

Digital computer organisation

Year 2007-2010

Answer Any Five Questions. Question one is compulsory.

1. Fill in the blanks :
 - a. It is _____base of binary no. system .
 - b. BCD stands for _____.
 - c. $(1010)_2$ equal to (_____)10.
 - d. $(1100)_2$ equal to one's complement of _____.
 - e. $(\overline{a + b}) = (\text{_____})$
2. What are the number systems? Which number system the digital computer user?
3. What are the gates? Defines the universal gates?
4. Describe the half adder and full adder.
5. Describe the J-K flip-flop with truth table.
6. What is the synchronous and asynchronous data transfer?
7. Write short notes on the following.
 - a. RAM
 - b. Cache memory
 - c. EBCDIC
8. What are the different types of semi-conductor memory? Describe:
9. Solve the following :
 - a. $F(A,B,C) = \sum (0,1,2,4,5)$
 - b. $F(X,Y,Z) = \sum (0,1,2,6,7)$