

0417 and 0983

INFORMATION AND COMMUNICATION TECHNOLOGY

TOPIC MARK SCHEME PAPER-1 SET-1

SMART EXAM RESOURCES

Unit 1.2 The Main Components of Computer Systems

MARKS SCHEME 1

<p>Four from: ROM Read Only Memory Non-volatile//Data is not lost when the computer is switched off Used to store the startup instructions/BIOS</p> <p>RAM Random Access Memory Volatile//Data is lost when the computer is turned off Stores the current running program/instruction RAM can be written to and read from</p> <p>To gain full marks the description must have correct answers for both ROM and RAM</p>	4
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MARKS SCHEME 2

<p>Four from: An item of hardware It carries out the instructions of a computer program It performs basic arithmetic calculations It performs logical operations It performs input/output operations of the computer It contains the internal storage/control unit</p>	4
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MARKS SCHEME 3

<p>Six from: Internal storage examples RAM and ROM Internal storage is chip based Backing storage can be solid state, optical or magnetic Backing storage is permanent storage RAM loses memory when computer is turned off RAM contains current instruction ROM contains instructions to boot up the computer Backing storage has slower access speeds More storage in backing storage</p>	6
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Unit 1. 2 The Main Components of Computer Systems

MARKS SCHEME 4

	ALU (✓)	Control Unit (✓)	Main memory (✓)
This is the immediate access storage			✓
This carries out the calculations	✓		
This carries out logical decisions	✓		
This directs the input and output flow in the CPU		✓	

[4]

MARKS SCHEME 5

<p>Any four from:</p> <ul style="list-style-type: none"> - ROM can only be read from whereas RAM can be read and written to - ROM is non-volatile whereas RAM is volatile - ROM stores the start-up instructions / boot file whereas RAM stores the current instruction - ROM is needed on boot up, whereas RAM is needed during processing / storing data 	4
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MARKS SCHEME 6

	TRUE (✓)	FALSE (✓)
A mouse is an output device		✓
The Control Unit is part of the Central Processing Unit	✓	
The Arithmetic and Logic Unit is part of the Central Processing Unit	✓	
A temperature sensor is an input device	✓	

4 correct answers – 2 marks
 2 or 3 correct answers – 1 mark
 1 correct – 0 marks

[2]

Unit 1. 2 The Main Components of Computer Systems

MARKS SCHEME 7

	true (✓)	false (✓)
ROM is Real Optical Memory.		✓
RAM stores the instructions you are currently working on.	✓	
ROM stores the BIOS.	✓	
RAM allows the user to read and write data.	✓	

4 correct answers – 2 marks
2 or 3 correct answers – 1 mark
0 or 1 correct answer – 0 marks

[2]