



**Ain Shams University**  
**Women's college**  
**Home Economics Dep.**

***Nano – textile treatment to produce self  
cleaning fabric and its biological impact***

*Thesis submitted for requirement of Ph.D*  
*Home Economics – Textile and clothing*

*By*

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## Approval Sheet

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## *Acknowledgement*

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جامعة عين شمس  
كلية البنات  
قسم الاقتصاد المنزلي

" معالجة بعض الاقمشة كيميائيا بمركبات متناهية في الصغر  
(نانو) للحصول على اقمشة ذاتية التنظيف ودراسة تاثيرها  
البيولوجي "

للحصول على درجة دكتوراه الفلسفة في العلوم  
(اقتصاد منزلي – ملابس ونسيج)

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م / / م / /



## "كلمة تقدير و عرفان لأمي"

في حر الصيف تهبي نسима  
وفي قربك تأت الظلال  
عرفتك أنقى واطهر قلب  
وفيك تلاقى صنوف الجمال  
يفوح فؤادك حنانا وعطفا  
وفيك يا أمي شموخ الجبال  
بلغت أقاصي الكمال حدودا  
ويرخص لك كل نفيس وغال  
أنت العزيزة الطاهرة  
يا نبع الحنان وكل الآمال

أنت يا من ضحيتي لأجلي الكثير اقبل يداك..... اقبل قدماك.....  
لا اعرف كيف أشكرك..... فكل الكلمات.... وكل الأفعال.... لا ترد  
جميلك

فأرجو من الله عز وجل أن يحفظك ويصونك



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