

Practical Workbook
EF-101
IT Fundamentals and Applications



Name : _____

Year : _____

Batch : _____

Roll No : _____

Department: _____

Department of Computer & Information Systems Engineering
NED University of Engineering & Technology

Practical Workbook

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IT Fundamentals and Applications



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Introduction

This workbook has been compiled to assist the conduct of practical classes for EF-101 IT Fundamentals and Applications. It gives to the students the elementary knowledge of various computer related courses, which they study throughout the four years of their stay at the university. This course helps students make themselves acquainted with computer and information systems engineering.

The Course Profile of EF-101 IT Fundamentals and Applications lays down the following Course Learning Outcome:

“Practice the application of ICT tools and computer programming in a laboratory environment. (C3, PLO-5)”

Almost all lab sessions of this workbook have been designed to assist the achievement of the above CLO. A rubric to evaluate student performance has been provided at the end of the workbook.

The workbook is divided into three sections. The first section introduces some basic concepts about various operating systems. Labs 1 and 2 cover Windows Command Prompt (CMD) commands, the fundamental concepts, and the powerful features that the Command Prompt provides for the system and its users. Lab 3 discusses Windows 10 utilities and the importance of network sharing.

The second section focuses on exploring various documentation and presentation tools that are useful for everyday computer users. Lab 4 & 5 focuses on documentation using MS Word, Lab 6 & 7 explores MS Excel, Lab 8 & 10 covers presentation skills using MS Power Point and Canva, and Lab 9 elaborates MS Access to give idea how databases works. These software applications will help students performing better documentation, making dazzling presentations and professional report work for various courses.

The third section focuses on the practical application of computing concepts and the exploration of emerging technologies. Lab 11 introduces the basics of digital logic design. Here students learn the operation of basic logic gates’ ICs. Lab 12 explores the foundations and creative potential of Generative AI. Finally, Lab 13 and 14 help the students develop simple yet functional web pages using HTML and CSS.

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