

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session – (2021-22)

Name of the Teacher/s- Mandeep K. Chawla

Department: Department of Computer Science & Applications

Class: BCA II

Section (s): A & B

Semester: 3rd

Subject: Information System Design and Implementation (BCA-16-303)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	Aug, 2022	31 Aug, 2022	Systems Concepts and Information Systems Environment: Definition and characteristics, Elements of a system Environment. Types of systems. The System Development Life Cycle: Introduction to various phases. The Role of System Analyst, Skills of a System Analyst.	PPT, Assignments, Case study discussions, class test
2	1 Sep 2022	30 Sep 2022	System Planning and the Initial Investigation: Bases for planning in system analysis, Initial investigation, determining the users information requirements, Problem definition and Project Initiation, Background Analysis, Fact Finding, Fact Analysis, Determination of Feasibility. Information Gathering: Introduction, Information Gathering tools: Review of Literature, Procedures and forms. On -site observation. Interviews and questionnaires. Tools of Structured Analysis: Various tools of structured analysis: Data flow diagram (DFD), Data Dictionary, Decision tree and structured English, Decision table, Pros and cons of each tools.	PPT, Assignments, Case study discussions, Brain Storming, Discussions, Related Material, class test
3	1 Oct, 2022	31 Oct, 2022	Feasibility Study: System Performance-statement of Constraints, Identification of Specific System Objectives, description of Outputs. Feasibility Study – Feasibility considerations, Steps in feasibility analysis. Feasibility Report. System Design: The Process of Design-Logical and Physical Design, Design methodologies: Structured design, Functional Decomposition	PPT, Assignments, , Peer Learning, Related Material, class test
4	1 Nov, 2022	30 Nov, 2022	System Testing and Quality Assurance: Testing, System testing, Quality assurance and its goals in its system life cycle, Levels of quality assurance, Trends in testing. Implementation and Software Maintenance, User Training, Hardware and Software Selection	Assignments, Peer Learning, Related Material, mid-term exam

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans

			- To Teach both sections – Self-review	

Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session – (2021-22)

Department Computer Science and Applications

Class: BCA-II (3rd Semester)

Subject Computer Oriented Numerical Method (BCA-16-304) **Section (s)** A & B

Name of the Teacher/s Deeksha Gupta

S. No	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	11.8.21	31.8.21	Data Representation and Computer Arithmetic, Storage of Integer Numbers, Normalization and their consequences, Errors, Measures of Accuracy, Error	Lecture method Periodic Test Assignments PPT, Quiz Online Content Question Bank
2	1.9.21	30.9.21	Solution of Non-Linear Equations : Bisection Method, False-Position Method, Secant Method, Newton - Raphson Methods, Zeros of a polynomial using Birge Vieta Method, Convergences of every method Simultaneous Linear Equations: Gauss – Elimination Method, Gauss-Jordan Method, Concept of Pivoting, Iterative Method: Gauss-Seidal Method	Lecture method Periodic Test Assignments, PPT Online Source and Content , Quiz Question Bank
3	1.10.21	31.10.21	Interpolation: Lagrange Interpolation, Inverse Interpolation, Finite Differences, Difference Tables, Newton's Method of Interpolation Numerical Integration: Newton-Cotes Integration Formulae: Trapezoidal Rule, Simpson's 1/3rd Rule, Simpson's 3/8th Rule.	Lecture method Periodic Test Assignments PPT, Quiz Online Content Question Bank
4	1.11.21	30.11.21	Approximation: Taylor Series Representation, Chebyshev Polynomials. Solution of Ordinary Differential Equations: Introduction, Euler's Method, Runge-Kutta Methods: 2nd order & 4th order, Predictor Corrector Methods: Modified Euler's Method.	Lecture method Periodic Test Assignments Remedial classes PPT, Quiz Online Content Question Bank
Departmental meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson Plan				

Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Odd Semester) Session – (2021-22)

Name of the Teacher/s Ms Punam

Department Computer Science & Applications

Class BCA-II (3rd Semester)

