MSCCS 01 Computer Fundamental and System Software

SET : 1

Section-A
(Very Short Answer Questions)

1.   (i). Define Computer.
    (ii). Define Software.
    (iii). Define compiler.
    (iv). What is solid state media?
     (v). What is a track ball?
    (vi). What is a Plotter?
    (vii). What is a logic gate?
    (viii). What is a device driver?
     (ix). Define an Operating system.
     (x). Define a Deadlock.

Section-B
(Short Answer Questions)

2. Differentiate between a mainframe computer and a super computer.
3. List & explain different types of secondary storages.
4. Explain the working of the following: (i). OCR, (ii). OMR, (iii). Voice Input.
5. Explain with truth table: (i). NOR, (ii) NAND, (iii), XNOR.
6. Explain 8421-BCD code with a suitable example.
7. Explain the following commands in Linux: (i). CAT, (ii). LS, (iii). MORE, (iv). WHO
8. Describe the various functions of IO management & Memory management.
9. What is a process? Discuss the information contained in PCB.

Section-C
(Long Answer Questions)

10. What is a micro-computer? List and explain different types of micro-computers with the help of diagrams.
11. What is a Printer? List and explain different types of printers.
12. What is a System Call? List & explain various categories of system calls.
13. What is CPU scheduling? Explain the following scheduling algorithms:
    (i). First Come First Serve, (ii). Shortest Job First, (iii). Shortest Remaining Job First,
    (iv). Priority scheduling, (v). Round Robin scheduling.

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SET : 2

Section-A
(Very Short Answer Questions)

1.   (i). What is Micro Computer?
     (ii). Define System Software.
     (iii). What is a full form of SCSI?
     (iv). What is a smart card?
     (v). Define Modem.
     (vi). Write the names of universal logic gates.
     (vii). What is a kernel?
     (viii). What is CPU Scheduler?
     (ix). Define Critical Section.
     (x). What is fragmentation?

Section-B
(Short Answer Questions)

2. Explain the following: (i). High level language, (ii). Low level language.
3. What is RAID Systems? Explain RAID functions & levels.
4. Differentiate between positional & non-positional number systems with examples.
5. Write notes on the following: (i). ASCII, (ii). EBCDIC, (iii). Gray code.
6. Explain various states of a process and state transition with the help of a diagram.
7. What is Paging? Explain the concept of demand paging.
8. With the help of a diagram explain the following: track, sector & cylinder.
9. What is a thread? What are the advantages of Multi-tasking?

Section-C
(Long Answer Questions)

10. With the help of a block diagram explain operations of a basic computer.
11. What is an Operating Systems? Explain various components of operating systems.
12. Explain the following:
    (i).various software components of Linux operating systems,
    (ii). types of files in Linux operating systems,
    (iii).various features of Linux operating system.
13. What are the necessary conditions for a deadlock to occur? Discuss the method of handling deadlocks.