

Assignment 1:

Q1: write short note on:

1. Thrashing
2. Page stealing
3. Page fault

Q2: What do you understand by virtual memory? Why it gives illusion of infinite storage?

Q3: what is relocatable variable partition allocation memory scheme?

Explain with proper example and diagram. Give its advantages & disadvantages?

Q4: Write short note on: a) Simple paging b) Page table in demand paging

Q5: Compare External memory, Secondary memory, Primary memory (RAM), Cache memory and Register.

Assignment 2:

Q1: What are the various functions of Operating System? Explain the functions of File Manager.

Q2: What are the various steps computer goes through when it is switched on? Explain the booting process.

Q3: What is DOS? What is volume structure of DOS? What are various components of File Path?

Q4: Differentiate between: Sector, Cluster, Track and Cylinder.

Q5: What is the volume structure of UNIX? What are the advantages of UNIX over DOS?

Assignment 3:

Q1: Name the various registers available in CPU and explain how an instruction is Fetched from memory, interpreted and executed? Explain with help of diagram?

Q2: What is the difference between high level and assembly language? What are the advantages of one over the other?

Q3: List 15 different areas of computer application and explain how the computer has changed various processes in those areas?

Q4: what do you understand by number system? Make the following conversions?

1. $(789)_{base 10} = (_)_{base 2} = (_)_{base 8} = (_)_{base 16}$
2. $(ABCD)_{base 16} = (_)_{base 2} = (_)_{base 8} = (_)_{base 16}$ Write the steps of conversions.

Q5: What are the various addressing mode? Explain?

Assignment4:

Q1: What is the Process Manager? What is the structure of Process?

Q2: What do you understand by Process states and state transitions? Explain with help of diagram?

Q3: Explain following terms:

1: Throughput 2: Turnaround Time 3: Response Time 4: CPU Utilization

Q3: What is the difference between Preemptive & Non Preemptive multitasking?

Q4: What are the advantages & disadvantages of following?

1: First Come First Served Policy. 2: Shortest Job first.
3: Round Robin Algorithm. 4: Priority Scheduling Policy.

Assignment 5

Q1: define the following:

1. I/O channel
2. Software interrupt
3. Spooling

Q2 what is direct memory access? Explain the process to bypass the C.P.U?

Q3: what is the structure of an I/O system? Take the help of diagram to explain?

Q4: what is the difference between shared and dedicated scheme for device allocation give example in both categories.

Q5: Search the internet and give some latest development in the field of operating system.