***Networking Fundamentals (H17A 11)***

To help with your studying, below is a list of all the topics covered.

Topics covered

For O1

* Cabling (coax, RJ45, cat5, cat5e, cat6, Fibre-optic), Bandwidth, UTP, STP, Straight Through, Cross-over)
* Wireless, Bluetooth, Satellite, WEP, WPA2
* Devices (Hubs, Switches, Routers, NIC, Modems, Gateway)
* Interference, Attenuation, Crosstalk
* Simplex, Half-Duplex, Full-Duplex
* Topology
* TCP/IP, UDP, VoIP
* Scalability, Fault Tolerance, Security, Qos

For O2

* OSI model
* TCP/IP model
* Data Encapsulation/De-capsulation
* DNS, ARP
* IPv4, IPv6
* Classful Addressing, Classless Addressing
* Public and Private address ranges
* Unicast, Broadcast, Multicast
* Subnet Masking
* Port Numbers

For O3

* Circuit Switched Technology
* Packet Switched Technology
* Analogue Dial-up
* ISDN
* X.25
* Frame Relay
* ATM
* Telecommunications Terminology
* Telephone Terminology
* DTE/DCE Interface Standards
* xDSL connection (all variants)
* Cable Modem
* VPNs
* Wireless
* MPLS
* SMDS
* HDLC