**Assignment No 1**

1. Explain language processing activities.
2. List different data structures used for language processing.
3. Explain language processing tools: Translators and preprocessors.
4. Compare: Compiler and Interpreter.
5. Explain pass 1 and pass 2 assembler with example.

**Assignment No. 2.**

1. Explain design of two pass macroprocessor.
2. How two pass assembler works and explain algorithm and structure.
3. Write a short note on compiler and loader.
4. Explain memory allocation techniques used in compiler.

**Assignment No. 3**

1. Draw and explain editor structure
2. What is linker? How it works?
3. Explain subroutine linker? Direct linking loader.
4. Explain software tools for program development.

**Assignment No. 4**

1. What is deadlock and explain deadlock avoidance techniques.
2. Explain Interprocess communication along with Interprocess communication techniques.
3. List scheduling algorithms and explain any two.
4. What is kernel and explain types of kernel.

**Assignment No. 5**

1. List page replacement algorithms and explain any two.
2. Write a short note on : 1. Virtual Memory organization 2. Demand paging.
3. Compare : Paging and segmentation.
4. What is page fault? Explain steps in page fault handling.

**Assignment No. 6**

1. Explain three different ways of IO handling.
2. Write a short note on : a. CD Drive. b. Linux file system
3. Explain directory system with directory handling operations.
4. Explain Interrupt handling process.

**Open book Test. 1**

1. Explain language processing activities.
2. List different data structures used for language processing.
3. Explain language processing tools, translator and preprocessor.
4. Compare compiler and interpreter.
5. Explain different data structure used to in assembler with example.
6. List and Explain various assembler directives.

**Open book Test. 2**

1. Explain macro definition and expansion.
2. Explain what is compiler and phases of compilation.
3. What is code optimization and explain its various techniques.
4. Explain data structure used in macro.

**Open book Test. 3**

1. Explain the debugger and editor software tools used for program development.
2. What is loader? Explain functions of loader.
3. What is program relocation and explain program relocatability.
4. Explain absolute loaders loading scheme.
5. What is editor? Explain with block diagram.