

DipIETE – CS (OLD SCHEME)

Code: DC03
Time: 3 Hours

Subject: COMPUTER FUNDAMENTALS
Max. Marks: 100

DECEMBER 2010

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after half an hour of the commencement of the examination.
- Out of the remaining EIGHT Questions answer any FIVE Questions. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated.

Q1. Choose the correct or the best alternative in the following: (2×10)

- a. A computer which measures continuously changing conditions, such as temperature and pressure and converts them into quantities is called as.....
- (A) Digital computer (B) Analog computer
(C) Hybrid Computer (D) All of the above
- b. The performance of cache memory is generally measured in terms of a quantity called as
- (A) bit ratio (B) click ratio
(C) no ratio (D) hit ratio
- c. The is the time required by a sector to reach below read/write head.
- (A) Seek Time (B) Latency Time
(C) Access time (D) None
- d. A pixel can be defined as
- (A) A program that draws picture
(B) A picture stored in secondary memory
(C) The smallest measurable part of screen
(D) None of the above
- e. The smallest unit in a semiconductor memory is called a
- (A) cell (B) Flip flop
(C) latch (D) multivibrator

- f. On detection of an error, a part of thememory can be erased and rewritten .
- (A) EROM (B) EPROM
(C) PROM (D) EEROM
- g. The LCD stands for.....
- (A) Liquid Crystal Diode (B) Light Crystal Diode
(C) Liquid Crystal Display (D) None of the above
- h. Which one of the following is both an input and output device?
- (A) A Hard disk drive (B) A digitizer
(C) A Plotter (D) A DLP Projector
- i. In which of the following the data processing is faster?
- (A) Flash drives (B) ROM
(C) RAM (D) Hard disk drives
- j. Which of the following is not an application software ?
- (A) Word Processor (B) Spreadsheet
(C) Operating System (D) Notepad

**Answer any FIVE Questions out of EIGHT Questions.
Each question carries 16 marks.**

- Q.2** a. Explain about the characteristics and limitations of Computer systems in detail. (10)
- b. Give the description about various generations of computers in brief (6)
- Q.3** a. What is arithmetic and logic unit? Explain the major function performed by this unit ? (6)
- b. Explain about the functionality of the Control unit in brief (4)
- c. Differentiate between the static and dynamic RAM. (6)
- Q.4** a. What is a Cache memory? Explain about multiple levels of Cache. (8)
- b. Explain about the factors affecting processor speed. (8)
- Q.5** a. What do you mean by VDU. Explain working principal of CRT Monitor with the help of it's diagram (10)

- b. Define any four of the following terms in context of disk storage (6)
 - (i) Access time
 - (ii) Spin-up time
 - (iii) Seek time
 - (iv) Latency Time
 - (v) Transfer rate

- Q.6** a. Explain the difference between an impact and non impact printer? Which one is advantageous over and why? (4)

- b. Distinguish between Application software and System software. (6)

- c. What is the purpose of CONFIG.SYS and AUTOEXEC.BAT file. (6)

- Q.7** a. In DOS, what do these commands do? (6)
 - (i) COPY
 - (ii) CHKDSK
 - (iii) PROMPT
 - (iv) DISKCOMP
 - (v) CLS
 - (vi) REN

- b. What do you understand of multiprogramming and time sharing of system? (6)

- c. Write about some features of windows operating system (4)

- Q.8** a. How mail merge is used in MS WORD. (6)

- b. Write the applications and advantages of Spread Sheet? (6)

- c. Write a short note on Keyboard Buffer. (4)

- Q.9** a. Explain about the construction and working principle of IDE hard disk. (10)

- b. Distinguish between (6)
 - (i) Workbook and Worksheet
 - (ii) Command line interface and Graphical user interface