

**FORM 3**                      **Information & Communication Technology**                      **TIME: 1h 30min**

**Name:** \_\_\_\_\_ **Class:** \_\_\_\_\_

**1. This question is about Basic Concepts.**

a) Fill in the blanks with the following:

|           |             |             |                         |            |
|-----------|-------------|-------------|-------------------------|------------|
| <b>MB</b> | <b>bits</b> | <b>1024</b> | <b>1024 * 1024*1024</b> | <b>bit</b> |
|-----------|-------------|-------------|-------------------------|------------|

- i) 1 byte is equivalent to 8 \_\_\_\_\_.
- ii) 1 TB is equivalent to \_\_\_\_\_ GB.
- iii) 1024 KB are equivalent to 1 \_\_\_\_\_.
- iv) 1GB is equal to \_\_\_\_\_ bytes.
- v) \_\_\_\_\_ is short for Binary Number.

[3]

b) Match each phrase with its definition as in the example shown in bold.

|   | <b>Phrase</b>   |  |          | <b>Definition</b>   |
|---|-----------------|--|----------|---|
| A | RAM             |  |          | is a portable storage device, which can be used instead of a floppy disk or a CD.         |
| B | Memory card     |  |          | uses Digital Optical Recording to store data. Its capacity varies between 4.7GB and 17GB. |
| C | Hard Disk       |  |          | is volatile storage that holds the program and data that the CPU would be processing.     |
| D | DVD             |  | <b>B</b> | is a storage used to store digital data. They are typically used with digital cameras.    |
| E | USB flash drive |  |          | is the large storage area within a computer.  |

[2]

- c) Software can be divided into two categories - **system software** and **application software**. Use the following list of software to fill in the table below.

|             |                |      |
|-------------|----------------|------|
| Linux       | Word Processor | DTP  |
| Web Browser | Unix           | OS/2 |

| System Software | Application Software |
|-----------------|----------------------|
|                 |                      |
|                 |                      |
|                 |                      |

- d) The table below shows four **different applications of computers** in four different sections. Write down another application for each section.

[4]

|   |   |
|---|---|
| <p><b>Applications in Health</b></p> <p>1. <i>Ambulance control system</i></p> <p>2.</p>    | <p><b>Applications within Government</b></p> <p>1. <i>Tax collection</i></p> <p>2.</p>        |
| <p><b>Applications in Education</b></p> <p>1. <i>Preparation of timetable</i></p> <p>2.</p> | <p><b>Applications in Business</b></p> <p>1. <i>Insurance claims processing</i></p> <p>2.</p> |

- e) ADSL is an example of a Broadband connection. Mention 3 other types of broadband connections.

A \_\_\_\_\_ B \_\_\_\_\_

C \_\_\_\_\_ [3]

- f) Tick (✓) the correct answer from each question:

- i) Kbps stand for

Kilo bits per second  
Kilo bytes per second  
Kilo bits printer speed

☐  
☐  
☐

- ii) A Dialup connection is
- An ISP that provides internet connection ☐
  - A form of Internet access that uses telephone lines ☐
  - A way of using fast dial up to call a friend ☐
- iii) When logging into a network, a user ID is needed because
- The network can identify the user ☐
  - It replaces the password ☐
  - The user ID card must be shown ☐
- iv) A password should
- Include your name or surname ☐
  - Must be all small letters ☐
  - Ideally include letters, numbers and characters ☐
- v) Good password policies include
- not sharing passwords, changing them regularly and adequate password length ☐
  - not changing the password so that you will not forget it ☐
  - writing down the password and keep it near the computer so that you don't forget it ☐

[5]

