

QP Code: D 112908		Total Pages: 2	Name:
			Register No.
FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2024			
(CUFYUGP)			
ELE1MN101 Electronic Fundamentals			
2024 Admission onwards			
Maximum Time :2 Hours			Maximum Marks :70
Section A			
All Question can be answered. Each Question carries 3 marks			
1	Define a current source. Give the differences between current source and voltage source.		Ceiling : 24 Marks
2	Find the effective inductance when 25H and 10H are connected in (i) series (ii) parallel.		
3	Define an intrinsic semiconductor. Suggest the method to convert it to extrinsic semiconductor.		
4	Give the applications of zener diode.		
5	Define (i) PIV (ii) knee voltage		
6	Draw the structure of PNP transistor.		
7	Write a note on current gain of transistor in CE configuration.		
8	List the different types of FET. Draw the symbols also.		
9	Define rectification efficiency. Compare the efficiency of half wave and full wave rectifiers.		
10	Draw the circuit of the bridge rectifier. Draw the input output waveforms also.		
Section B			
All Question can be answered. Each Question carries 6 marks			
11	Explain the different passive components.		Ceiling : 36 Marks
12	State and explain Kirchhoff's Laws.		
13	Discuss about the classification of solids.		
14	Explain the basic principle of operation of a PN-junction diode.		
15	Explain the CE transistor input and output characteristics.		
16	Explain the structure of a transistor in detail.		

17	Explain the working of a half wave rectifier with necessary circuit diagram and waveforms.	
18	Explain the working of a DC power supply with the help of a block diagram.	
Section C		
Answer any ONE .Each Question carries 10 marks		
19	Explain the different modes of a biased transistor with necessary figures.	1x10=10 Marks
20	Explain the working of CE transistor amplifier with a neat circuit diagram.	