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BICS-028

DIPLOMA IN COMPUTER SCIENCE AND TECHNOLOGY (DCSVI)/ADVANCED LEVEL CERTIFICATE COURSE IN CSE (ACCSVI)

Term-End Examination

December, 2012

BICS-028 : PC ASSEMBLY AND MAINTENANCE

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt* ***any five*** *questions and question No.* ***1*** *is* ***compulsory*** *which is multiple choice question.*

1. (a) The minimum no. of bits required to represent a character from ASCII code set is 2

(i) 2 (ii) 5

(iii) 7 (iv) 8

(b) The XOR operator $\oplus$ is 2

(i) Commutative

(ii) Associative

(iii) Distributive over and operator

(iv) None of above

(c) Parallel printer uses 2

(i) RS - 232 C interface

(ii) Centronics interface

(iii) Hand - shake mode

(iv) Synthronous data transfer mode

(d) The three main component of digital computer system are 2

(i) Memory, I/O DMA

(ii) ALU, CPU, Memory

(iii) Memory, CPU, I/O

(iv) Control circuits, ALU, Register

(e) Which of the following is an example of output device 2

(i) Mouse (ii) Keyboard

(iii) MICR (iv) Speaker

(f) Which of the following is volatile 2

(i) Bubble Memory (ii) RAM

(iii) ROM (iv) Magnetic disk

(g) Tera is 2 to the power of : 2

(i) 32 (ii) 30

(iii) 40 (iv) 25

2. (a) What do you mean by RAID technology. Explain with suitable diagram 7

(b) Draw the SMPS block diagram and explain it's function in detail. 7

3. Describe various modes of data transfer. Also discuss how DMA mode is better than other modes. 14

4. (a) Explain the memory connections RAM and ROM with the help of diagram 7

(b) Explain logical, virtual, segmented and linear addresses. 7

5. What is the Hard disk ? Discuss Hard disk Interfaces in detail. 14

6. (a) What is the optical storage. Discuss CD technology in detail. 7

(b) Discuss construction and working of a magnetic disk. Also discuss various component of disk access time. 7

7. What is the Mother board. Write different types of Parts, slats and connectors in detail 14

8. Write short note on ***any four*** : $3\frac{1}{2} \times 4 = 14$

(a) Clusters

(b) USB

(c) PCI

(d) Cache Memory

(e) Video Memory

(f) SMPS