



**Maldives  
Polytechnic**

## **Assignment Brief**

### **November – 2022**

Student ID No.:

Student Name: ..... Date: .....

## **Data Communication and Networking**

**Subject Code: IT004**

**Certificate III in Information Technology**

**Total Marks: 100**

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### **READ THESE INSTRUCTIONS FIRST**

- The total of the marks for this assignment is **100**

- Students are to submit the word document .

## Tasks

ABW Collage wants to implement a network in their premises that would cater to the students and to their staff. The building has two class rooms and an office space for their staffs. You are assigned to implement a network setup that would cater to these three places in that premises. Each class must have 10 computer system and the staff's office should have 5 computers with a network shared printer.

1. Explain the difference between internet and intranet and how they work. **(10 Marks)**
2. Explain different types of networks in computer network and their usage and what is the type of network that the collage would require. **(10 Marks)**
3. List out the required software's and hardware's this network setup and explain the usage and purpose of these software's and hardware's. **(15 Marks)**
4. List down the different network topologies and explain the differences with their usage along with the advantages and disadvantages of these network topologies. **(15 Marks)**
5. Recommend a network topology explaining the reasons for your recommendation. **(15 Marks)**
6. Draw a network diagram for the given requirements of the collage. **(20 Marks)**
7. An Ip Address should be assigned to these devices. Explain different classes of IP address and what class would you chose for the above network. **(15 Marks)**

### **Instruction to Students**

1. Please fill all the required entries on assignment cover sheet (Student Name, Student ID, Date submitted).
2. Word count limit 1500.
3. It is a **MUST** to maintain the word count specified (10% variation is acceptable). Not meeting the criteria for word count can result a penalty.
4. Answers should be clear, specific and self - reflective.
5. **DO NOT COPY** answers from Internet instead, paraphrase and quote using proper ways.
6. Please be cautious about the structures of the report and the essay.
7. Report needs to be produced with academically accepted formatting guidelines.
  - a. Paper A4
  - b. Font size: Headings 14pt, Bold; Normal font 12pt
  - c. Font Face: Times New Roman or any other Serif Font face.
8. **Please note that institute has very strict regulations on unfair practice and failing to follow regulations can result serious penalties.**