

## AIN SHAMS UNIVERSITY FACULTY OF ENGINEERING

Electronics and Communications Engineering Department

# ANALYSIS AND DESIGN OF MICROSTRIP ANTENNAS

#### A Thesis

Submitted in Partial Fulfillment for the Requirements of the Degree of Master of Science in Electrical Engineering (Electronics and Communications Engineering)

Submitted By

### Mostafa Naguib Abdulla

B.Sc. of Electrical Engineering (Electronics and Communications Engineering) Ain Shams University, 1992

Supervised By

Prof. Dr. Hadia M. S. El-Hennawy Dr. Hany A. Ghali

Cairo - 1996









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### بسم الله الرحمن الرحيم

﴿ وَالْمِ اللَّهُ لَا عَلَمُ لَا إِلَّا مَا كُنَّ أَنْكُ أَنْكُ اللَّهِ اللَّهُ اللَّا اللَّهُ اللَّا اللَّهُ اللَّهُ اللَّا اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ ا

(البقرة ٣٢)



#### **Examiners Committee**

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Thesis: Analysis and Design of Microstrip Antennas

Degree: Master of Science in Electrical Engineering

(Electronics and Communications Engineering)

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#### Statement

This dissertation is submitted to Ain Shams University for the degree of Master of Science in Electrical Engineering (Electronics and Communications Engineering).

The work included in this thesis was carried out by the author at the Electronics and Communications Engineering Department, Faculty of Engineering, Ain Shams University.

No part of this thesis has been submitted for a degree or qualification at other university or institution.

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