FACULTY OF ENGINEERING & TECHNOLOGY

SYLLABUS

FOR

DIPLOMA COURSE IN COMPUTER APPLICATIONS
(FULL TIME)

(SEMESTER – I & II)

SESSION: 2016–17

GURU NANAK DEV UNIVERSITY, AMRITSAR

DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULLTIME)

Semester – I

Paper–I	Information Technology and Operating System	Theory: 50 Practical: 50	Total: 100
Paper–II	PC Computing–I	Theory: 50 Practical: 50	Total: 100

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – I)

Paper–I: Information Technology and Operating System

Time : 3 Hours   **Max. Marks : 100**
Theory : 50
Practical : 50

Note : 1. The paper setter is required to set eight questions in all and the candidates will be required to attempt any five. All questions carry equal marks.
2. The students can use only Non–programmable & Non–storage type calculator.

UNIT–I

Information Concepts and Processing
       Evolution of Information Processing
       Data Information Language
       Communication and Network
       Client Server Systems
       Computer Networks
       LAN & WAN

UNIT–II

Internet
       Understanding the Internet
       E–mail Basics
       Browsing the Web
       Finding Stuff on the Web and Net

Elements of a Computer Processing System
       Hardware – CPU
       Storage Devices and Media
       VDU
       Input – Output
Data Communication Equipment
Software–System Software, Application Software

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – I)

UNIT–III

Programming Languages
      Classification
      Machine Code
      Assembly Language
      Higher Level Languages
      Fourth Generation languages

Operating System
      What is Operating System–Evolution of OS
      Types of Operating System
      A)   Single User Systems
      B)   Multi User Systems : Unix, XENIX, VAX/VMS

Booting a System

Recommended Book:
V.K. Jain : Fundamentals of Information Technology

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – I)

PAPER–II
PC Computing–I

Time : 3 Hours　　　　　　　　　　　　　　　**Max. Marks : 100**
　　　　　　　　　　　　　　　　　　　　　　Theory　　　: 50
　　　　　　　　　　　　　　　　　　　　　　Practical　　: 50

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UNIT–I

Introduction to windows
　　　1.1　　Origin of windows

　　a)　　**Parts of Windows Screen (Definition)**
　　　　　　-　　　　The Desktop, the taskbar
　　　　　　-　　　　Start Menu
　　　　　　-　　　　The windows
　　　　　　-　　　　Icons

　　b)　　**Types of windows**
　　　　　　-　　　　Application Windows
　　　　　　-　　　　Document Windows

　　c)　　**Anatomy of a window**
　　　　　　-　　　　The title bar
　　　　　　-　　　　Minimize and Maximize buttons
　　　　　　-　　　　The control box
　　　　　　-　　　　Scroll bars, scroll buttons and scroll boxes
　　　　　　-　　　　About my computer icon
　　　　　　-　　　　About the networking neighbourhood icon
　　　　　　-　　　　Recycle bin
　　　　　　-　　　　Folders – creation and definition
　　　　　　-　　　　Windows explorer (definition)
　　　　　　-　　　　Shortcut icons with creation and definition

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – I)

UNIT–II

Introduction to MS–Office
Introduction to Word (Word for Windows)

1. Introduction to Word
2. Introduction to Parts of a Word Window (Title bar, Menu bar, Tool bar, the Ruler, Status area)
3. Creating new document
4. Opening an existing document
5. To insert a second document into an open document
6. Editing a document
7. Deleting text, replacing text, moving and copying text
8. Page setup
9. Margins and gutters
10. Changing fonts and front size
11. To make text bold, italic or underline
12. Line spacing
13. Centering, right alignment and left alignment
14. Page breaks
15. Headers and footers
16. Putting page numbers in headers and footers
17. Saving documents
    - naming word document
    - saving in different formats
    - saving on different disks
18. Spell checker
19. Printing
20. Creating a table using the table menu
    - entering and editing text in tables
    - selecting in tables
    - adding rows
    - changing row heights
    - deleting rows
    - inserting columns
    - changing columns and cell width
21. Borders and shading
22. Templates and wizards
23. Working the graphics
24. Drawing objects
25. Using frames, position objects
26. Mail merge
27. Using word and word documents with other applications

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – I)

UNIT–III

MS–POWER POINT
1. Introduction to Ms Power Point
2. Power Point Elements
   - Templates
   - Wizards
   - Views
   - Color Schemes
3. Exploring Power Point Menu
   - Opening and Closing Menus
   - Working with Dialog Boxes
4. Adding text, adding title, moving text area, resizing text boxes, adding art.
5. Starting a new slide
6. Starting a Slide show
7. Saving Presentation
8. Printing Slides
9. Views
   – Slide View, Slide sorter view, notes view, outline view
10. Formatting and enhancing text formatting
    a) Formatting
    - Changing format with a new layout
    - Using a pick look wizards to change format
    - Alignment of Text
    - Working with text spacing
    b) Enhancing
    - Using Bullets
    - Changing text font and size
    - Selecting text style, effect and color
    - Picking up and applying styles
11. Creating Graphs
12. Displaying slide show and adding multi–media

DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULLTIME)

Semester – II

Paper–I	Database Management System	Theory: 50 Practical: 50	Total: 100
Paper–II	PC Computing–II	Theory: 50 Practical: 50	Total: 100

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – II)

Paper–I
Database Management Systems

Time : 3 Hours   Max. Marks : 100
                                                                            Theory   : 50
                                                                            Practical   : 50

Note : 1. The paper setter is required to set eight questions in all and the candidates will be required to attempt any five. All questions carry equal marks.
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UNIT–I
Introduction to Database Management System, Components of DBMS, E.R. Diagrams, Data Models, Hierarchical Model, Network Model and Relational Model.

UNIT–II
Concept of Database Security, Protection, Integrity, Recovery, Concurrency. Idea of Distributed Databases, Knowledge Base/Expert Systems

ORACLE 10g:
SQI. *PLUS
    Introduction to Oracle **10g**
    SQL– DOL, DML, DCL

UNIT–III
ORACLE 10g:
SQI. *PLUS
    Join methods & Sub query, Union, Intersection, Minus, Tree Walking
    Built in Functions, Views, Security amongst users, Sequences, Indexing Object
    Oriented Features of Oracle **10g**
PL/SQL
    Introduction to PL/SQL
    Cursors– Implicit & Explicit
    Procedures, Functions & Packages
    Database Triggers

Recommended Book :
C.J. Date : Data Base Management Systems

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – II)

Paper–II
PC Computing–II

Time : 3 Hours   **Max. Marks : 100**
                                                      Theory   : 50
                                                      Practical   : 50

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UNIT–I

MS–EXCEL

a)	Introduction to Worksheet/Spreadsheets
b)	Creating a simple Worksheet
c)	Computations in a Worksheet

UNIT–II

MS–EXCEL

a)	Printing the Worksheet
b)	Graphs
c)	What if Analysis (Data Sort, Fill, Query, Filter)

UNIT–III

MS Access

Introduction, Understanding Databases, Creating Tables, Queries, Forms Reports, Adding graphs to your report.