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**Apoptosis as biomarkers in some anuran
amphibian from Egypt**

A Thesis

Submitted to the Faculty of Science,
Cairo University,
In partial fulfillment of the requirements of the
master degree of Science in Zoology

By

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Approval sheet

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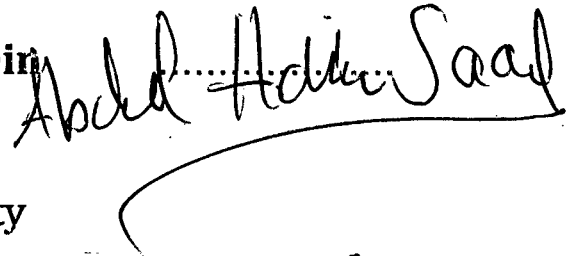
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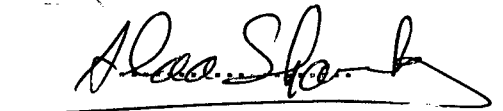
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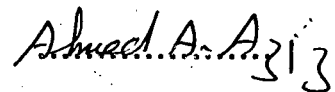
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List of Abbreviations

ANOVA	Analysis of Variance
Ca	Calcium
Cd	Cadmium
DNA	Deoxyribonucleic Acid
EDCS	Endocrine disrupting chemicals
EM	Electron microscope
FCS	Fetal calf serum
Fe	Ferric
G6PDH	Glucose-6-phosphate Dehydrogenase
GSH	Glutathione
K	Potassium
KCS	kupffer cell
Mg	Magnesium
MM	Melanomacrophage
MMCS	Melanomacrophage centres
MT	Metallotnionine complex
Na	Sodium
O ₂	Oxygen
Pb	Lead
PCT	Proximal Convoluted Tubule
RER	Rough Endoplasmic Reticulum
SAS	Statistical Analysis System
SOD	Superoxide Dimutase
UV	Ultraviolet
UV-B	Ultraviolet -B
Zn	Zinc

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