

## Lesson Plan

### Government College, Mangali

#### Unit wise Lesson Plan for Odd Semester 2025-26

**Department: Computer Science**

Name of Teacher: **Dr. Suman Malik**

Class: **BA I/B.Sc. I(1<sup>st</sup> Sem.)**

Subject: Fundamentals of Computer and Programming in C

**Paper: C24COS101T**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	<b>Basics of Computers:</b> Definition of a Computer - Characteristics and Applications of Computers – Block Diagram of a Digital Computer – Classification of Computers based on size and working – Central Processing Unit – I/O Devices. <b>Storage:</b> Primary, Auxiliary and Cache Memory – Memory Devices. Software, Hardware, Firmware. <b>Operating System</b> – Definition and Functions of an Operating System – MS-DOS – MS Windows – Desktop, Computer, Documents, Pictures, Music, Videos, Recycle Bin, Task Bar – Control Panel.	14 <sup>th</sup> July, 2025 to 14 <sup>th</sup> August, 2025	Assignment-1
Unit-2	<b>C Programming Fundamentals:</b> Keywords, Variables and Constants, Structure of a C , Program, Input/Output. <b>Operators &amp; Expressions:</b> Arithmetic, Unary, Logical. Bit-wise, Assignment & Conditional Operators <b>Decision Making:</b> Decision making using if...else. Else If Ladder; Switch, break. Continue and Goto statements. <b>Loop Control Structure:</b> While and do-while, for loop and Nested for loop, Decision using switch; goto, break and continue statements.	18 <sup>th</sup> August, 2025 to 15 <sup>th</sup> September, 2025	Test
Unit-3	<b>Functions:</b> Introduction, using functions – Function declaration/ prototype – Function definition function call – return statement – Passing parameters, Recursive functions <b>Arrays:</b> Introduction, Declaration of Arrays, Accessing elements of the Array – Storing Values in Array, Passing array element to a function: Call by Value and Call by Reference, One dimensional array -declaration, initialization, Accessing one dimensional array, Two dimensional Arrays-declaration, initialization, Accessing two dimensional arrays.	16 <sup>th</sup> September, 2025 to 15 <sup>th</sup> October, 2025	Assignment-2
Unit-4	<b>Strings:</b> Introduction, String and Character functions, String Operations using String functions- strcat() , strcmp() , strcpy() , strlen(). <b>Pointers:</b> Declaring Pointer Variable, Pointer Expressions and Pointer Arithmetic, Passing Arguments to Functions using Pointers. Dynamic Memory Allocation: malloc(), calloc(), realloc(), free() functions <b>Structures and Unions:</b> Declaration of structures, Structure Initialization, Accessing structure members, Arrays of structure, Nested structures, Structure with pointers, Union	16 <sup>th</sup> October, 2025 to 15 <sup>th</sup> November, 2025	Performance Improvement Test
Revision	<b>Revision of Syllabus and Students Query Handling with Sample Papers</b>	16 <sup>th</sup> November, 2025 to Exam Date	

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### Government College, Mangali

#### Unit wise Lesson Plan for Odd Semester 2025-26

**Department: Computer Science**

Name of Teacher: **Dr. Suman Malik**

Subject: **Information Technology**

Class: **BA I/B.Sc. I/B.Com I(1<sup>st</sup> Sem.)**

Paper: **C24MDC105T**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
<b>Unit-1</b>	Introduction to Computers, Characteristics and Limitations of Computers, Block Diagram of Computer, Classification of Computers, Hardware and Software, Types of software, Computer Languages. Data and information, Types of data & information, Data processing using Computer. Units of a Computer, CPU, ALU, Types of Memory and Memory Hierarchy, Registers, Input Output devices, Mother Board. Processing numerical data using Spreadsheets, Processing and displaying textual data using word processor.	14 <sup>th</sup> July, 2025 to 15 <sup>th</sup> September, 2025	Assignment-1
<b>Unit-2</b>	Societal impact of IT, social use of WWW, privacy security and integrity of Information, Internet, Web Browsers, Internet Connection Types, How Internet Works, ISPs, Search Engines, Emails and Its Working, Internet Security, Uses of Internet, Introduction to Cloud and its Applications.	16 <sup>th</sup> September, 2025 To 15 <sup>th</sup> November, 2025	Test
<b>Revision</b>	<b>Revision of Syllabus and Students Query Handling with Sample Papers</b>	16 <sup>th</sup> November, 2025 to Exam Date	

