**COMSATS University Islamabad, Lahore** **Campus**

**Assignment-I – Spring 2024**

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| Course Title: | Computer Networks | | | | Course Code: | CSC340 | | Credit Hours: | 4(3,1) |
| Course Instructor/s: | Dr Tariq Umer | | | | Programme Name: | BS Software Engineering | | | |
| Semester: | 5th | Batch: | FA22-BSE | Section: | A | Date: | 17-03-24 | | |
| **Dead line** |  | | | | **Maximum Marks:** | | **10** | | |

**Question:**

**CLO-1 Summarize the fundamental concepts of computer networks.**

Total Marks: 10 Due Date: March 24, 2024

Q1- You are assigned the role of Network Manager for a multinational organization. You are required to establish the Local Area Network of 500 Nodes for 4 different departments with a Wifi facility and fiber backbone between two branch offices. You also have to establish security using VLAN and provide FTP, Mail and data center facilities. Keeping in view of the CISCO three-layer architecture, make a comparison table of required Network devices and software for budget approval from higher management. Please search the web and prepare a comparison table of required devices and software. Highlighting the device and software specification, vendor profile, Price, and key features which you believe can play an important role in selection.