

Bangladesh Polytechnic Institute
Technology- **Electronic-6th**

Sub. Name: Electronic Measurement & Measuring Instrument -2 (6861)
Teacher Name: MD. Asaduzzaman

T P C: 3 3 4
Mob-01761 75 12 75

Class No.	Chapter	Remarks
Class-1	<ul style="list-style-type: none"> ❖ Understand extension of instrument range. <ul style="list-style-type: none"> ➤ List different types of instrument for which extension is required. ➤ Explain the necessity for extension of instrument range. ➤ Describe the principles of extension of instrument range. 	
Class-2	<ul style="list-style-type: none"> ❖ Understand the concept of ammeter shunt. <ul style="list-style-type: none"> ➤ Describe the ammeter shunt for DC circuit. ➤ Express the deduction of the relation: $R_s = \frac{R_m}{N-1}$ 	
Class-3	 Feed Back	
Class-4	<ul style="list-style-type: none"> ❖ Understand the concept of ammeter shunt. <ul style="list-style-type: none"> ➤ Explain ammeter shunt for AC circuit. ➤ Solve problems relating to ammeter shunt 	
Class-5	<ul style="list-style-type: none"> ❖ Understand the concept of voltmeter multiplier. <ul style="list-style-type: none"> ➤ Describe voltmeter multiplier. ➤ Describe the swamping resistance 	
Class-6	 Feedback	
Class-7	<ul style="list-style-type: none"> ❖ Understand the concept of voltmeter multiplier. <ul style="list-style-type: none"> ➤ Explain voltmeter multiplier for AC instrument. ➤ Solve problems relating to voltmeter multipliers 	
Class-8	<ul style="list-style-type: none"> ❖ Understand the measurement of resistance. <ul style="list-style-type: none"> ➤ Classify resistance. ➤ Explain low, medium and high range of resistance. 	
Class-9	 Class Test	
Class-10	<ul style="list-style-type: none"> ❖ Understand the principle of measurement of low resistance. <ul style="list-style-type: none"> ➤ List the methods of measurement of low resistance. ➤ Describe the ammeter – voltmeter method. 	
Class-11	<ul style="list-style-type: none"> ❖ Understand the principle of measurement of low resistance <ul style="list-style-type: none"> ➤ Describe Kelvin's double bridge method. ➤ Solve problems on Kelvin's double bridge method. 	
Class-12	 . Class Test	
Class-13	<ul style="list-style-type: none"> ❖ Understand the measurement of medium resistance. <ul style="list-style-type: none"> ➤ List the method of measurement of medium resistance. ➤ Describe Wheatstone bridge method of measurement of medium resistance. ➤ Mention the advantages of Wheatstone bridge method. ➤ Discuss the precaution in measuring medium resistance by Wheatstone bridge method. ➤ Solve problems related to Wheatstone bridge method. 	
Class-14	 Feedback+ Class Test	
Class-15	<ul style="list-style-type: none"> ❖ Understand the features of Impedance Bridge. <ul style="list-style-type: none"> ➤ Describe the method of measurement of inductance by Maxwell's bridge. 	
Class-16	<ul style="list-style-type: none"> ❖ Understand the features of Impedance Bridge. <ul style="list-style-type: none"> ➤ Explain the principle of Wein's bridge. 	
Class-17	 Feedback+ Class Test	
Class-18	<ul style="list-style-type: none"> ❖ Understand the features of Impedance Bridge. <ul style="list-style-type: none"> ➤ Describe the Murray and Varley loop test methods for 	

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	localization of cable faults.	
Class-19	<p>❖ Understand the features of Impedance Bridge.</p> <ul style="list-style-type: none"> ➤ Describe the methods of testing for the localization of ground fault. ➤ Solve Problem on R, L & C measurement using ac bridge. 	
Class-20	 Feedback+ Class Test	
Class-21	<p>Understand the features of special measuring instruments</p> <ul style="list-style-type: none"> ➤ Describe the operation of audio power meter. ➤ Explain the basic principle of distortion factor meter. 	
Class-22	<p>Understand the features of special measuring instruments</p> <ul style="list-style-type: none"> ➤ Describe the operation of Q meter. ➤ Describe the operation of RX meter. 	
Class-23	 Class Test	
Class-24	<p>❖ Understand the principle of measurement of frequency.</p> <ul style="list-style-type: none"> ➤ Name the methods of measuring frequency. <p style="text-align: center;"><i>Explain the principle of mechanical resonance</i></p>	
Class-25	<p>❖ Understand the operation of digital frequency meter.</p> <ul style="list-style-type: none"> ➤ Describe the principle of operation of digital frequency meter. <p style="text-align: center;">Sketch the block diagram of a digital frequency meter</p>	
Class-26	<ul style="list-style-type: none"> ➤ Describe each block of a digital frequency meter. <p style="text-align: center;">Describe the function of time base selector in digital frequency meter</p>	
Class-27	<ul style="list-style-type: none"> ➤ Draw the logic diagram of a digital frequency meter. ➤ Explain the operation of logic diagram of the digital frequency meter. 	
Class-28	Feedback	
Class-29	<ul style="list-style-type: none"> ➤ List different types of power factor meter. ➤ Describe the principle of operation of digital power factor meter. ➤ Draw the block diagram of a power factor meter. ➤ Describe each block of a digital power factor meter. 	
Class-30	Class Test	