

DIPLOMA IN COMPUTER APPLICATIONS

Syllabus Session (2020-2021)



KHALSA COLLEGE
AMRITSAR
-An Autonomous College

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- 2. Subject to change in the syllabi at any time. Please visit the Khalsa College website time to time.**

DIPLOMA COURSE IN COMPUTER APPLICATIONS

Semester – I

| Sr. No. | Paper | Paper Name | Marks | | | | Page No. |
|---------|----------|---|--------|-----------|--------------------|-------|----------|
| | | | Theory | Practical | Internal | Total | |
| 1 | Paper-I | Information Technology and Operating System | 37 | 37 | 13 Th. 13 Prac. | 100 | 206-207 |
| 2 | Paper-II | PC Computing-I | 37 | 37 | 13 Th. 13 Prac. | 100 | 208-210 |

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – I)**Paper–I: Information Technology and Operating System****Time : 3 Hours****Max. Marks: 100****Theory Marks: 37****Theory Internal Assessment Marks: 13****Practical Marks: 37****Practical Internal Assessment Marks: 13**

Section A: It will have question No.1 consisting of 10 very short answer questions from the entire syllabus. Students will attempt 6 questions. Each question will carry **1.5 marks** with answer to each question up to 10 lines in length. The total weightage being **09 marks**.

Section B: It will consist of essay type/numerical questions up to five pages in length. Four questions numbering 2, 3, 4 and 5 will be set by the examiner from Unit-I of the syllabus. The students will be required to attempt any two questions. Each question will carry **07 marks**.
The total weightage of this section shall be **14 marks**.

Section C: It will consist of essay type/numerical questions up to five pages in length. Four questions numbering 6, 7, 8 and 9 will be set by the examiner from Unit-II of the syllabus. The students will be required to attempt any two questions. Each question will carry **07 marks**.
The total weightage of this section shall be **14 marks**.

UNIT–I**Information Concepts and Processing**

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

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-II

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 Marks: 37

Theory Internal Assessment Marks: 13

Practical Marks: 37

Practical Internal Assessment Marks: 13

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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)**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-II****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

Semester – II

| Sr. No. | Paper | Paper Name | Marks | | | | Page No. |
|----------|-----------------|----------------------------|-----------|-----------|----------------------------|------------|------------|
| | | | Theory | Practical | Internal | Total | |
| 1 | Paper-I | Database Management System | 37 | 37 | 13 Th. 13 Prac. | 100 | 212 |
| 2 | Paper-II | PC Computing–II | 37 | 37 | 13 Th. 13 Prac. | 100 | 213 |

DIPLOMA COURSE IN COMPUTER APPLICATIONS (SEMESTER – II)**Paper–I****Database Management Systems****Time : 3 Hours****Max. Marks: 100****Theory Marks: 37****Theory Internal Assessment Marks: 13****Practical Marks: 37****Practical Internal Assessment Marks: 13**

Section A: It will have question No.1 consisting of 10 very short answer questions from the entire syllabus. Students will attempt 6 questions. Each question will carry **1.5 marks** with answer to each question up to 10 lines in length. The total weightage being **09 marks**.

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Section C: It will consist of essay type/numerical questions up to five pages in length. Four questions numbering 6, 7, 8 and 9 will be set by the examiner from Unit-II of the syllabus. The students will be required to attempt any two questions. Each question will carry **07 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.

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

ORACLE 10g:**SQL. *PLUS**Introduction to Oracle **10g**

SQL– DQL, DML, DCL

Join methods & Sub query, Union, Intersection, Minus, Tree Walking

Built in Functions, Views, Security amongst users, Sequences, Indexing Object

Oriented Features of Oracle 10g

UNIT–II**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 Hour****Max. Marks: 100****Theory Marks: 37****Theory Internal Assessment Marks: 13****Practical Marks: 37****Practical Internal Assessment Marks: 13**

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UNIT–I**MS–EXCEL**

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

MS–EXCEL

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

UNIT–II**MS Access**

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