COMSATS University Islamabad, Abbottabad Campus

Department of Computer Science

Course: Principal of Operating System
Instructor: Dr. Rab Nawaz Jadoon
Exam: Mid Term (Fall 2024)

Class: (BCS – 6D)
Max Marks: 50
Time: 90 Minutes
Date: 14-11-2024

Special instructions:

1. First write down your **name and registration#** clearly.
2. Cutting leads to zero marks.
3. If any helpful material is found during the exam, the student is directly punished according to the CUI rules.

Name: _____ **Reg#:** _____

Question 1: **[CLO-1] – Marks (5x5)**

Differentiate the following!

1) Physical Memory vs Virtual Memory
2) Monolithic vs Micro Kernal Approach
3) Interrupts vs Context Switch
4) Current PSW vs New PSW
5) Extra Segment vs Stack Segment

Question 2: **[CLO-2] – Marks (15, 10)**

1) Explain context switching? how the operating system handles the context switching process in terms of interrupt processing. Outline the concept with a state diagram?
2) How does an operating system monitor and adjust process execution to maintain system stability in a multiprogramming or multitasking environment?

***Good Luck ***

CamScanner