P3	0632	0652	
P4	0014	0656	

   (a) What is the content of matrix need?
   (b) Is the system in a safe state?
   (c) If a request from process P1 arrives for (0, 4, 2,0) can the request be granted immediately?   [16]

5. (a) Discuss shortest-process-next scheduling with an example.
   (b) Describe various short-term scheduling policies.   [8+8]

6. (a) What are pre-allocation, dynamic allocation, partition size with respect to secondary storage management?
   (b) Describe various file allocation methods briefly.   [8+8]

7. Discuss the reasons why operating system might require accurate information on how blocks are stored on a disk. How can the OS improve the performance of the file system with this knowledge?   [16]

8.(a) List out the various functions of operating system.

(b)Explain how protection is different from security.   [8+8]

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