The Open University of Sri lanka
B.Sc Degree Programme – Level 03
Department of Mathematics and Computer Science
Final Examination 2012/2013
PCU1159 : Computer Skills

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

Date:23.05.2013 Time:09.30 am – 11.30 am

Answer FOUR (04) Questions ONLY

Q1.

a. State whether the following statements are **TRUE** or **FALSE.** If it is false give a reason.
   i. **Registers** are located outside the processor
   ii. **Primary storages** are **volatile**
   iii. Capacity of a **single side CD** is equal to 671088640 bites
   iv. The first **microprocessors** used a **word size** of 8 bits

b. Write short answers for the given questions (Answer must be in few words)
   i. What are the **common characteristics** of **computers**? (give 4 characteristics)
   ii. What are the **four functional components** of a **digital computer**?
   iii. What are the **character representation** formats other than **ASCII**?

c. Briefly describe the following
   i. Computer Mother-board
   ii. Intel Microprocessors
   iii. Von-Neumann's computer architecture

Q2.

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

   i. **Text based user interfaces** are more useful for **server OS**
   ii. "**CD ...**" MS-DOS command is used to go to the upper level directory
   iii. Recommended system requirements must be satisfied for the software to be usable at all.

b. Write short answers for the given questions (Answer must be in few words)
   i. **Operating System** has several tasks, what are they?
   In the **Linux shell** the **root** user types the following command

```
chmod 756 /home/myfile.txt
```

   What are the **file access permissions** of the **Owner**, **Group** and **Others** in the above file?

iii. Give examples for each of the following types of application Software

1) Anti-virus software
2) Desktop publishing software
3) Image editing software
4) Audio player
5) Open-source software

iv. **Software** can be categorized according to the **version**, What are they (give 5 types)

c. Complete the following table

OS	Single/Multi user	Single/Multi -Tasking	GUI/Text	Commercial / Free	Desktop/Server/ Both
MS-DOS					
Windows 95					
Windows 7					
Ubuntu					
Windows 2000					

d. Use **advantages** and **disadvantages**, to compare **Windows** and **Linux** Operating Systems

Q3.

a. State whether the following statements are **TRUE** or **FALSE.** If it is false give a reason.
   i. **PCM** is an uncompressed audio format
   ii. **MP3** is a lossless compression audio format
   iii. higher **sampling rate** of an audio file increase the quality of the sound
   iv. **Multi-agents** are distributed agents that do not have the capabilities to achieve an objective alone and thus must communicate

b. Write short answers for the given questions (Answer must be in few words)

   i. In the digital computer several **color modes** are used to represent a color, name **3** modes
   ii. Specify **3 image operations**, that can be apply within the **image objects**.
   iii. Specify **4** advantages of the use of **e-library** than traditional library

c. Briefly describe the following

   i. Vector and Raster image formats
   ii. BMI Technology
   iii. Natural Language Processing Systems

Q4.

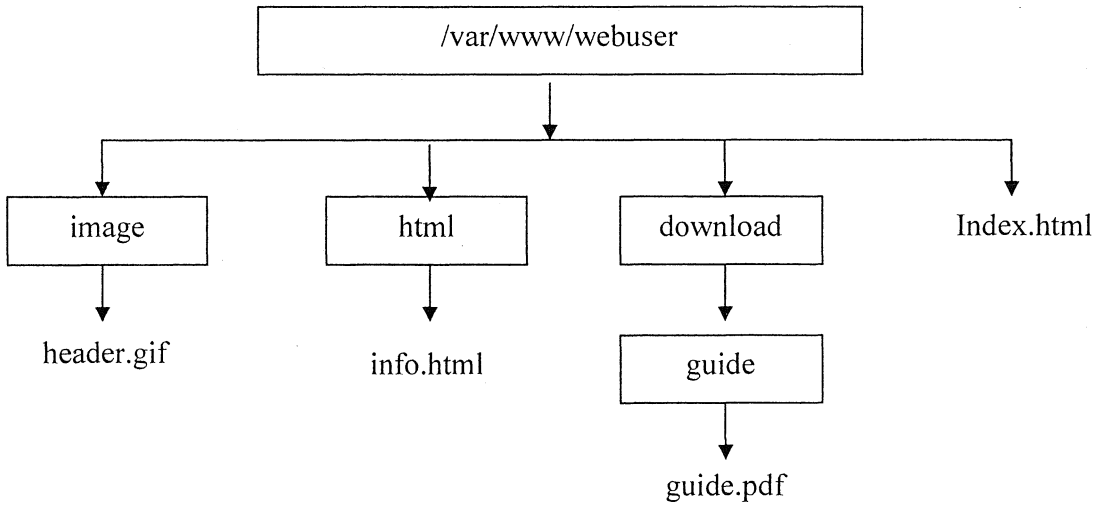
a. State whether the following statements are **TRUE** or **FALSE.** If it is false give a reason.
   i. Web servers are responsible for accepting HTTPs requests from web clients
   ii. The HTML tags pairs cannot be nested.
   iii. Upper or lower case HTML tags are same.
   iv. <img> Tag does not has a close tag

