The Open University of Sri lanka
B.Sc Degree Programme – Level 03
Department of Mathematics and Computer Science
Final Examination 2014/2015
PCU1159: Computer Skills

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

Date: 26.04.2015 Time: 09.30 am -- 11.30 am

Answer FOUR (04) Questions ONLY

Q1.

a. Name the three types of computers and briefly describe them.

b. Describe the Von Neumann architecture using a named block diagram and briefly describe each part of the architecture.

c. What are the uses of the following hardware components?

   i. VGA

   ii. Modem

   iii. Sound Card

   iv. Network Card

d. Describe the following future software technologies giving two examples for each of their use.

   i. Agent based systems

   ii. Natural Language Processing (NLP)

Q2.

a. **Operating System** is responsible for several **tasks**, what are they?

b. In the **Linux shell** the **root** user types the following command. What are the **file access permissions** of the **Owner, Group** and **Others** in the above file?
chmod 756 /home/myfile.txt

c. Give examples for each of the following types of **application Software**

   i. Anti-virus software

   ii. Audio player

   iii. Desktop publishing software

   iv. Open source software

v. Image editing software

d. Considering the **advantages** and **disadvantages of each operating system** compare **Windows** and **Linux** Operating Systems

e. Briefly describe the following terms related to the **Windows XP** Operating System.

i. My computer programs

ii. User profile

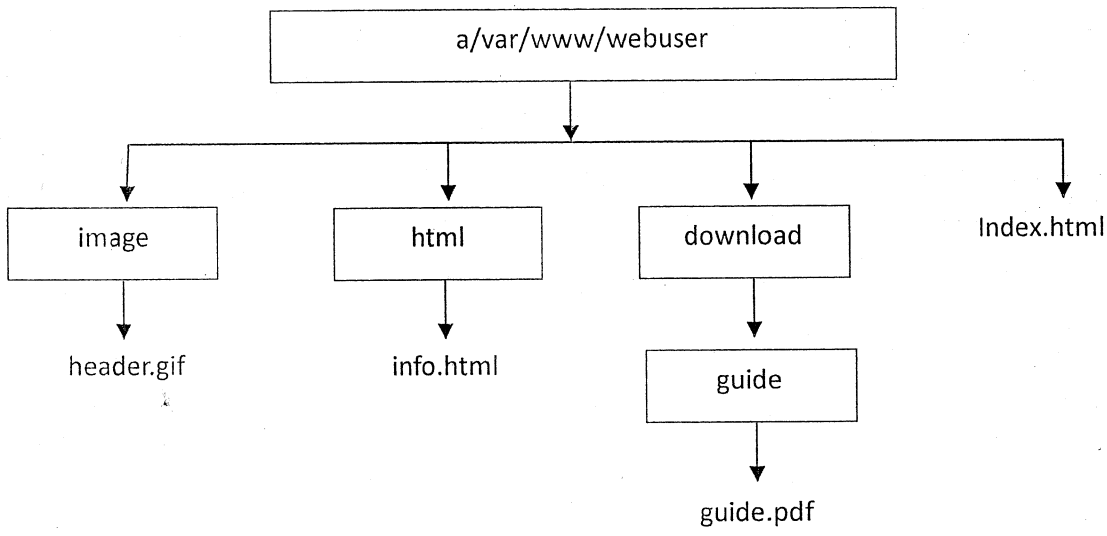
iii. Windows explorer

iv. Control panel

Q3.

a. What is the general structure of an HTML document and briefly describe the use of each tag?

b. Consider the following folder structure and answer the question given below (Assume that the rectangle boxes are folders)



i. What is the **HTML** code which is used to load **header.gif** inside the index.html file?

ii. Inside the **info.html** file what is the anchor tag which is used to add hyper link for the **guide.pdf**?

iii. What is the **absolute path** for the **info.html** file?

c. Write the HTML code to get the following output.

