B.Sc. (With Credits)-Regular-Semester 2012 Sem II

2SCS-T1 Computer Science -I
(Operating System Paper - I)

P. Pages : 4

Time : Three Hours   Max. Marks : 50

Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and clean diagram wherever necessary.

1.   Either :

a) What is Real time system? Explain.   **5**

b) Write note on :   **5**
    i) I/O Interrupts.
    ii) Storage Hierarchy.

OR

c) What is Swapping? Explain Swap-in and Swap-out.   **5**

d) Write a short note on I/O structure and DMA structure.   **5**

2. Either :

a) Explain the following in detail :　　**5**
   i) System Protection.
   ii) Networking.

b) Explain how operating system manages　**5**
   the devices.

OR

c) What is process? List and explain different　**5**
   states of process.

d) Explain System Call. What happens when　**5**
   a system call is executed?

3. Either :

a) What is Kernel Operating System? Explain　**5**
   its functions.

b) Explain the following commands:　　**5**
   i) rmdir
   ii) cp

OR

c) Discuss the hierarchical structure of File system of Linux Operating system. **5**

d) Explain the following commands : **5**
   i) In
   ii) mkdir

4. Either :

a) Write a Shell Script to check whether two names that we have accepted are identical or not. **5**

b) Explain the following Security and Protection commands in Linux : **5**
   i) chown
   ii) chmod

OR

c) Explain the use of pipes and filters. **5**

d) Write a Shell Script to accept age and display appropriate message as follows : **5**
   If age "above 80", then "too old"
   "60-80", then "simply odd"
   "30-60", then "middle age"

5. All the below questions are compulsory.

a) Discuss the functions of Operating System. **2½**

b) Explain the simple system structure of Operating system. **2½**

c) What is the use of vi editor? Explain. **2½**

d) Explain the switch command used in Linux with an example. **2½**

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