**2. This question is about Using the Computer and Managing files.**

- a) Match each file extension with its corresponding file type as in the example shown in bold. [5]

|    | File Extension |
|----|----------------|
| 1  | .rtf           |
| 2  | .tmp           |
| 3  | .jpg           |
| 4  | .xls           |
| 5  | .wav           |
| 6  | .mdb           |
| 7  | .doc           |
| 8  | .exe           |
| 9  | .avi           |
| 10 | .zip           |
| 11 | .txt           |

|          | File Type                  |
|----------|----------------------------|
|          | MS Notepad - Text file     |
|          | Compressed file            |
|          | MS Video for Windows movie |
|          | Rich Text Format           |
| <b>3</b> | Picture                    |
|          | Executable file            |
|          | Windows temporary file     |
|          | Wave file (sound)          |
|          | MS Word document           |
|          | MS Access database file    |
|          | MS Excel worksheet file    |

- b) Look carefully at the following screenshot and answer the questions with (T) true or (F) false.

All or part of the file name:  
mar\*.xls

A word or phrase in the file:

Look in:  
DVD-RAM Drive (D:)

**When was it modified?**

☐ Don't remember  
☐ Within the last week  
☐ Past month  
☐ Within the past year  
☒ **Specify dates**

Modified Date  
 from 21/04/2011  
 to 21/05/2011

**What size is it?**

☐ Don't remember  
☐ Small (less than 100 KB)  
☒ **Medium (less than 1 MB)**  
☐ Large (more than 1 MB)  
☐ Specify size (in KB)  
 at least 0

Back Search

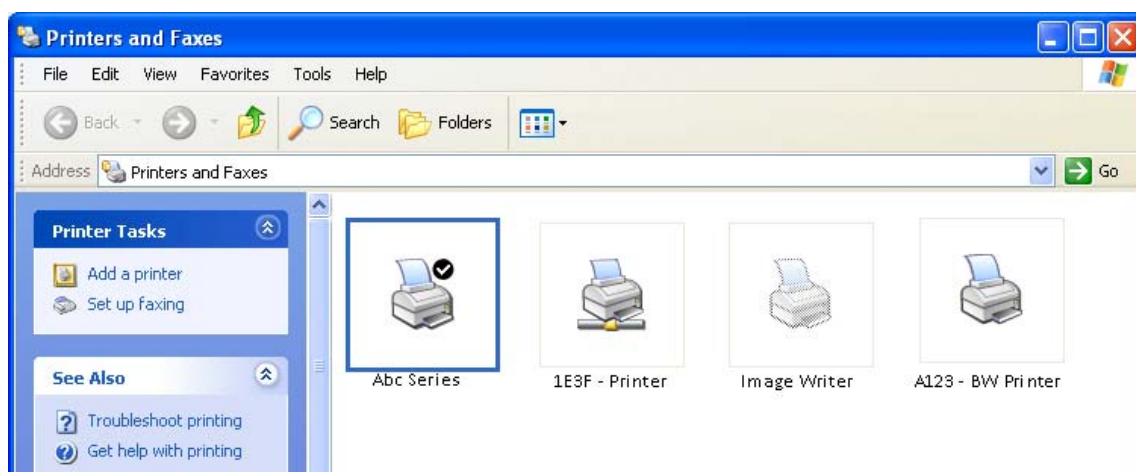
|      |  |  |
|------|--|--|
| i)   | The file March.xls that is 2MB large will be in the search result                |  |
| ii)  | The file Mary.xls that was modified last January will not be displayed           |  |
| iii) | The file March10.xls stored on the CD-Rom will be in the search result           |  |
| iv)  | All the files named March will be listed in the search result.                   |  |
| v)   | This search will only display Excel files starting with the letters <b>mar</b> . |  |

- c) The file status can be set from the attributes section in the file properties. Write which of the following buttons should be pressed if :

Attributes: ☐ Read-only ☐ Hidden ☐ Archive

- i) Mary is preparing a surprise party invitation for her parents' anniversary and she used a DTP to prepare the invitation on the family's home computer.
- \_\_\_\_\_
- ii) Karl prepared a presentation for the geography lesson and doesn't want his friends to change anything from his presentation.
- \_\_\_\_\_
- iii) Pat is choosing important files which she wants to back up for security reasons.
- \_\_\_\_\_

d) Look at the window below and answer the following questions:



|   |   |  |
|---|---|--|
| 1 | The name of the default printer is                      |  |
| 2 | The name of the printer that is offline is              |  |
| 3 | When I need to install a new printer I need to press on |  |
| 4 | The name of the network printer is                      |  |

[4]

e) File Compression is a desirable feature in a computer system.

i) Give 2 reasons why a user may want to compress a file or folder.

