

Govt. College Mangali- Lesson Plan B.A./B.Sc. III, Odd Sem 2025-26 (Dept. of Computer Science)

Academic Calender- Odd Sem 2025-26	
Teaching-I	14.07.2025 to 18.10.2025
Vacations(Diwali)	19.10.2025 to 26.10.2025
Teaching-II	27.10.2025 to 21.11.2025
End Semester Examinations (Major Test)(for UTD and Affiliated Colleges)	22.11.2025 to 20.12.2025
Winter Vacations (for Affiliated Colleges)	21.12.2025 to 31.12.2025

Name of Teacher: Dr. Monika		Class: B.A./B. Sc. V Sem	Session: 2025-26
Subject: Computer Science		Nomenclature of Paper: Object Oriented Programming Using C++	Paper Code: BACS-311/CCsL-503
Week	July 25/Duration	Topic- Unit-I	
1	14 July-19 July	Procedure-Oriented Programming, Object-Oriented programming Paradigm, difference between Procedure-Oriented Programming and Object-Oriented Programming	
2	21 July-26 July	Basic concepts of Object-Oriented programming	
3	28 July-31 July	Benefits of OOP, Object Oriented Languages, and application of OOP.	
Week	Aug 25/Duration	Topic- Unit-II	
1	04 Aug -09 Aug	Structure of a C++ Program, Insertion operator, Extraction operator, Hierarchy of Console Stream Classes	
2	11 Aug -16 Aug	Unformatted and Formatted I/O Operations, Manipulators, and inline functions	
3	18 Aug -23 Aug	C structure revisited, specifying a Class, Creating Objects, Defining member function, Memory allocation for objects, Scope resolution operator and its significance	
4	25 Aug -30 Aug	Static Data Members, Static member functions, Friend Function, Friend Class.	
Week	Sept 25/Duration	Topic- Unit-III	
1	01 Sept -06 Sept	Dynamic Memory Management using new and delete Operator, Constructor, type of constructors	
2	08 Sept -13 Sept	Dynamic initialization of objects, Constructor overloading, Constructor with default arguments, Destructors	
3	15 Sept -20 Sept	function overloading	
4	22 Sept -27 Sept	Operator Overloading, Overloading unary and binary operators.	
Week	Oct 25/Duration	Topic- UNIT-IV	
1	01 Oct -04 Oct	Inheritance, Single Inheritance, Making a private member inheritable, Multilevel Inheritance	
2	06 Oct -11 Oct	Multiple Inheritance, Hierarchical Inheritance, Hybrid Inheritance	
3	13 Oct -18 Oct	Virtual Base Class, Abstract Classes	
4	27 Oct -31 Oct	Constructors in derived classes.	
Week	Nov 25/Duration	Revision	
1	03 Nov -08 Nov	Backlog of chapter, if any, discussion, and problems taken.	
2	10 Nov -15 Nov	Revision of UNIT-1&2	
3	17 Nov -21 Nov	Revision of UNIT-3&4	

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Name of Teacher: Dr. Monika		Class: B.A./B. Sc. V Sem	Session: 2025-26
Subject: Computer Science		Nomenclature of Paper: Data Analytics	Paper Code: BACS-312/CCsL-504
Week	July 25/Duration	Topic- Unit-I	
1	14 July-19 July	Data Analytics: Introduction to Data Analytics, Business Intelligence (BI) for better decisions, Decision types, BI tools, BI skills, BI applications.	
2	21 July-26 July	Data warehousing: Introduction to Data warehousing (DW), Design considerations for DW, DW development approaches, DW architecture.	
3	28 July-31 July	Data Mining: Introduction to Data mining, Data cleaning and preparation, outputs of Data mining, evaluation of data mining results, Data Mining Techniques.	
Week	Aug 25/Duration	Topic- Unit-I & II	
1	04 Aug -09 Aug	Decision Trees: Introduction to Decision tree, Decision tree problem, Decision tree construction, Lessons from constructing trees, Decision tree algorithms.	
2	11 Aug -16 Aug	Regression: Introduction, Correlations and Relationships, Visual Look at Relationships, Logistic regression, Advantages and disadvantages of regression models.	
3	18 Aug -23 Aug	Artificial Neural Networks: Introduction, business applications of ANN, Design principles of an ANN, Representation of a neural network	
4	25 Aug -30 Aug	Architecting a neural network, Developing an ANN, Advantages and disadvantages of using ANN.	
Week	Sept 25/Duration	Topic- Unit-III	
1	01 Sept -06 Sept	Cluster analysis: Introduction, Applications of cluster analysis, Definition of a cluster, Representing clusters, Clustering techniques, K-means algorithm for clustering, Selecting the number of clusters.	
2	08 Sept -13 Sept	Association rule Mining: Introduction, Business applications of association rules, Representing association rules, Algorithms for association rule	
3	15 Sept -20 Sept	Apriori algorithm, Creating association rules.	
4	22 Sept -27 Sept	Web Mining: Introduction, Web content mining Web structure mining, Web usage mining, Web mining algorithms	
Week	Oct 25/Duration	Topic- UNIT-IV	
1	01 Oct -04 Oct	Naive-base analysis: Introduction, Probability, Naïve base model, Text classification example.	
2	06 Oct -11 Oct	Support vector machines: Introduction, SVM model, The kernel method	
3	13 Oct -18 Oct	Big data: Introduction, Defining big data, Big data landscape, Business implications of big data	
4	27 Oct -31 Oct	Technology implications of big data, Big data technologies, Management of big data.	
Week	Nov 25/Duration	Revision	
1	03 Nov -08 Nov	Backlog of chapter, if any, discussion, and problems taken.	
2	10 Nov -15 Nov	Revision of UNIT-1&2	
3	17 Nov -21 Nov	Revision of UNIT-3&4	

