

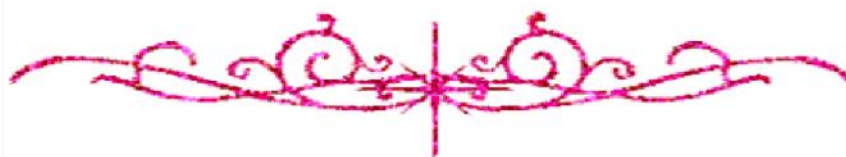
hossam maghraby



بسم الله الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني



hossam maghraby



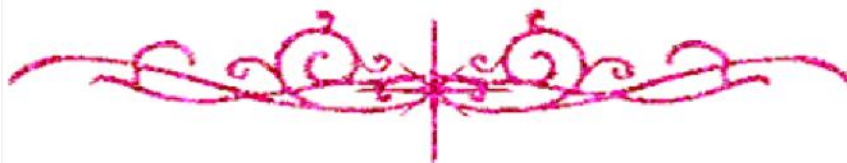
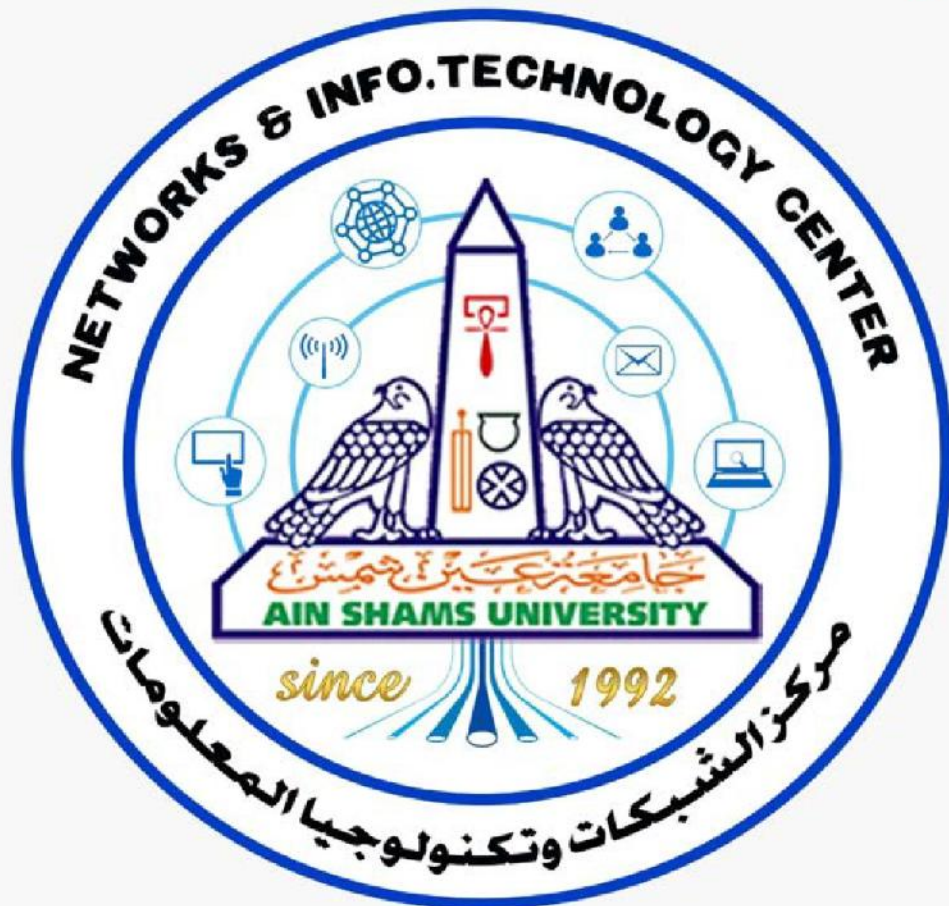
جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

