## BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI - K. K. BIRLA GOA CAMPUS

DIGITAL DESIGN Experiment 3

Name :	ID. No. :

**Task:** Design a combinational circuit whose truth table is given below.  $A_3$ ,  $A_2$ ,  $A_1$  and  $A_0$  are inputs; and  $Y_3$ ,  $Y_2$ ,  $Y_1$  and  $Y_0$  are outputs. Use minimum number of gates in circuit.

$A_3$	$A_2$	$A_1$	$A_0$	<b>Y</b> <sub>3</sub>	<b>Y</b> <sub>2</sub>	<b>Y</b> <sub>1</sub>	$Y_0$
0	0	0	0	0	0	0	0
0	1	0	0	0	1	0	0
0	1	0	1	0	0	1	1
0	1	1	0	0	0	1	0
0	1	1	1	0	0	0	1
1	0	0	0	1	0	0	0
1	0	0	1	0	1	1	1
1	0	1	0	0	1	1	0
1	0	1	1	0	1	0	1
1	1	1	1	1	0	0	1