

PREFACE

Directorate General of Training (DGT) under the Ministry of Skill Development and Entrepreneurship (MSDE) is the apex body in the country as regards planning, formulating and prescribing norms, standards, procedures and guidelines in respect of various vocational training schemes of which Craftsmen Training Scheme (CTS) implemented in ITI's is the most important. Prescribing well designed curriculum and putting in place appropriate assessment and certification procedure are among the vital aspects of vocational training.

DGT vide its communication No. MSDE(GT)-19/03(02)/2022-CD dated 5th April 2022 to all concerned conveyed its decision to simplify the syllabus related to **Workshop Calculation & Science (WCS)** and **Engineering Drawing (ED)** to maximum 40 hours each and to merge these subjects with Trade Theory subject of all engineering trades.

Taking note of this latest development, this book has been prepared which comprises of essentials of WCS and ED as per the latest notified syllabus. This covers primarily main topics of WCS (Units, Ratio & Proportion, Mensuration, Work, Power, Energy, Trigonometry etc.) and ED (Introduction to ED, Lines & Lettering, Dimensioning, Geometrical Figures, Reading of Drawings etc.), which are nearly common for all one-year engineering trades and first year of two-year engineering trades with little variation in allocated teaching time for different topics. While simplified and illustrated topic summary matter in this book has been kept to the minimum, rich bank of Multiple-Choice Questions both on WCS and ED has been included in accordance with what trainees are likely to face in the trade test. A special mention has to be made here about the Explanatory Notes added along with key to MCQs. This will immensely help trainees not only to pick correct options but also understand necessary related explanation.

We sincere hope that trainees will find this book very much helpful to adjust with the latest change in syllabus related to WCS and ED. We would welcome suggestions for further improvement of this book in subsequent editions.

—Author

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