Lesson Plan (2022-23)

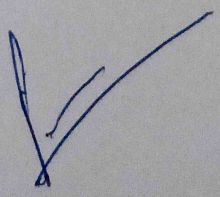
Name of the Assistant Professor: - Parveen Gorya
Class: -BCA 5th Sem.
MIS

S.No.	Month	Topics
1	August 2022	Introduction to system and Basic System Concepts, Types of Systems, The Systems Approach, Information System: Definition & Characteristics, Types of information,
2	September 2022	Role of Information in Decision-Making, Sub-Systems of an Information system: EDP and MIS management levels, EDP/MIS/DSS. An overview of Management Information System: Definition & Characteristics, Components of MIS, Frame Work for Understanding MIS: Information requirements & Levels of Management
3	October 2022	Simon's Model of decision-Making, Structured Vs Un-structured decisions, Formal vs. Informal systems. Developing Information Systems: Analysis & Design of Information Systems: Implementation & Evaluation,
4	November 2022	Pitfalls in MIS Development. Functional MIS: A Study of Personnel, Financial and production MIS, Introduction to ebusiness systems, ecommerce – technologies, applications,
5	December 2022	Decision support systems – support systems for planning, control and decision-making Revision

Lesson Plan (2022-23)

Name of the Assistant Professor:- Parveen Gorya
Class: - B.Sc first year
Computer Fundamentals

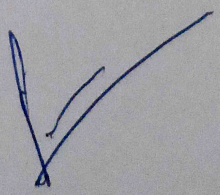
S.No.	Month	Topics
1	August 2022	Introduction : Historical evolution of computers, Classification of computers, Block Diagram along its components and characteristics, Usefulness of Computers. Human being Vs computer, Computer as a tool, Applications of computers.
2	September 2022	Number Systems: Definition of Number system, necessity of binary number system, binary, dec ima l, octal and hexadecimal number system, interconversion of numbers, Representation of integers, fixed and floating points, BCD codes, Error detecting and correcting codes, character Representation-ASCII, EBCDIC, Binary arithmetic. Input/Output Devices: Keyboards, mouse, joysticks, trackballs, digitizer, voice-recognition, optical-recognition, scanners, terminals, point-of-sale terminals, machine-vision systems
3	October 2022	Hard-copy devices: Impact printers - DMPs, Daisy-wheel printers, Line-printers. Non-impact printers - Inkjet, Laser, Thermal, LED; Plotters. Soft-copy devices: Monitors, video-standards (VGA and SVGA). Memory & Mass Storage Devices: Characteristics of memory systems, types of memory, RAM, ROM, magnetic disks - floppy disk, hard-disk; optical disks - CD, CD-I, CD-ROM; Magnetic tapes; Concepts of Virtual and Cache memory Software Concepts: Introduction, types of software - System & Application software; Language translators - Compiler, Interpreter, Assembler;
4	November 2022	Operating system - Characteristics, bootstrapping, types of operating, operating system as a resource manager; BIOS; System utilities - Editor, Loader, Linker, File Manager. Concept of GUI, GUI standards. Introduction to Algorithm & Flowcharts, Advantages & Disadvantages. MS-OFFICE:MS-Word :- Creating a document, font operation, bullet and numbering, find & replace, hyper linking, mathematical operation, Create table and flow chart, Macro, Mail merge, Correcting grammar, protect files, difference between doc and docx.MS-PowerPoint :- Creating single and multiple slide, Animation, manual and automatic slide show, hyper linking, DFD, shape and style.
5	December 2022	MS-Excel:- Create sheet and rename sheet, table and operation, cells operation, hyper linking, Function(mathematic, logical), sort and data tools, protection(sheet, workbook). Revision