Subject Data Structures (BCA-16-305)

Section (s) A & B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	17 th Aug 2021	31 st Aug 2021	Basic Concepts: Introduction to Complexity, Data Structure and Data Structure operations. Applications of Data Structure, Basic data Structures Arrays: Introduction, Types of Array, Memory representation, Applications and operations.	Lecture Method, Reading & Discussion, Presentation, Programs Discussion, Online Resources
2	1 st Sep 2021	30 th Sep 2021	Searching: Binary and Linear Search Sorting: Bubble sort Linked List: Operations:-traversing, searching, inserting, deleting, Operations on header linked list, circular linked list, doubly linked list, memory representation, Applications, polynomial manipulation.	Lecture Method, Reading & Discussion, Presentation, Programs Discussion, Online Resources
3	1 st Oct. 2021	31 th Oct 2021	Stacks: Introduction, memory representation, Applications and operations, Quick sort Queue: Introduction, Types, Memory Representation and Applications. Trees – Definition and Basic concepts, Representation in Contiguous Storage, Binary Tree,	Lecture Method, Reading & Discussion, Presentation, Programs Discussion, Class Test, Assignment Submission
4	1 st Nov. 2021	30 th Nov 2021	Binary Tree Traversal, Searching, Insertion and deletion in Binary trees, Binary Search tree.	Lecture Method, Online Resources Reading

			Graphs: Introduction, Memory Representation, Graph Traversal (DFS and BFS) Sorting: Insertion sort, Selection sort, Merge Sort. Comparison of various Searching and Sorting algorithms.	& Discussion, Programs Discussion, Presentation, Assignment submission
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
1	31st Aug 2021		<i>Discussed and reviewed, prepared the next lesson plan</i>	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
2	30 Sep 2021		<i>Discussed and reviewed, prepared the next lesson plan,</i>	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
 Other Methods adopted by the teacher – Please write the specific teaching method

Lesson Plan
MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2021-22)

Name of the Teacher/s: Dr. Mandeep K. Chawla

Dept.: Department of Computer Sci. & Appl.

Class: BCA 4th Sem

Subject: SPM (BCA-16-403)

Section (s): A & B

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity to Undertake*
	From	To		
1	22 Feb 2022	28 Feb 2022	Introduction to project management, role of a project manager, Software economics	Lecture Method, PPT, notes-giving, one assignment
2	1 Mar	31 Mar	Project phases and product life cycles, Principles of modern software management, Project Management Framework, Software Tools, Staff Acquisition and Team formation, Workflows and Checkpoints, Integration Management	Lecture Method, PPT, Class test, notes-giving, Group revisions
3	1 Apr	30 Apr	Project monitoring and controlling, Scope Management, WBS, Process instrumentation and seven core metrics, Iterative process planning, Project organizations and responsibilities	Lecture Method, PPT, Class tests, example case discussion, Group revisions, notes-giving, mid-term exam (tentative)
4	1 May	31 May	Process automation, Project Scheduling, Project Network Diagrams, Gantt charts, Project Cost Management, Cost Budgeting and Control	Lecture Method, PPT, MCQ, Group revisions
5	1 June	10 June	REVISION	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
			- To Teach both sections – Self-review	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				

*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
 Other Methods adopted by the teacher – Please write the specific teaching method

Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Even Semester) Session – (2021-22)

Name of the Teacher- Deeksha Gupta

Department- Computer Science and Applications

Class- BCA-II (4th Semester)