b. Write short answers for the given questions (Answer must be in few words)

   i. There are different **types** of **web sites** available on the web, specify **5**
   ii. What is the **output** of the following HTML Code?

A > B < = C & A > C

c. 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

d. Write a suitable **HTML code** to create the following table

Result Sheet			
Semester	Index No	Course Code	Marks
1	AS20001	CPU1159	56
		CPU1160	78
		CPU1161	90
	AS20002	CPU1159	58

e. Write a suitable **HTML code** to generate the following lists

- Home
- Download
    1. Software
        - Anti-virus
        - Game
        - Dictionary
    2. Device Divers
    3. Manuals
    4. Videos
- AboutUS
- Contact US

Q5.

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

i. LAN is a computer network used for communication among devices close to one person

ii. PROXY is the server name which services the requests of its clients by forwarding requests to other servers

iii. ifconfig is the Windows command that can be used to see the Network configuration information

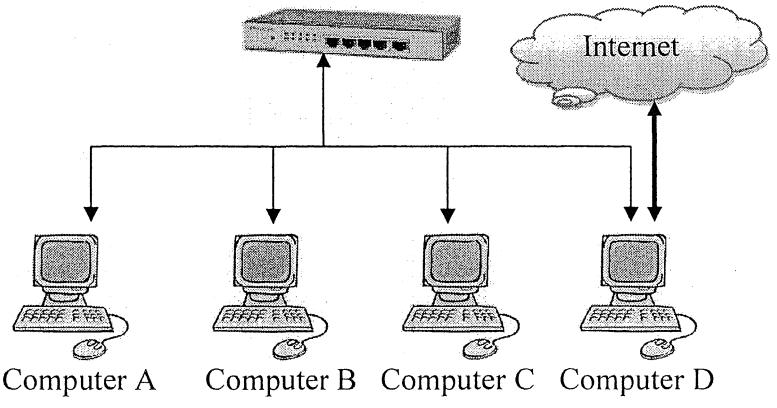
iv. According to the classification of networks by scale, MAN is the smallest network.

v. URLs are case sensitive and do not contain any spaces.

b. Write short answers for the given questions (Answer must be in few words)

i. What is the network protocol name which is used to transfer data from one computer to another through a network, such as the Internet?
ii. What is the loopback IP address?
iii. What are the protocol names that can be used to handle the email transactions

c. 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 the A's (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

d. Briefly describe the following

i. Network Topology
ii. Search engine
iii. web browsers

Q6.

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

i. ODT is the file format of the Open Office document
ii. '**ls**' is the Linux command that can be used to change the user
iii. The Microsoft Office small business edition does not contain Publisher

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

	A	B	C	D
1	Index	PHY	CHE	BOT
2	10001	45	67	89
3	10002	45	56	66
4	10003	67	87	34
5	10004	84	94	59
6	10005	56	56	62
7	10006	7	72	36
8	10007	45	44	75
9	10008	67	68	45
10	10009	89	32	45
11	10010	28	45	67
12				

Write EXCEL functions/formulas to do the following

i. Get the total mark of the student index **10001** and stored in a **Cell E2**
ii. Assume that total mark of the student index 10001 is available in the **Cell E2**. Write an excel formula to add 5% of the total marks and stored result in the **Cell F2**
iii. Write a **formula** to print a grade of the mark which is available in the **Cell B2**

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

iv. Get total number of students who get the marks for the Physics more than **50**
v. Identify the following errors **"#NAME?"** and "######"

c. What are the new features available in the **Office 2007**?

d. Use advantages and disadvantages, Compare **Microsoft Office** and **Open Office**

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