

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

Term-End Examination

June, 2013

BICS-027 : COMPUTER ORGANIZATION

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions in all. Question number 1 is compulsory which is multiple choice question.

-
1. (a) The binary equivalent of decimal number 0.4375 is : 2
- (i) 0.0111
 - (ii) 0.1011
 - (iii) 0.1100
 - (iv) 0.1010
- (b) Negative numbers can not be represented in : 2
- (i) signed magnitude form
 - (ii) 1's complement form
 - (iii) 2's complement form
 - (iv) None of above
- (c) The XOR operator \oplus is : 2
- (i) commutative
 - (ii) Associative
 - (iii) Distributed over AND operator
 - (iv) None of above

- (d) Which of the following is not a sequential circuit ? 2
- (i) Register
 - (ii) Full adder
 - (iii) MUX
 - (iv) None of above
- (e) Which of the following is not a field in the Ethernet message packet ? 2
- (i) Type
 - (ii) Data
 - (iii) Pin - code
 - (iv) Address
- (f) Fence register is used for : 2
- (i) CPU protection
 - (ii) Memory Protection
 - (iii) File Protection
 - (iv) All of above
- (g) Tera is 2 to the power of : 2
- (i) 32
 - (ii) 30
 - (iii) 40
 - (iv) 25
2. (a) Describe Hub, repeater, Amplifier, switch and router in brief. 7
- (b) What is Internet ? Explain it's applications in detail. 7

3. (a) Define the input and output devices, and describe any two input and two output devices. 7
- (b) What is the Hamming code ? Explain with example. 7
4. (a) Describe the salient characteristic features and important applications of digital computer. 7
- (b) Describe the various generations of computer systems. 7
5. (a) What is the operating system ? Compare DOS, windows, and UNIX operating system in terms of their characteristics. 7
- (b) What is the time sharing operating system and Real time operating system ? Explain in detail. 7
6. (a) What is the relationship between TCP/IP and Internet ? Explain in detail. 7
- (b) What is the decision support system ? Briefly explain. 7
7. What are the different types of programming languages ? Explain in detail and also write merits and demerits of programming languages. 14

8. Write short notes on *any four* of the following :

(a) Interpreter and compiler

3.5x4=14

(b) Inventory control

(c) World Wide Web (WWW)

(d) DRAM

(e) RISC

(f) TELNET
