

## Exam Outline for ICT – Year 10

### Paper Structure

- Practical Exam– 2hr 30 min
- Theory Exam – 2hr

**Practical-** Able to demonstrate ability to use a range of software packages in practical and work-related contexts.

### Topic 17- Document production – MS Word

- Create and edit the contents, appearance and layout of documents. Students should be able to use word processing facilities to prepare documents.

### Topic 18 - Data Manipulation – MS Access

- Interrogate, manipulate and present data using a data handling system. Students should be able to use database facilities to manipulate data to solve problems.

### Topic 19- Presentation Authoring – MS PowerPoint

- Create, control and output information from a presentation. Students should be able to create and control an interactive presentation.

### Topic 20 - Data Analysis – MS Excel

- Create, manipulate, test, interrogate and present data using a spreadsheet model. Students should be able to use a spreadsheet to create and test a data model, extract and summarise data, and to represent this data graphically.

**Theory** –Able to demonstrate knowledge and understanding of the structure of ICT systems, the roles of these systems in organisations and their impact on society.

### Topic 1-Types and components of computer systems

- Describe hardware, software, RAM,ROM, operating system and different types of computers.

### Topic 2-Input and output devices

- Identify the following input devices: keyboards, numeric keypads, pointing devices (including mouse, touch pad and tracker ball), remote controls, joysticks, touch screens, magnetic stripe readers, chip readers, PIN pads, scanners, digital cameras, microphones, sensors, graphics tablet, MICR, OMR, OCR, barcode readers, video cameras, web cams, light pens
- Identify suitable uses of the input devices stating the advantages and disadvantages of each:
- Identify the following output devices: monitors (CRT, TFT), projectors, printers (laser, ink jet and dot matrix), plotters, speakers, control devices – motors, buzzers, lights, heaters
- Identify suitable uses of the output devices stating the advantages and disadvantages of each

### Topic 3- Storage devices and media

- Describe common backing storage media (including magnetic tapes, hard discs, all forms of CD and DVD, memory sticks, flash memory) and their associated devices identify typical uses of the storage media.

#### Topic 4-Networks and the effects of using them

- Describe a router, hub, switch, bridge and its purpose
- Describe the use of WIFI and Bluetooth in networks, etc.

#### Topic 5- The effects of using IT

- Explain what is meant by software copyright
- Describe what a computer virus is, what hacking is and explain the measures that must be taken in order to protect against hacking and viruses describe the effects of information and communication technology on patterns of employment, including areas of work where there is increased unemployment, etc.

#### Topic 8- Safety and security

- Understand the number of ways in which the use of computers can physically harm you and steps that should be taken to reduce or eliminate these dangers. Ensure the safety of computer system to protect it from hackers and viruses, which can cause you to lose files.

#### Topic 9- Audience

- Be aware of the legal, moral, ethical and cultural needs of the audience.

#### Topic 10 – Communication

- Understand the fundamentals of the internet as well as the advantages and disadvantages in using the internet as a source of information.

#### **Final Report**

- Term 1 & 2 (60%)
- Final Exam (40%)