THE OPEN UNIVERSITY OF SRI LANKA
B.SC. DEGREE PROGRAMME / B. TECH DEGREE PROGRAMME
LEVEL 03
DEPARTMENT OF MATHEMATICS & COMPUTER SCIENCE
FINAL EXAMINATION 2014/2015
PCU1160/PCU1162: ICT SKILLS

Duration : **Two Hours Only (2 Hours)**
Date : 26th April 2015 **Time: 09.30 a.m. – 11.30 a.m.**
Answer Four (04) questions only.

Question 01.

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

i) Software is a series of instructions that tells the hardware of a computer what to do.
ii) An Operating System contains instructions that co-ordinate all of the activities of software devices of a computer.
iii) An assembler translates the symbolic codes of programs into machine language instructions.
iv) A computer that manages file printing, communicationsand other services available to users in a network is called as a client of the network.
v) A firewall is a set of technologies designed to protect a private network from users on a public network.

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

i) List main characteristics of a Computer.
ii) List different types of personal Computers.
iii) List five (5) input devices of a Computer.

(c) Briefly describe the following.

i) Mother Board
ii) CD-Rom Drive
iii) Primary Storage

Question 02.

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

i) Online shopping and electronic payments can be considered as the most famous examples of e-commerce.
ii) Computer security is the protection of computing systems and the data they store or access.
iii) Windows 7 was released in July 2007.
iv) MS DOS operating system is a command based operating system.
v) ***Saman_1.docx** is a valid file name in windows.

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

i) Classify the types of Computer Viruses.
ii) Discuss possible hardware threatsof a computer withsolutions.
iii) What are the advantages of **e-learning** with respect to both teaching and learning?
iv) What is meant by **Information Security**?
v) System Root (C drive) mainly consists of three folders. What are they?

(c) List the sectors where ICT is used in the Sri Lanka and the world.

Question 03.

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

i) **Clip art** refers to pre-made images used to illustrate any medium.
ii) To check spelling and grammar on the text of your document you can use the ***Format tool*** available in office 2007.
iii) First Windows based office program was developed in 1990.
iv) Pictures, clip arts, shapes, Smart Arts and charts are called office Illustrations.
v) You can't insert more clip arts other than the collection available in the MS office clip art gallery.

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

i) What is the purpose of having the ***"Help Menu"*** in MS office applications?
ii) Write down two (2) possible ways of starting MS Word?
iii) What are the key combinations that can be used to perform following activities?
   a. Copy a selected text.
   b. Cut a selected text.
   c. Paste a selected text.
   d. Save a document.

c) In MS Word printing document is a basic functionality.State the difference between 'Print'vs 'Quick Print' options (see Figure I below) in MS Word 2007.

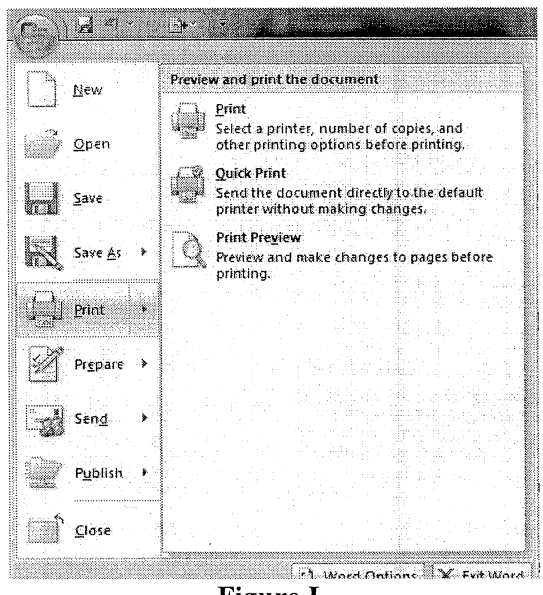


Figure I

Question 04.

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

i) Error *"#NAME?"* means there is a name in the formula that Excel doesn't recognize.
ii) MS Excel 2007 does not support to sort and filter data.
iii) Macros exist in a standard slide layout of an MS PowerPoint presentation.
iv) Microsoft PowerPoint runs on Microsoft windows and the Mac OS computer operating systems.

b) The following table (**Figure II**)shows a part of an Excel work sheet that contains the marks obtained by a group of students for the subjects Mathematics, English, and Sinhala.

	A	B	C	D	E	F	G	H
1	Reg. No	First Name	Last Name	Marks			Total	Status
2				Mathematics	English	Sinhala		
3	001	Jagath	Perera	78	85	70		
4	002	Sunila	Gallage	85	45	52		
5	003	Romal	Fernando	63	69	63		
6	004	Jayani	Peiris	58	85	58		
7	005	Seetha	Alwis	78	96	74		
8	006	Kelum	Perera	25	56	65		
9	007	Rahal	Gomes	70	49	85		
10	008	Mali	de Silva	85	55	45		
11	009	Gayan	Athauda	75	62	55		
12	010	Ranjan	Munidasa	45	55	63		
13								
14			Average	66.2	65.7	63		
15								

Figure II

i) Write an Excel formula to find the **minimum mark** of the Mathematics subject.
ii) Write an Excel formula to calculate **average marks** of the first student.
iii) Write an Excel formula to calculate **Total marks** of the first student.
iv) Write an Excel formula to print first student's **Status** according to the Total marks by using following criteria.
- Total<=200: Poor
- Total<250: Good
- Total>=250: Excellent

v) Write a formula to get the total number of students, who scored **Total** more than **250**.
vi) The **Average marks** for each subject are indicated in the row 14 of the above worksheet. Write a function to get the average mark for **English subject** in E14.

c) What are the objects that can be inserted into a PowerPoint slide by using the tools A, B, C, and D shown in the following **Figure III**?

