

Government College of Engineering, Amravati

(An Autonomous Institution of Government of Maharashtra)

CSE Dept. – Summer 2018

CT- II

Course Name - STLD

Course Code - CSU601

Solve (Each question carries 5 marks):

Q.1] Minimize given function using Tabulation method: $F(P,Q,R,S) = \Sigma_m (4,5,6,8,9,10,13) + d_m (0,7,15)$

Q.2] a) Implement binary adder using a decoder and an OR gate

b) Simplify: $F(A,B,C,D) = \Sigma_m (0,2,4,5,8,14,15) + d_m (7,10,13)$

Q.3] Design system for Binary to Gray code convertor.

OR

Q.4] a) Design $F(A,B,C,D) = \Sigma_m (0,1,2,3,5,7,8,9,11,14)$ using only 4:1 multiplexers

b) Solve the given function using 3:8 decoder: $F = \Pi_m (0,1,3,7,9,10,11,13,14,15)$