**GANPAT UNIVERSITY**

**U.V.PATEL COLLEGE OF ENGINEERING**

**2CEIT301: DIGITAL ELECTRONICS**

**Assignment-1**

**Answer the following**

1. (26)10=(\_\_\_\_\_\_\_)2
2. (10111.0110)2=(\_\_\_\_\_\_\_)10
3. (265.731)8=(\_\_\_\_\_\_\_\_\_\_)10
4. (0.275)8=(\_\_\_\_\_\_\_\_\_\_\_)2
5. (A23)16=(\_\_\_\_\_\_\_\_\_)10
6. (F23.6A1)16=(\_\_\_\_\_\_\_\_\_\_)2
7. Convert (1001001 )2  into gray code.
8. Why NANAD and NOR Known as universal gate.
9. Simplify the expression using boolean algebra **ABC +A’B +ABC’**
10. Define term (1) Minterm (2) Maxterm
11. Minimize expression using K-map Y(A,B,C)=∑m(0,2,4)
12. Minimize expression using K-map Y(A,B,C,D)=∑m(0,1,3,4,5,7,8,9,11,12,13,15)
13. Minimize expression using K-map Y(A,B,C,D)=∑m(0,1,2,4,5,6,8,9,12,14)
14. Minimize expression using K-map Y(A,B,C,D)=π(3,4,5,6,7)
15. Minimize expression using K-map Y(A,B,C,D)=∑m(0,1,2,4,5,8,13) with don’t care condition d (A,B,C,D)=∑m(3,6,7,9,12)
16. Simplify using tabulation method (W,X,Y,Z)=∑m(1,4,6,7,8,9,10,11,15)
17. Draw the circuit of Full adder(Draw only circuit)
18. Discuss J-K flip-flop.
19. Draw the circuit of Bi-directional shift register with parallel load (Draw only circuit)

**LAST DATE 17/11/2020**

**Upload Assignment in Google form (Link already mention on Moodle)**