CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

The main purpose of the study was to find out the effects of different strength training on selected body composition, motor ability components, physiological and hematological variables of male athletes.

To accomplish the objective, for training programme were formulated in the study. Seventy five men athletes were selected random divided into five groups (A) plyometric training (B) barbell training (C) uphill training (D) circuit training and (E) control group. The four experimental group and one control group were progressively introduced in eleven dependent variables were compiled before the commencement of the twelve weeks experimental study and final test was taken after twelve weeks of respective training. The study was conducted at to the sports training of sports authority of India, eastern centre, Kolkatta India. Seventy five men athletes were chosen as subjects who represented the 200 strong athletes population in the study. The experimental design used in the study was a completely randomized measures design.

The subjects selective and assignment were at random. The subjects were not equated in relation to the factors in which they were examined. Hence the differences among the means of pre-test scores were taken into account during the analysis of post-test differences among the means. This was achieved by analysis
of co variation, where as final means were adjusted for the differences in the initial means and the adjusted means were tested for significance where ever significant Scheffe’s post-hoc test was applied to determine the significance of paired means differences, the level of significance being fixed at 0.05 level.

5.2 FINDINGS

The following results were observed after the statistical analysis of covariance significant response to four types of strength training of twelve weeks, were observed in the all eleven parameters of the study namely percentage of body fat, mean body mass, body mass index, speed, speed endurance, explosive power, resting pulse rate, VO₂ max, anaerobic power, hemoglobin content, and red blood corpuscle. The training programmes assembled in the study on the whole brought about significantly positive responses from the respective experimental group subjects.

5.3 CONCLUSION

In the light of the study undertaken certain limitations imposed by the experimental conditions, the following conclusions were arrived.

1. Percentage of body fat, mean body mass, body mass index, speed, speed endurance, explosive power, resting pulse rate, VO₂ max, anaerobic power, hemoglobin content, and red blood corpuscle were significantly improved due to the influence of plyometric training, barbell training, uphill training, and circuit training among the men athletes.
2. The plyometric training improved body mass index, lean body mass, speed, speed endurance, explosive power and resting pulse rate greater than that of barbell training, uphill training, and circuit training among men athletes.

3. The barbell training improved percentage of body fat, lean body mass, speed, speed endurance, explosive power and resting pulse rate greater than that of uphill training and circuit training among men athletes.

4. The percentage of body fat, and anaerobic power were improved greater by uphill training than that of circuit training among men athletes.

5. VO_{2} max, hemoglobin content and red blood corpuscle greater by circuit training than that of plyometric training, barbell training and uphill training among men athletes.

6. Percentage of body fat, mean body mass, body mass index, speed, speed endurance, explosive power, resting pulse rate, VO_{2} max, anaerobic power, hemoglobin content, and red blood corpuscle were improved greater by circuit training than that of control group.

5.4 SUGGESTION FOR FURTHER RESEARCH

- The similar study can be conducted on different games.
- The similar study can be conduct on the changes of bio-chemical parameters.
- The similar study can also be conducted for women athlete.