UNIVERSITY OF RUHUNA

BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE

Level I Semester II - Dec/Jan 2015/2016

CLC 1b10 COMPUTER LITERACY
Answer <u>all</u> questions

Time: 02 hours

01.
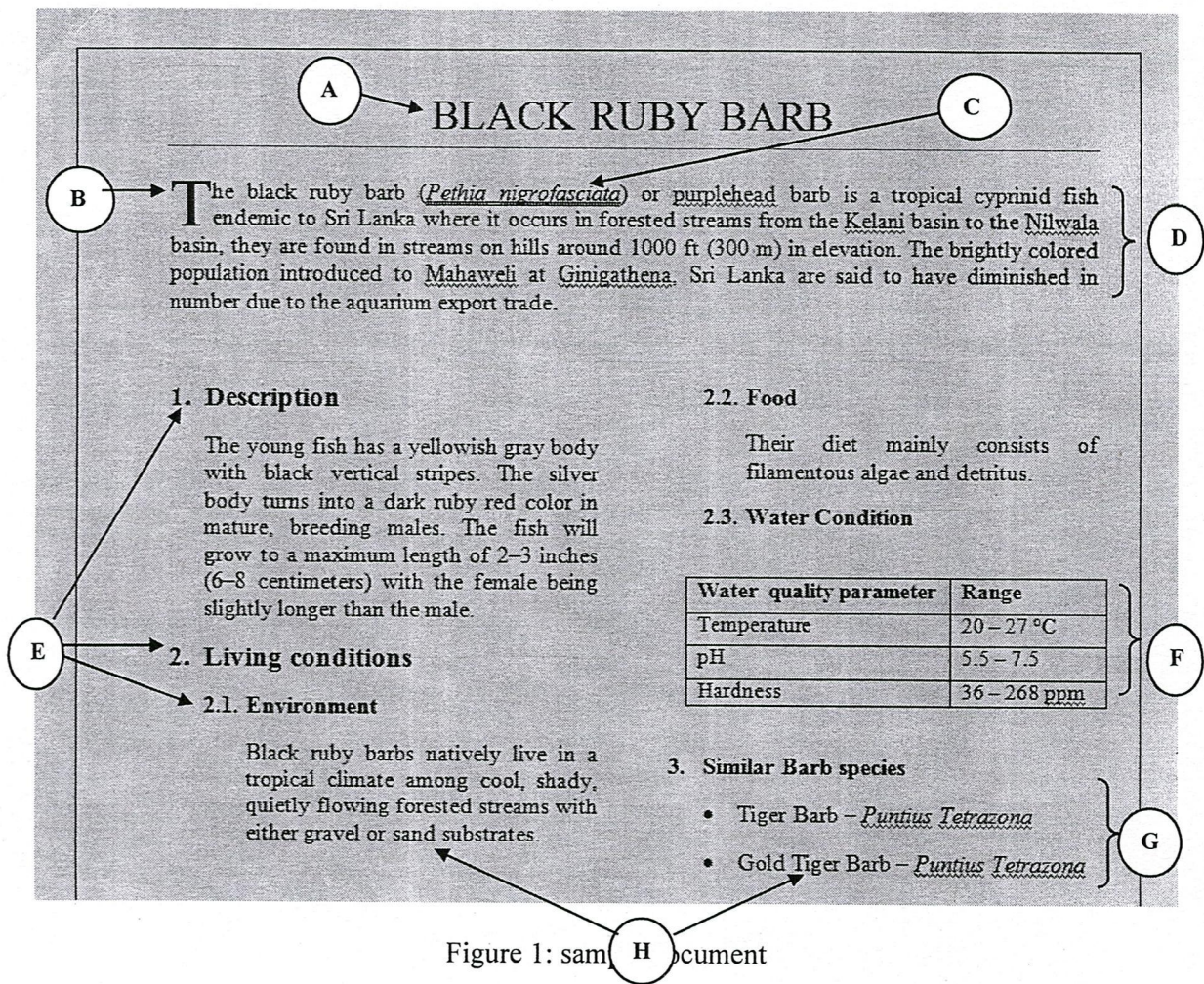
    a. What are the four main classified categories of a computer system? Briefly explain them.

    b. What is a computer virus?

    c. How do you prevent and remove viruses from your computer (Provide four points).

    d. List the four different Types of Personal Computers.

