EL-1005 Digital Logic Design- SPRING 2024

Mini Projects   **Date: 04th March 2024**

Important Note:

- Besides the below mentioned projects the students' <u>**self-proposed ideas would be equally appreciated**</u>, provided they are in accordance with the course content.

- The group should consist of 2 to 4 members depending on the scope of the project.

- The proposal should be submitted on Google Classroom. It should be submitted in the template discussed below.

- No hand-written and emailed proposal will be accepted, submit them only on GCR.

- The students are advised to start working on the project soon after the proposal is approved.

- The project assignment will be on **a first come first serve** basis.
- Failing to submit your project proposal within the given deadline will result in **-2 weightage** from Project. No excuses will be entertained.

- Date for viva and submission of project along with **report** will be announced later.

Deadline for Proposal Submission is Monday 18th March 2024

Proposal Pattern:

The proposal should be written in the following format.

1- *Group member's names & Roll numbers*

2- *Project's objective (Two- line)*

3- *Components used (list of important components and ICs used in the Project)*

4- *Circuit Diagram (Required in project report but also preferred in proposal)*

5- *Abstract, including brief description of your project along with the areas/topics/concepts the project is going to cover. (At least two to three lines and at most one paragraph.*

Some Project Ideas:

Any new ideas will be highly appreciated.

S. No.	Project Title	Maximum Number of Group Members
1	Buzzer Game	3-4
2	4-way Traffic Control Signal	2-3
3	8-way Traffic Control Signal	3-4
4	Electronic Combination Lock	depends on the design
5	Digital Clock	3
6	Digital Clock with Alarm	4
7	Stopwatch	3
8	Temperature Sensor	3
9	Water Level Detector	depends on the design
10	Frequency Counter	4
12	TIC TAC TOE Game	4
13	Electronic Score Board	3-4
14	ASCII Character Display	4
16	Remote Application Controller	depends on the design
17	Arithmetic & Logic Unit	4
18	Error Detection & Correction System	depends on the design
19	Code Converter	depends on the design
21	Billing System	4
22	Color Organ	3-4
23	Programmable Logic Array	depends on the design
24	Automatic Taller Counter	4
25	Elevator Control System	4
26	PC Based Home Automation System	4
27	IC Tester	4
28	16-bit RAM	4

Note: The number of members for any proposed new idea will be determined after seeing the project proposal/circuit diagram.