Bahria University
Lahore Campus
Mid Term Assessment (Spring-2020 Semester)
Department of Computer Sciences

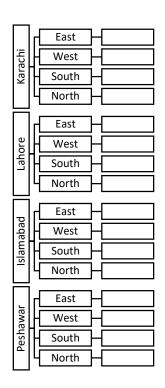**Due Date: 31st may 2020**

Instructor Name: Mr. Hanif   **Program/Semester: BSCS-5-A**

Course Title: Data communication and networks   **Lab Engineer: Fakhra Batool**

Max Marks: 50   **Weightage: 20%**

Instructions:
Read out the Instructions carefully.
I. Attempt all questions

Name: _____   **Enrollment:_____**   **Section: _____**
_____

SUBJECTIVE

Multinet Pakistan is one of the premier information and communication solution providers for leading enterprises in the region. Multinet is known for its reliable connectivity solutions on its 12,000+ km long self-healing and scalable optical fiber network covering over 120 cities of Pakistan, as well as a diversified portfolio of managed services solutions and a large array of IT related services.. They have large number of customers in Karachi, Lahore, Islamabad and Peshawar.

There are 4 Cities and Each City have 4 Division East, West, South North every city have its own router and every division also have its own router.

There are many corporate clients in each division Like Nestle Unilever, Dominos Pizza, McDonalds and Clinix Pharmacy. They are located in each division and the customers have its own router.

Karachi
- East
- West
- South
- North

Lahore
- East
- West
- South
- North

Islamabad
- East
- West
- South
- North

Peshawar
- East
- West
- South
- North

Configuration:

1. Each Router have 5 number of Desktop Clients.
2. Configure Hostname, Console Password and Virtual Line Terminal Password for each router.
3. Connectivity among cities in Gigabit Adapter and in Intracity use Fast Ethernet Adapter.
4. Karachi have RIP Routing Network, Lahore have EIGRP V2 Routing Network, Islamabad have OSPF Routing Network and Peshawar have Static Routing Network
5. Configure Redistribution Between RIP to OSPF, Static to OSPF and EIGRP to Static to established communication among cities KHI to LHR then LHR to ISB and then ISB to PSH
6. Change Banner in all router and switches according to cities.

Formatting Requirements

1. The assignment should be saved as a file entitled:

Student#_LASTNAME_FIRSTNAME_Midterm

- **Screen shots of each step with code**
- **Topology must be fully labeled.**
- **Description can be added with steps.**
- **Make table of each router, ip address or gateways and interfaces.**

2. Text

- All text should be **left justified**.
- Do not use full justification.
- Paragraphs **should not be indented** and should, instead, be **separated by a space**.
- Use **size 12 Times New Roman** font.
- **Edit** your writing for **spelling and grammar.**
- Write as **concisely** as possible.

3. Title Page

Include a title page with your name, student number, course and submission date.

4. Few Instructions

- The report should be written in **3rd person**. Do not use "I" or "we.
- Divide your write up in Chapter, each discussing different type or topic related to your study.

5. Headers/Page Numbers

- Use Word *Header & Footer* to insert a header, including your last name and the page number, positioned at the top right side of the page.
- Your name should be separated from the number using a vertical line, similar to "Name | 1".
- The title page should **not** have a page number.

- Use Roman numerals (i, ii, iii, etc.) for the page numbers for the Table of Contents, List of Figures, and List of Tables pages.
- Arabic numbers (1, 2, 3, etc.) begin on the first page of the assignment and should be used for all subsequent pages (including appendices when applicable).
- Make proper use of section breaks and page breaks.

6. Headings

- Use Word *Styles* to consistently format your headings for sections and subsections.
- Each question and the references section should have its own heading.:

Tables

- Maximize white space.
- Eliminate vertical lines between cells.
- Where possible, minimize the number of horizontal lines between cells.
- Centre text in cells.
- Avoid using color where possible.