



MULTIPLE CHOICE | FREE RESPONSE QUESTIONS

Information Technology Foundation Course



World ORT Union



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MULTIPLE CHOICE QUESTIONS



HARDWARE

Input devices

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 Where would you find the letters QUERTY?
A. Mouse
B. Keyboard
C. Numeric Keypad
- 2 How did the computer mouse get its name?
A. Because it squeaks when moved
B. It's cable looks like a tail
C. It has ears
- 3 What are you most likely to use when playing a computer game?
A. Touch screen
B. Light pen
C. Joystick
- 4 A digitising tablet can be used for?
A. Printing letters
B. Tracing diagrams
C. Reading bar codes
- 5 Which of the following is a pointing device used for computer input?
A. Touch screen
B. Hard disk
C. CD-ROM drive
- 6 What does a light pen contain?
A. Refillable ink
B. Pencil lead
C. Light sensitive elements
- 7 What would be the best way to move around a 3-D environment?
A. Use a space mouse.
B. Use a tracker ball.
C. Use a keyboard.
- 8 What input device can be used for marking a multiple choice test?
A. Mouse
B. Bar code reader
C. Optical mark reader
- 9 What input device could tell you the price of a bar of chocolate?
A. Mouse
B. Bar code reader
C. Optical mark reader
- 10 Where would you find a magnetic strip?
A. Credit card
B. Speakers
C. Smart card

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HARDWARE

Output devices

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 Hard copy is a term used to describe...?

A. Writing on a hard board
B. **Printed output**
C. Storing information on the hard disk
- 2 What do the abbreviations VAB stand for?

A. Voice activated broadcasting
B. **Voice answer back**
C. Visual audio board
- 3 What are the individual dots which make up a picture on the monitor screen called?

A. Coloured spots
B. **Pixels**
C. Pixies
- 4 A daisy wheel is a type of...?

A. **Printer**
B. Storage device
C. Pointing device
- 5 Factory production lines can be automated using...?

A. VDUs
B. **Machine tools**
C. Plotters
- 6 An impact printer creates characters by using...?

A. Electrically charged ink
B. An ink pen
C. **An inked ribbon and print head**
- 7 What would you NOT use with a flatbed plotter?

A. A pen
B. Paper
C. **Eraser**
- 8 What would be the best way to move around a 3-D environment?

A. Electrostatic plotters
B. **Robots**
C. Thermal printers
- 9 What do you need for an ink jet printer?

A. **A cartridge**
B. A drum
C. A ribbon

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HARDWARE

Output devices

10 A laser printer does NOT use?

- A. A print head
- B. A laser beam
- C. A photoconductive drum

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Storage devices

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 The amount of data that a disk may contain is known as the disk's...?
A. Volume
B. Size
C. Storage capacity
- 2 You can _____ protect a floppy disk.
A. Read
B. Write
C. Read and Write
- 3 Information on a hard disk is usually backed-up using a...?
A. Magnetic tape
B. CD-ROM
C. Floppy disk
- 4 Magnetic storage devices can represent binary 0 by the absence of...?
A. Magnetic tape
B. A magnetic field
C. Static electricity
- 5 Magnetic tape is a...?
A. Serial access medium
B. Random access medium
C. A parallel access medium
- 6 Hard disks can have a storage capacity in the region of...?
A. 1.44Mb
B. 1Gb
C. 720K
- 7 Formatting a disk results in all the data being...?
A. Deleted from the disk
B. Copied from the disk
C. Saved to the disk
- 8 Which storage device has the largest capacity in Mb's?
A. A CD-ROM
B. A floppy disk
C. Magnetic tape storage
- 9 Which storage device cannot be erased?
A. A CD-ROM
B. A floppy disk
C. Magnetic tape storage
- 10 Where should floppy disks be stored?
A. By a sunny window
B. By magnet objects
C. In a drawer

MULTIPLE CHOICE QUESTIONS



HARDWARE

Computer Logic

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 What is the output state of an OR gate if the inputs are 0 and 1?
A. 0
B. 1
C. 2
- 2 What is the output state of an AND gate if the inputs are 0 and 1?
A. 0
B. 1
C. 2
- 3 What is the output state of a NOT gate if the input is 1?
A. 0
B. 1
C. 2
- 4 A NOT gate has...
A. Two inputs and one output
B. One input and one output
C. One input and two outputs
- 5 An OR gate has...
A. Two inputs and one output
B. One input and one output
C. One input and two outputs
- 6 The output of a logic gate can be one of two ____?
A. Inputs
B. Gates
C. States
- 7 Logic states can only be ____ or 0.
A. 3
B. 2
C. 1
- 8 The output of a ____ gate is only 1 when all of its inputs are 1.
A. NOR
B. XOR
C. AND

MULTIPLE CHOICE QUESTIONS

HARDWARE

Computer Logic

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 9 A NAND gate is equivalent to an AND gate plus a gate put together.
- A. NOR
 - B. NOT**
 - C. XOR
- 10 A Half adder circuit is _____?
- A. Half of an AND gate
 - B. A circuit to add two bits together**
 - C. Half of a NAND gate

