**P15/1221/2018**

**ISUTSAH JOHN**

**CSC 226: NETWORKING LAB ASSIGNMENT**

1. **Differentiate the four pairs of the unshielded twisted pair (UTP) cable.**

|  |  |  |  |
| --- | --- | --- | --- |
| **PIN NO.** | **COLOUR** | **PAIR NO.** | **FUNCTION** |
| 1 | White/orange | 2 | TxData + |
| 2 | Orange | 2 | TxData - |
| 3 | White/green | 3 | RecvData + |
| 4 | White/blue | 1 | Unused |
| 5 | Blue | 1 | Unused |
| 6 | Green | 3 | RecvData - |
| 7 | White/brown | 4 | Unused |
| 8 | Brown | 4 | Unused |

1. **Show the different characteristics of UTP categories and the maximum distance they cover.**

|  |  |  |  |
| --- | --- | --- | --- |
| **CATEGORY NO.** | **SIGNAL TYPE** | **SPEED** | **DISTANCE (Metres)** |
| CAT1 | Voice only | Up to 1 Mbps | - |
| CAT2 | LocalTalk & Telephone | Up to 4 Mbps | - |
| CAT3 | 10BaseT Ethernet | Up to 16 Mbps | 100 m |
| CAT4 | Token Ring | Up to 20 Mbps | 100m |
| CAT5 | 100BaseT Ethernet | Up to 100 Mbps | 100m |
| CAT5e | Gigabit Ethernet | Up to 1 Gbps | 100 m |
| CAT6 | Gigabit Ethernet | Up to 10 Gbps | 100 m |
| CAT6a | Gigabit Ethernet | Up to 10 Gbps | 100 m |
| CAT7 | Gigabit Ethernet | Up to 10 Gbps | 100 m |

1. **Difference between CAT5 AND CAT6**

* CAT6 has more reduced “crosstalk” than CAT5.
* CAT6 is faster in transferring data and connection than CAT5.