PG/IIS/ELC/295/23(Pr.)

M.Sc. 2nd Semester Examination, 2023

ELECTRONICS

(*Digital Electronics Lab*)

[Practical]

PAPER – ELC-295

Full Marks : 50

Time : 3 hours

Candidates are required to give their answers in their own words as far as practicable

Answer any **one** question selecting it by a **Lucky draw**

1. Design and implement a full adder circuit using NAND gates only.

2. Design and implement a full substractor circuit using NAND gates only.

3. Design and implement a full adder circuit using 4 : 1 Mux.

4. Design and implement a full substractor circuit using 4 : 1 Mux.

5. Design and implement a binary to Gray code converter circuit.

6. Design and implement a J-K and M-S flip flops.

7. Design and implement a MOD-8 counter.

8. Design and implement a MOD-10 counter.

9. Design and implement a BCD adder.

Marks Distribution

Circuit design		: 15 Marks
Implementation		: 10 Marks
Results & Discussion		: 10 Marks
Viva-voce		: 10 Marks
LNB		: 05 Marks
	Total	: 50 Marks