MULTIPLE CHOICE QUESTIONS



HARDWARE

Processor & Memory

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 Who is accredited with developing the architecture of the modern computer?
 - A. Sir Clive Sinclair
 - B. Bill Gates
 - C. John Von Neumann
- 2 Which bus carries information between processors and peripherals?
 - A. Data bus
 - B. Auto bus
 - C. Address bus
- 3 Which bus controls the sequencing of read/write operations?
 - A. Data bus
 - B. Address bus
 - C. Control bus
- 4 The contents of these chips are lost when the computer is switched off?
 - A. ROM chips
 - B. RAM chips
 - C. DRAM chips
- 5 What are responsible for storing permanent data and instructions?
 - A. RAM chips
 - B. ROM chips
 - C. DRAM chips
- 6 Which parts of the computer perform arithmetic calculations?
 - A. ALU
 - B. Registers
 - C. Logic bus
- 7 What are small high speed memory units used for storing temporary results?
 - A. CPUs
 - B. Registers
 - C. Control unit
- 8 What maintains the status of the last operation carried out by the ALU?
 - A. Accumulator
 - B. Instruction pointer
 - C. Status register
- 9 How many bits of information can each memory cell in a computer chip hold?
 - A. 0 bits
 - B. 1 bit
 - C. 8 bits
- 10 What type of computer chips are said to be volatile?
 - A. RAM chips
 - B. ROM chips
 - C. DRAM

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MULTIPLE CHOICE QUESTIONS



HARDWARE

Range of Computers

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 An example of an embedded system is ...?

 - A. A calculator
 - B. A machine tool
 - C. A CD-ROM
- 2 Which computers use single chip processors?

 - A. Personal computers
 - B. Parallel computers
 - C. Cray computers
- 3 Travel agents use this computer system when reserving flights.

 - A. Supercomputer
 - B. Personal computer
 - C. Mainframe computer
- 4 Which computers are used in the weather forecasting industry?

 - A. Notebook computers
 - B. Supercomputers
 - C. Jon Von Neumann computers
- 5 Which computers are connected to many terminals and can multitask?

 - A. Personal computers running MS-DOS
 - B. Minicomputers
 - C. LEO 1 computers

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MULTIPLE CHOICE QUESTIONS



HARDWARE

Generations of Computers

Answer the questions by putting the chosen letter in the box on the answer sheet or by circling the correct letter.

- 1 Vacuum tube based electronic computers are...?

 - A. First generation
 - B. Second generation
 - C. Hoover generation
- 2 Which generation of computer was developed from microchips?

 - A. Second generation
 - B. Third generation
 - C. Fourth generation
- 3 Which generation of computer uses more than one microprocessor?

 - A. Second generation
 - B. Third generation
 - C. Fifth generation
- 4 Which generation of computer developed using integrated circuits?

 - A. Second generation
 - B. Third generation
 - C. Fifth generation
- 5 Which generation of computer developed using solid state components?

 - A. Second generation
 - B. Third generation
 - C. Fifth generation



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FREE RESPONSE QUESTIONS

These questions do not appear in the interactive DO IT course. If you want help to answer them you can use the navigation buttons to move to the relevant unit of the course. You may prefer to use the Contents listings. Write your answers on paper.



HARDWARE

Peripheral devices (input, output & storage)

- 1 What are peripheral devices? 
- 2 What is meant by the terms **a.** Input **b.** Output **c.** Storage? 
- 3 List four devices for each of **a.** Input **b.** Output **c.** Storage.
- 4 For each of the devices listed below, copy their name and describe briefly what each is used for, and who would be most likely use them: 

a. Joystick	i. Dot matrix printer
b. Digitising tablet	j. Laser printer
c. Touch sensitive screen	k. Robot
d. Light pen	l. Voice Answer Back
e. Optical Mark Reader (OMR)	m. Hard disk
f. Optical Character Recognition (OCR)	n. Floppy disk
g. Bar code reader	o. Optical disk
h. VDU	
- 5 Choose two of the input devices and compare them.
Think about how easy they are to use, what they are to be used for, and how suitable they are for a particular purpose.
- 6 Choose two output devices and compare them.
Think about who will read the output (is it for use within the company or will it go to customers and clients). Consider the speed of the device, the quality of the output, the cost of the device and of the materials it uses.
- 7 Choose two of the storage devices and compare the benefits of one over the other.

Computer logic

Complete the following truth tables.

1 'OR' Gate



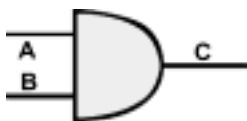
Truth table		
A	B	C
0	0	
0	1	
1	0	
1	1	

FREE RESPONSE QUESTIONS

HARDWARE

Computer logic

② 'AND' Gate



Truth table		
A	B	C
0	0	0
0	1	0
1	0	0
1	1	1

③ 'NOT' Gate



Truth table	
A	B
0	1
1	0

④ Exclusive 'OR' (XOR) Gate



Truth table		
A	B	C
0	0	0
0	1	1
1	0	1
1	1	0

⑤ 'NAND' Gate



Truth table		
A	B	C
0	0	1
0	1	1
1	0	1
1	1	0

Processor & Memory

System Bus

- ① What is a bus? List the three buses that make up the system bus.

Microprocessor

- ② Explain what is meant by the term 'sequential instruction executing machine'.
- ③ a. What are the main parts of the Central Processing Unit (CPU)?
 b. Draw a diagram of the three major parts of the Central Processing Unit (CPU) and briefly describe their function.

FREE RESPONSE QUESTIONS

HARDWARE

Processor & Memory



Memory

- 4 List the two main types of memory and describe their use.
- 5 Describe appliances where you might find ROM chips and explain the purpose of these chips.



Range of computers



- 1 Name the five ranges of computers and give an example of where each range of computers might be used.
- 2 Compare microcomputers and minicomputers.
 - a. Can the two ranges be used for the same application in some instances?
 - b. When would you decide to use a microcomputer and when would you use a minicomputer?
 - c.. Compare the cost and size.
- 3
 - a. Discuss the differences between the mainframe computer and the supercomputer.
 - b. What does 'multitasking' mean?



Generations of computers

- 1 List the generations of computers and give a short description including the dates of their development. Which generation is in use today?
- 2 Explain the benefits of the latest generation of computers. (You might have to read extra material).