

**DIPLOMA - VIEP - COMPUTER SCIENCE AND
ENGINEERING (DCSVI) / ADVANCED LEVEL
CERTIFICATE COURSE IN COMPUTER
SCIENCE AND ENGINEERING (ACCSVI)**

Term-End Examination

December, 2015

BICS-028 : PC ASSEMBLY AND MAINTENANCE

Time : 2 hours

Maximum Marks : 70

Note : *Attempt any five questions. Question number 1 is compulsory. All questions carry equal marks.*

1. (a) Which of the following is an example of Internal device ? 2
- (i) Digital Camera
 - (ii) Printer
 - (iii) BIOS
 - (iv) Scanner
- (b) Sockets are used to exactly match a 2
- (i) bus
 - (ii) sectors
 - (iii) chip
 - (iv) data

- (c) User-defined data used by a set-up program resides in 2
- (i) BIOS
 - (ii) CMOS
 - (iii) Mother Board
 - (iv) ROM
- (d) Expansion cards are also called as 2
- (i) connectors
 - (ii) sockets
 - (iii) peripherals
 - (iv) adapters
- (e) Which of the following contains a set of protocols ? 2
- (i) CMOS
 - (ii) ISA
 - (iii) ATA
 - (iv) PCI
- (f) Firmware runs from the 2
- (i) CIOS
 - (ii) BIOS
 - (iii) ROM
 - (iv) RAM
- (g) If cache is common for both data and instructions, it is called 2
- (i) United cache
 - (ii) Uniform cache
 - (iii) Unified cache
 - (iv) Persistent cache

2. (a) Explain in detail the functions and operations of SMPS. Also draw its block diagram. 7
- (b) What do you understand by hardware components ? Explain the parts and functions of a mother board. 7
3. (a) What are ports and slots ? Briefly explain their features and functions. 7
- (b) Describe the functions of cluster. Explain in detail about magnetic data storage. 7
4. (a) Explain the properties of hard disk drives. Describe the partitioning and formatting performed in a hard disk. 7
- (b) Describe various modes of data transfer. Also discuss how DMA mode is better than other modes. 7
5. (a) What is Data Addressing ? Differentiate between Standard CHS and Extended CHS. 7
- (b) Explain Sector Layout. Also discuss various components of disk access time. 7
6. (a) What are Segment and Virtual memories ? Explain the various memory addresses in detail. 7
- (b) How do you explain magnetic optical devices ? Briefly explain the features of a DVD. 7

7. (a) What is a Port ? Explain its types and give examples. 7
- (b) What are Interfaces ? Explain Keyboard and Mouse Interfaces. 7
8. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) IDE
- (b) Holographic Storage
- (c) AGP
- (d) USB
- (e) PCI
- (f) RAID
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