SHRI RAMSWAROOP MEMORIAL UNIVERSITY

End Semester Examination (2021-22)-Odd Semester

Diploma (CE/EE) – I Year (I Sem)	
Course Name: Fundamental of Electrical and Electronics Engineering	**Code: DEE1001**
Time: 02 Hours	**Max Marks: 60**

University Roll No.															
(To be filled by the Student)															

Note: Please read instructions carefully:

a) *The question paper has 03 sections and it is compulsory to attempt all sections.*

b) *All questions of Section A are compulsory; questions in Section B and C contain choice.*

Section A: Very Short Answer type Questions **Attempt all the questions.**		**BL**	**CLO**	**Marks (10)**
1.	Define electric potential and potential difference.	BL1	CLO1	02
2.	What is resistivity of a material?	BL1	CLO2	02
3.	What are the indications of fully charged battery?	BL1	CLO2	02
4.	Write the difference between AC and DC.	BL1	CLO3	02
5.	Compare intrinsic and extrinsic semiconductors.	BL2	CLO4	02
Section B: Short Answer Type Questions **Attempt any 03 out of 06 questions.**		**BL**	**CLO**	**Marks (30)**
1.	Explain the series and parallel connection of capacitors.	BL2	CLO1	10
2.	What is magnetic Hysteresis? Explain magnetic hysteresis curve with neat diagram.	BL2	CLO1	10
3.	Illustrate the Ohm's law. Discuss the limitations of Ohm's law.	BL2	CLO2	10
4.	What is ripple factor? What is its value for a half wave and full wave rectifier?	BL1	CLO4	10
5.	Compare the form factor and peak factor of a sinusoidal wave.	BL2	CLO3	10
6.	Explain the construction, working and application of LED.	BL2	CLO4	10
Section C: Long Answer Type Questions **Attempt any 01 out of 04 questions.**		**BL**	**CLO**	**Marks (20)**
1.	Illustrate the kirchhoff's voltage and current law applied on an electric circuit.	BL3	CLO2	20
2.	Distinguish between primary and secondary batteries. Illustrate each in brief.	BL4	CLO2	20
3.	Develop the expression for average and RMS values of a sinusoidal varying current.	BL3	CLO3	20
4.	What is a PN Junction? Explain the formation of depletion region in	BL2	CLO4	20

	a PN Junction. Illustrate the forward and reverse biasing.			
