

# Air University Mid Semester Lab Examination: Fall 2021

**Subject: - Computer Networks** 

Course Code: - Class: - **BS-CYS** 

Semester: - 3<sup>rd</sup> Section(s): - A Total Marks: 30

Date:

Time: 12 PM to 2 PM

Max Time Allowed: 2 Hours FM(s) Name: **Adnan Shah** 

# Student's Name: Reg-ID:

#### **Instructions:**

- Each Question contains equal marks
- Task based practical examination
- Compile complete report in PDF format which includes all task screenshot.
- Plagiarism of any kind will result in Zero (0) marks.

#### CLO<sub>2</sub>

## **Question 01:**

Calculate IP Addresses produced after applying the "formula (mathematical calculation for each IP)". Identify Class, Private/Public, Valid/Invalid and Reserved/Not Reserved for each of calculated IP Address.

- 1. 1\*Student-ID % 200. 1\*Student-ID % 150. 1\*Student-ID % 100. 1\*Student-ID % 50.
- 2. 2\*Student-ID % 200. 2\*Student-ID % 150. 2\*Student-ID % 100. 2\*Student-ID % 50.
- 3. 3\*Student-ID % 200. 3\*Student-ID % 150. 3\*Student-ID % 100. 3\*Student-ID % 50.
- 4. 4\*Student-ID % 200. 4\*Student-ID % 150. 4\*Student-ID % 100. 4\*Student-ID % 50.
- 5. 5\*Student-ID % 200. 5\*Student-ID % 150. 5\*Student-ID % 100. 5\*Student-ID % 50.

## CLO 3

# **Question 02:**

Using the **NET SHARE** command perform the following:

- 1. Create a directory:
  - a. Name format: networkexam{Reg}
  - b. Example: networkexam201764
- 2. Create a NEW SHARE for this directory.
  - a. Name format: networkexamshare {Reg}
  - b. Example: networkexamshare201764
- 3. Grant all users (everyone) with **CHANGE** permission
- 4. Set the allowed no. of users equal to the combination of first & last digits of your Reg.Number
  - a. Example: **2**0176**4** => **24**
- 5. Display the information for the **SHARE** you have created

#### CLO 3

# **Question 03:**

## TASK-1: ROUTE

- 1. Display the route table
- 2. Find the "Gateway" for your network.
- 3. Using ROUTE command add a route with the following values:
  - a. Destination IP = 148.66.137.120
  - b. Gateway = {Your Network Gateway}
  - c. METRIC = 100

## TASK-2: NETSH

Using NETSH command Display and Save the following:

- 1. Information about Network IP configuration
- 2. Information about all TCP Connections
- 3. Information about all UDP Connections

Text file format: "{name} {Reg}.txt" e.g: "adnan201764.

NOTE: Also upload these TEXT FILES in your submission.