Subject- Operating System concepts & Linux (BCA-16-404) **Section (s)-** A & B

S.No	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	22.2.22	28.2.22	<ul style="list-style-type: none"> • Operating Systems (OS): Introduction, its needs and services, Types of OS • Process Management: Introduction to Process, PCB, Process States • CPU Scheduling: Scheduling Criteria 	Lecture method Periodic Test Assignments PPT, Quiz, Question Bank, Online Sources and Content
2	1.3.22	31.3.22	<ul style="list-style-type: none"> • CPU Scheduling: Algorithms • Introduction to Linux: Linux's shell, Kernel, Features, History, Minimum system requirements, Boot and Root disks 	Lecture method Periodic Test Assignments, PPT, Quiz, Question Bank Online Content
3	1.4.22	30.4.22	<ul style="list-style-type: none"> • Deadlocks • Linux: Terminal Handling commands, wildcards, Environment variables. • Understanding I/O Redirection and Piping: Introduction, cut, paste, sort, tee; Regular Expressions and grep 	Lecture method Periodic Test Assignments, PPT, Online Source and Content, Quiz Question Bank
4	1.5.22	31.5.22	<ul style="list-style-type: none"> • Memory Management, File system: Introduction to common types of files, Filenames, directories, Absolute and relative filenames, creating files and directories, listing files (ls), pwd, mv, cp, moving directories, Removing files and directories, using wildcards with files and directories, File and directory, Changing group ownership, umask settings 	Lecture method Periodic Test Assignments PPT, Seminar Online Source and Content, Quiz Question Bank
5	1.6.22	16.6.22	<ul style="list-style-type: none"> • Virtual Memory: Demand paging, Introduction to Page Replacement algorithms: FIFO, OPT and LRU Process Management • Process Management: Types of processes, ps, bg, fg, nice, kill. • Understanding System Administration activities: Superuser (su) command, Taking backups using tar, Managing disk space, Mounting and Un-mounting file system, Managing users, Managing printers Vi editor 	Lecture method Periodic Test Assignments Remedial classes PPT Seminar Online Source and Content Quiz Question Bank
Departmental meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson Plan				

Lesson Plan

MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Even Semester) Session – (2021-22)

Name of the Teacher- Ms Deepti Sharda

Department Computer Science & Applications

Class BCA-II (4th Semester)

Subject Database Management (BCA-16-405)

Section (s) A & B

S.No	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	22.2.22	28.2.22	<ul style="list-style-type: none"> • Operating Systems (OS): Introduction, its needs and services, Types of OS • Process Management: Introduction to Process, PCB, Process States • CPU Scheduling: Scheduling Criteria 	Lecture method Periodic Test Assignments PPT, Quiz, Question Bank, Online Sources and Content
2	1.3.22	31.3.22	<ul style="list-style-type: none"> • CPU Scheduling: Algorithms • Introduction to Linux: Linux's shell, Kernel, Features, History, Minimum system requirements, Boot and Root disks 	Lecture method Periodic Test Assignments, PPT, Quiz, Question Bank Online Content
3	1.4.22	30.4.22	<ul style="list-style-type: none"> • Deadlocks • Linux: Terminal Handling commands, wildcards, Environment variables. • Understanding I/O Redirection and Piping: Introduction, cut, paste, sort, tee; Regular Expressions and grep 	Lecture method Periodic Test Assignments, PPT, Online Source and Content, Quiz Question Bank
4	1.5.22	31.5.22	<ul style="list-style-type: none"> • Memory Management, File system: Introduction to common types of files, Filenames, directories, Absolute and relative filenames, creating files and directories, listing files (ls), pwd, mv, cp, moving directories, Removing files and directories, using wildcards with files and directories, File and directory, Changing group ownership, umask settings 	Lecture method Periodic Test Assignments PPT, Seminar Online Source and Content, Quiz Question Bank
5	1.6.22	16.6.22	<ul style="list-style-type: none"> • Virtual Memory: Demand paging, Introduction to Page Replacement algorithms: FIFO, OPT and LRU Process Management • Process Management: Types of processes, ps, bg, fg, nice, kill. • Understanding System Administration activities: Superuser (su) command, Taking backups using tar, Managing disk space, Mounting and Un-mounting file system, Managing users, Managing printers Vi editor 	Lecture method Periodic Test Assignments Remedial classes PPT Seminar Online Source and Content Quiz Question Bank
Departmental meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson Plan				