

# Sample Paper – End Term Examination

## Fundamentals of Computing (ETCS 111)

### B Tech 1<sup>st</sup> Semester

**Time: 3 Hours**

**Max. Marks: 75**

**Note: Attempt five questions including Q. No. 1 which is compulsory. Select one question from each unit.**

- Q1. i) Differentiate between internal and external commands.  
ii) What are system utilities in Windows OS?  
iii) What is the basic function of primary memory in the computer? Define various types of RAMs.  
iv) Name and differentiate the two main categories of computer software.  
v) Draw a flow chart to print names of all the students having age 20 or more in a class. The input record contains the name and age of student.  
vi) Differentiate between DOS and Windows OS.  
vii) What is computer network? List four benefits that networks provide to their users.  
viii) Why is the Internet sometimes described as a network of networks?  
ix) What are the unique features of Linux?  
x) List Administrative Tools available in Define DBMS. Also list its advantages.

[2½ x 10]

#### Unit – I

- Q2. a) What do you understand by booting a PC?  
Separate internal and external commands from the following list. Also write their purposes and syntaxes.

**i) edit  
iv) rd**

**ii) ren  
v) move**

**iii) fdisk  
vi) deltree**

- b) Explain the different generations of computers with their basic characteristics.

[7 +5 ½]

- Q3. a) What do you understand by input and output devices of a computer? Discuss any two from each in detail. Also define Sector, Track and Cylinder of a hard disk.  
b) Draw a block diagram to illustrate the basic organization of a computer system and explain the functions of the various units.

[6 +6 ½]

## Unit – II

- Q4. a) How *file permission* is given in Linux system? If the file name is **ggsipu** then write the command and syntax to assign file permission: read, write and execute to owner; read to group; read and write to others.
- b) What is a *shell*? Explain any five Linux commands with their purpose and syntax.

[6 +6 ½]

- Q5. a) Describe Linux Architecture and File System.
- b) What is kernel? List the role of kernel.

[7 +5 ½]

## Unit – III

- Q6. a) What do you understand by *network topology*? Describe star and bus topologies with their advantages and disadvantages.
- b) What is the need of protocol? Describe the purpose of the following protocols: **HTTP, FTP, SMTP** and **PPP**.

[6 +6 ½]

- Q7. a) What are the common network devices? Also list various communication media and their characteristics.
- b) Define DBMS. What are the characteristics of DBMS?

[7 +5 ½]

## Unit – IV

- Q8. Write short notes on **ANY THREE** of the following:

- a) Blu Ray Disk
- b) Direct Data Entry Devices
- c) Main Modules in Libre / Open Office
- d) Impact & Non Impact Printers
- e) Translators.

[4½ + 4 +4]