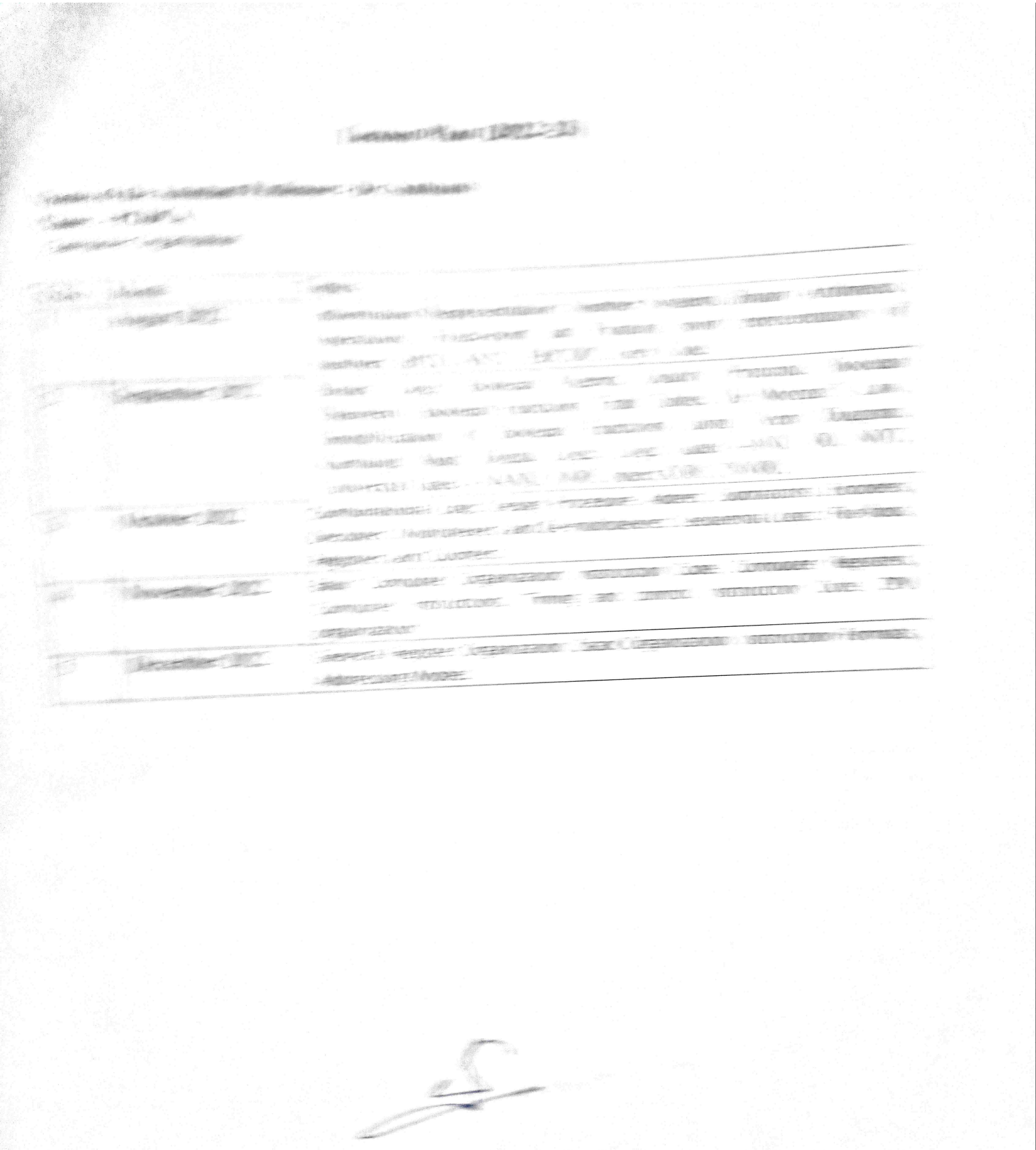


Lesson Plan (2022-23)

Name of the Assistant Professor:- Parveen Gorya
Class: - B.Sc first year
Computer Fundamentals

