

Al-Mustaqbal University College		
College of Engineering and Technology		
Biomedical Engineering Department		
Stage:3 <sup>th</sup> Sub: Electronics Laboratory		
Week	Laboratory Work	
1 <sup>st</sup>	Introduction to Digital Electronics lab- nomenclature of digital	
2 <sup>nd</sup>	Implementation of the given Boolean function using logic gates	
3 <sup>rd</sup>	Both sop and pos forms.	
4 <sup>th</sup>	Verification of state tables of RS, JK, T and D flip-flops using NAND & nor gates	
5 <sup>th</sup>	Implementation of 4x1 multiplexer using logic gates	
6 <sup>th</sup>	Implementation of 4-bit parallel adder using 7483 IC	
7 <sup>th</sup>	First Examination	
8 <sup>th</sup>	Design and verify the 4-bit synchronous counter	
9 <sup>th</sup>	Design and verify the 4-bit synchronous counter asynchronous counter	
10 <sup>th</sup>	To design and verify operation of half adder and full adder. 28-2	
11 <sup>th</sup>	Examination	

<b>12<sup>th</sup></b>	<b>Design and verify operation of half subtractor</b>
<b>13<sup>th</sup></b>	<b>Design &amp; verify the operation of magnitude comparator.</b>
<b>14<sup>th</sup></b>	<b>Study and verify NAND as a universal gate</b>
<b>15<sup>th</sup></b>	<b>Exam</b>