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ii) Write the name of a utility program that can be used to compress or uncompress a file or folder.

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[3]

### 3. This question is about Word Processing.

a) Fill in the blanks:

i) To use special symbols in a word document such as © and ®, you must click on \_\_\_\_\_ in the Menu Bar and then select \_\_\_\_\_.

- ii) To open the Hyphenation dialog box, you must click on \_\_\_\_\_ in the Menu Bar, then select \_\_\_\_\_ and then press on \_\_\_\_\_.
- iii) To change the height of the rows in a table, you can first \_\_\_\_\_ the table, click the \_\_\_\_\_ mouse button to open the menu, select Table Properties, and then click on \_\_\_\_\_.

[4]

b) Match the following Non-Printing characters to their equivalent type.

| Type                 | Non-Printing Character |
|----------------------|------------------------|
| A Soft line break    | · dot between words    |
| B Tab characters     | ¶                      |
| C A space            | ↵                      |
| D Paragraph mark     | .....Page Break.....   |
| E Manual line breaks | →                      |

[5]

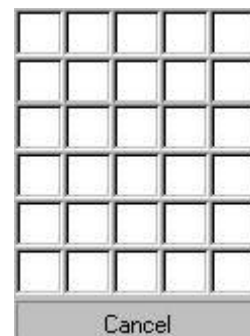
c) Marilyn is using the **Word Processing program** for her Geography homework. She wants to insert a **Table** to store information on the four Scandinavian countries shown below.

| Country | Capital city | Population (million) |
|---------|--------------|----------------------|
| Sweden  | Stockholm    | 9                    |
| Norway  | Oslo         | 4.5                  |
| Denmark | Copenhagen   | 5                    |
| Finland | Helsinki     | 5                    |

- i) In the box on the right, draw the button from the ones shown below, that she must click to **create a table**.



- ii) After clicking the button, the picture shown on the right appeared below the tables button. Shade the **cells required** to create the Table on countries shown above.



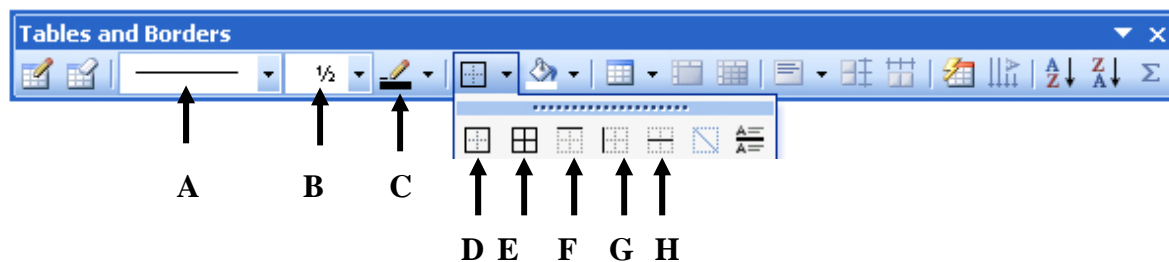
iii) How many **rows** and **columns** does the **Country** table have?

Rows: \_\_\_\_\_ Columns: \_\_\_\_\_

iv) After printing the table, Marilyn noticed that it was **printed without borders**. Explain what borders are.

\_\_\_\_\_

v) The picture below shows the **Tables and Borders** toolbar.



Write down the letters of the TWO buttons that she must click to **quickly draw all the borders**.

|  |  |
|--|--|
|  |  |
|--|--|

vi) Before clicking the two buttons, what **must she do to the table**?

