**Unit No: 10**

***A Bespoke Solution***

***The scenario:***

Mr. Evans owns a small office which prints leaflets and cards. He wants to learn more about communication technologies and eventually create a small network to connect his computers together. For this assignment you are required to discuss different transmission methods commonly used.

**(P6 describe different transmission methods used) and (M2 explain why particular transmission methods are chosen in particular situations)**

***Introduction***

***Main body***

**Describe** the different transmission methods that can be used by Mr Evans. This can be in form of a presentation. You must explain covering the following types and mediums of transmission methods:

***Transmission****:* methods eg coaxial, optical fibre, unshielded twisted pair (UTP), shielded twisted pair (STP), infrared, radio, microwave, satellite.

***Electronic communication*:** methods eg simplex, duplex, half-duplex communication, parallel, universal, serial bus, serial, infra red, Bluetooth, WiFi, 3G

**(M2) Explain** why particular transmission methods are **chosen in particular situations**. You can use the following transmission methods to explain this: Coaxial, fibre optic and UTP.

In this section also you will need to identify (in a table) the advantages and disadvantages of both wired and wireless network systems:

|  |  |  |
| --- | --- | --- |
|  | Advantages | Disadvantages |
| Wired network |  |  |
| Wireless network |  |  |

***Conclusion***

Explain what you have learnt and why. Can you relate your learning of the above topic/s to real life?

**Reference**

**(D2 compare the effectiveness of different transmission methods.)**

**Compare** the effectiveness of different transmission methods. For this part of the assignment you should attempt to identify both the similarities and differences of particular transmission methods. It’s important also to link knowledge of these transmissions and attempt to identify potential problems and solutions. The comparison is expected to be detailed and show a clear link with both OSI and TCP/IP.

At this stage you should also research **ethical and environmental issues** about the use of these transmission methods. How is the environment effected?

**Keywords:**

Transmission