00233

The Open University of Sri Lanka
B.Sc. Degree Programme – Level 03
Department of Mathematics and Computer Science
Final Examination 2013/2014
PCU 1159: Computer Skills

Duration: **Two hours only (2 hours)**

Date: 03.06.2014 Time: 9.30am-11.30am

Answer FOUR (04) questions ONLY.

Q1.

a. State whether the following statements are **TRUE** or **FALSE.** If false, give the reason.

i. A computer has an **in-built memory** where it can store a large amount of data. This memory is called as **Secondary Storage.**
ii. **Registers** and **System clocks** are available inside the **microprocessor.**
iii. Capacity of the **1.4 MB Floppy disk** is equal to **11744051 bytes.**
iv. If memory is **volatile,** data will be lost as soon as the power is turned off.
v. **L1 caches** are available as the external devices in the **microprocessor.**

b. Write **short answers** for the following questions.
i. Computers can be classified according to the data processing power. List them in **descending** order of processing power.
ii. A complete **computer system** consists of **four (04)** main parts. What are they?
iii. List **five (05)** pointing devices.

c. Write **short notes** on the following.
i. Output devices.
ii. Fixed hard disk drive.
iii. Central Processing Unit.

Q2.

a. State whether the following statements are **TRUE** or **FALSE.** If false, give the reason.

i. A standard **power supply** is able to deliver around 350 watts of power.
ii. **PS/2 ports** are simple and generally use as **input ports** to connect **only** keyboard with the computer.
iii. **Firewire** was invented by **Apple Computer** in 1995.
iv. **Intel core-i7** microprocessor consists of **2 cores** and **4 threads.**
v. **Microprocessor** is directly connected to the **motherboard** through the **north bridge chip.**

b. Write **short answers** for the following questions.

i. **A CD-ROM** drive is connected to the computer via several interfaces. List **four (04)** names of **the serial interfaces.**
ii. Name **two (02) Windows based desktop operating systems** and **server operating systems.**
iii. List **two (02) advantages** and **disadvantages** of **Bespoke Application Software.**
iv. There are **four (04)** versions of **Windows 7.** What are they?
v. What are the difference between the **Shutdown** and **Hibernate**?

c. Write **short notes** on **interpreter** and **compiler** including their differences.

Q3.

a. State whether the following statements are **TRUE** or **FALSE.** If false, give the reason.

i. **PAN** is a computer network use to communicate among the devices close to the one person.
ii. **Web browser** is one of most familiar example for the **client.**
iii. **NIC** provides a low-level addressing system through the use of **IP addresses.**
iv. **Switches** that additionally process data at the **network layer** (layer 3) and above are often called **multilayer switches.**
v. **192.168.1.1** is a loopback IP address.

b. Write **short answers** for the following questions.
i. Name **four (04) internet protocols** and specify their usage.
ii. Name **four (04)** locally installed **email clients.**
iii. List **two (02) advantages** and **disadvantages** of the **Dial-up Connection.**

c. Write **short notes** on the following.
i. Network topology
ii. Intranet and Extranet
iii. POP3 and IMAP servers

Q4.

a. State whether the following statements are **TRUE** or **FALSE.** If false, give the reason.

i. **FAT12** and **FAT16** have limit of **8 characters** for the file name, and limit of **3 characters** for the **extension.**
ii. In the **Windows operating system, "C:\Windows"** directory is called as the **System Root.**
iii. **Windows based** first office program was developed in **1990.**
iv. **Microsoft Office 2007** can be installed on any **Windows operating system.**

b. Write **short answers** for the following questions.
i. **Windows 7** provides **two (02)** main types of user accounts. What are they?
ii. There are some characteristics and features in **word processing software.** List **four (04)** of them.
iii. List **four (04)** features available in the **Microsoft Office 2007 package.**
iv. List **four (04)** names of Open **sources word processors.**
v. In **Microsoft Word 2007,** you can view a document in different ways. What are they?

c. By using desktop publishing features you are required to create/format a large document with auto generated Table of content (TOC) and list of figures. Briefly explain the tasks you are required to follow to generate TOC and the list of figures automatically.