S.No.	Month	Topics
1	August 2022	Introduction : Historical evolution of computers, Classification of computers, Block Diagram along its components and characteristics, Usefulness of Computers. Human being Vs computer, Computer as a tool, Applications of computers.
2	September 2022	Number Systems: Definition of Number system, necessity of binary number system, binary, dec ima l, octal and hexadecimal number system, interconversion of numbers, Representation of integers, fixed and floating points, BCD codes, Error detecting and correcting codes, character Representation-ASCII, EBCDIC, Binary arithmetic. Input/Output Devices: Keyboards, mouse, joysticks, trackballs, digitizer, voice-recognition, optical-recognition, scanners, terminals, point-of-sale terminals, machine-vision systems
3	October 2022	Hard-copy devices: Impact printers - DMPs, Daisy-wheel printers, Line-printers. Non-impact printers - Inkjet, Laser, Thermal, LED; Plotters. Soft-copy devices: Monitors, video-standards (VGA and SVGA). Memory & Mass Storage Devices: Characteristics of memory systems, types of memory, RAM, ROM, magnetic disks - floppy disk, hard-disk; optical disks - CD, CD-I, CD-ROM; Magnetic tapes; Concepts of Virtual and Cache memory Software Concepts: Introduction, types of software - System & Application software; Language translators - Compiler, Interpreter, Assembler;
4	November 2022	Operating system - Characteristics, bootstrapping, types of operating, operating system as a resource manager; BIOS; System utilities - Editor, Loader, Linker, File Manager. Concept of GUI, GUI standards. Introduction to Algorithm & Flowcharts, Advantages & Disadvantages. MS-OFFICE:MS-Word :- Creating a document, font operation, bullet and numbering, find & replace, hyper linking, mathematical operation, Create table and flow chart, Macro, Mail merge, Correcting grammar, protect files, difference between doc and docx.MS-PowerPoint :- Creating single and multiple slide, Animation, manual and automatic slide show, hyper linking, DFD, shape and style.
5	December 2022	MS-Excel:- Create sheet and rename sheet, table and operation, cells operation, hyper linking, Function(mathematic, logical), sort and data tools, protection(sheet, workbook). Revision





Govt. College, Narnaul
Department of Computer Science
Lesson Plan (2022-23)

Name of the Assistant Professor:- Dr. Archana Gupta
Class: - M.Sc 1st Sem
M.SC.-2102: DATA STRUCTURES & ALGORITHMS

S.No	Month	Topics
1	September 2022	Definition, Classification of data structures, Operations on data structures, Design and analysis of algorithm, Top down and bottom up approaches to Algorithm design. Frequency count, Complexity. Arrays: Address calculation using column and row major ordering. Various operations on Arrays, Vectors, Application of arrays: Matrix multiplication, sparse polynomial representation and addition. CLASS TEST
2	October 2022	Stacks and Queues: Introduction, Operations, Representation using arrays and linked-list. Circular queues, Priority Queue and DeQueue. Applications of stacks: Conversion from infix to postfix and prefix expressions, Evaluation of postfix expression using stacks. Linked list: Singly linked list; operations on list, Linked stacks and queues. Polynomial representation and manipulation using linked lists. Circular linked lists, doubly linked lists. Class Test and Assignment
3	November 2022	Binary tree traversal methods: Preorder, In-order, Post-ordered. Recursive Algorithms. Traversal methods. Binary tree representation of a general tree. Conversion of forest into tree. Threaded binary trees. Binary search tree: Height balanced (AVL) tree, B-trees. Sorting: Selection sort, Insertion sort, Bubble sort, Quick sort, merge sort, Heap sort, Radix sort and their complexities. CLASS TEST
4	December 2022	Searching, sorting and complexity, Hashing Schemes. Comparison of time complexity. Graph representation: Adjacency matrix, Adjacency lists, Depth first search, Breadth first search. Spanning tree: Definition, Minimal spanning tree algorithms. Shortest Path algorithms (Prim's and Kruskal's). File Structures: File Organization, Sequential Files, Indexing and Hashing, Primary indices, Secondary indices, B+ Tree index Files, B Tree index Files, Indexing and Hashing Comparisons. REVISION

