IGCSE June 2011

Revision

Chapter 1 - Hardware

1. Game Console

Device/PC which is used in multimedia entertainment and gaming. It's an input and output device. Consists of screen/HDD/input devices/internet connection eg: Microsoft Xbox / Sony play station /Nintendo

2. Embedded Computer

used for specific application / performs limited dedicated functions / contains a microprocessor / eg: washing machines, DVD players

3. Cores

main processor contains several processors built into it.

4. Processor

Home user – AMD sempron/Athlon, Intel dual core

Multimedia applications – Intel quad core

5. Example microprocessor

Intel Core 2 duo / 3.33GHz/1333MHz FSB(carries data between processor and memory/6MB cache (Will store frequently used programs and data)

- 6. Chip and Pin readers read data in smart cards and magnetic stripe s
- 7. Buffer small memory in the printer to store print jobs, Spooling print jobs are put into a queue on a server in priority basis
- 8. Actuators/Control devices heaters, coolers, motors, buzzers and alarms

Chapter 2 – Backing Storage

- 1. Storage medium the material used to store data
- 2. Hard disk capacity (number of readable sides X number of cylinders/number of tracks X sectors per track X bytes per track)
- 3. RAID multiple copies of data on different hard disk drives
- 4. DVD 4.7GB / Blu Ray 50GB
- 5. IAS memory immediately accessible to the processor.
- 6. Flash memory eg: BIOS chip / Sometimes portable eg: USB pens
- 7. Word Size measured in BITS 32bit, 64bit
- 8. Scanners OCR, Magnetic Stripe Card readers read Alphanumeric
- 9. Types of printers
- 10. Multifunction Devices advantages and disadvantages

Chapter 3 – Software

- 1. System Software / Application software
- 2. Project Management software/Educational Software/Integrated Software/Specialised Software/General Purpose Software/Off-the-shelf software
- 3. Bespoke Software/Customised Software
- 4. Parallel Processing/Multi Tasking
- 5. File Paths/File Extensions .xlsx, .csv, .etc
- 6. Software licence / Software piracy / Licensed Software/ Public Domain Software(freeware)/ Open source software / Shareware / Creative commons / Demonstration disk

Chapter 4 – Word Processing and Desktop Publishing

- 1. Proof Reading
- 2. Mail merge main document / data source(database, spreadsheet, word document) } merged documents

Chapter 5 – Spreadsheets and Modelling

- 1. Formulae / Functions (SUM, AVERAGE) / Terms e.g. Cell, Cell reference, range reference etc.
- 2. Exponentiation e.g.: B7^2 (B7 into the power of 2)
- 3. Absolute cell reference / Relative cell reference / Cell Formatting / Sorting
- 4. Lookup / IF / Nested IF / Mathematical Modelling / page 110 (super market model)

Chapter 6 – Database

1. Data Types / Field Properties / Primary Key / Validation Rules / Field Size / Relationships / Calculated fields

Chapter 7 - Graphics, Video and audio editing software

- 1. Vector and bitmap graphics
- 2. Sampling Rate

To be continued...