

(Please write your Exam Roll No.)

Exam Roll No. ....

# END TERM EXAMINATION

## FIRST SEMESTER [MCA] DECEMBER-2012

*Paper Code: MCA 109*

*Subject: Fundamentals of  
Information Technology*

**Time : 3 Hours**

**Maximum Marks : 60**

**Note : Attempt any five questions including Q. no. 1 which is compulsory.  
Select one question from each Unit.**

- Q1 Answer the following briefly :- (2x10=20)
- (a) What do you mean by switching?
  - (b) Explain the working of sequential access and direct access.
  - (c) What do you mean by hardware maintenance?
  - (d) Describe in brief the storage technology.
  - (e) Write the advantages of synchronous modes of data transmission.
  - (f) Explain the Digital signature and Logic gates.
  - (g) What is a flowchart?
  - (h) What are the communication protocols?
  - (i) Give the four examples of external storage devices
  - (j) What do you mean by internetworking?

### UNIT-I

- Q2 What is microprocessor 8085? What are the different types of operation of it?  
Give the suitable example with respective diagram. (10)
- Q3 (a) What are the major symbols for NOR gates? Draw the picture of logical gate symbols.(5)  
(b) What are the NAND and NOR GATES? How to represent the NAND and NOR gates? (5)

### UNIT-II

- Q4 (a) Define the term (software) and explain the various components of the software development. (6)  
(b) What is plotter? How it is different from the printer? (4)
- Q5 Differentiate the following:- (2.5x4=10)
- (a) Plasma display-Liquid Crystal Display
  - (b) Internal Storage device- External Storage Device
  - (c) Black box testing-White box testing
  - (d) Cathode ray-Raster scan

**UNIT-III**

- Q6 (a) What do you like in the latest operating system and why? Write down its five salient features. (5)  
(b) Note down the five internal and external commands of unix operating system with example. (5)
- Q7 (a) Explain the working of sequential access and direct access methods with the help of example. (5)  
(b) Describe the role of scheduling technique in process management. (5)

**UNIT-IV**

- Q8 (a) write the procedure to create own e-mail account. What is the difference between POPUP and web base e-mail? (6)  
(b) Define the various Networking topologies and its application. (4)
- Q9 Write the short notes on the following :- (2.5x4=10)  
(a) Digital and Analog transmission (b) Internetworking  
(b) Switching technique (d) Communication protocol

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