[15 marks]

02.

    a. Write four advantages of using word processing packages.

    b. What is mail merge?

    c. Consider the MS word document shown in the following **Figure 1** and write necessary steps to perform different formattings, indicated by labels from "A" to "H". Brief descriptions of formatting requirements indicated by labels from "A" to "H" are given below.

[20marks]

BLACK RUBY BARB

The black ruby barb (*Pethia nigrofasciata*) or purplehead barb is a tropical cyprinid fish endemic to Sri Lanka where it occurs in forested streams from the Kelani basin to the Nilwala basin, they are found in streams on hills around 1000 ft (300 m) in elevation. The brightly colored population introduced to Mahaweli at Ginigathena, Sri Lanka are said to have diminished in number due to the aquarium export trade.

1. Description

The young fish has a yellowish gray body with black vertical stripes. The silver body turns into a dark ruby red color in mature, breeding males. The fish will grow to a maximum length of 2–3 inches (6–8 centimeters) with the female being slightly longer than the male.

2. Living conditions

2.1. Environment

Black ruby barbs natively live in a tropical climate among cool, shady, quietly flowing forested streams with either gravel or sand substrates.

2.2. Food

Their diet mainly consists of filamentous algae and detritus.

2.3. Water Condition

Water quality parameter	Range
Temperature	20 – 27 °C
pH	5.5 – 7.5
Hardness	36 – 268 ppm

3. Similar Barb species

- Tiger Barb – *Puntius Tetrazona*
- Gold Tiger Barb – *Puntius Tetrazona*

Figure 1: sample document

A: Title of the document

B: Size of the first letter of the paragraph is equal to double lines.

C: Italic and underline (using double lines)

D: Justified paragraph

E: Define the heading and sub headings using the numbering format

F: Contain is arranged in a table stricture.

G: Use bullets

H: Text content is divided in to two columns

03.

a. What is MS PowerPoint?

b. Write four objects which can be included in a PowerPoint slide.

c. Write the names of the commonly used controllers labeled from A to E in Figure 2 given below.

