## Bangladesh Sweden Polytechnic Institute, Kaptai Electrical Technology.

## Semester Plan

Teacher-Mohammad Mohaiminul Islam Sabbir.

Subject Code: - 26811

**Subject Name: - Basic Electronics.** 

**Department :-** Electrical, Mechanical, Civil(Wood), Computer,

Construction

T P C 2 3 3

Week No	Theory contents/ General Objectives	Resources Needed	Practical contents/ General Objectives	Resources needed
1	<ol> <li>Understand the Concept of soldering and Color Code.</li> <li>S.O. (1.1 – 1.7)</li> <li>Understand the Concept of Semiconductor.</li> <li>S.O. (2.1 -2.8)</li> </ol>	WHITE BOARD & MARKER	Show skill in identifying the electronic components.	Job Sheet,
2	3. Understand the Concept of P-N Junction Diode. S.O. (3.1 - 3.9)	WHITE BOARD & MARKER * Class Test-1	Show skill in electrical measurement.	Job Sheet,
3	4. Understand the DC power supplies. S.O. (4.1 - 4.8)	WHITE BOARD& MARKER	Show skill for determining the values of different resistors and capacitors with the help of color code.	Job Sheet,
4	5. Understand the Concepts of Special Diode.	WHITE BOARD & MARKER	Show skill in performing soldering.	Job Sheet,

Week No	Theory contents/ General Objectives	Resources Needed	Practical contents/ General Objectives	Resources needed
	S.O. (5.1 - 5.6)	*Quiz Test-1		
5	6. Understand the construction and operation of Bipolar Junction Transistor (BJT)  S.O. (6.1 - 6.9)	WHITE BOARD & MARKER	Show skill in soldering & disordering of electronic components and wires to the other components and circuit boards.	Job Sheet,
6	7. Understand the concept of BJT Amplifier S.O. (7.1 - 7.6)	WHITE BOARD & MARKER	Show skill in checking the semi-conductor diode.	Job Sheet,
7	8. Understand the main feature of digital electronics S.O. (8.1 - 8.5)	WHITE BOARD & MARKER	Show skill in sketching forward and reverse characteristics curves of a semiconductor diode.	Job Sheet,
8	9. Understand the Electronic measuring and testing equipment  S.O. (9.1 - 9.5)	WHITE BOARD & MARKER *Quiz Test-2	Show skill in sketching waves of half wave rectifier circuit.	Job Sheet,
9	Review	WHITE BOARD& MARKER	Show skill in sketching waves of full wave center tapped rectifier circuit.	
10	Review	WHITE BOARD & MARKER	Show skill in constructing full wave bridge rectifier.	Job Sheet,
11	Review	WHITE BOARD & MARKER	Show skill in identifying the	

Week No	Theory contents/ General Objectives	Resources Needed	Practical contents/ General Objectives bipolar junction transistor.	Resources needed
12	Review	WHITE BOARD & MARKER	Show skill in determining input and output characteristics of a transistor in common emitter connection.  Verify the truth tables of different types of logic gates.	