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BIEE-032

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

00156

Term-End Examination

June, 2016

BIEE-032 : PRINCIPLES OF COMPUTER ARCHITECTURE

Time : 2 hours *Maximum Marks : 70*

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

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

(a) The full form of DOS is

(i) Disk Operating System

(ii) Directory Oriented System

(iii) Direct Online Software

(iv) Dual Operation Solution

(b) The full form of RAM is

(i) Real Access Memory

(ii) Random Access Memory

(iii) Random Array Memory

(iv) Real and Memory

(c) The SMPS in a computer system gives the following output :

(i) + 12 V

(ii) + 5 V

(iii) – 5 V

(iv) All of the above

(d) SCSI is a/an

(i) input device

(ii) software

(iii) interface

(iv) host adapter

(e) BIOS is a/an

(i) hardware

(ii) software

(iii) firmware

(iv) integrated chip

(f) IDF can support a maximum of

(i) 2 devices

(ii) 1 device

(iii) 4 devices

(iv) 8 devices

(g) Which of the following operations is commutative but not associative ?

(i) AND

(ii) OR

(iii) NAND

(iv) XOR

2. (a) Describe any two mapping procedures for organizations of cache memory with examples.

(b) What are the various types of printers ? Explain Dot Matrix Printer in detail. *2×7=14*

3. What is a Scanner ? What are the various types of scanners ? Also draw the block diagram of a scanner. *14*

4. Draw the block diagram showing the internal hardware of CRTC (Monitor). Explain the function of each block. *14*

5. (a) Describe the interfacing technique employed for storage device.

(b) What is internal and external cache memory ? State the advantages of using cache memory. *2×7=14*

6. (a) Draw a block diagram of SMPS and explain how it works.

(b) Explain the working principle of LCD monitor with a suitable diagram. *2×7=14*

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

   (b) What do you mean by MODEM ? Differentiate between Internal and External MODEMs. *2×7=14*

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

   (a) Surge Suppressor

   (b) Video Accelerator Card

   (c) Head Parking