Archana Gupta

Govt. College, Narnaul
Department of Computer Science
Lesson Plan (2022-23)

Name of the Assistant Professor:- Dr. Vijay deep
Class: - B.B.A. Vth Semester
Paper Code BBAN506: **CYBER SECURITY**

S.No	Month	Topics
1	September 2022	Concept of information society, knowledge society, cyber space, digital economy, critical infrastructure. Critical information infrastructure, internet as global Information infrastructure..
2	October 2022	Cyber terrorism, terrorist atrocities, the role of IT by terrorist, the power of cyber terrorism, characteristic of cyber terrorism , factors contributing to the existence of cyber terrorism, real examples of cyber terrorism, political orientation of terrorism, economic consequences.
3	November 2022	Cybercrime, types of cybercrime: hacking, virus, worm, Trojan horse, mall ware, fraud and theft, cyber homicide, current cyber-attack methods, criminal threats to IT infrastructure, web security, basic cyber forensics , internal penetration, external penetration, your role on cyber-attacks. Cybercrimes and law, cyber jurisdiction, Indian IT ACT.
4	December 2022	. Fundamental concepts of information security, information warfare, levels of information war, cost of information warfare, cyber disaster planning, why disaster planning, companywide disaster planning, business impact analysis.

PG DEPARTMENT OF GEOLOGY

Lesson Plan for odd semesters in the session 2022-23

Assistant Professor- Sh. Jaipal Singh

B.Sc. 5th Semester Paper- 501 (Structural Geology)

August/September, 2022	Study of outcrop, Identification of bedding, effect of topography, Dip & Strike, outlier and Inlier. Unconformity: Types, significance and recognition in the field. Monthly Test and Assignments
October, 2022	**Folds:** Morphology, classification of folds, Mechanism and causes of folding. **Faults:** Parts, geometric and genetic classification, effect of faulting on outcrop. Recognition of fault infield. Revision and Mid Term Test and Assignments/Presentation
November, 2022	Joints: geometrical and genetic classification, mechanism of jointing and significance of joints, recognition and demarcation of joint sets in the field. Monthly Test and Assignments.
December, 2022	Doubt Clearing classes, Revision, Sessional Test, Presentations and internal practical.

B.Sc. 5th Semester Paper- 502 (Economic Geology)

August/September, 2022	Factors controlling mineral availability , distribution of mineral deposits in space and time. Metallogenetic Epochs & Provinces, Tenor, ore mineral , gangue mineral, syngenetic and epigenetic deposits. Principles of Mineral Economics: Strategic, critical and essential minerals. Monthly Test and Assignments.
October, 2022	Classification and origin of deposits. Processes of formation of ore deposits: Magmatic Concentration and Contact metasomatism. Revision and Mid Term Test and Assignments/Presentation.
November, 2022	Processes of formation of ore deposits : Hydrothermal – Cavity filling and replacement, Sedimentation, Evaporation and brines and Metamorphism. Monthly Test and Assignments.
December, 2022	Processes of formation of ore deposits: Weathering products and residual deposits. Mechanical concentration- Placer deposit, Oxidation and Supergene sulphide enrichment deposits. Revision, Sessional Test, Presentations and internal practical.

Jaipal 31/8/2022

Name of the Teacher.

Pooja Verma.

Dept. of Economics.

Session – 2022-23.

Lesson Plan.

