



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





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# شبكة المعلومات الجامعية

## التوثيق الالكتروني والميكرو فيلم

# جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

## قسم

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



## يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of  
15 – 25c and relative humidity 20-40 %



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# بعض الوثائق الأصلية تالفة



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بالرسالة صفحات  
لم ترد بالأصل

**Ain Shams University  
Faculty of Engineering**

**BEHAVIOUR OF PRESTRESSED HOLLOW  
RECTANGULAR CONCRETE BEAMS IN  
BENDING , TORSION AND SHEAR**

**By**

**Mohamed. M. Ahmed Kamal**

**THESIS**

**Submitted In Partial Fulfillment For The Requirements Of The  
Degree Of Master Of Science**

**In**

**STRUCTURAL ENGINEERING**

**Supervised By**

**Prof.Dr. Shaker EL Behairy  
Prof. of R.C. Structure  
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**Prof.Dr. Abdel Wahab Abu El Anin  
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**Prof.Dr. Mohamed M. Attabi  
Prof. of Structural Engineering  
Ain Shams University**

**Cairo - 1998**

B 744

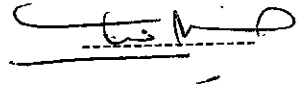


## EXAMINERS COMMITTEE

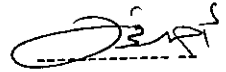
Name, Title and Affiliation

Signature

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On behalf of the supervisors committee

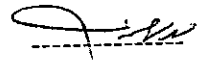
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Date 9/ 12/ 1998





To  
My Father

To  
My Son



## **Information About The Researcher**

**Name** : MOHAMED M. AHMED KAMAL

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**Qualification** : **B.Sc.** degree in civil engineering - structural section.

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## STATEMENT

This dissertation is submitted to Ain Shams University for the degree of **Master of Science** in Civil Engineering - Structural.

The work included in this thesis was carried out by the author in the department of Civil Engineering (Structural Division) . Ain Shams University, from April 1995 to December 1998.

No part of this thesis has been submitted for a degree or a qualification at any other University or Institution.

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