**National University of Computer and Emerging Sciences**

**Operating Systems**

**Spring Semester 2020**

**Assignment No. 1**

**28th March 2020**

Due date: 13th April, 2020

Questions from the book, given at the end of the corresponding chapter

**Q1 and Q2:** 3.1 and 3.16 from Chapter 3

**Q3**: 4.13 from Chapter 4

**Q4 to Q9**: 9.4, 9.6, 9.7, 9.13, 9.21 and 9.23 from Chapter 9

**Q10**: Consider a simple paging scheme with the following parameters:

A physical memory of 232 bytes, page size = 212 bytes; 220 pages of logical address space. Answer the following questions: i. How many bits are there in a logical address?

ii. How many bytes are there in a frame?

iii. How many bits are there in physical address?

iv. How many entries are there in the page table?

v. What is the minimum number of bits in each page table entry?

Consider a simple paging scheme with the following parameters: A physical memory of 232 bytes, page size = 212 bytes; 220 pages of logical address space. Answer the following questions: **[5.5]**

1. How many bits are there in a logical address?
2. How many bytes are there in a frame?
3. How many bits are there in physical address?
4. How many entries are there in the page table?
5. What is the minimum number of bits in each page table entry?