FACULTY OF ENGINEERING & TECHNOLOGY

SYLLABUS

FOR

DIPLOMA COURSE IN COMPUTER APPLICATIONS
(FULL TIME)

(SEMESTER – I & II)

SESSION: 2019–20

GURU NANAK DEV UNIVERSITY,
AMRITSAR

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# DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULLTIME)

## Semester – I

<table>
<thead>
<tr>
<th>Paper–I</th>
<th>Information Technology and Operating System</th>
<th>Theory: 50 Practical: 50</th>
<th>Total: 100</th>
</tr>
</thead>
</table>
Instructions for the Paper Setters:-
Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

Section–A

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

Section–B

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
DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULL TIME) (SEMESTER – I)

Section–C
Data Communication Equipment
Software–System Software, Application Software

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

Section–D
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
Section – A

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 (FULL TIME) (SEMESTER – I)

Section–B

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

Section–C

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
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
### Semester – II

<table>
<thead>
<tr>
<th>Paper – I</th>
<th>Database Management System</th>
<th>Theory: 50 Practical: 50</th>
<th>Total: 100</th>
</tr>
</thead>
</table>
DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULL TIME) (SEMESTER – II)

Paper–I
Database Management Systems

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

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Section–A

Section–B

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

Section–C

ORACLE 10g:
SQL *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

Section–D

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 (FULL TIME) (SEMESTER – II)

Paper–II
PC Computing–II

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

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Section–A
MS–EXCEL
   a) Introduction to Worksheet/Spreadsheets
   b) Creating a simple Worksheet
   c) Computations in a Worksheet

Section–B
MS–EXCEL
   a) Printing the Worksheet
   b) Graphs
   c) What if Analysis (Data Sort, Fill, Query, Filter)

Section–C
MS Access
   Introduction, Understanding Databases, Creating Tables, Queries.

Section–D
MS Access
   Forms Reports, Adding graphs to your report.