

COMPONENTS OF COMPUTER AND THEIR USES

TOTAL MARKS:21

QUESTION 1:

2 (a) The Fetch-Execute (F-E) cycle is represented in register transfer notation.

Describe each of the given steps.

Step	Description
$PC \leftarrow [PC] + 1$
$MDR \leftarrow [MAR]$
$MAR \leftarrow [PC]$

[3]

(b) Explain how interrupts are handled during the F-E cycle.

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QUESTION 2:

2 A computer has hardware and software.

(a) The hardware includes different types of memory.

(i) Complete the description of computer memory.

Random Access Memory (RAM) and Read Only Memory (ROM) are both examples of

..... memory.

One item that is stored in RAM is

One item that is stored in ROM is

RAM can be either Static RAM (SRAM) or Dynamic RAM (DRAM).

SRAM uses transistors arranged as

DRAM uses transistors and

[5]

(ii) Explain the difference between Programmable ROM (PROM), Erasable Programmable ROM (EPROM) and Electrically Erasable Programmable ROM (EEPROM).

[3]

(b) A magnetic hard disk is used to store data on the computer.

Describe the principal operations of a magnetic hard disk.

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