	DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE		
	Winter Examination – 2022		
	Course: B. Tech **Branch : Electrical Engineering** **Semester : III**		
	Subject Code & Name: **BTEEC303 Electrical & Electronics Measurement**		
	Max Marks: 60 **Date:** **Duration: 3 Hr.**		

Instructions to the Students:
1. *All the questions are compulsory.*
2. *The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.*
3. *Use of non-programmable scientific calculators is allowed.*
4. *Assume suitable data wherever necessary and mention it clearly.*

		(Level/CO)	Marks
Q. 1	**Solve Any Two of the following.**		**12**
A)	**State and explain the types of errors**	**L-2/CO 1**	**6**
B)	**Discuss importance of Calibration in Measurement.**	**L-2/CO 1**	**6**
C)	**Describe the following terms. (i) Precision (ii) Drift (iii) Resolution**	**L-2/CO 1**	**6**
Q.2	**Solve Any Two of the following.**		**12**
A)	**Describe the working principle of single phase induction type energy meter.**	**L-2/CO 2**	**6**
B)	**What is difference between PMMC & MI Instruments?**	**L-2/CO 2**	**6**
C)	**Write short note on CT and PT**	**L-2/CO 2**	**6**
Q. 3	**Solve Any Two of the following.**		**12**
A)	**With neat sketch explain the construction and working of megger**	**L-2/CO 2**	**6**
B)	**Explain the method of measuring medium resistance with neat diagram and equation of Wheatstone bridge at balance.**	**L-2/CO 2**	**6**
C)	**Explain the method of measuring low resistance with neat diagram and equation of Kelvin's Double bridge at balance.**	**L-2/CO 2**	**6**
Q.4	**Solve Any Two of the following.**		**12**
A)	**Draw a block diagram of CRO and Explain the function of each block.**	**L-2/CO 2**	**6**
B)	**What is difference between Digital & Analog Instruments ?**	**L-2/CO 2**	**6**
C)	**Draw a block diagram of DVM and Explain the function of each block.**	**L-2/CO 2**	**6**
Q. 5	**Solve Any Two of the following.**		**12**
A)	**Explain the selection criteria for the transducers**	**L-2/CO 3**	**6**
B)	**Write short note on LVDT.**	**L-2/CO 3**	**6**
C)	**Explain working of Strip Chart Recorder.**	**L-2/CO 3**	**6**

	*** End ***	

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