\_\_\_\_\_

vii) What is **part A** of the Borders toolbar used for?

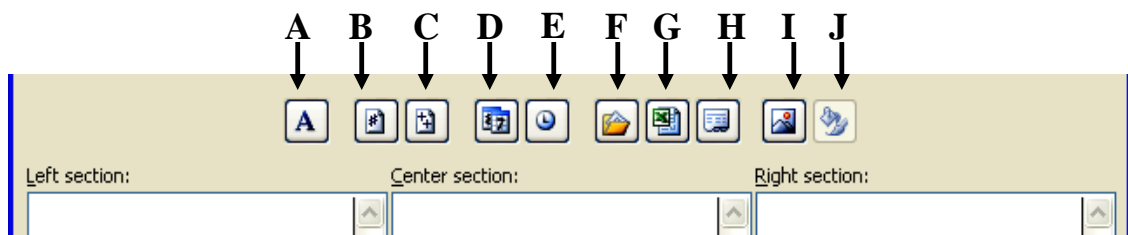
\_\_\_\_\_ [8]

#### 4. This question is about spreadsheets.

The following is a price list for a shop.

|    | A                        | B                                 | C   | D             | E         | F |
|----|--------------------------|-----------------------------------|-----|---------------|-----------|---|
| 1  |                          |                                   |     |               |           |   |
| 2  | ABC Computers Price List |                                   |     |               |           |   |
| 3  |                          |                                   |     |               |           |   |
| 4  | VAT                      | 18%                               |     |               |           |   |
| 5  |                          |                                   |     |               |           |   |
| 6  | Product Code             | Selling Price<br>excluding<br>VAT | VAT | Selling Price | Expensive |   |
| 7  | 125C                     | 154.25                            |     |               |           |   |
| 8  | 562B                     | 12.25                             |     |               |           |   |
| 9  | 160P                     | 36.52                             |     |               |           |   |
| 10 | 885C                     | 44.55                             |     |               |           |   |
| 11 |                          |                                   |     |               |           |   |
| 12 |                          |                                   |     |               |           |   |
| 13 |                          |                                   |     |               |           |   |

- a) i) Write the formula to be inserted in cell C7 using **absolute addressing** and work out the VAT: \_\_\_\_\_ [2]
- ii) What is **absolute addressing** and when is it used?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_ [2]
- iii) What should you do to **quickly** insert the formulas in cells C8 to C10, without having to type the formula in each cell? \_\_\_\_\_ [1]
- iv) Write the formula to be inserted in cell D7 using **relative addressing** and work out the Selling Price. \_\_\_\_\_ [1]
- v) The shop owner would like to indicate if an item is Expensive or not. Insert a function to print **YES** if the selling price is greater than 50 and print **NO** if otherwise \_\_\_\_\_ [2]
- vi) Which are the **Merged Cells**? \_\_\_\_\_ [1]
- vii) Which cell is using **Text Wrap**? \_\_\_\_\_ [1]
- b) The shop owner would like to insert a header in his spreadsheet. Consider the header window below and write the corresponding letters. [4]



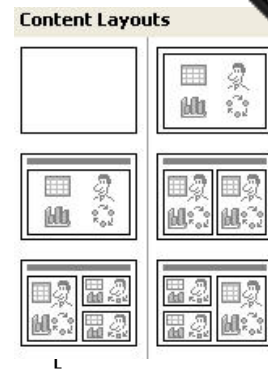
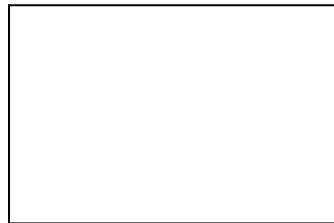
- i) To insert the date when the price list is printed he must press on
- ii) To insert the page number he must press on
- iii) To insert the company Logo he must press on
- iv) To change the font of the text he must press on
- v) To insert the total number of pages

|          |
|----------|
| <b>D</b> |
|          |
|          |
|          |
|          |



