

## PREFACE TO THE FIRST EDITION

This book is targeted primarily to site engineers and inspectors who are engaged in actual supervision and inspection of building construction, and not particularly to designers in the design office. Obviously, in order to obtain high quality and efficiency of construction, site supervisors and inspectors need to have good knowledge about structural specifications, detailing requirements, concrete quality control, basics of structural analysis and foundation engineering and estimating of quantity and cost. Sometimes field engineers may also need to or want to make a quick check of the design of certain structural members which they are in doubt or even make simple designs on their own. For all these purposes they need, for quick reference and as an aid, a handy pocket manual or a compact resource book which include useful data, formulae, procedures and guidelines on topics normally encountered in actual construction. The author hopes that this small book will fulfil this need to some extent.

The author would like to express his sincere thanks to Daw Nan Kay Zar Wint, Structural Designer and Instructor at the PIONEER Structural Design Group for her valuable contribution and assistance in preparing this book in this unusual format. The author also appreciates the understanding shown by other members of the PIONEER Structural Design Group and the assistance and encouragement offered by friends and former students of RIT/YIT/YTU, far and near.

**Nyi Hla Nge**

Yangon

May 2010

## REFRESHER COURSE AND FIELD REFERENCE MANUAL FOR SITE ENGINEERS AND INSPECTORS

<b>CONTENTS</b>	<b>PAGE</b>
A. STRUCTURAL SPECIFICATIONS FOR R. C. CONSTRUCTION	1 - 16
B. ORDINARY & SEISMIC DETAILINGS OF R. C. STRUCTURES	17 - 32
C. INSPECTION	33 - 70
D. CONCRETE QUALITY CONTROL	71 - 76
E. STEEL CONSTRUCTION	77 - 96
F. SOILS AND FOUNDATIONS	97 - 112
G. STRUCTURAL ANALYSIS FUNDAMENTALS	113 - 132
H. ANALYSIS OF RATES	133 - 144
I. REFERENCES	145 - 146
J. APPENDICES	147 - 202