

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

Term-End Examination

December, 2016

BICS-028 : PC ASSEMBLY AND MAINTENANCE

Time : 2 hours

Maximum Marks : 70

Note : Attempt any five questions. Question number 1 is compulsory which has multiple choice questions. All questions carry equal marks.

1. Choose the correct answer from the following four alternatives :

$7 \times 2 = 14$

- (a) Which of the following are the two major types of flow charts ?
- (i) System, problem
 - (ii) Program, problem
 - (iii) Program, system
 - (iv) Logic, system
- (b) How many units in a single bus structure communicate at a time ?
- (i) 1
 - (ii) 2
 - (iii) 3
 - (iv) 4

- (c) Memory consisting of electronic circuits attached into silicon chip is known as
- (i) Magnetic core memory
 - (ii) Semi-conductor memory
 - (iii) Thin film memory
 - (iv) MOS memory
- (d) On detection of an error, a part of the memory can be erased in
- (i) PROM
 - (ii) EPROM
 - (iii) EROM
 - (iv) EAROM
- (e) Floppy disk is protected by
- (i) Breaking the slider
 - (ii) Positioning the slider to cover the hole
 - (iii) Positioning the slider away from the hole
 - (iv) Cannot be write protected
- (f) A spiral shape track formatting is present in
- (i) Floppy disk
 - (ii) Optical disk
 - (iii) Hard disk
 - (iv) Half-inch tape cartridge
- (g) Diskettes spins at about _____ revolutions per minute.
- (i) 150
 - (ii) 300
 - (iii) 600
 - (iv) 1000

2. (a) What are the different types of memories available in the computer system ? How are they organized in a hierarchy ? 7
- (b) Explain how read/write operation is carried out in an optical disk. 7
3. (a) What is RAID ? Explain about the RAID levels in detail ? 7
- (b) Discuss about the holographic storage. 7
4. (a) List the three major tasks that you can perform to improve the performance of a computer hard disk. 7
- (b) Explain Direct Memory Access (DMA) with diagram. 7
5. (a) Explain in what way a magnetic optical device is different from an optical disk. 7
- (b) Describe about the physical and logical memory addresses. 7
6. (a) What do you understand by CPU ? Describe in detail about the various units of CPU. 7
- (b) Explain the role of bus in a computer and about the different types of buses in detail. 7

7. Discuss about the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Constant linear velocity
- (b) Standard CHS addressing
- (c) HMA
- (d) EIDE

8. (a) What is the purpose of magnetic disk file allocation table ?

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(b) List and describe the three types of emerging storage technologies.

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