

ST BENEDICT COLLEGE Secondary School, Kirkop

Mark

HALF-YEARLY EXAMINATION – 2015/2016

Level 5 - 8

FORM 3

COMPUTING

TIME: 1h 30min

Question	1	2	3	4	5	6	7	8	9	10	Global Mark
Max. Mark	5	10	18	4	13	12	10	12	10	6	100
Mark											

Instructions to students:

*Answer **ALL** questions.*

*Calculators are **NOT** allowed; Good English and orderly presentation are important.*

Read each question carefully.

DO NOT WRITE ABOVE THIS LINE

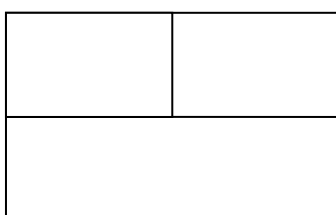
Name: _____

Class: _____

1. Label the following block diagram of a computer system.

[5 marks]

Don't forget to draw the **arrows** to show the **flow of data** between the units.



2. Who am I?

10 marks

a. I am a group of 8 bits

b. I am a storage device which is serially accessed

c. When the computer is switched off, I forget everything

d. I continue supplying power to the computer so that the date and time are kept up-to-date

e. I hold the bootstrap loader

f. I provide the user with hard copies of his documents

g. I am used by visually impaired persons to type in data

h. I am a pointing device and I'm normally found in laptops

i. I can translate a graphical image into digital data

j. I am really fast and reliable when inputting data and I am usually found at a point of sale

3. This question is about Storage.**18 marks**

a. Fill in the table below about different Storage Devices

[15]

	Device	Type	Typical Capacity
a.	Hard disk	Magnetic	
b.	CD		
c.			1.44 MB
d.	Pen Drive		
e.	DVD		
f.			4.7 GB – 54 GB
g.	SD Card		
h.	Solid State Disk		

b. How many Kilobytes are there in 5 MB? _____

[1]

c. If one sector in a hard disk holds 512 bytes of data, how many sectors do we need to store a file which is 4KB of size? _____

[2]**4. Write these abbreviations in full****4 marks**

a. MICR: _____

b. OCR: _____

c. OMR: _____



d. VDU: _____

5. This question is about Databases

13 marks

- a. What is the difference between data and information? [2]

- b. Label the following views which are available in Microsoft Access. [2]

- c. Your school decided to computerise the library's system by creating a database in Microsoft Access. So far they have created two tables, namely the ***Student*** table and the ***Book*** table. Answer the questions below about this new database.

- i. Choose a suitable **primary key** for each table: [2]

Student table: _____

Book table: _____

- ii. What would be a suitable **data type** for the Student Table primary key? [1]

- iii. List two other **fields** which you should find in each table:

Student table: [2]

- _____
- _____

Book table: [2]

- _____
- _____

- iv. Mention another database **table** which can be used by the school library. [1]

- v. Mention an **attribute** which can be included in the table you suggested. [1]

6. Carry out the necessary conversions to fill in the table below

12 marks

Make sure that you show all necessary working in the space below.

Decimal	Binary	Hexadecimal
	101 0011	
		A5
45		

Space for working

7. This question is related to Computer Logic.

10 marks

- a. Draw the graphical representations for analogue and digital signals. [2]

Analogue signals	Digital signals

- b. Give a situation when we need to use a digital to analogue converter. [1]

- c. What do you understand by two state electronic devices? [1]

- d. How many bits do we need to represent the 12 months of the year? ____ bits [1]

- e. How many possible values can be represented by 5 bits? ____ values [1]

- f. Mention two different coding systems. [2]

- i) _____
- ii) _____

- g. Why is it important to use a standard code when transferring data from one computer to the other? [1]

- h. If in the collating sequence of a character map, capital letter A is represented by the decimal notation 65, what is the decimal notation for letter G? [1]

8. What is the difference between each pair of terms.

12 marks

a. File and Folder

b. Soft copy and Hard copy

c. Data and Information

d. Analogue and Discrete data

e. Input and Output devices

f. Backing storage and Backup

9. Match the first column with the second column by writing a letter (a – j) next to the related phrase. 10 marks

a. Plotters	<input type="text"/>	Provides best resolution of all flat panel displays.
b. LCD	<input type="text"/>	Technology used in the first television screens.
c. TFT	<input type="text"/>	Used in multiple choice exam questions.
d. CRT	<input type="text"/>	There are 2 types: Flatbed & Drum.
e. Laser Printer	<input type="text"/>	Has a head full of steel pins.
f. Dot Matrix	<input type="text"/>	Used as a display on calculators.
g. OMR	<input type="text"/>	Is widely used in banking.
h. Pen Computing	<input type="text"/>	Converts image of text into actual text.
i. MICR	<input type="text"/>	Mainly works like a photocopier.
j. OCR	<input type="text"/>	Use a devices like a stylus to select menus.

10. Fill in the blanks. The first letter of each word is given for you. 6 marks

- Printers can be classified as **I**_____ and **N**_____.
- Printers can also be classified as **C**_____, **L**_____ & **P**_____ printers.
- An LCD **P**_____ is used to display images or data.
- The **R**_____ of the screen determines the clarity of the image.
- Input devices are **P**_____ devices used to pass **H**_____-**R**_____ data to the computer.
- L**_____ is sometimes called wand or stylus.
- G**_____ **T**_____ allows users to draw images on the computer.
- An advantage of a **D**_____ **C**_____ is that it easily captures images which can later be manipulated.