



School: School of Engineering and Technology
Program/s: BTECH EEE
Year: 2nd **Semester:** 6th
Examination: EndSEM Examination
Examination year: May 2023

Course Code: EE 433	Analog Circuit and Sensors	Total Marks: 40
Date: 17/05/2023		Total Pages: 2
Time: 2:00 pm to 4:00 pm		

Instructions:

- Write each answer on a new page.
- Use of a calculator is permitted/not permitted.
- * COs=Course Outcome mapping. # BTL=Bloom's Taxonomy Level mapping

Q. No.	Details	Marks	COs*	BTL#
Q.1	Find the output voltage for given 3 bit R 2R ladder DAC for input 001	8		
			C04	BT1, BT2
Q.2	Draw the complete block diagram of a CRO and explain its various sections as follows: 4) Horizontal Section 5) Vertical Section 6) Time base generator	8	C02, C03	BT1, BT3, BT6
Q.3	What are the 3) Basic Requirements of a Transducer 4) Selection Criterion of a Transducer	8	C04	BT3, BT4
Q.4	Give the similarities and differences between the OP 741 and the 555 Timer IC and also explain one application of each with suitable diagram.	8	C02, C03	BT1, BT3, BT6

Q.5 Write short note on:

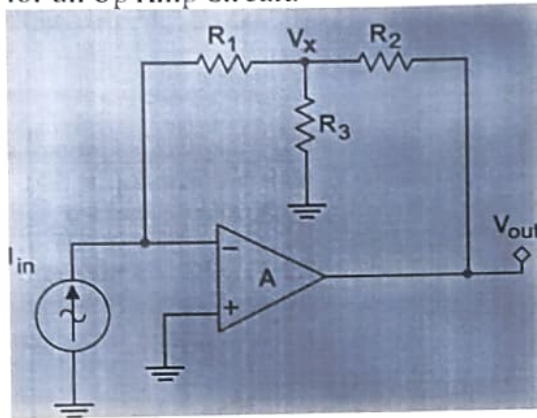
- 3) Imbalance voltage and current for an OP Amp
- 4) Digital Cathode Ray Oscilloscope

8

C01, BT1,
C03 BT3,
BT6

Q.6 For the following circuit identify the type of compensation for the parameter of OP Amp and give the explanation for the compensation and effect of it for an Op Amp Circuit.

8



C02, BT1,
BT3,
BT6

*****End of Question Paper*****