

Govt. Islamia Graduate College Kasur

2nd Year Comp. Sci. Lesson Plan 2021-2022

1st Week (1 Sept - 6 Sept)

Chapter 1: Data Basics

- ❖ Data Vs Information
- ❖ Data Processing/ Operations
- ❖ Traditional File Systems (TFS)
- ❖ Problems in TFS
- ❖ Types of File

2nd Week (7 Sept - 13 Sept)

- ❖ Databases and it's Components
- ❖ Objective of Database
- ❖ Models of Database (Hierarchical, Network, Relational)
- ❖ What is a Database Management System (DBMS)
- ❖ Objective of DBMS

3rd Week (14 Sept - 20 Sept)

- ❖ Advantages of Database System
- ❖ Disadvantages of Database System
- ❖ Features of DBMS
- ❖ Chap 1: Summary and Exercise
- ❖ Test No:1

4th Week (21 Sept – 27 Sept)

Chapter 2: Basic Concepts and Terminologies (overview)

- ❖ File Management Systems (FMS)
- ❖ Data Handling in FMS
- ❖ Attributes, Rows, Tables
- ❖ Relation or Table
- ❖ Properties of Relation

5th Week (28 Sept – 4 Oct)

- ❖ Views
- ❖ Indexes
- ❖ Keys and it's Types
- ❖ Users, Data Administrator, Database Administrators
- ❖ Chap 1: Summary and Exercise
- ❖ Test No: 2

6th Week (5 Oct – 11 Oct)

Chapter 3: Database Design Process (overview)

- ❖ Data Modeling and ingredients
- ❖ Relationships types
- ❖ Cardinality and Modality
- ❖ ER Diagrams with Examples

7th Week (12 Oct - 17 Oct)

- ❖ Database Design
- ❖ Conceptual Design View
- ❖ Physical Design View
- ❖ Implementation
- ❖ Chap 3: Summary and Exercise
- ❖ Test NO: 3

8th Week (18 Oct – 24 Oct)

Chapter 4: Data Integrity and Normalization (overview)

- ❖ Data Integrity
- ❖ Hidden Problems in Database
- ❖ Normalization Forms (NF)
- ❖ 1NF
- ❖ 2NF

9th Week (25 Oct – 1 Nov)

- ❖ 3 NF
- ❖ Chap 4: Summary and Exercise
- ❖ Test NO: 4

Chapter 5: Introduction to MS Access (overview)

- ❖ Creating Database and Opening Database
- ❖ MS Access Interface
- ❖ Data base Objects
- ❖ Chap 5: Summary and Exercise
- ❖ Test NO: 5

11th Week (2 Nov – 7 Nov)

- ❖ Access IDE
- ❖ Table Design View
- ❖ Datasheet View
- ❖ Working with Design View
- ❖ Field Data Types and Properties
- ❖ Formatting
- ❖ Creating Table using Wizard

12th Week (16 Nov – 22 Nov)

- ❖ Modify Data Tables
- ❖ Printing Datasheet
- ❖ Sorting and Filtering
- ❖ Introduction to Queries
- ❖ Performing Calculations in Query

13th Week (23 Nov – 29 Nov)

- ❖ Chap 6: Summary and Exercise
- ❖ Test NO: 6

Chapter 7: MS Access Forms and Reports (overview)

- ❖ Creating Forms
- ❖ Creating forms in Design View
- ❖ Adding Data using forms
- ❖ List and Combo Box
- ❖ Check Box and Radio Buttons

14th Week (30 Nov – 6 Dec)

- ❖ Sub Forms
- ❖ Sub Form Wizard
- ❖ Reports
- ❖ Conditional Formatting
- ❖ Report Using Wizard

15th Week (7 Dec – 13 Dec)

- ❖ Linking
- ❖ Switchboard in Access
- ❖ Chap 7: Summary and Exercise
- ❖ Test NO: 7

Chapter 8: Getting Started with C (overview)

- ❖ History
- ❖ Approach
- ❖ Turbo ++ IDE
- ❖ Steps to Run a Program
- ❖ Basic Structure of C Program
- ❖ Description of Each Part

16th Week (14 Dec – 20 Dec)

- ❖ Errors in Program
- ❖ Programming Languages and types

- ❖ Language Translators
- ❖ Computer Languages
- ❖ Translators
- ❖ Chap 8: Summary and Exercise
- ❖ Test NO: 8

17th Week (21 Dec – 1 Jan)

Chapter 9: Elements of C (overview)

- ❖ Identifiers and types
- ❖ Keywords, Variable
- ❖ Constants, Data types
- ❖ Data types categories
- ❖ Operators

18th Week (2 Jan – 7 Jan)

- ❖ Types of Operators
- ❖ Comment in c
- ❖ Chap 9: Summary and Exercise
- ❖ Test NO: 9

Chapter 10: Input/Output (overview)

- ❖ Printf function, Format specifier

19th Week (8 Jan – 14 Jan)

- ❖ Escape Sequence
- ❖ Scanf function
- ❖ Character Input
- ❖ Chap 10: Summary and Exercise
- ❖ Test NO: 10

20th Week (15 Jan – 21 Jan)

Chapter 11: Decision Constructs (Overview)

- ❖ Control Structures
- ❖ If Statement, If-Else
- ❖ Nested If
- ❖ If-Else-If
- ❖ Use of Logical Operators

21th Week (22 Jan – 28 Jan)

- ❖ Switch Statement
- ❖ Conditional Operator
- ❖ Chap 11: Summary and Exercise
- ❖ Test No:11

Chapter 12: Loop Constructs (Overview)

- ❖ Loops and types

22th Week (29 Jan – 5 Feb)

- ❖ While Loop
- ❖ Do-While loop
- ❖ For Loop
- ❖ Nested Loops
- ❖ Goto Statement
- ❖ Chap 12: Summary and Exercise
- ❖ Test NO: 12

23th Week (6 Feb – 13 Feb)

Chapter 13: Functions in C (Overview)

- ❖ Importance of Functions and Types of function
- ❖ Initializing, Prototype, Calling of Function
- ❖ Local Variable Vs Global Variable
- ❖ Function without Arguments
- ❖ Function with Arguments

24th Week (14 Feb- 20 Feb)

- ❖ Chap 13: Summary and Exercise
- ❖ Test NO: 13

Chapter 13: File Handling in C (Overview)

- ❖ Stream and types
- ❖ New line and End line
- ❖ Opening file
- ❖ File Pointer

25th Week (21 Feb - 28 Feb)

- ❖ Closing File
- ❖ Reading and Writing
- ❖ String Handling
- ❖ String Handling in file
- ❖ Chap 14: Summary and Exercise
- ❖ Test NO: 14

26th Week (1 March – 7 March)

Chapter 1: Revision
TEST

27th Week (8 March – 15 March)

Chapter 2: Revision
TEST

28th Week (16 March – 23 March)

Chapter 3: Revision
TEST

29th Week (24 April – 31 March)

Chapter 4: Revision

TEST

30th Week (1 April – 7 April)

Chapter 8: Revision

TEST

31th Week (8 April – 15 April)

Chapter 9 + Chapter 10: Revision

TEST

32th Week (16 April – 23 April)

Chapter 11: Revision

TEST

33th Week (24 April – 31 April)

Chapter 12: Revision

TEST