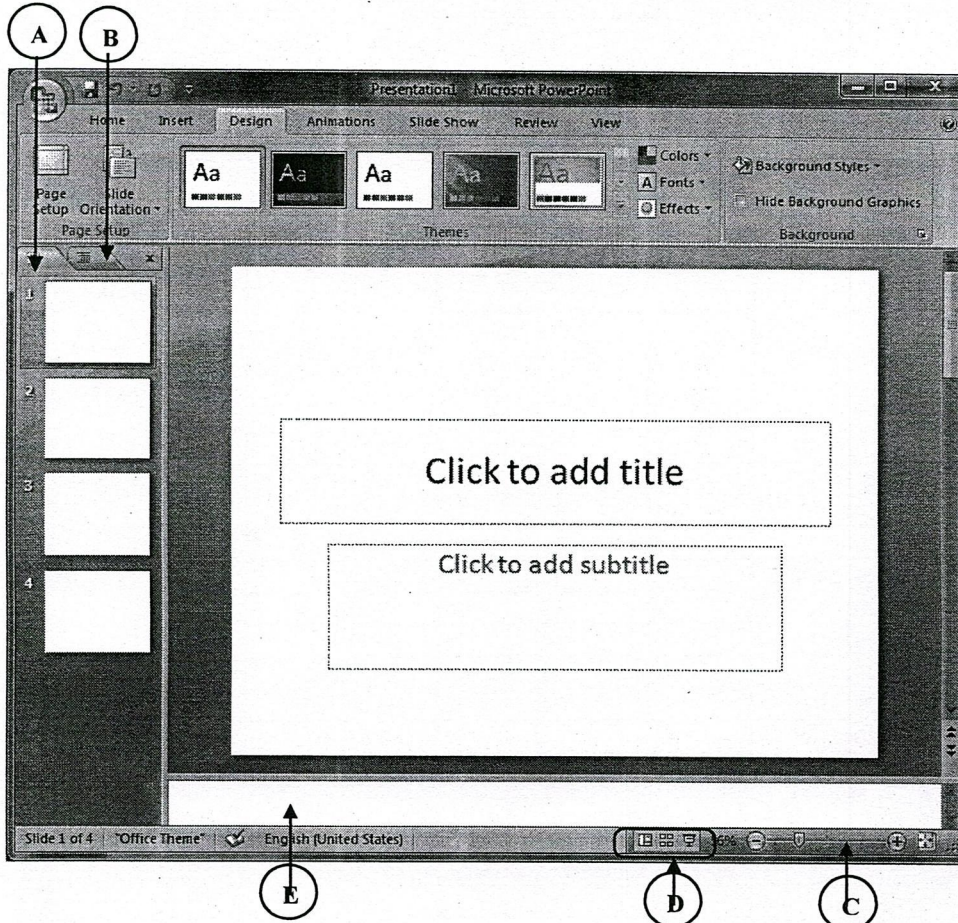

Figure 2: MS power point package

d. Write the steps to perform the following tasks.

   i. Insert a video file in to a power point slide.

   ii. Add an animation effect for slides transition.

[15 marks]

04.

a. What is a spreadsheet?

b. What are the advantages of using spreadsheet packages?

c. Figure 3 given below shows two types of cell formatting applied for an Examination Results table in MS Excel. Writes the necessary steps for performing two formattings labeled as "A" and "B" in the figure.
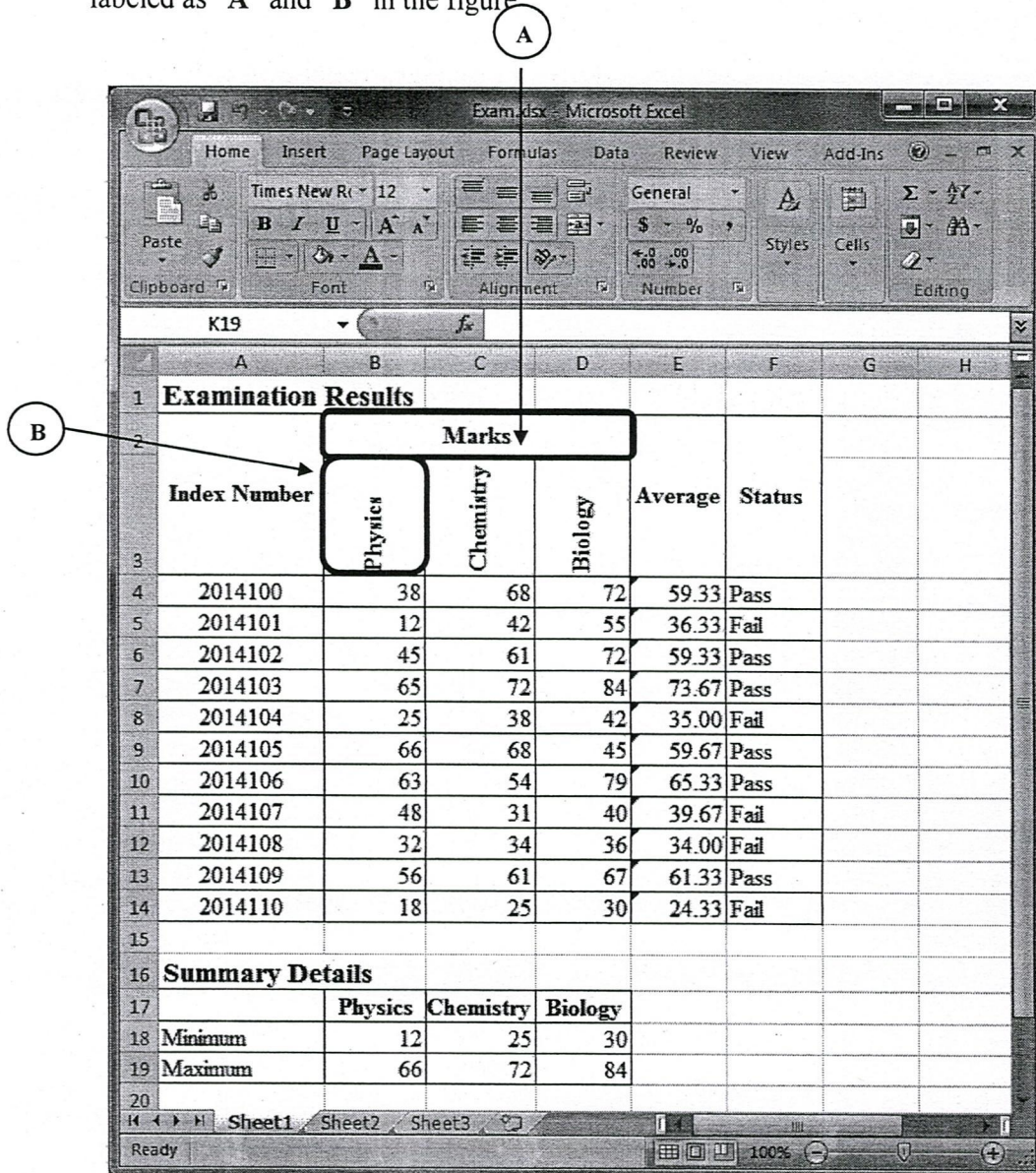

