BIEE-032

DIPLOMA IN ELECTRICAL ENGINEERING (DELVI)/ADVANCED LEVEL CERTIFICATE COURSE IN ELECTRICAL ENGINEERING (ACELVI)

Term-End Examination

□□ ∃`ア∃   December, 2016

BIEE-032 : PRINCIPLES OF COMPUTER ARCHITECTURE

Time : 2 hours   *Maximum Marks : 70*

Note : Question no. *1* is **compulsory**. Answer any **four** questions from questions no. 2 to 8.

1. Choose the correct option.   *7×2=14*

    (a) SD RAM stands for

        (i)   Synchronous Dynamic Random Access Memory

        (ii) Static Dynamic Random Access Memory

        (iii) Single Dynamic Random Access Memory

        (iv) Synchronous Dual Random Access Memory

    (b) BIOS is stored in

        (i)   RAM

        (ii) Floppy Disk

        (iii) Hard Disk

        (iv) ROM

(c) Which one of the following is **not** a recording technique ?

    (i)   MFM

    (ii)   RLL

    (iii) FM

    (iv) EFM

(d) The combination of 16 bits is known as

    (i)   Bit

    (ii)   Byte

    (iii) Nibble

    (iv) Word

(e) What primary precaution should you take when replacing a keyboard ?

    (i)   Completely power down the system

    (ii)   Turn off the keyboard

    (iii) Wear an ESD strap

    (iv) Use a screw-driver

(f) Which memory chip is programmed during the manufacturing process ?

    (i)   ROM

    (ii)   RAM

    (iii) PROM

    (iv) EEPROM

(g) Where is IDE hard disk configuration information kept ?

(i) Hard disk controller

(ii) CMOS

(iii) Config.sys

(iv) Autoexec.bat.

2. Discuss the construction and working of a magnetic disk. Also discuss various components of disk access time with the help of a suitable diagram. *14*

3. (a) What are the characteristics of a CRT monitor ?

(b) Draw a block diagram of video accelerator card. *2×7=14*

4. Compare Inkjet printers with Laser printers. Describe the functions of various parts of a Laser printer. *14*

5. (a) What is the preventive maintenance for a PC ?

(b) What are the protections offered for RFI and Electrostatic discharge ? *2×7=14*

6. (a) List out the power problem found in power supplies.

(b) What do you mean by MODEM ? Differentiate between internal and external modem. *2×7=14*

7. Explain the working of a CD-ROM drive with diagram. *14*

8. Write short notes on any *ttwo* of the following : *2×7=14*

   (a) RLL Encoding Technique

   (b) Video Accelerator Card

   (c) Surge Suppressor