

## ACKNOWLEDGEMENT

Firstly, the author thanks the God for the accomplishment this work.

The author wishes to express her deepest gratitude to **Prof.Dr. Yehya Mahfouz Azouz**, Professor of Comparative Physiology, Zoology Department, Faculty of Science, Cairo University, for his valuable supervision, which enabled this work to come to light in a suitable time.

Acknowledgements are gratefully made to **Prof.Dr. Nabil Mohamed El-Nagar**, Head of Physics Department, Faculty of Science, Benha University, as regards his concern and encouragement.

Profound thanks and appreciation are due to **Dr. Mohamed Marzouk**, Professor assistant, Zoology Department, Faculty of Science, Cairo University, for his illuminative guidance and supervision.

To **Dr. Maher Khalifa**, Professor assistant, Zoology Department, Faculty of Science, Cairo University, is given sincere gratitude, for his valuable suggestions and facilities.

The author wishes to express also her thanks to **Dr. Sabry El Sayrafy**, Lecturer of Zoology, Faculty of Science, Benha University, for his concern and the facilities offered by him.

Special thanks, are due to **Dr. Afaf Al-Saify**, Lecturer of Zoology, for her cooperation and valuable encouragement.

Lastly, but not the last, I feel deeply thankful to my family specially my mother which helped me during the preparation of this work.

	Page
Lipid content of tissues of the chicken "Arbor Acre" and the kestrel " <u>Falco tinnunculus</u> " ... ..	35
<b>Chapter III</b>	
Serum and liver constituents of normal adults of chicken and kestrel ... ..	39
<b>Part I.</b> Levels of metabolites in the serum, and liver glycogen, in case of the chicken and kestrel ... ..	39
(1) Serum glucose level ... ..	39
(2) Serum total lipids ... ..	39
(3) Serum total proteins ... ..	41
(4) Liver glycogen concentration ... ..	41
<b>Part II.</b> Enzyme activities in the sera and livers of normal adults of the chicken and kestrel ... ..	42
(1) Glutamic oxaloacetic transaminase activity ... ..	42
(2) Glutamic pyruvic transaminase activity ... ..	42
(3) Alkaline phosphatase activity ... ..	45
(4) Acid phosphatase activity ... ..	45
<b>DISCUSSION</b> ... ..	46
<b>SUMMARY</b> ... ..	68
<b>REFERENCES</b> ... ..	72
ARABIC SUMMARY.	