

Govt. College for Girls , Sector-14, Gurugram

Name of the Assistant Professor : Mrs. Jyotsna Bhardwaj

Class : BCA 3rd Semester

SUBJECT & CODE : DATA STRUCTURES – I (BCA – 202)

Month	Syllabus
13 July to 21 July	Introduction: Elementary data organization, Data Structure definition, Data type vs. data structure
23 July to 28 July	Categories of data structures, Data structure operations, Applications of data structures
30 July to 4 August	Data Structure Operations- Create, Traversing, Insert,update, delete ,search and sort.
6 August to 11 August	Algorithm, Flow Charts, Algorithms complexity and time-space tradeoff, Big-O notation.
13 August to 18 August	Strings: Introduction, Storing strings, String operations, Pattern matching algorithms.
20 August to 25 August	Arrays: Introduction, Linear arrays, Representation of linear array in memory, address calculations, Traversal, Insertions, Deletion in an array, Multidimensional arrays, Parallel arrays, Sparse arrays
27 August to 1 Sept	Linked List: Introduction, Array vs. linked list, Representation of linked lists in memory,
3 Sept to 8 Sept	Traversal, Insertion, Deletion, Searching in a linked list, Header linked list, Circular linked list,

10 Sept to 15 Sept	Two-way linked list, Threaded lists, Garbage collection, Applications of linked lists.
17 Sept to 22 Sept	Algorithm of Single Linked List and Doubly Linked list with implementation
1 Oct to 6 Oct	Stack: Introduction, Array and linked representation of stacks, Operations on stacks,
8 Oct to 13 Oct	Applications of stacks: Polish notation, Recursion
15 Oct to 20 Oct	Queues: Introduction, Array and linked representation of queues, Operations on queues,
22 Oct to 27 Oct	Deques, Priority Queues, Applications of queues

29 Oct to 3 Nov & 5 Nov.	Tree: Introduction, Definition, Representing Binary tree in memory, Traversing binary trees
6 Nov. To 13 Nov.	Traversal algorithms using stacks. Graph: Introduction, Graph theory terminology, Sequential and linked representation of graphs.

Govt. College for Girls , Sector-14, Gurugram

Name of the Assistant Professor : Mrs. Jyotsna Bhardwaj

Class : M.Com Ist Semester

subject & code : Computer Applications in Business (1011C02104)

Month	Syllabus
1 August to 4 August	Introduction to computer: Characteristics of computer systems, Various Functional units of computers, Types of computer systems
6 August to 11 August	, Introduction to computer Memories: Primary Storage, Secondary storage, Input/Output Devices,
13 August to 18 August	Software types: Systems software, Application software, functions of Operating Systems,

20 August to 25 August	Computer Networks: Advantages of Networking, Types of Network: LAN, MAN, WAN, Public and Private Network, Data communication Media.
27 August to 1 Sept	Internet and E-Commerce: Internet concept and Technologies, Internet applications, Internet Accounts, Extranet and E-Mail, Features of E-Commerce,
3 Sept to 8 Sept	Elements of E-Commerce, Types of E-Commerce System: B2B,B2C,C2C,C2B,B2Gand G2C, E-commerce technologies, Types of an Electronic Payment System, Security Schemes of an electronic Payment Systems, E-Commerce On-line Services. Electronic data Interchange (EDI): Basics of EDI, Application of EDI, Advantages of EDI.
10 Sept to 15 Sept	Word processing: Introduction and working with MS-Word in MS-Office; Word basic commands; Formatting-text and documents;
17 Sept to 22 Sept	Sorting and tables; Working with graphics; Introduction to mail merge.
1 Oct to 6 Oct	Spread Sheets: Working with EXCEL-formatting, functions, chart features; Working with graphics in Excel;
8 Oct to 13 Oct	using worksheets as database in accounting, marketing, finance and personnel areas. .
15 Oct to 20 Oct	Presentation with Power-Point: Power-point basics, creating presentations the easy way; Working with graphics in Power-Point; show time, sound effects and animation effects
22 Oct to 27 Oct	Accounting Package-Tally (ERP 9): Features of Tally, Contents of Accounts Info, Menu, Creating Ledgers, Preparation of Vouchers, Inventory Master: Functions in Inventory Information Menu, Inventory Information Menu
29 Oct to 3 Nov & 5 Nov.	Accounting Package-Tally (ERP 9): Features of Tally, Contents of Accounts Info, Menu, Creating Ledgers, Preparation of Vouchers, Inventory Master: Functions in Inventory Information Menu, Inventory Information Menu
6 Nov. To 13 Nov.	MS OFFICE Revision and Tally (Accounting Package)

Month	Syllabus
August	
September	
October	
November	VAT(Value added tax) in Tally, Maintenance of Inventory records, Maintenance of Accounting Books and Final Accounts, Generating and Printing of Accounting Reports. Introduction to Statistical Packages (SPSS): Features, Formation of table, Types of graph, uses of SPSS.