Month	Class B. Com 1st yr. Bussiness Economics.	B. A. 1st year. Micro Eco.	B. A. 2nd year. Macro Eco.	B. Com. IIIrd year. International Trade.
September.				
1st week	(1) Basic Problems of an Economy. (2) Working of Price Mechanism	(1) The Economic Problem (2) function of an economic system.	(1) Nature & Scope of Macro Eco. (2) Concept of GDP (3) National Income.	(1) An overview Domestic & International Bussiness (2) International Trade
2nd week.	(3) Concept of Elasticity of demand (4) Measurement of E.I (5) Importance.	(3) Circular flow of Economic activities (4) System of Economic organisation.	(4) Measurement of N.I (5) Related Aggregates of N.I	(3) Risks & challanges of I.B. (4) Components of I.B.E
3rd week.	(6) Determinants of Elasticity of demand (7) Revenue - Average, Marginal	(5) Micro and Macro Economics (6) Concept of demand	(6) Nominal Income. (7) Real Income (8) Limitations of GDP Concept.	(5) Determinants of International Bussiness Environment (6) stages of Internationalization of Bussiness.
4th week.	(8) AR, MR & Elasticity of Demand. (9) Elasticity of Supply. * Unit Test	(7) Concept of Elasticity of Demand (8) Types, Measurement Determinants & Importance of E.I * Unit test	(9) C.S.O (10) Method of Measurement of National Income. (11) Unit Test.	(7) International Business Approaches (8) Concept of Globalization (*) Unit test

Govt. College, Narnaul

Govt. College, Narnaul
Department of Computer Science
Lesson Plan (2022-23)

Name of the Assistant Professor:- Dr. Palak
Class: - M.Sc 1st Sem
M.SC.-2102: MODREN OPERATING SYSTEM WITH UNIX

S. NO.	Month	Topics
1	September 2022	Introduction of Windows and UNIX operating system: Basic feature of Operating System; Process and CPU Scheduling, Multithreaded Programming, Scheduling Criteria, Multiple Processor Scheduling, Real-Time Scheduling. File Structure; Memory Management: Swapping, Demand paging, Virtual Memory, Critical Section Problem, Mutual Exclusion Problem.
2	October 2022	Introduction of Deadlock, methods of handling, Prevention and Avoidance, Deadlock Detection, Recovery from Deadlock, Disk Scheduling. Commands: User Names and Groups, Logging in; Format of UNIX commands; Changing your password; Characters with Special Meaning; Files and Directories; Current directory, Directory contents, Absolute and Relative Pathnames, File contents. File access Permissions; Basic operation on Files; Changing Permission Modes; Standard files, Standard output; Standard Input, Standard Error. Class Test 1 and Assignment
3	November 2022	Filter and pipelines, Text Manipulation: Inspecting Files; File Statistics, Searching for Patterns; Comparing Files; Operations on File; Printing Files, Rearranging Files; Splitting Files. Translating characters; calculator command, nice command, Processes: Finding out about Process; Stopping Background Process. File System; Block and Fragments, I-nodes, Directory Structure; User to User Communication. UNIX Editor Class TEST 2
4	December 2022	Shell Programming: Programming in the Borne Shell, C-Shell and Korn-Shell; Wild cards; shell programming; Shell variables; interactive shell scripts; AWK utility. System Administration: Definition; Booting system; Maintaining user accounts; File systems and special files; Backups and restoration; Role and functions of a system manager. Overview of Linux operating system, Difference between LINUX and UNIX REVISION

30/8/22

Department of Geography

Lesson plan for odd Semester 2022-23

(November)

Subject M.A. (Pre.) 12:00 : 12:45	Atmospheric pressure: Measurement and its distribution pattern, General circulation planetary, geostroptic, subtropical, Westerlies and Polar winds, tricellular Meridional circulation, walker circulation - ENSO and La Nina; circulation pattern in vertical and horizontal planes origin of Monsoon and Jet Streams.
B.A. III sem. Theory 12:45 : 1:30	Surface configuration of the ocean floor - classification of Ocean floor, pacific ocean, Atlantic ocean, Indian Ocean. Temperature of oceanic waters circulation of the Oceanic waters ocean currents (Atlantic, Pacific, Indian Ocean) Oceanic Resources

