**TABLE OF CONTENTS**

**Page**

|  |  |  |
| --- | --- | --- |
| **ABSTRACT** |  |  |
| **TABLE OF CONTENTS** |  | **i-iv** |
| **ACKNOWLEDGEMENT** |  | **v** |
| **CHAPTER ONE** |  |  |
|  | **INTRODUCTION** | **1** |
| **CHAPTER TWO** |  |  |
|  | **REVIEW OF LITERATURE** | **4-11** |
|  | 2.1 Bio-security

|  |
| --- |
| 2.1.1 Farm location and construction |
| 2.1.2 Preventing disease transmitted by humans |
| 2.1.3 Preventing disease transmitted by animals |

 | 4567 |
|  | 2.2 Vaccination | 7 |
|  | 2.3 Housing management

|  |
| --- |
| 2.3.1 Before arrival of chicks |
| 2.3.2 On arrival of chicks |

 | 666 |
|  | 2.4 Water Management

|  |
| --- |
| 2.4.1 Water Quality |

 | 77 |
|  | 2.5 Litter Management | 8 |
|  | 2.6 Brooder Management | 8 |
|  | 2.7 Beak trimming | 9 |
|  | 2.8 Feeding Management | 9 |
|  | 2.9 Management during production

|  |
| --- |
| 2.9.1 Weighing birds |
| 2.9.2 Feeding  |
| 2.9.3 Managing a very high producing flock  |
| 2.9.4 Feeding the male breeder |

 | 1010101010 |
|  | 2.10 Molting | 11 |
|  | 2.11 Record keeping | 11 |
| **CHAPTER THREE** |  |  |
|  | **MATERIALS AND METHODS** | **12-25** |
|  | 3.1 The study area | 12 |
|  | 3.2 Study Period | 12 |
|  | 3.3 Study Population | 12 |
|  | 3.4 Data collection | 12 |
|  | 3.5 Parameters | 12 |
|  | 3.6 Housing System

|  |
| --- |
| 3.6.1 House establishment |
| 3.6.2 House equipments |

 | 12**Page**1515 |
|  | 3.7 Ventilation system | 15 |
|  | 3.8 Temperature maintaining system | 17 |
|  | 3.9 Cooling pad maintaining system | 17 |
|  | 3.10 Vaccination system | 18 |
|  | 3.11 Bio-security | 18 |
|  | 3.12 Dipping | 18 |
|  | 3.13 Fumigation | 19 |
|  | 3.14 Brooding temperature management | 19 |
|  | 3.15 Body weight gain & uniformity monitoring | 20 |
|  | 3.16 Lighting management | 20 |
|  | 3.17 Litter management | 21 |
|  | 3.18 Feeding | 22 |
| **CHAPTER FOUR** |  |  |
|  | **RESULTS AND DISCUSSION** | **26-31** |
| **CONCLUSION** |  | **32** |
| **REFERENCES** |  | **33-35** |

**LIST OF TABLES**

 **Page**

|  |  |  |
| --- | --- | --- |
| Table1.1 | Poultry Population in Bangladesh (In millions) | 2 |
| Table1.2 | Broiler parent stock population and day old chick’s production in our country | 2 |
| Table2.4.1 | Drinking water supplying standard for Broiler parent stock | 7 |
| Table2.6.1 | Requirement of area per bird during brooding period | 8 |
| Table2.8.1 | Standard feeding process of broiler parent stock | 10 |
| Table3.7.1 | Automatic air circulation maintaining system through TC5 machine | 16 |
| Table3.8.1 | Temperature maintaining system | 17 |
| Table3.10.1 | Vaccination system in CP | 18 |
| Table3.12.1 | Dipping system in CP for egg box and trays | 19 |
| Table3.13.1 | Fumigation system used in CP | 19 |
| Table3.14.1 | Temperature maintaining system in CP during brooding period | 19 |
| Table3.16.1 | Lighting management system in CP | 20 |
| Table3.18.1 | Feeding system of birds from 1 week to 24 week in compare to standard | 22 |
| Table3.18.2 | Feeding system of birds from 24-57 weeks | 23 |
| Table3.18.3 | Actual body weight gained by both male and female from 25-58 weeks of age comparing with standard. | 24 |
| Table4.1 | Comparative study of recommended and achieved weekly egg production percentage (%). | 26 |
| Table4.2 | Comparative study of recommended and achieved weekly Hatching egg production percentage (%) | 28 |
| Table4.3 | Comparative study of Standard and achieved weekly Mortality percent (%). | 29 |

**LIST OF FIGURES**

**Figure**

 **Page**

|  |  |  |
| --- | --- | --- |
|  Figure 2.6.1 | Schematic diagram of brooding | 9 |
| Figure 3.6.1 | Outside view of farm | 13 |
| Figure 3.6.2 | Shed is covered by polythene | 13 |
| Figure 3.6.3 | Distance between two portion of each tower. | 13 |
| Figure 3.6.4 | Shed with cooling pad | 13 |
| Figure 3.6.5 | Exhaust fans of shed | 14 |
| Figure 3.6.6 | Feeder used in shed | 14 |
| Figure 3.6.7 | Water Supply system | 14 |
| Figure 3.6.8 | Auto nest for hen | 14 |

**ACKNOWLEDGEMENT**

All praises are due to Almighty “Allah” who has created everything of the nature and who enable me to complete this study. I feel great pleasure to express my deepest sense of gratitude and indebtedness to my supervisor **Dr. Tahmina Bilkis, Lecturer, Department of Genetics and Animal Breeding,** Chittagong Veterinary and Animal Sciences University for her scholastic guidance , valuable suggestions , constant inspiration and encouragement throughout the entire period of my study. Special thanks to **Dr. Bibek Chandra Sutradhar,** Associate Professor & Director (External affairs), Department of Medicine and Surgery, for his valuable advice and co-operation. I would like to express my deep sense of gratitude and thanks to **Vice Chancellor, Professor. Dr. A.** **S. Mahfuzul Bari** and **Professor. Dr. Md. Kabirul Islam Khan**, Dean, Faculty of Veterinary Medicine, Chittagong Veterinary and Animal Sciences University.

 I would like to express my special gratitude to the authority of CP Bangladesh, Rangpur-2 specially **Mr. Akram Hossain,** Manager**, Mr. Imran Sheikh, Raju Ahmed and Shafiqul Islam**, Supervisors of the farm for their heartiest appreciation .

Finally the author would like to give heartiest gratitude to his father **Eng. Md. Amirul Islam** and his mother **Merina Islam** and all other relatives for their great sacrifices, infinite patience, spontaneous blessings, continuous encouragement and dedicated effort for a period of study.

**The Author**