FINAL YEAR PROJECT REPORT

DIPLOMA IN ELECTRICAL (INSTRUMENTATION) ENGINEERING

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SHAH ALAM, SELANGOR

FLOW CONTROL BY USING AN IBM/PC

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INTRODUCTION

This project is suggested by our project supervisor En. Mohd. Nadzri. The title is Flow Control By Using An IBM PC. It consists of three parts, which is :

1) Computer Hardware

   IBM Personnel Computer is used to output the appropriate control instruction.

2) Software

   The control program was written in BASIC language.

3) Process Hardware

   This part consists of tanks, relays, heaters and solenoid valves.

This project is an example of a simple discrete computer control without feedback. The appropriate valves and haeters are turned on and off according to the programmed instruction.

The 8255 Chip (Programmable Input/Output Function) is used to interface the computer and the process and we use delay to set the time for the valves to open or close. There are six output signal from port A and they are used to control the six variables in the process.

1. THE PROBLEM

1.1 DIAGRAM OF PROCESS

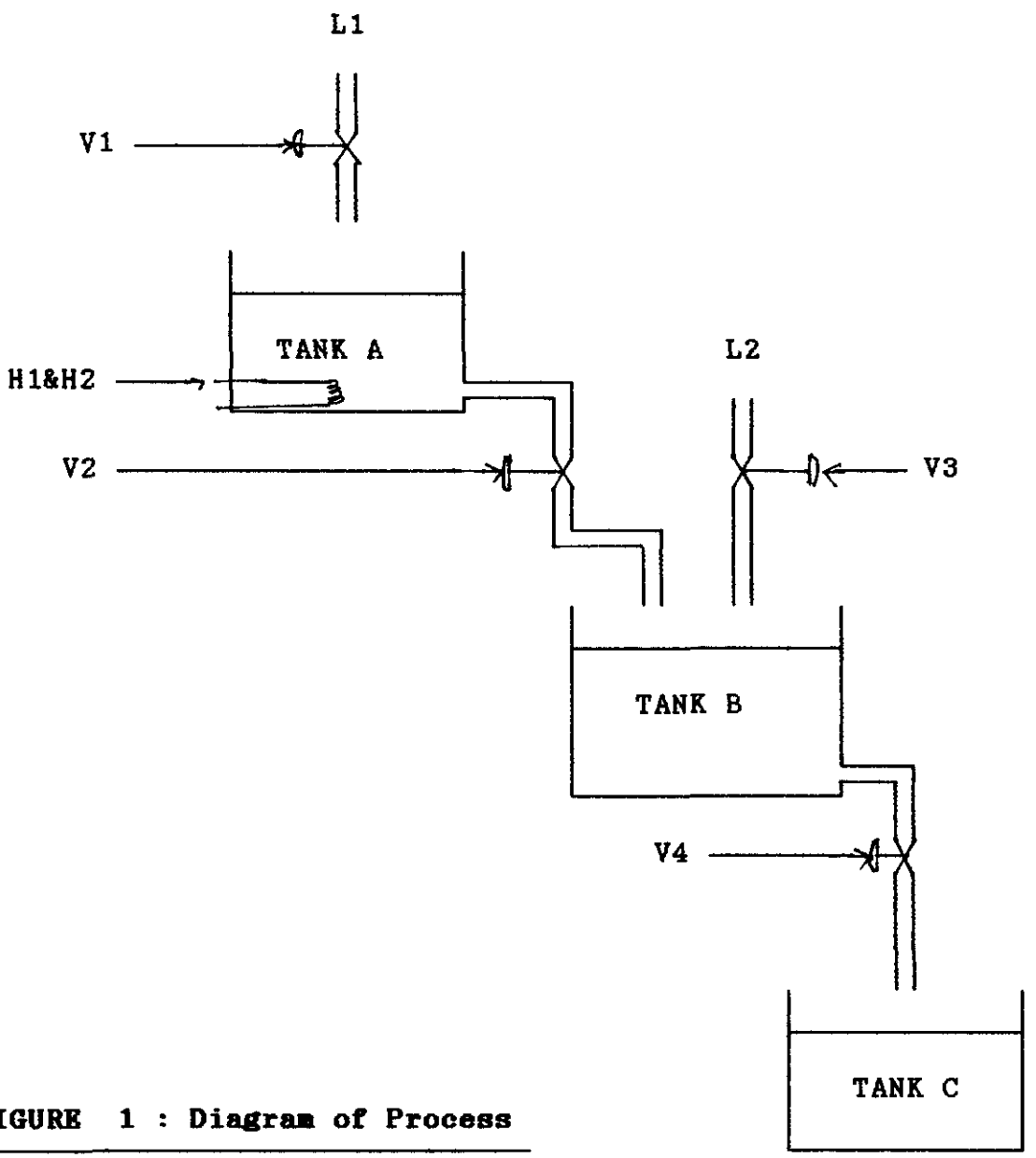

FIGURE 1 : Diagram of Process