Dr. Neetu Yadav

Lesson plan - Session 2022-23

Class - M.Sc. Geography, IIIrd Semester

Subject: Remote Sensing

Schedule of Teaching	Topics	Teaching Aids
16-08-22 to 20-8-22	Concept of Remote Sensing and its development	Black Board & Smart board
22-08-22 to 27-08-22	Electromagnetic radiation and spectrum	,,
29-08-22 to 03-09-22	Interaction of EMR with Atmosphere	,,
05-09-22 to 10-9-22	Interaction with Surface features	
12-9-22 to 17-09-22	orbits, platforms, Sensors and Resolution	,,
19-09-22 to 24-09-22	Active and passive Remote Sensing, Concept of microwave remote Sensing	,,
26-09-22 to 01-10-22	Hyper Spectral Remote Sensing and Indian Space programme.	,,
03-10 22 to 08-10-22	Class Test of above topics.	,,
10-10-22 to 15-10-22	Interpelation of digital Image processing	,,
17-10-22 to 21-10-22	Digital Image and Data formats.	,,

Lesson plan

Class - B.A. IInd, Sem - 3rd

Subject: Practical Geography

Date	
16.08 to 31-08.22	Study the Instruments through which Measurement of weather Elements.
01-9-22 to 30-9-22	Presentation of climatic data.
01-10-22 to 31-10-22.	Weather maps and their distributions.
~~31 to~~ 01-11-22 to 30-11-22	Chain and Tape Survey.

पाठ-योजना बी० ए० प्रथम वर्ष सत्र 2022-23 (प्रथम सेमेस्टर)

हिंदी विभाग

(अजय कुमार तंवर)

(मनप्रीत कौर)

अगस्त 2022 ⇨

- कबीरदास: साहित्यिक परिचय
- कबीरदास: सरलार्थ
- कबीरदास: अति लघुउत्तरीय प्रश्न

सितम्बर 2022 ⇨

- सूरदास: साहित्यिक परिचय
- सूरदास: सरलार्थ
- सूरदास: निबंधात्मक प्रश्न
- सूरदास: लघुउत्तरीय प्रश्न
- सूरदास: अति लघुउत्तरीय प्रश्न
- तुलसीदास: साहित्यिक परिचय
- तुलसीदास: सरलार्थ
- तुलसीदास: निबंधात्मक प्रश्न
- तुलसीदास: लघुउत्तरीय प्रश्न
- तुलसीदास: अति लघुउत्तरीय प्रश्न

अक्टूबर 2022 ⇨

- मीराबाई: साहित्यिक परिचय
- मीराबाई: सरलार्थ
- मीराबाई: निबंधात्मक प्रश्न
- मीराबाई: लघुउत्तरीय प्रश्न
- मीराबाई: अति लघुउत्तरीय प्रश्न
- रसखान: साहित्यिक परिचय
- रसखान: निबंधात्मक प्रश्न
- रसखान: लघुउत्तरीय प्रश्न
- रसखान: अति लघुउत्तरीय प्रश्न

नवम्बर 2022 ⇨

- बिहारी: साहित्यिक परिचय, सरलार्थ
- बिहारी: निबंधात्मक प्रश्न
- बिहारी: लघुउत्तरीय प्रश्न
- बिहारी: अति लघुउत्तरीय प्रश्न
- घनानंद: साहित्यिक परिचय
- घनानंद: साहित्यिक परिचय, सरलार्थ
- घनानंद: निबंधात्मक, लघु एवं अति लघु प्रश्न

Lesson Plan

November, ~~December~~

SOMLATA
Dept. of Commerce

B.Com-Ist Sem (B)
Financial Accounting

~~Final Accounts~~
→ Final Accounts with adjustments and Errors & Rect.
→ N.P.O and Consignment Accounts
→ class test.
→ class Quiz.

B.Com- IIIrd Sem (A & B)
Corporate law

→ Borrowing powers and Debentures and charges
→ class Test.
→ class Quiz
→ Revision.

B.Com - IVth Sem - E.S.S.B

Managing roles & Functions of Small Business.
Procⁿ & operation Management
Business Growth.
Incentives & subsidy
Institutional support
Class test and quiz.

