

Computer Logic and Organisation CCE1012

Coursework 2012

The coursework carries 10% of the total mark of the course module.

Every student will be assigned one particular topic. There can be no change from the topic assigned.

A write up of about ten pages is to be presented, **individually**, on the topic. If it is felt necessary there will be a further oral examination.

While you are encouraged to use the resources on the Internet, please be aware that some double checking is necessary as the data is not always necessarily accurate, especially if it is dated. It is clear that cut and paste from Internet to your document does not make this your work. One appreciates that diagrams, illustrations, tables etc. already available, can be made use of, (duly referenced), but you must put an input at the level of comparison, discussion, advantages and disadvantages etc. of whatever topic, technology, etc. you are writing on. You are expected to include one practical, real, example of the topic you are discussing.

Topics list

1. Hard disk drives on a PC – organisation, reading and writing mechanism, addressing, coding, buffering. Include one **current** HDD organisation
2. RAM organization on a PC board - use one type of dynamic RAM. Include access to columns and rows, refresh strategy, refresh circuitry , discussion on different types - SIMM, DIMM, SDRAM. Include one **current** RAM used in a PC.
3. DVD organisation and operation. Codes used to store video on DVD - description and operation.
4. (i) The Flash Memory – history, description, operation, types, size, applications advantages and disadvantages compared to other forms of data storage.
(ii) The USB system – history, description, operation, types, size, applications; advantages and disadvantages compared to other I/O connections to the PC