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Name of Teacher: Dr. Monika		Class: B. Sc. V Sem	Session: 2025-26
Subject: Computer Science		Nomenclature of Paper: Cloud Computing	Paper Code: CCsL-505
Week	July 25/Duration	Topic- Unit-I	
1	14 July-19 July	Cloud Computing, Introduction to cloud computing, Peer to peer computing, Distributed computing	
2	21 July-26 July	Collaborative computing and cloud computing, Importance of cloud computing in current era	
3	28 July-31 July	characteristics, advantages and disadvantage of cloud computing.	
Week	Aug 25/Duration	Topic- Unit-I & II	
1	04 Aug -09 Aug	Cloud Services: Functioning of cloud computing, Classification of cloud based on services.	
2	11 Aug -16 Aug	Software as a service: Definition, characteristics, and their benefits.	
3	18 Aug -23 Aug	platform as a service : Definition, characteristics, and their benefits.	
4	25 Aug -30 Aug	Infrastructure as a service: Definition, characteristics, and their benefits.	
Week	Sept 25/Duration	Topic- Unit-III	
1	01 Sept -06 Sept	Cloud Architecture: Cloud computing logical and service architecture,	
2	08 Sept -13 Sept	Types of cloud: Private cloud, Public Cloud and Hybrid Cloud	
3	15 Sept -20 Sept	Comparison of a Private, public and hybrid clouds	
4	22 Sept -27 Sept	migration to a cloud, seven steps model to migrate.	
Week	Oct 25/Duration	Topic- UNIT-IV	
1	01 Oct -04 Oct	Application: Business opportunities using cloud	
2	06 Oct -11 Oct	Cloud as a type of distributed infrastructure	
3	13 Oct -18 Oct	Application of cloud computing for centralized email communication	
4	27 Oct -31 Oct	managing desktop and devices in cloud, collaboration on schedules, calendars.	
Week	Nov 25/Duration	Revision	
1	03 Nov -08 Nov	Case study: Overview of major cloud service providers- Amazon EC2, Google App Engine, Google Drive etc.	
2	10 Nov -15 Nov	Revision of UNIT-1&2	
3	17 Nov -21 Nov	Revision of UNIT-3&4	

Govt. College Mangali- Lesson Plan B.A./B.Sc./B.Com. II, Odd Sem 2025-26 (Dept. of Computer Science)

Skill Enhancement Course

Academic Calendar- Odd Sem 2025-26	
Teaching-I	14.07.2025 to 18.10.2025
Vacations(Diwali)	19.10.2025 to 26.10.2025
Teaching-II	27.10.2025 to 21.11.2025
End Semester Examinations (Major Test)(for UTD and Affiliated Colleges)	22.11.2025 to 20.12.2025
Winter Vacations (for Affiliated Colleges)	21.12.2025 to 31.12.2025

Name of Teacher: Dr. Monika		Class: B.A./B. Sc./B.Com. III Sem	Session: 2025-26
Subject: Comp. Sci. (SEC)		Nomenclature of Paper: Data Analysis using Excel	Paper Code: C24SEC303T
Week	July 25/Duration	Topic- Unit-I	
1	14 July-19 July	Introduction to Excel: About Excel, Uses of Excel	
2	21 July-26 July	Spreadsheet window pane, Ribbon	
3	28 July-31 July	Home Tab – Cut, Copy, Paste, Font	
Week	Aug 25/Duration	Topic- Unit-I	
1	04 Aug -09 Aug	insert cell, delete cell, format cell, fill, clear, find and replace	
2	11 Aug -16 Aug	Alignment, data types, conditional formatting	
3	18 Aug -23 Aug	Page Layout Tab- Theme group	
4	25 Aug -30 Aug	Page setup group, Formula Bar. Test and Assignment 1	
Week	Sept 25/Duration	Topic- Unit-II	
1	01 Sept -06 Sept	Creating Formulas : Using Formulas	
2	08 Sept -13 Sept	Formula Functions – Sum, Average, if, Count	
3	15 Sept -20 Sept	max, min, Proper, Upper, Lower, Using AutoSum	
4	22 Sept -27 Sept	Create and run a macro	
Week	Oct 25/Duration	Topic- UNIT-II	
1	01 Oct -04 Oct	Spreadsheet Chart: Creating Charts	
2	06 Oct -11 Oct	Different types of charts	
3	13 Oct -18 Oct	Formatting Chart Objects, Changing the Chart Type	
4	27 Oct -31 Oct	Showing and Hiding the Legend, Showing and Hiding the Data Table, Test and Assignment 2	
Week	Nov 25/Duration	Revision	
1	03 Nov -08 Nov	Revision of UNIT-1	
2	10 Nov -15 Nov	Revision of UNIT-2	
3	17 Nov -21 Nov	Revision of UNIT-1&2	

