**SAC Date:** 30th April 2013

**Length:** Double Period

**Structure:**

**Mode : Written**

* 20 Multiple Choice Questions
* Short Answer Questions
* Case studies
* Diagrams
* Definitions etc.

**Checklist**

Network

Node

Types of Network

* LAN Vs. WAN
* Client Server Vs Peer-to-Peer
* Bus, Star and Ring Network

Types of Servers

* File Server
* Print Server
* Application Server

Network Devices

* Cables – Twisted Pair, Coaxial, Fibre Optic
* NIC
* Switch, Hubs and Routers
* Mobile Devices
* Modem, WAP
* Transmission Media – Broadcast Radio, Cellular Radio, Microwave

Network Security

* Threats
* Prevention
* Firewall

Network Administrator – Roles & Responsibilities

**Revision Questions**

1. Log into Exam View and Complete Multiple Choice Questions on
* Network Topology
* Network Hardware
* Network Security
* Y11 - U0102.tst
1. **Case Study**

Nelson Secondary College has decided to update it’s network. It currently has a small network in the careers with 10 computers. It has another network in the library with 23 machines, which is next doors but is not connected. There are two computer labs at the other end of the school building about 80 meters away. All the three networks work on client server model. The school has internet connection in the library and two printers on each network.

1. Provide reasons why the various separate networks around the school should be linked.
2. Draw a simple Network Diagram, showing different hardware devices that should be used to inter-connect the networks and connect to the internet.
3. List equipment’s that the school needs to be procured
4. List the servers that you would recommend be used on the network and describe their function.
5. School also wants to employ an IT professional to assist with the development and support of the network. Describe the role and three responsibilities of the network administrator
6. Describe three potential security threats to the information stored
7. Explain two security strategies that you would recommend ways against this threat?
8. The school wishes to establish a website. The website will be located on the College network. What hardware and software is required to establish the site.