FACULTY OF ENGINEERING & TECHNOLOGY

SYLLABUS FOR THE BATCH FROM YEAR FROM YEAR 2020 TO YEAR 2021

FOR

DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULL TIME)

(SEMESTER – I & II)

EXAMINATION: 2020–21



GURU NANAK DEV UNIVERSITY, AMRITSAR

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DIPLOMA COURSE IN COMPUTER APPLICATIONS (FULL TIME)

SCHEME

Semester – I

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

Paper-I: Information Technology and Operating System

Time: 3 Hours Max. Marks: 100

Theory: 50 Practical: 50

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

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

PAPER-II PC Computing-I

Time: 3 Hours Max. Marks: 100

Theory: 50 Practical: 50

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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

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

Section-D

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

SCHEME

Semester – II

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

Paper–I Database Management Systems

Time: 3 Hours Max. Marks: 100

Theory: 50 Practical: 50

Instructions for the Paper Setters:-

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Section-A

Introduction to Database Management System, Components of DBMS, E.R. Diagrams, Data Models, Hierarchical Model, Network Model and Relational Model.

Section-B

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

Section-C

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

Section-D

PL/SOL

Introduction to PL/SQL Cursors—Implicit & Explicit Procedures, Functions & Packages Database Triggers

Recommended Book:

C.J. Date: Data Base Management Systems

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.