

Worksheet 2

1. Several items of data are input to a computer using direct data entry methods. Write down the most appropriate input device to input each item of data.

- (a) data written in special ink at the bottom of bank cheques [1]
- (b) information on the label of a supermarket product [1]
- (c) shaded in boxes on a student's examination answer sheet [1]
- (d) debit card details input at an ATM [1]

2. Circle two items which are used as output devices. [2]

- | | | |
|-----------------|----------------------|-----------|
| bar code reader | multimedia projector | touch pad |
| joystick | PIN pad scanner | |
| laser printer | temperature sensor | |

3. Tick true or false next to each of these statements [2]

	True	False
Computer programs are examples of hardware.		
A Command Line Interface is a form of operating system.		
A tablet computer is larger than a desktop computer.		
A compiler is an example of applications software		

4. Johann is going on holiday to a different country. He will need to take his passport. He has a new type of passport which has an RFID chip in it. He will be passing through automated passport control gates.

- a) Describe what an RFID chip consists of. [2]
- b) Describe how RFID will be used as he passes through passport control. [3]

5. Describe the differences between RAM and ROM. [4]

6. Tick whether the following are examples of System Software or Applications Software

	System Software	Applications Software
Compiler		
Word processing software		
Spreadsheet software		
Operating system		

7. Command Line Interface (CLI) and Graphical User Interface (GUI) are examples of interfaces found in computer systems. Give two advantages of a computer having a GUI rather than a CLI. [2]

8. Circle three items which are used as output devices. [3]

Buzzer	LCD monitor	Trackerball
CD/RW drive	Speaker	Web cam
Keyboard	Solid state drive	

9. A drone is a remote-controlled flying vehicle. A drone is being used to monitor floods in Mumbai.

a) Complete the following sentences, using the most appropriate word or words from the list below.

Buzzer	pressure sensor	temperature sensor
Joystick	ROM	video camera
Monitor	Speaker	

I. The drone is microprocessor controlled with input from a [1]

II. Images of the floods are captured using a [1]

III. The images sent from the drone are displayed on a [1]

b) Name three advantages of using a drone to monitor the floods rather than collecting the data manually. [3]

10. An electric bus system is being considered for New Delhi. Passengers will use smart cards to travel on the bus. They will have to add money to their smart card before they can travel.

a) Compare and contrast the use of smart cards rather than using cash to pay for a journey. [6]

b) The new electric bus system will help to reduce the air pollution in the city. Sensors are used in the system. Name a sensor that could be used to detect high levels of air pollution. [1]

11. Smartphones are being increasingly used by tourists when travelling overseas.

Discuss, using examples, the benefits and drawbacks of the use of smartphones by tourists. [8]