University of Ruhuna - Faculty of Technology

Bachelor of Information & Communication Technology Degree
Level 1 (Semester 1) Examination
July 2017

Course Unit: ICT1123, PC Applications and Computer Laboratory

Time Allowed: 2 hours

Answer all **four (04)** questions

This question paper contains **09 pages** including this instruction page

IMPORTANT INSTRUCTIONS:

1. The medium of this examination is **English**.

2. This is a **Closed Book** examination.

3. This Examination consists of **four (04)** questions that are given equal marks.

4. You must **answer all four (04) questions** in this examination.

MS Word

01)   a)   i)   Write **four** capabilities of a word processor.

ii)   List **fou**r examples for word processors.

iii)   Write **one** advantage of mail merge.

iv)   List **two** main components required to perform mail merge.

v)   Identify the following symbols in MS Word "Home" tab.
        a. **B**   b. X^2
        c. X_2 d. **U**

vi)   Write the purpose of using following keys in MS Word.
    (First one is done for you)
            Up arrow – Move to the previous line
        a.   PgUp
        b.   Right arrow

vii)   Write the purpose of using cross-references in MS word documents.

viii)   Fill the following table by considering the uses of tab key in MS Word tables.
    (First one is done for you)

Operation	Result
Press tab key when you are in a middle cell of the table	**Move to the next cell**
a. Press tab key when you are in the bottom right cell of a table	
b. Press Tab + Shift keys together	

ix)   In MS Word you can set tabs to align the text in the documents. Fill the following table based on the tabs.

Tab selector icon	Tab type
a. **L**	
b. **⊥**	
c. **⅃**	
d. **⊥·**	
I	**Bar tab**

x)   What is a toggle in MS Word? Briefly explain it by giving **two** examples.
                            [MS Word: 50 marks]

MS Power Point

b) i) Write down **three (03)** popular Presentation applications.

(Except MS PowerPoint)

ii) Explain **three (03)** features of "Microsoft PowerPoint" application.

iii) Briefly explain benefits of using PowerPoint application.

iv) List three steps required on preparing and conducting a presentation

v) What are the main factors to consider when making an effective PowerPoint Presentation?

vi) List down the steps required to print a hand out, which consist 06 slides in a page.

vii) Discuss important points to remember when writing text for a PowerPoint presentation.

c) Select the suitable answer for the questions given below.

i) When you open PowerPoint and click Blank Presentation, you go directly to:
   A) Your first slide.
   B) Themes.
   C) Layout.
   D) Backstage view.
   E) Online templates.

ii) "Views" are important in PowerPoint for organization. The default view is:
   A) Slide Sorter
   B) Normal.
   C) Master.
   D) Reading.
   E) Outline.

iii) The visual effect of movement that occurs when one slide changes into another slide is called a(n):
   A) Animation.
   B) Wipe.
   C) Transformation.
   D) Transition.
   E) Advance.

iv) When developing your presentation, you should use this view to see it as your audience will see it:
   A) Slide Show
   B) Presenter
   C) Automatic
   D) Notes Master
   E) Slide Sorter

v)   To add an image from your camera to your presentation, to which tab should you go to first?

        A)   Design
        B)   Import
        C)   Page Layout
        D)   View
        E)   Insert

[MS Power Point part: 50 marks]

MS Excel

02)   a)   i)   Briefly explain what do you mean by a "**Spreadsheet**" application.

      ii)   Write down **two (02)** advantages and **two (02)** disadvantages of using "**Spreadsheets**".

      iii)   Write down **three (03)** popular spreadsheet applications.

  b)   i)   Briefly explain the **four(04)** different types of cell references that are used in formulas in Excel.

      ii)   Briefly explain how you can use following options to enter data into cells.

         a) AutoFill
         b) FillSeries
         c) AutoComplete

      iii)   Write down the functionality of following functions with respect to excel 2010.
         a) *SUM*
         b) *AVERAGE*
         c) *COUNT*
         d) *MAX*

      iv)   Explain why below error messages are appearing in cells.
         a) *#####*
         b) *#VALUE!*
         c) *#DIV/0!*

  c)   Write functions/formulas with the relevant cell addresses for questions (i) – (vii) based on the dataset shown in figure 1.

