21.2.6. COMPUTER APPLICATION II (120 HOURS)

20.2.6.01 INTRODUCTION

This module unit is designed to equip the trainee with knowledge, skills and attitude that will enable him/her use specialised computer application software.

20.2.6.02 GENERAL OBJECTIVES

By the end of this module unit, the trainee should be able to:

a) use financial application software
b) use project management software
c) use computer aided design
d) appreciate the use of geographical information systems
e) appreciate the use of artificial intelligence

20.2.6.03 COURSE SUMMARY AND TIME ALLOCATION (120 HOURS)

CODE	TOPIC	SUB-TOPIC	TIME T	TIME P	TOTAL
20.2.6.1	FINANCIAL APPLICATIONS	• meaning and importance of financial application • types of financial applications • features of financial applications • fundamentals of accounting • accounting and book keeping • accounting ledgers • practical applications	20	40	60
20.2.6.2	COMPUTER AIDED DESIGN (CAD)	• meaning and importance of CAD • fundamentals of Technical Drawing • features of CAD software • screen layout • commands used • configuration of CAD • practical applications	10	30	40
20.2.6.3	GEOGRAPHYCAL INFORMATION SYSTEM (GIS)	• meaning and importance of GIS • components of GIS • application areas • others	10	10	20
20.2.6.4	ARTIFICIAL INTELLIGENCE	• meaning and importance of artificial intelligence • categories of artificial intelligence • benefits and challenges of artificial intelligence • emerging trends in artificial intelligence	40		40
TOTAL			**120**		

20.2.6.1T FINANCIAL APPLICATIONS

THEORY

20.2.6.1.T0 Specific Objectives

By the end of this topic, the trainee should be able to:

a) describe the fundamental of accounting
b) distinguish between accounting and book-keeping
c) describe the ledgers used in accounting

CONTENT

20.2.6.1.T1 Fundamentals of accounting

20.2.6.1.T2 Difference between accounting and book keeping

20.2.6.1.T3 Ledgers used in accounting

PRACTICE

20.2.6.1.P0 Specific Objectives

By the end of this topic, the trainee should be able to:

a) apply various computerised financial systems

20.2.6.1.P1 Applying various computerised financial systems

payroll systems
inventory systems
others

20.2.6.2T COMPUTER AIDED DESIGN (CAD)

THEORY

20.2.6.2.T0 Specific Objectives

By the end of this topic, the trainee should be able to:

a) explain the meaning and importance of computer aided design
b) explain the fundamentals of technical drawing
c) describe the typical screen layout of a CAD system
d) describe the features of a CAD system
e) explain the advantages of a CAD system

CONTENT

20.2.6.2.T1 Meaning and importance of computer-aided design

20.2.6.2.T2 Fundamental of technical drawing

20.2.6.2.T3 Features of a CAD system

20.2.6.2.T4 Typical screen layout of a CAD system

20.2.6.2.T5 Advantages of a CAD system

PRACTICE

20.2.6.2.P0 **Specific Objectives**

By the end of this topic, the trainee should be able to:

a) use the commands in a CAD system

b) configure the CAD system

CONTENT

20.2.6.2.P1 Using commands in a CAD system

20.2.6.2.P2 Configuring the CAD system

20.2.6.3T GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

THEORY

20.2.6.3.T0 **Specific Objectives**

By the end of this topic, the trainee should be able to:

a) explain the meaning and importance of GIS

b) describe the components of a GIS

CONTENT

20.2.6.3.T1 Meaning and importance of GIS

20.2.6.3.T2 Components of a GIS

PRACTICE

20.2.6.3.P0 **Specific Objectives**

By the end of this topic, the trainee should be able to:

a) apply GIS in various fields

20.2.6.3.P1 Applying GIS in various fields

marketing

security

others

20.2.6.4T ARTIFICIAL INTELLIGENCE

THEORY

20.2.6.4.T0 Specific Objectives

By the end of this topic, the trainee should be able to:

a) explain the meaning and importance of artificial intelligence
b) describe the categories of artificial intelligence
c) explain the benefits and challenges of artificial intelligence
d) identify emerging trends in artificial intelligence

CONTENT

20.2.6.4.T1 Meaning and importance of artificial intelligence

20.2.6.4.T2 Categories of artificial intelligence

robotics

cognitive science

natural interface applications

- speech
- voice recognition
- virtual reality

20.2.6.4.T3 Benefits and challenges of artificial intelligence

20.2.6.4.T4 Emerging trends in artificial intelligence

TEACHING/LEARNING RESOURCES

Computer

Relevant application software

Whiteboard

Printers and Printing papers

Relevant text books and free e-books

Online content (www. howstuffworks.com, www.wikipedia.com...)

ASSESSMENT MODE

Written Tests

Practical tests

Projects

Oral test