National University of Computer and Emerging Sciences, Lahore Campus

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EMERGIA.

Course: Computer Org & Assembly Lang Lab BS(Computer Science)
Duration: 30 Minutes

Paper Date: 5-Oct-18 Section: C

Exam: Quiz-I

Course Code: EL213 Semester: Fall 2018

Total Marks: 10
Weight 5%
Page(s): 1

Instruction/Notes:

Question 1:

Given an array of **N numbers** in the range of **0 to 255**, for every number that is a **Power of Two**, replace that number with the number next to it in the array. If such a number appears at the end of the array, replace it with **10**. In order to check power of two, you might need to apply some clever masking strategy. You have to store the elements of the array and its size into the memory using data labels.

Note: The solution should be implemented without checking the Carry Flag.

Array Elements -> 9, 18, 1, 2, 12, 27, 32, 16, 63, 128

Array Size -> 10

Final Array (after the execution of program) -> 9, 18, 2, 12, 12, 27, 16, 63, 63, 10