1. Names
    - Anne
    - Bob
    - Charly
2. Ages
    - 10
    - 11
    - 12
3. Class
    - 3A
    - 4C
    - 5D
4. Marks
    - Results for Anne
        - Mathematics – 70
        - Science – 90
    - Results for Bob
        - Mathematics – 80
        - Science – 60
    - Results for Charly
        - Mathematics – 40
        - Science – 30

d. Write HTML code to represent the above lists in part c in a table and draw the output of the code.

Q4.

a. Computer Networks can be classified as follows. Briefly describe each class.

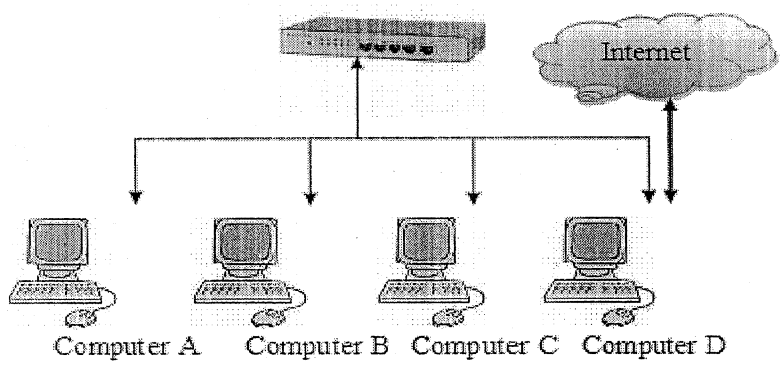
   i. Network topology

   ii. Functional relationship

   iii. Connection method

   iv. Scale

b. Consider the following Network diagram and answer the questions below



Computer	IP address	Subnet Mask
A	192.168.1. 1	255.255.255.0
B	192.168.2.2	255.255.255.0
C	192.168.2.1	255.255.255.0
D	192.168.1.2	255.255.255.0

   i. What are the other computers, that are available in Computer A's Network?

   ii. What is/are the Network Class(es) of each Network?

   iii. Considering the functionalities give another name for Computer D

c. What are the commands used to;

   i. Show network settings in the computer?

   ii. Show other computers that are available in the network?

   iii. Acknowledge another computer?

   iv. Get all data about the present network?

d. Briefly describe the following terms.

   i. Email Server

   ii. Search engine

iii. Web cilents

iv. Add ons

Q5.

a. Name the components included in OpenOffice.org 2.x office suite and describe the uses of them.

b. What are the advantages of Openoffice.org over other office suites? (List 5)

c. What are the uses of the following Linux Shell commands?

i. mkdir

ii. cp

iii. mv

iv. rm

v. chmod

d. What are the differences between Linux and Windows Operating Systems? (List 2)

Q6.

a. What are the differences between Vector and Raster Graphics?(List 2)

b. What are the Text Formatting buttons needed to design the following document in MS Word?

The **computer** is an *electronic device*, which operates under the direction of an operating system.

Mouse ~~not an animal~~ is an device of the computer

$AX^2 + BX + C = 0$ is an equation

$A_1 + A_2 + \ldots + A_n$ is a series

Answer the following questions using the MS Excel work sheet given bellow.

	A	B	C	D	E	F	G
1							
2		ABC School Nugegoda					
3		Class 13 B					
4		Mid term test 2007					
5							
6		No	Name	Physics	Maths	Chemistry	
7		1	A. F. Perera	45	67	89	
8		2	A. C. Kumara	34	28	23	
9		3	D.F Silva	23	48	45	
10		4	N.M. Silva	56	72	76	
11		5	S.K. Fernando	78	55	45	
12		6	S.J. Gamage	93	84	66	
13		7	K. N. Peris	42	93	45	
14		8	R. S. Roza	37	67	76	
15		9	S. J. Silva	84	53	38	
16		10	H.B. Zoyeza	56	87	95	
17							

c. Write the Excel functions to get the answers for the following tasks:

   i. Average marks for Maths.

   ii. Total marks of each student.

   iii. Maximum and Minimum for physics.

   iv. Number of students sat for Chemistry.

d. What are the cell formatting options used to design the title part of the above excel work sheet.

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