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**DEPARTMENT OF ELECTRONICS AND COMMUNICAION ENGINEERING**

**Subject: DIGITAL ELECTRONICS& MICROCONTROLLERS (ECH308B-T/P)**

**Branch: CSE**

**Course: B.Tech 5th SEM**

**TUTORIAL -3: Duality, SOP and POS**

***CO1: A thorough understanding of the fundamental concepts and techniques used in Digital Electronics and Microcontrollers.***

***CO2.Convert the different type of codes and number systems which are used in digital communication and computer systems.***

***Blooms Taxonomy Level****: BT2, BT3*

1. Construct truth table for the given min terms (m3+m6)
2. The function of Boolean variables X, Y and Z is expressed in terms of the min-terms as F(X, Y, Z) = ∑m(1, 2, 5, 6, 7). Find the product of sums expression.
3. Simplify f=(B+BC) (B+B (B+D)
4. Show that AB+AC+B=AC+B
5. Minimize the Boolean function

f(A,B)=∑ m(0,2,3)