## Lesson Plan

### Government College, Mangali

#### Unit wise Lesson Plan for Odd Semester 2025-26

**Department: Computer Science**

**Name of Teacher: Dr. Suman Malik**

**Subject: IT & E-Commerce**

**Class: BA II/B.Sc. II/B.Com II(3<sup>rd</sup> Sem.)**

**Paper: C24MIC302T**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Introduction to the Internet: Networking, Network Topologies, Types of Networks, Network Devices: Nodes and Hosts, TCP/IP, IP Address, Web Browsers and Web Servers, URL, Domain Names, WWW, Search Engines, Internet vs. Intranet vs. Extranet, Network Devices: Routers, Switches, Hubs, Modems, and their roles, Uses of Computer Networks.	14 <sup>th</sup> July, 2025 to 14 <sup>th</sup> August, 2025	Assignment-1
Unit-2	Introduction to E-commerce, E-commerce Models: B2B, B2C, C2C, C2B. Applications of E-commerce: Service Industry, Retail Sector, Financial Services, Travel & Tourism. Future of E-commerce, Online Shopping: Web Portals. Mobile commerce: Internet Services through Mobile, Mobile Banking, WAP & WML, Mobile Information Devices, POS.	18 <sup>th</sup> August, 2025 to 15 <sup>th</sup> September, 2025	Test
Unit-3	Online Payment Mechanism, Electronic Payment System: Legal Issues & Digital Currency - E-Cash & E-Cheque - Electronic Fund Transfer (EFT) - Advantages and Risks - Digital Token-Based E-Payment System - Smart Cards. Payment Gateways, Risk Management options for E-Payment Systems, Cryptography, Authentication, Data Encryption, Decryption, Public Key, Private Key, Digital Signature, E-check Certification, Digital Certification.	16 <sup>th</sup> September, 2025 to 15 <sup>th</sup> October, 2025	Assignment-2
Unit-4	Threats in E-commerce, Fraud Prevention, E-commerce Data Protection: PCI Compliance and Data Privacy Laws, Security of Client & Service Provider, Security Issues over the Web, Cyber Law- IT Act 2000.	16 <sup>th</sup> October, 2025 to 15 <sup>th</sup> November, 2025	Performance Improvement Test
Revision	<b>Revision of Syllabus and Students Query Handling with Sample Papers</b>	16 <sup>th</sup> November, 2025 to Exam Date	

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### Government College, Mangali

#### Unit wise Lesson Plan for Odd Semester 2025-26

**Department: Computer Science**

Name of Teacher: **Dr. Suman Malik**

Subject: C Programming

Class: **BA II/B.Sc. II/B.Com. II (3<sup>rd</sup> Sem.)**

**Paper: C24MDC305T**

Unit	Description of Chapter / Topics	Duration	Assignment / Test
Unit-1	Overview of C: Character Set, Constants and Variables, Identifiers and Keywords, Data Types, Assignment Statement, Symbolic Constant, Formatted input/output function Operators & Expression: Arithmetic, Relational, Logical, Bitwise, Increment and decrement operators, Assignment Operator, Conditional Operators and Special Operators, Arithmetic Expressions, Evaluation of Arithmetic Expression, Operator Precedence and Associativity, Decision making with if statement, if-else statement, nested if statement, else-if ladder, Switch and Break statement, Looping Statements: for, while, and do-while loop, jumps in loops.	14 <sup>th</sup> July, 2025 to 15 <sup>th</sup> September, 2025	Assignment-1
Unit-2	Arrays: Declaration and Initialization of One Dimensional arrays, Declaration and Initialization of two Dimensional Arrays, Declaration and Initialization of String Variable, String Handling Functions: String Length, Copy, Compare, Concatenate, Search for a Substring etc. Functions: definition, prototype, function call, passing arguments to a function: call by value; call by reference. Structure and Union: Structure definition, declaring structure variables, accessing structure members, Union definition, Difference between Structure and Union.	16 <sup>th</sup> September, 2025 To 15 <sup>th</sup> November, 2025	Test
Revision	<b>Revision of Syllabus and Students Query Handling with Sample Papers</b>	16 <sup>th</sup> November, 2025 to Exam Date	