Govt. College Mangali- Lesson Plan B.A./B.Sc./B.Com. I, Odd Sem 2025-26 (Dept. of Computer Science)

Skill Enhancement Course

Academic Calender- Odd Sem 2025-26	
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Name of Teacher: Dr. Monika		Class: B.A./B.Com./B. Sc. I Sem	Session: 2025-26
Subject: Computer Science		Nomenclature of Paper: Office Tools	Paper Code: C24SEC103T
Week	July 25/Duration	Topic- Unit-I	
1	14 July-19 July	Operating System - Definition, Functions, Types of Operating System, Basics of Popular Operating Systems, The User Interface	
2	21 July-26 July	Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection, managing files and folders	
3	28 July-31 July	Control panel – display properties, add/remove software and hardware, Common utilities.	
Week	Aug 25/Duration	Topic- Unit- I	
1	04 Aug -09 Aug	Basic Word Processing - Introduction to Word Processing	
2	11 Aug -16 Aug	Menus, Creating	
3	18 Aug -23 Aug	Editing & Formatting Document	
4	25 Aug -30 Aug	Spell Checking, Printing.	
Week	Sept 25/Duration	Topic- Unit-II	
1	01 Sept -06 Sept	Advanced Word Processing: Views, Tables	
2	08 Sept -13 Sept	modifying page setup, applying document themes	
3	15 Sept -20 Sept	applying document style sets	
4	22 Sept -27 Sept	Inserting headers and footers	
Week	Oct 25/Duration	Topic- UNIT-II	
1	01 Oct -04 Oct	Spread Sheet: Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus.	
2	06 Oct -11 Oct	Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, copying of cells	
3	13 Oct -18 Oct	Mathematical, Statistical and Financial function	
4	27 Oct -31 Oct	Drawing different types of charts, Sort and Filter Data	
Week	Nov 25/Duration	Revision	
1	03 Nov -08 Nov	Creating Presentation, Type of presentation views. Using sound, Animation,	
2	10 Nov -15 Nov	Working with Objects, Printing	
3	17 Nov -21 Nov	Revision of UNIT- 1&2	

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Value Added Course

Academic Calendar- Odd Sem 2025-26	
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Winter Vacations (for Affiliated Colleges)	21.12.2025 to 31.12.2025

Name of Teacher: Dr. Monika		Class: B.A./B. Sc./B.Com. I Sem	Session: 2025-26
Subject: Computer Science		Nomenclature of Paper: Digital Empowerment	Paper Code: C24VAC109T
Week	July 25/Duration	Topic- Unit-I	
1	14 July-19 July	Introduction to Digital Empowerment	
2	21 July-26 July	Digital Empowerment: Needs and challenges	
3	28 July-31 July	Vision of Digital India: DigiLocker, E-Hospitals	
Week	Aug 25/Duration	Topic- Unit- I & II	
1	04 Aug -09 Aug	E-Pathshala, BHIM	
2	11 Aug -16 Aug	e-Kranti (Electronic Delivery of Services), e-Health Campaigns	
3	18 Aug -23 Aug	Public utility portals of Govt. of India such as RTI, Health	
4	25 Aug -30 Aug	Finance, Income Tax filing, Education. Test-1, Assignment-1	
Week	Sept 25/Duration	Topic- Unit-III	
1	01 Sept -06 Sept	Electronic Communication: Electronic mail, blogs, social media	
2	08 Sept -13 Sept	Tools/platforms for online learning	
3	15 Sept -20 Sept	Collaboration using file sharing, messaging, video conferencing	
4	22 Sept -27 Sept	Test and Assignment 2	
Week	Oct 25/Duration	Topic- UNIT-IV	
1	01 Oct -04 Oct	Safe and Secure Cyberspace: Online security and privacy,	
2	06 Oct -11 Oct	Data breach and Cyber Attacks	
3	13 Oct -18 Oct	Security Initiatives by the Govt of India	
4	27 Oct -31 Oct	Ethics in Cyberspace, Test-2	
Week	Nov 25/Duration	Revision.	
1	03 Nov -08 Nov	Revision of UNIT-1	
2	10 Nov -15 Nov	Revision of UNIT-2	
3	17 Nov -21 Nov	Revision of Units 1 & 2.	