Figure 3: examination details of the Grade 12-A students

d. Write formulas to perform following tasks.

   i. Calculate the average mark for the students as shown in the figure.

   ii. Get the calculated Average marks in column E in two decimal points.

   iii. To set the "Status" column to "**Pass**" if the average mark for a student is greater than or equal to fifty (>=50), and otherwise to "**Fail**"

   iv. Find the minimum and maximum marks obtained by the students for the subject "Physics" as shown in the figure.

[25 marks]

05.

    a. What is a database?

    b. Write the relationship between primary key and foreign keys in relational databases?

    c. Write the five data types using a suitable example.

MS access database maintains two tables such as "StudentDetails" and "ExamMarks", to keep students details. Structure of the tables are as follows. Answer following two questions based on these tables.

Table "Student Details"

Index Number	Initials	LastName	Address	DOB	NIC
20141000	K.K.A.A.	KUMARASINGHE	NO 243 Maharagama	1998-12-16	981920823V

Table "Exam Marks "

Index Number	ExamYear	Physics	Chemistry	Biology
20141000	2014	56	65	72

    d. Define suitable data types and field sizes for the fields of the table "StudentDetails".

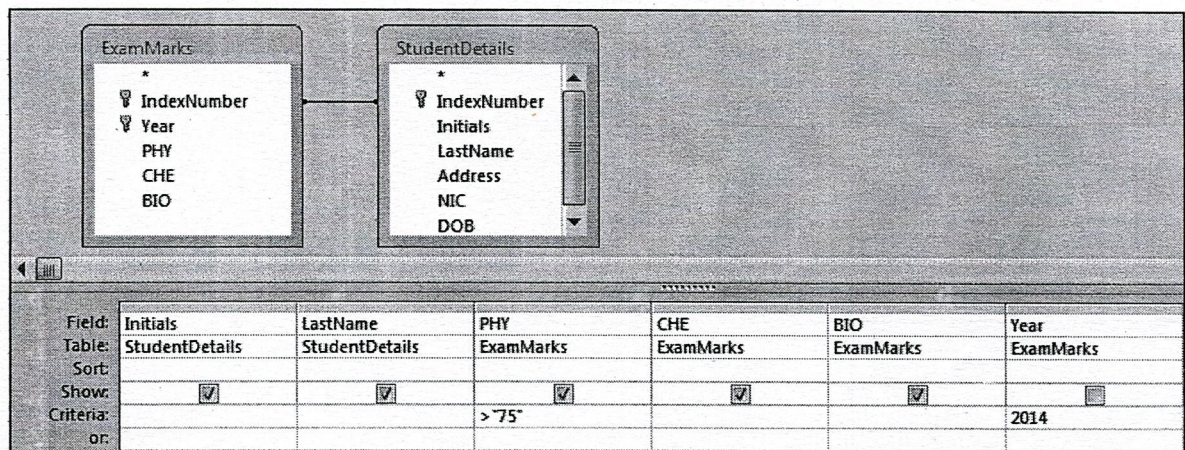   e. Answer following questions using the "Figure 4" given below.

Field:	Initials	LastName	PHY	CHE	BIO	Year
Table:	StudentDetails	StudentDetails	ExamMarks	ExamMarks	ExamMarks	ExamMarks
Sort:						
Show:	✓	✓	✓	✓	✓	☐
Criteria:			>'75'			2014
or:						

Figure 4

    i. What are the displayed fields of the query?

    ii. What is the filtering criterion shown in the query design view in the figure?

[25 marks]

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