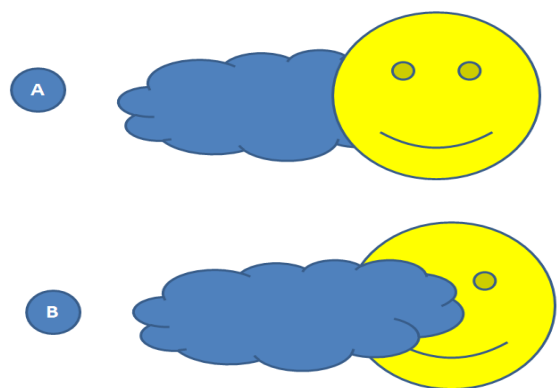
5. This question is about PowerPoint Presentations.

- a) i) Jason is using *power point* and would like to insert a new slide with a title and a table. Draw clearly the layout that Jason should click on.



[1]

- ii) In another slide Jason drew the following picture (A), but he would like to draw the sun behind the clouds (like in picture B). What feature must he use to do this, and what steps must he take in order to accomplish this task?

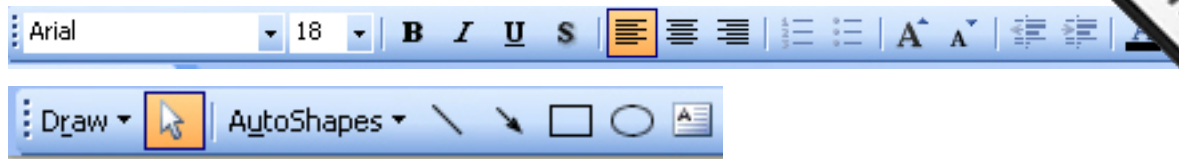


[2]

- iii) Jason would like to change the colour of the cloud and also the outline of the sun. List the steps he must take in order to accomplish this task.

[3]

b) Look carefully at the images below and draw the button you would press to:



|      |                                     |  |
|------|-------------------------------------|--|
| i)   | Group a number of objects together. |  |
| ii)  | Apply a shadow to a name.           |  |
| iii) | Draw the cloud in question a above. |  |
| iv)  | Change the font.                    |  |
| v)   | Insert a <b>text box</b> .          |  |

[5]

#### 6. This question is about Information and Communication.

a) Mark the following with a **T** (True) or and **F** (False)

- i) **Encryption** is used in web sites which contain online games.
- ii) **Digital certificates** are used by organisations involved in online monetary transactions.
- iii) A web site that starts with “**https**” is a site that is used to steal information.
- iv) Once you install an **antivirus** on your computer, you can be sure that no virus will ever enter your computer.
- v) A web site with a lock symbol is a site that can only be accessed with a valid username and password.

|  |
|--|
|  |
|  |
|  |
|  |
|  |

[5]

- b) **Malware** (malicious software) is a program designed to secretly enter and damage a computer system. Malware includes: *Viruses*, *Worms*, *Trojan horses* and *Spyware*. Mention 2 characteristics of each one of them.

|               |     |
|---------------|-----|
| Viruses       | i)  |
|               | ii) |
| Worms         | i)  |
|               | ii) |
| Trojan horses | i)  |
|               | ii) |
| Spyware       | i)  |
|               | ii) |

[8]

- c) Match each phrase with its definition.

|          |          |  |  |   |
|----------|----------|--|--|---|
| <b>A</b> | firewall |  |  | a small web browser window that appears on top of the website you are viewing.  |
| <b>B</b> | Cache    |  |  | is an Internet service that enables you to communicate with someone else using your voice.  |
| <b>C</b> | VoIP     |  |  | a special folder on the hard disk that stores Web pages accessed by your browser.   |
| <b>D</b> | pop-up   |  |  | a text files that save information regarding particular websites. They may save information, shopping cart contents, or user preferences. |
| <b>E</b> | Cookie   |  |  | a system designed to prevent unauthorised access to your computer system when connected to the Internet.                                  |

[5]