



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

Low Frequency Electromagnetic Field And Its Effect On Spermatogenesis Of Albino Rats

*Thesis Submitted
For The Partial Fulfillment Of The Master Degree
"M.Sc" In Dermatology and Venereology*

B5746

By
Magdy Al Said Abdel Salam Abdel Rahman
M.B.B.Ch.

Under supervision of

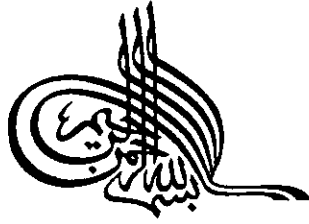
Prof. Dr. Mohamed Hassan El Hefnawy
Professor of Dermatology and Venereology
Faculty of Medicine - Ain Shams University

Prof. Dr. Fadel Mohamed Ali
Professor Of Biophysics
Faculty of Science – Cairo University

Assistant Prof. Dr. Elham Abdel Zaher
Assistant Professor of Dermatology and Venereology
Faculty of Medicine - Ain Shams University

FACULTY OF MEDICINE
AIN SHAMS UNIVERSITY
2000

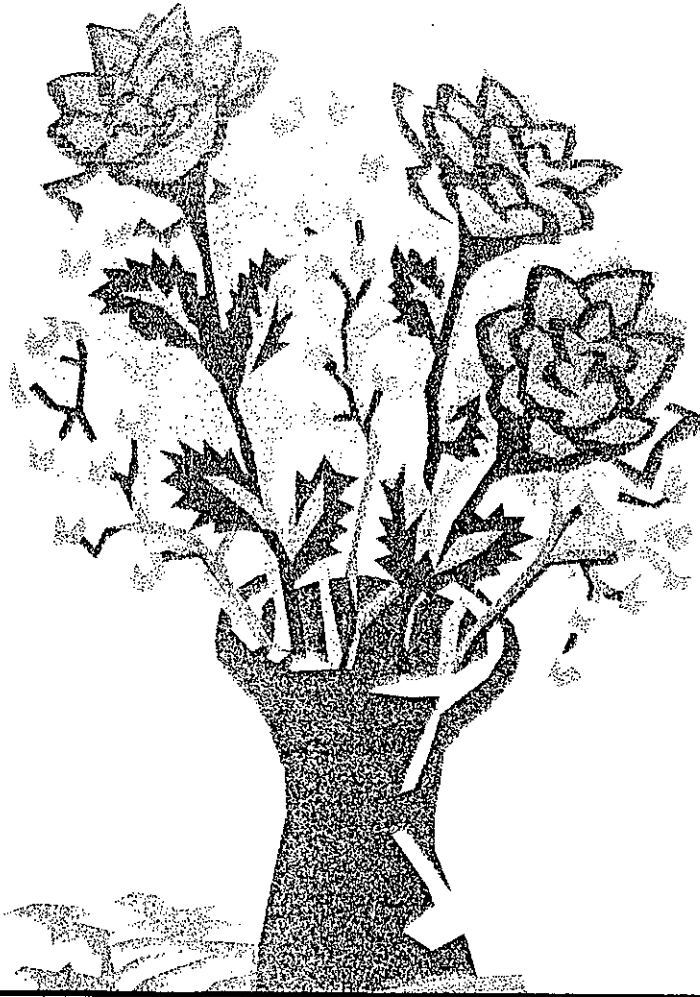




"إِنَّا كُلَّ شَيْءٍ خَلَقْنَاهُ بِقَدَرٍ"

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
الْعَظِيمِ

سورة القمر (آية ٤٩)



Acknowledgment

Acknowledgment

I would like to express my deepest thanks and gratitude to Prof. Dr. Mohamed Hassan El Hefnawy, Professor of Dermatology and Venereology, Faculty of Medicine - Ain Shams University, for his great help, valuable criticism and continuous encouragement through the whole research.

I wish to express my thanks to my highly regarded supervisor Prof. Dr. Fadel Mohamed Ali, Professor Of Biophysics, Faculty of Science – Cairo University, for his support and great help in accomplishing the methodology of this work.

I feel grateful to Assistant Prof. Dr. Elham Abdel Zaher, Assistant Professor of Dermatology and Venereology, Faculty of Medicine - Ain Shams University, for her great care and valuable support.

Ultimately, to all my professors and colleagues in Dermatology and Venereology Department, I offer my thanks and gratitude.

Contents

	<i>Page</i>
✧ <i>List Of Figures and Tables</i>	<i>i- v</i>
✧ <i>Introduction</i>	<i>1</i>
✧ <i>Review of Literature</i>	
• <i>Electromagnetic Field "EMF"</i>	<i>3</i>
• <i>Human Testis</i>	<i>20</i>
• <i>Hormonal Control Of Spermatogenesis</i>	<i>44</i>
• <i>Effects Of EMF On Spermatogenesis</i>	<i>54</i>
✧ <i>Materials and Methods</i>	<i>57</i>
✧ <i>Results</i>	<i>60</i>
✧ <i>Discussion</i>	<i>86</i>
✧ <i>Summary</i>	<i>92</i>
✧ <i>Annex</i>	<i>96</i>
✧ <i>References</i>	<i>102</i>
✧ <i>Arabic Summary</i>	<i>i-ii</i>