	A	B	C	D	E	F	G	H	I	J	K
1	Registration No	Name	Date of Birth	Age	ICT Marks	Maths Marks	Physics Marks	Total Marks	Average Marks	Grade	
2	ICT001	Yukith	12/25/1996		65	58	68				
3	ICT002	Perera	1/23/1996		45	35	50				
4	ICT003	Sejaya	8/10/1996		75	65	70				
5	ICT004	Navindu	5/23/1997		85	73	80				
6	ICT005	Yashoda	6/15/1997		90	82	78				
7											
8	Max										
9	Min										
10											
11	Total Number of students										
12											

Figure 1

i) To calculate the total marks ("ICT"+"Maths"+"Physics" Marks) for each student and display it in "Total Marks" column.

ii) To calculate the average marks for each student and display it in "Average Marks" column.

iii) To obtain the highest "ICT Marks" and display it in cell E8.

iv) To get the lowest "ICT Marks" and display it in cell E9.

v) To get the total number of students sat for the examination and display it in cell E11.

vi) a) Briefly explain the functionality of "NOW" function

    b) To calculate age of students and display it in "Age" column.

vii) a) Write down the syntax of "IF" function in Excel.

    b) Using below given ranges, write a formula to calculate student grades based on "Average Marks" and display them in "Grade" column.

Grade	Average Marks Range
A	75 - 100
B	55 – 74
C	35 - 54
F	0 - 34

viii) a) Write down the syntax of "PMT" function in Excel.

    Briefly explain the functionality of "PMT" function.

    b) Using "PMT" function, write the formula to calculate the monthly payment of a student who wants to buy a laptop

for Rs: 150, 000.00 at an 18% interest rate and pay the loan back within 03 years.

[MS Excel part: 100 marks]

MS Access

03)   a)   i)   Write down the suitable word that can be used to Fill the blank.

Microsoft Access is a _____ Database Management System.

ii)   Write down **four (04)** Microsoft Access 2010 object types.

iii)   Identify the most important object type in MS Access 2010 which uses to store Data. Briefly explain it.

b)   Using below given figures, answer (i) – (ii) questions.

Student_Data	
Field Name	**Data Type**
🔑▶ Reg_No	Text
Full_Name	Text
DoB	Date/Time
Gender	Text
Address	Text
Contact_No	Text

Field Properties

General Lookup

Field Size		
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None
Smart Tags	

i)   Write down the **name of the field property** which should use to get the following outputs.

     a)   To display "Reg_No" as "Registration No"

     b)   To limit "Reg_No" field size to 6

c) To Start "Reg_No" field with "ICT" when you are entering data to the table(e.g.: ICT001)

ii) a) Briefly explain the functionality of "Lookup Wizard" in MS Access.

b) Can we use "Lookup Wizard" for fields in "Student_Data" table? If "Yes" write down field/ fields.

c) Write down the custom format to show "Contact_No" as below given format.

"<03 digits> - <07 digits>"

(e.g.: 0412212345 as 041-2212345)

c) i) What are the relationship types that you can have between two tables? Explain with examples.

ii) Briefly describe what you mean by "Primary Key" and "Foreign Key"

iii) Using below given figures, answer (a) – (b) questions.

Student_Data

Registration No ▾	Full Name ▾	DoB ▾	Gender ▾	Address ▾	Contact Number ▾
⊞ ICT001	S.D.Sanjeewa	12/15/1996	Male	No 80, Wajiraa	011-2272456
⊞ ICT002	R.K.Asitha	1/15/1997	Male	Welipitiiya, Ma	041-2234589
⊞ ICT003	A.P.Wasana	5/18/1996	FeMale	hikkaduwa, Ga	032-7894563

Student_Marks

Registration No ▾	ICT Marks ▾	Physics Marks ▾	Maths Marks ▾	English Marks ▾
⊞ ICT001	75	65	70	50
⊞ ICT002	45	50	60	70
⊞ ICT003	55	60	50	80

a) Can we create a relationship between above two tables? If "Yes" write down the relationship type between two tables.

b) With respect to above two tables, explain following Relationship options.

i) Enforce Referential integrity

ii) Cascade update Related Fields

iii) Cascade Delete Related Records

d) i) Write down the two (02) basic types of queries in MS Access.

ii) Write down the four (04) Query Wizard types.

