

19BSIT 29394

University of Sargodha

BS 4th Semester/ Term Exam 2021

Subject: Information Technology

Paper: Operating Systems (CMPC-204)

Time Allowed: 02:30 Hours

Maximum Marks: 60

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

- Q.1. Write short answers of the following in 2-3 lines each on your answer sheet. (2*12)**
- Explain the main purpose of an operating system?
 - Which is the best non preemptive scheduling algorithm?
 - Give some benefits of multithreaded programming.
 - What is the difference between logical and physical address binding?
 - How does swapping results in better memory management?
 - What is the best page size while designing an operating system?
 - Why partitioning and formatting is a prerequisite to installing an operating system?
 - How Buffering can improve the performance of a computer system?
 - What is the Difference between a Job and a Process?
 - Give any two examples of program thread?
 - When does a page load in demand paging?
 - Where are thread libraries implemented in an OS?

Subjective Part (3*12)

- Q.2. What is operating system? Explain the abstract view of the components of a computer system?**
- Q.3. Explain process scheduling and difference between process schedulers. Draw the structure of Process Scheduling Queues.**
- Q.4. What is paging? Explain the conversion of virtual address in paging with example.**
- Q.5. Provide examples of applications that typically access files according to the following methods:**
- Sequential
 - Random
- Q.6. What are necessary conditions which can lead to a deadlock situation in a system?**
-