M.Com- I
Value Education.

Sources of Value Education
Famous Thinkers and philosophers
Revision
class test
class Quizes

Department of Botany (LESSON PLAN)

MONTH	TEACHER - Dr. Priyanka Sharma	DESIGNATION Extension Lecturer
	Class B.Sc 3rd sem	Class M.Sc (P) / M.Sc (F)
SEPT	General Characters, origin and evolution of gymnosperm, Geological Time table, evolution of seed Habit, Pilger and Melchior's system of Classification of Gymnosperm. Tissue – Meristematic and permanent tissue systems, The Shoot system – Shoot apical Meristem and its histological organization.	virus, virions, Chemical Nature, replication transmission and economic importance of virus Phytoplasm, General Character and role in causing Plant disease Mechanism of water, Apoplast, Symplast Physical State of water, Plants cell, Movement of water. Stomatal physiology Mechanism of stomatal movement and transpiration, Beneficial nutrients function and deficiency symtoms, Toxic effects, Comparison of xylem and Phloem transport, loading & unloading
OCT	Palaeobotany – Fossils & fossilization, Reconstruction of fossil plants – Lagenopteris williamsonia, Cycadeoides Cambium – Structure and function Secondary growth in dicot stem, Characteristic of growth ring, sap wood & heart wood, Periderm. Anomalous secondary growth, Dracaena Boerhaavia & Achyranthus.	Archabacteria, Eubacteria, General account, Ultra structure, Nutrition and reproduction, economic imp. of virus, cyanobacteria, Special feature & biological importance Mycology – cell organization Signal transduction, cyclic mechanism Specific signaling, Mechanism, Photoperiodism, phytochrome, Endogenous rhythm, tropism. Photosynthesis, chloroplast, energy transducting, composition, light Harvesting, electron flow

Sharma

Lesson Plan (2022-23)

Name of the Assistant Professor:- Dr. Mahesh Kumar Sharma
Class: - BBA 1st Sem
Subject: Computer Fundamentals

S.No	Month	Topics
1	August 2022	Introduction – Digital and analog computers, evolution of digital computers, major components of a digital computer
2	September 2022	hardware, software, firmware, middleware and freeware, computer applications; Input devices, output devices, printers, plotters, other forms of output devices; main memory, secondary memory and backup memory. Decimal number system, binary number system, conversion of a binary number to decimal number, conversion of a decimal number to a binary number. CLASS TEST
3	October 2022	addition of binary numbers, binary subtraction, hexadecimal number system, octal number system. Introduction to Operating System, history; functions, types, structure, memory management; file management system... CLASS TEST
4	November 2022	Computer applications in offices, use of computers in books publication, desktop publishing system, CLASS TEST
5	December 2022	application of computers for data analysis, application of computer in education, application of computer in banks, medical field. . REVISION

Lesson Plan (2022-23)

Name of the Assistant Professor:- Manoj Kumar
Class: - M.Sc. (Computer Science)—3rd semester
Subject: COMPUTER GRAPHICS (PAPER CODE- MCS301)

S.No.	Month	Topics
1	August 2022	Computer Graphics and Its Types, Applications of Computer Graphics; Graphics Display Devices: CRT (Random-Scan and Raster Scan Monitor)
2	September 2022	Color CRT Monitors, Refresh CRT and Interlacing; DVST, Emissive and Non- Emissive Display devices; Hard copy devices; Graphics Software Standards, Scan Conversion: Scan Converting a Point, Line: Slope Method, DDA and Bresenham's Algorithm, Circle: Mid Ponit and Bresenham's Algorithm, Anti- aliasing.
3	October 2022	2-D Graphics Transformations: Rotations, Scaling, Translation, Reflection, Shearing; Homogeneous coordinates: Need, Transformations in Homogeneous Coordinates. Composite Transformation, Polygon Filling: Scan-Line Polygon Fill Algorithm, Inside-Outside tests, Boundary-Fill Algorithm, Flood Fill Algorithm, Cell Array, Character Generation.
4	November 2022	Two-Dimensional Viewing: The Viewing Pipeline, Window to View port coordinate transformation, Clipping Operations, Point Clipping, Line Clipping, Polygon Clipping for convex and concave polygons, Text Clipping, Exterior Clipping, Interactive Picture-Construction Techniques: Basic Positioning Method, Constraints, Grids, Gravity field, Rubber Band Methods, Dragging, Painting and Drawing
5	December 2022	Three–Dimensional Concepts: Three Dimensional Display Methods: Parallel Projection and Perspective Projection; 3D Transformations: Translation, Rotation & Scaling. Applications of 3D graphics.

