

# Preface to Level-5 compliant Edition

Directorate General of Training (DGT) under the Ministry of Skill Development & Entrepreneurship, being the apex organization for development and coordination of vocational training at the national level, undertakes steps from time to time to improve its various aspects in line with changing market and industry requirements. In 2015, DGT initiated the process of incorporating the concept of competency based curricula. In order to do so, the curriculum of each trade under Craftsmen Training Scheme has been reoriented with appropriate National Skill Qualification Framework (NSQF) level.

As per DGT's order No. MSDE / 19 / 01 / 2017 - CD dated 14th August 2017, the curriculum of seven trades was revised and re-aligned with appropriate NSQF levels. Continuing the process further, DGT issued order No MSDE(DGT) - 19/02(7)/2018 - CD dated 9th April 2018, revising / updating curricula of 51 more trades under CTS. Draughtsman Civil is one among these 51 trades. The competency-based curriculum for this trade is aligned with NSQF level 5 in Construction sector.

Draughtsmen translate the ideas and rough sketches of engineers, architects and scientists into detailed drawings. Draughtsmen prepare technical drawings and plans used by production and construction workers to build everything from manufactured products such as spacecraft or industrial machinery, to structures such as office buildings or oil and gas pipelines.

Most draughtsmen now use computer-aided drafting (CAD) systems to prepare drawings. These systems employ computer workstations which create a drawing on a video screen. These systems make it easy to prepare many variations of a design and allow it to be viewed from angles not usually available with traditional drafting methods. The drawings are stored electronically so that variations, revisions or duplications can be made easily and quickly. Although this equipment has become easier to operate, CAD is only a tool. People who produce technical drawings using CAD still function as drafters, and need most of the knowledge of traditional drafters, relating to drafting skills and standards, as well as CAD skills. Some drafting work, however, continues to be done by traditional manual and tracing methods in addition to using computers to draw designs.

In keeping the latest changes, this volume has been prepared to be fully in line with the updated curriculum of Draughtsman Civil trade. The subject matter both for theory and practical, semester-wise has been developed and presented strictly as per NSQF 5 level curriculum. A rich compilation of Multiple Choice Questions has been appended to each chapter.

As per DGT's order No. MSDE - 18011/DGT/2017 - TTC dated 19th April 2018, the trainees admitted in August 2018 session and thereafter will have to appear for annual trade test (unlike semester system). This book is thus complete in all respects for theory and practical subjects of Draughtsman Civil trade for its full duration of second year.

Hoping to serve the needs of trainees and Instructors / Training Officers well, we are always open to suggestions for further improvement of this book.

**- Authors**

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