

GUJARAT TECHNOLOGICAL UNIVERSITY

B.VOC- SEMESTER-I EXAMINATION – WINTER 2024

Subject Code:1110702

Date:23-12-2024

Subject Name: Fundamental of Analog Electronics

Time:10:30 AM TO 12:30 PM

Total Marks:50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		Marks
Q.1	(a) Explain conductor, insulator and semiconductor.	05
	(b) Explain P-type semiconductor.	05
Q.2	(a) Explain LDR.	05
	(b) Explain Half Wave rectifier.	05
	OR	
	(b) Explain Full Wave rectifier.	05
Q.3	(a) Explain Common Emitter configuration.	05
	(b) Find relationship between α & β .	05
	OR	
Q.3	(a) Explain Working of NPN transistor.	05
	(b) Explain need of biasing for transistor.	05
Q.4	(a) Compare CB, CE & CC configuration of transistor.	05
	(b) Compare BJT & FET.	05
	OR	
Q.4	(a) Explain transistor as a switch.	05
	(b) Explain N -Channel MOSFET with circuit diagram.	05
Q.5	(a) Explain N-Channel JFET with circuit diagram.	05
	(b) Explain SMPS.	05
	OR	
Q.5	(a) Explain P-Channel MOSFET with circuit diagram.	05
	(b) Explain Working of Voltage regulator IC-7905.	05
