

# Microprocessors & Interfacing

## EEE/CS/INSTR F241

# Design Assignment Report

*Submitted By –*

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# Problem Statement

## IC TESTER

Design a Microprocessor based Tester to test the logical functioning of the following chips:

1. 7400
2. 7408
3. 7432
4. 7486
5. 747266

The IC to be tested will be inserted in a 14-pin ZIF socket. The IC number is to be entered via a keyboard. The keyboard has keys 0-9, backspace, enter and test. The user places the IC in the ZIF socket closes it – then enters the IC No, followed by enter key. The IC No. is displayed on the 7-segment display. The testing will start once the user presses test key.

After Test, the result PASS/FAIL must be displayed on the 7-segment display.

## Assumptions

- The user connects the IC before flipping the switch.
- IC will be one of the ICs listed in the question.
- User enters the number, then presses enter to validate IC number, then test to test connected IC.

## List of ICs used

IC No.	Count	Purpose
8086	1	CPU
74LS373	3	Address bus
74LS245	2	Data bus
2732	2	ROM
6116	2	RAM
8255A	3	I/O Interfacing