iii)   Using given figure, answer below questions.
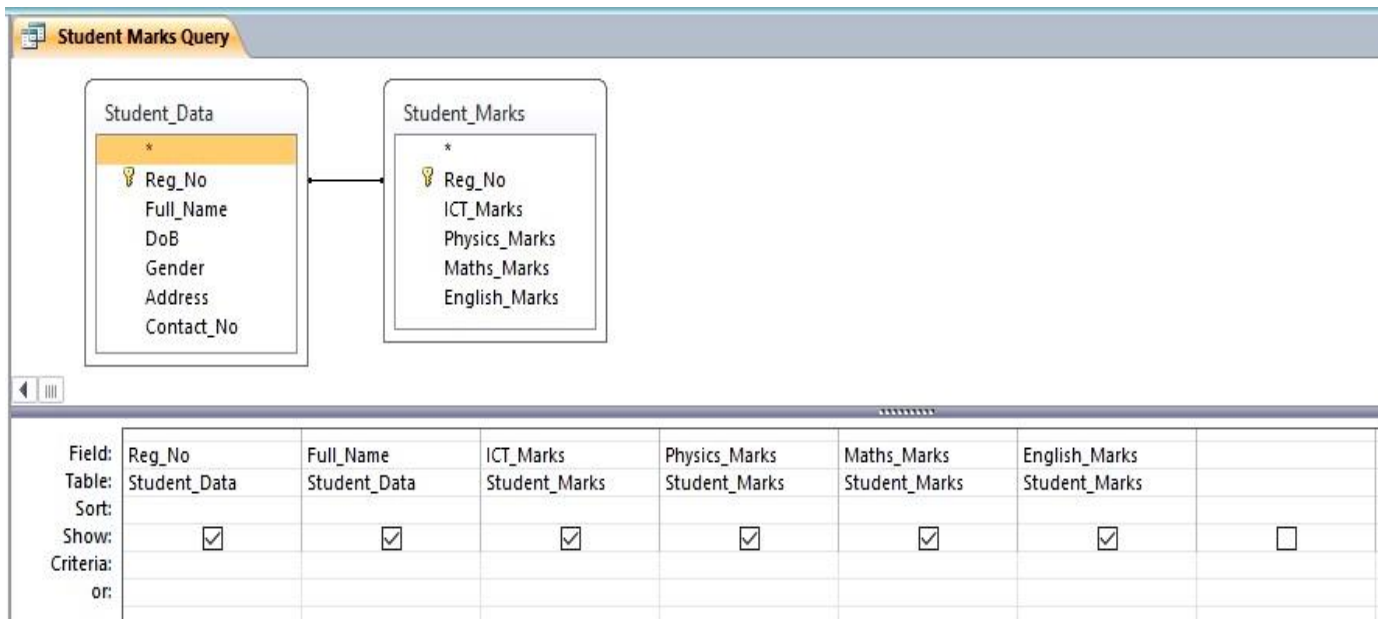
a) What are the changes to be done in above window to convert above "Simple Query" to a "Parameterized Query" and ask for user input shown below?
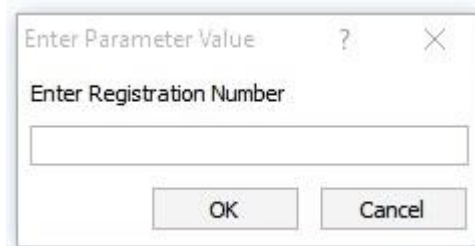
b) Write down the formula to add a new calculated field called "Total Marks" to get the total marks per student in above "Student Marks Query".

Total Marks = ICT_Marks + Maths_Marks + Physics_Marks + English_Marks

(Hint: You can use **"Field"** Field or "Field" Field and "Table" Field to add a new calculated field)

iv)   Write the **"SQL" statement** to get "Reg No", "ICT Marks", "Physics Marks" and "Maths Marks" from "Student Marks" table.

[MS Access part: 100 marks]

Adobe Photoshop

04)   a)   Consider **Adobe Photoshop CS**5 for answering following questions

        i)   What are the two general purposes of adobe Photoshop?

        ii)   Name three color standards supported by adobe Photoshop.

        iii)   Computer graphics can be categorized into two basic groups. Name these two groups and briefly describe them.

        iv)   What is the difference between Image size and Canvas size?

        v)   Identify the following Photoshop tools and briefly state the use of each tool

1.   2.

3.   4.

5.
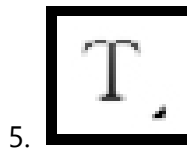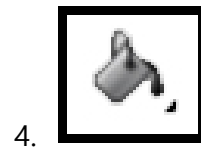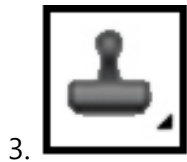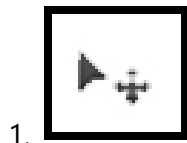
[Adobe Photoshop part: 60 marks]

Corel DRAW X7

    b)   Use "**Corel DRAW X7**" to answer below questions

        i)   Identify below fly outs and write them down

a.   b.   c.

d.   e.
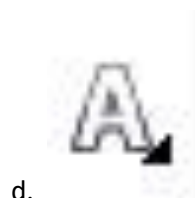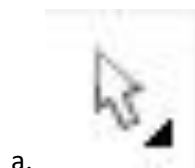
        ii)   Briefly describe "Drawing Window" and "Drawing Page"

        iii)   What is the difference between "Rectangle" & "3-Point Rectangle" Tool?

        iv)   What are Five "Perfect Shapes"? Explain them in brief.

        v)   Compare "Paragraph Text" with "Artistic Text"?

[Corel DRAW X7 part: 40 marks]