2021
B.A./B.Sc.
First Semester
CORE – 2
COMPUTER SCIENCE
Course Code: CSC 1.21
(Computer System Architecture)

PART–B
Total Mark: 30

Answer the following questions.

1. (a) Explain the NOR and NAND logic gate. 2
   (b) Simplify using K-map: $F(A,B,C,D) = \Sigma (0,2,3,4,5,6,7,8,10,11,12,13,14,15)$ 4

2. (a) Simplify $111111_2 - 11011_2$ using 1's complement. 3
   (b) Convert the following : 3
   $124_{10} = (\_\_\_)_2 = (\_\_\_)_8 = (\_\_\_)_{16}$

3. Explain instruction cycle in detail. Write a note on the types of registers. 3+3=6

4. What is a stack? Convert the infix notation (A*B–(C+D^E)/F) into postfix notation. 1+5=6

5. What are interrupts? Explain the primary memory of a computer system.Write a note on Direct Access Memory. 1+2+3=6