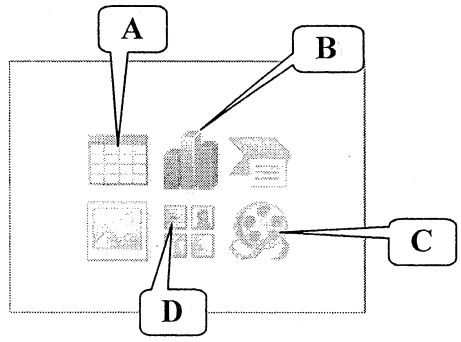


Figure III

Question 05.

a) Briefly explain the following.

i) Relational Database Management System (RDBMS)
ii) Primary Key
iii) Foreign Key
iv) One to Many (1:M) Relationship

b) Answer the following questionsusing the **Figure IV** below, that showsa MS Access database table (tblEmpPersonal) containing personal data of 20 employees of the **William's (Pvt.) Ltd.**

tblEmpPersonal

EmpID	EmpName	EmpSex	EmpAddress	EmpDeptWork	EmpDatejoined
1	Mala Perera	Female	Colombo	2	05-Apr-00
2	Kamal Perera	Male	Colombo	2	04-Jan-05
3	Sanath Mahawela	Male	Matara	3	07-Jul-99
4	Gayan Weerahewa	Male	Galle	4	04-Sep-00
5	Leela Wijetunga	Female	Ambilipitiya	2	16-Apr-08
6	Kolitha Gallege	Male	Galle	1	09-Sep-10
7	Sarani Perera	Female	Matara	1	08-Apr-08
8	Gayan Peiris	Male	Panadura	1	04-Apr-06
9	Gunapala de Silva	Male	Panadura	3	07-Jul-01
10	Raja Muththaiah	Male	Meegama	2	11-Mar-09
11	Nithya Wellappu	Female	Padukka	3	04-Apr-09
12	Sangapala Polhena	Male	Horana	2	09-Sep-11
13	Devaka Ratnapala	Male	Horana	4	12-Jun-10
14	Soma Nagahagedara	Female	Padukka	4	04-May-02
15	Rani Muthukuda	Female	Colombo	4	04-Aug-06
16	Malan Kodippili	Male	Matara	2	04-Jan-99
17	Siri Gunasekara	Male	Matara	3	07-May-08
18	Bopage Senanayake	Male	Padukka	1	09-Nov-09
19	Cyril Wikrama	Male	Horana	1	02-Apr-10
20	Gopala Medagedara	Male	colombo	1	15-Sep-10
(New)					

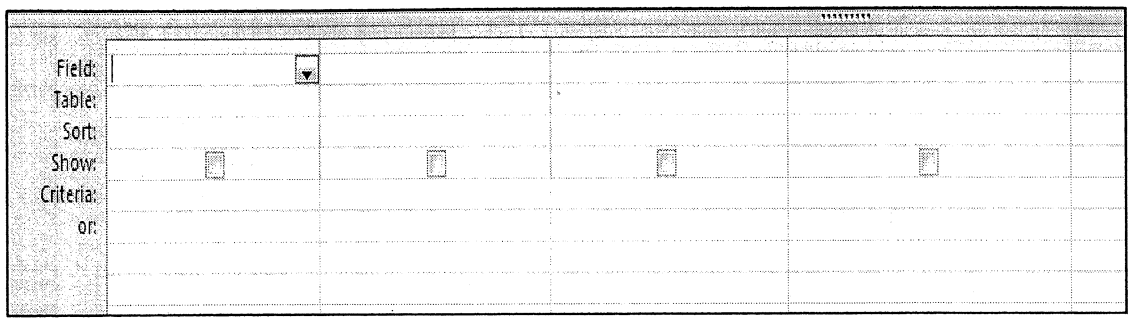
Figure IV

i) What would be the Primary key of the above tblEmpPersonal table?

ii) What would be the data types of EmpName and EmpDateJoined?

iii) The field EmpDeptWork represents the ID number of the department that each employee works in. Assume that there is another table named tblDeptDetails, which contains the data such as Department ID, Department Name, and the Department Location. Each department is uniquely identified by the Department ID. What would be the Relationship type betweenthetblEmpPersonal and tblDeptDetails tables? Justify your answer.

iv) Fill and complete the design-view of the following query such that the query output will **display the Names of employees who work in the Sales department sorted in alphabetical order**. You may draw a similar structure on your answer sheet and fill appropriately.**(Hint: the ID of Sales department is '2')**



Question 06.

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

i) The TCP/IP defines rules which computers must follow when communicate with each other over the Internet.
ii) SMTP Internet Protocol is used by local email clients to retrieve email from a remote server over a TCP/IP connection.
iii) A communication protocol called as the Internet Protocol (IP) is used for relaying these network packets across the Internet.
iv) Dial-up packages are used in homes as well as in small businesses.
v) The Gmail does not allow to attach**executable files** (.exe files) as a security measure to prevent potential viruses.

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

i) List four (04) facilities available in the Internet.
ii) List three (03) commonly used web browsers.
iii) What is the purpose of having the ***"content"*** tab inthe internet options?

c) Briefly explain the following.

i) Search Engines
ii) DNS Server
iii) E-mail

***** All Rights Reserved *****