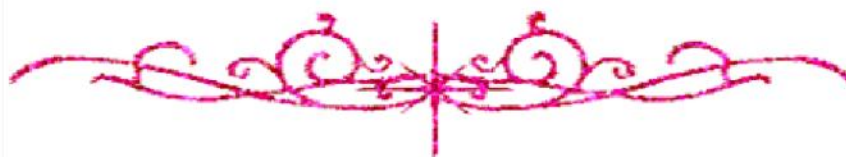
علي هذه الأقراص المدمجة قد أعدت دون أية تغييرات



hossam maghraby



**بعض الوثائق الأصلية تالفة
وبالرسالة صفحات لم ترد بالأصل**



B17831

**GEOLOGY AND TECTONIC EVOLUTION
OF THE AREA AROUND
GABAL ABU FURAD,
NORTHERN EASTERN DESERT OF
EGYPT**

A THESIS
SUBMITTED IN PARTIAL FULFILLMENT
FOR THE REQUIREMENTS OF THE MASTER
OF SCIENCE DEGREE
(GEOLOGY)

BY

ALAA AHMED ABDEL KAWY MASOUD
(B.SC. GEOLOGY, EXC. HONS.)

GEOLOGY DEPARTMENT
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1997

**DEDICATED TO MY MOTHER
AND TO
THE SPIRITS OF MY FATHER AND MY NEPHEW
HAYTHAM**

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Ex-president of Tanta University,
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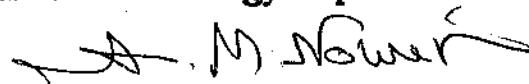
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DECLARATION

I declare that the contents of this thesis haven't been submitted for any degree at Tanta or any other university.

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STATEMENT

Beside the research work materialized in this thesis, the candidate has attended the following courses for one year in the following topics:-

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- 2- *IGNEOUS PETROLOGY.*
- 3- *METAMORPHIC PETROLOGY.*
- 4- *ECONOMIC GEOLOGY.*
- 5- *GEOCHEMISTRY.*
- 6- *STATISTICS.*
- 7- *ESSAY.*
- 8- *GERMAN LANGUAGE.*

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Prof. Dr. A.M. Noweir

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Chapter ONE : INTRODUCTION

CHAPTER ONE

INTRODUCTION

1.1. Delimitation of the Area

The area around Gabal Abu Furad which forms the subject of the present thesis, is located in the southern sector of the northern Eastern Desert of the exposed Precambrian rocks of Egypt (Fig.1.1). It is named after the conspicuous mountain of Abu Furad which occupies the central part of the present map area.

The study area covers about 994 km² of the basement crystalline rocks. The central part of the district is traversed by the Qena - Safaga highway which runs in an E - W direction, leading from the Nile valley to the Red Sea coast.

The area under consideration is bounded by the following coordinates:

Longitude : 33° 28' 15" - 33° 48' 28" E.

Latitude : 26° 32' 25" - 26° 48' 42" N.

1.2. Physical Features

The conspicuous land features of the present area include the following mountains arranged roughly from north to south :

- Gabal Ras Barud (1339 m.a.s.l.).
- Gabal Abu Hawis (1046 m.a.s.l.).
- Gabal Um Taghir El-Foqani (900 m.a.s.l.).
- Gabal Abu Furad (1029 m.a.s.l.).
- Gabal Abu El-Diyab (479 m.a.s.l.).

The area under consideration is drained by three main wadies and their tributaries. These include W. Barud, W. Um Taghir and W. Safaga. W. Barud crosses the northern part of the area, trending roughly NW - SE and flowing southeastward. It opens into W. Um Taghir along which the Qena - Safaga highway (about 160 km) is laid at km. 10 from Safaga. It had a very wide sandy plain striking Gabal Ras Barud from the south. It also opens into W. Um Taghir at km. 38 from Safaga. W. El-Barud El-Abiad is a tributary of W. Barud. W. Safaga crosses the southern part of the present district, trending roughly E-W and flowing eastwards to the Red Sea. Between W. Safaga and W. Um Taghir the studied area is drained by W. El-Bula, W. Abu Furad and W. Abu Maya. Both of W. El-Bula and W. Abu Furad flows into W. Safaga, whereas W. Abu Maya flows and opens into W. Um Taghir. The southern part of the map area is drained by W. Talet El-Zarga and W. Abu Marawat El-Rayan. Water resources of the studied area include Bir Ras Barud, Bir Abu Maya and Bir Abu Marawat.