| BICS-028 |

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

Term-End Examination

June, 2015

00124

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)   Firmware runs from the   2

    (i)   CIOS

    (ii)   RAM

    (iii) BIOS

    (iv)   ROM

    (b)   Set of integrated circuits that allow stored data access in any order is called   2

    (i)   ROM

    (ii)   RAM

    (iii) Mother-board

    (iv)   PC

(c) Blu-ray is used to $\qquad$ 2
   (i) Copy
   (ii) Store
   (iii) Read and write
   (iv) Edit

(d) Which of the following is an example of external device ? 2
   (i) Scanner
   (ii) BIOS
   (iii) Hard disk
   (iv) CPU

(e) Which type of data is stored in SSD ? 2
   (i) Permanent
   (ii) Current
   (iii) Persistent
   (iv) Temporary

(f) In which technology are two or more hard disk drives used ? 2
   (i) BIOS
   (ii) CIOS
   (iii) RAPID
   (iv) RAID

(g) Expansion cards are also called as 2
   (i) Modems
   (ii) Peripherals
   (iii) Adapters
   (iv) Connectors

2. (a) What are Add on Cards ? Draw SMPS block diagram. Explain the functions and operations of Add on Cards. 7

(b) How do you explain Disk Controller ? Specify the various disk characters and operations. 7

3. (a) What is a cluster ? Discuss the properties of a magnetic disk. 7

(b) What is optical storage ? Also discuss about CD-R, CD-RW and CD-ROM in detail. 7

4. (a) What do you understand by data transfer ? Also explain how DMA mode is better than other modes. 7

(b) Explain Memory Addressing. Differentiate between Static and Dynamic RAMs. Also explain their functions. 7

5. (a) What is a video memory ? Draw and explain the features of cache memory. 7

(b) What is a port ? Differentiate between serial and parallel ports and discuss their features. 7

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

(b) What is HMA ? Explain the features and advantages of flat memory model. 7

7. (a) Describe hard disk interfaces in detail. Explain keyboard and mouse interface connectors. 7

(b) Differentiate between constant linear and constant angular velocity. Also explain the data transfer rate and access time. 7

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

(a) IDE

(b) Ultra DMA

(c) Sectors

(d) WORM Devices

(e) Holographic Storage

(f) USB