Q5.

a. State whether the following statements are **TRUE** or **FALSE.** If false, give the reason.

i. **Microsoft Excel 2007** supports **16,384 Columns** in a worksheet.
ii. Enter the first two values in a series and use the fill handle to extend the series is called as **AutoComplete.**
iii. **ERROR "######"** means the number in the cell is too wide for the cell to display.
iv. "Create a Package for a CD" is one of the new features available in **Microsoft PowerPoint 2007.**

b. Consider the following **dataset** and answer the question given bellow.
The following table shows the result sheet of **PCU1160. CAT1, CAT2 and Exam marks** are listed on the Column **B, C** and **D** respectively.

	A	B	C	D	E	F
1	PCU1160 ICT Skill					
2	Result sheet 2014					
3	IndexNo	Cat1	Cat2	Exam	Final	Grade
4	10001	34	56	45		
5	10002	45	23	34		
6	10003	67	56	56		
7	10004	87	78	78		
8	10005	89	56	43		
9	10006	23	79	47		
10	10007	45	43	67		
11	10008	67	56	89		
12	10009	87	78	90		
13	10010	89	65	32		
14	10011	34	34	45		
15	10012	56	58	67		
16						

i. What is the selected **cell range**?

ii. Write a Excel formula to calculate **average Cat marks** of the first student.

iii. Final marks are calculated by the **40%** of the **average Cat marks** and **60%** of the **Exam result**. Write an Excel formula to calculate final marks of the first student

iv. Write an Excel formula to **add 5%** of the **Final marks** for the first student's **Final mark.**

v. Write a formula to print first student's Grade according to the **Final mark** by using following criteria.

Mark <40: print F
Mark <70: print C
Mark <100: print A

vi. Write a formula to get the total number of students, who scored **Final marks** more than **50**.

c. Briefly explain what **mail merge** is, and why it is useful to a company?

Q6.

a. State whether the following statements are **TRUE** or **FALSE.** If false, give the reason.

i. **Microsoft Office 2007** basic edition contains **Microsoft Access 2007.**
ii. **.accdb** is the correct file format of **Microsoft Access 2007.**
iii. **Object-oriented** databases are more expensive to develop.
iv. **Sybase** is a **database management** application.

b. Consider the following **dataset** and answer the question given bellow

User table

User Id	User name	Password
1001	Sam01	xx
1002	Ruw02	xxxx

Student table

Id	name	Address
1001	Saman Kumara	Colombo 3
1002	Ruwan Silva	Nawala

Course table

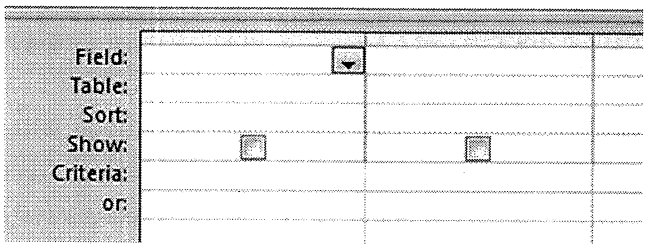
Id	name	Credit
PCU1160	ICT Skills	3
PCU1140	Computer Fundermantals	1

Result Table

Id	IndexNo	Course	Marks
1	1001	PCU1160	90
2	1001	PCU1140	78

i. Specify **two (02)** table names which have **one-to-one** relationship.
ii. Specify **two (02)** table names which have **one-to-many** relationship.
iii. Specify **two (02)** table names which have **many-to-many** relationship.
iv. What are the suitable **Microsoft Access data types** for each field on the **Result Table?**
v. Using an example, Explain what is the **primary key** and **foreign key.**

vi. Draw a **Query design view** to print a result sheet (index no and marks only) for the course **PCU 1160.**



vii. What are the **wildcard characters** that take the place of a single letter?

c. Briefly describe why **DBMS** are useful to handle data easily.

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