**Question Bank (I scheme)**

**Name of Course: Operating System (OSY) Course Code: 22516**

**Unit Test: I Program: IF5I**

**Semester: V**

**Chapter No: 1 Overview of Operating System (8 marks)**

**2 marks:**

1. Enlist the different types of operating system.
2. Compare between multiprogramming and multitasking operating system

**4 marks:**

1. Explain in detail distributed system.
2. Compare between time sharing and real time operating system.
3. Explain in detail multiprocessor system.
4. Compare command line interface and graphical user interface

**Chapter No: 2 Services and Components of Operating System (10 marks)**

**2 marks:**

1. Enlist services provided by operating system.
2. Enlist components of operating system.
3. Describe any two system call related with file management.
4. Describe any two system call related with device management.
5. Describe any two system call related with process management.

**4 marks:**

1. Explain concept of system call in detail.
2. Explain any four services provided by operating system.
3. Explain any four components of operating system.
4. Explain any two uses of operating system tools.

**Chapter No: 3 Process Management (14 marks)**

**2 marks:**

1. Describe term context switch.
2. Compare program and process.
3. Define term co-operative and non-co-operative process.
4. Describe term program, process and thread.
5. Write any two benefits of thread.

**4 marks:**

1. Explain in detail concept of inter-process communication (IPC).
2. Explain process control block with diagram.
3. Draw the process state diagram and describe each state in detail.
4. Explain concept of various scheduling queue in detail.
5. Compare between long-term, short-term and medium-term scheduler.
6. Compare between shared memory and message passing model.
7. List and explain various types of multi-threading model with diagram.
8. Explain shared memory communication model in detail.
9. Explain message passing communication model in detail.