

**AN IMPLEMENTATION  
OF  
AUTOMATIC INCUBATOR**

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requirement of Advanced Diploma in Electrical  
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## *SUMMARY*

This report is about designing a prototype automatic egg incubation system. It is a continuation from 'Automatic Incubator' by Nooraini and Sharifah Salwah, Nov. 1993.

The foundation of the system was started and completed by Nooraini and Sharifah Salwah in 1993. The system to be designed was stated as an egg incubation system which automatically controls the parameters of egg incubation such that at least 80% hatchability is obtained. The system must also economically beneficial for small poultry farmer and breeder.

The requirements made the system design very complex. This reports will describe the authors attempt to fulfill the design requirements for controlling the important parameters of the incubation, such that a complete prototype system is realised.

The design concept used throughout the system design is off-the-self design. Circuits were obtained from magazine, journals, source-book; tested and modified to suit the

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## 1.0 INTRODUCTION

Nooraini and Sharifah Salwah had designed and built the cabinet and trays. They also completed the timing and heating control circuits. However, on testing of the design, few problems were encountered. Thus, apart from redesigning the circuits, the authors had to design other required controller circuits.

Thus the authors task in this project are :

- i. To test and improve the accuracy and realibility to the completed circuits.
- ii. To redesign the cabinet and rack for the eggs.
- iii. To design the humidity control system, the turning control system, the alarm system and display panels.

Each circuit is to be built in a module form and then combined on a main board to form the required integrated system.

In designing the circuits, cost of components is the most important factor to be considered. This is to achieve an