Practical Workbook
CS-114
Fundamentals of Computer Engineering

Name   : _____

Year   : _____

Batch   : _____

Roll No   : _____

Department: _____

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

Practical Workbook
CS-114
Fundamentals of Computer Engineering

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INTRODUCTION

This workbook has been compiled to assist the conduct of practical classes for CS-114 Fundamentals of Computer Engineering. 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 CS-114 Fundamentals of Computer Engineering lays down the following Course Learning Outcome:

"Practice with commonly used hardware tools. (P3, PLO-5)"
Some 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. Lab 1& 2 covers MS-DOS commands, the fundamental concepts and the powerful features that DOS provides for the system and to its users. Lab 3 discusses Windows 10 utilities and the importance of network sharing.

Second section helps in exploring different documentation and presentation tools which are helpful to a common computer user. 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 Prezi, 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.

Third section exclusively covers Computer Hardware to achieve the above mentioned PLO. Lab 11 & 12 introduces the basics of digital logic design. Here students learn the operation of basic logic gates' ICs and their use to implement various logic functions on breadboard. Lab 13 demonstrates various hardware components of a computer, its peripheral devices and its assembly. And Lab 14 covers the various communication media and accessories.

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