Lesson plan for odd sem, (2022) Commerce

Topics - month wise

Class & Subject	August	Sept.	October	November
Advance Cost A/c M.Com (F) 9:45 - 10:30	Inventory system; ABC Analysis, VED " JIT	Inventory systems, Material Requirement Planning. ERP	Process Costing, Uniform costing, Inter firm comparison	Cost Records, Preparation of Accounts.
A/c for Fin. Mgmt. B.Com (F) 10:30 - 11:15	Nature and scope of Management A/c, Financial Statements	Ratio analysis, Types of Financial Analysis	Cash Flow statements	Capital Budgeting
Business Comm. B.Com Ist 12:00 - 12:45	Basics of Communi. 7c's of communication	Barriers of Comm., Ethical content of Comm., Letter writing	Email, Bad news Letter, Memo, Report writing	Reading skills, Listening skills Persuasive Speaking
Cost Accounting B.Com (F) 12:45 - 1:30	Introduction to cost A/c Elements, concept & classification	Material Cost Accounting, Labour Cost control	Overheads Costing	Unit & output costing

KAVITA YADAV
(Dept. of Commerce)

DEPARTMENT OF GEOLOGY

Lesson Plan

Name of the Teacher .**Dr Sonu**

Subject: - ***SEDIMENTOLOGY AND FUEL GEOLOGY***

Class-M.Sc. (P)

Session: 1st Semester, September 2022 to December 2022

Sr.No	Months	Content
1	**September**	Mechanical properties of rocks and their controlling factors. Theory of rock failure. Concept of stress and strain and their relationships of elastic, plastic and viscous materials. Types of strain ellipses and ellipsoids, their properties and geological significance. Strain markers in naturally deformed rocks.
2	**October**	Fold anatomy, classification and mechanism of folding and field evidence of fold. Fractures and Joints: Their nomenclature, age relationship, origin and significance. Causes and dynamics of faulting, strike-slip faults, normal faults, overthrust and nappe and field evidences of faults.
3	**November**	Effect of confining Pressure, Temperature, Pore-fluid pressure, and strain rate in rocks. Shear Zones: Brittle and ductile. Mylonites and cataclasites-their origin and significance. Structural behavior of diapirs and salt domes. Major tectonic features and associated structures in extensional-, compressional-, and strike-slip terrenes.
4	**December**	Concept of petro-fabrics and symmetry. Foliation and lineation, their origin and significance. L-, L-S-, and S-tectonic fabrics. Use of stereographic and equal area projections. Time relationship between crystallization and deformation.

DEPARTMENT OF CHEMISTRY

LESSON PLAN

Name of Teacher: - Sanjeeta
Section: E
Session: Odd Session

Class: B.sc (1st Semester, Non -Med)
Subject: Chemistry

Month	Chemistry
Aug,22	Idea of de Broglie matter waves, Heisenberg uncertainty principle, atomic orbitals, quantum numbers, radial and angular wave functions and probability distribution curves, shapes of s, p, d orbitals, Maxwell's distribution of velocities and energies (derivation excluded) Calculation of root mean square velocity, average velocity and most probable velocity. Collision diameter, co llision number, col lision frequency and mean free path. Deviation of Real gases from ideal behaviour, Real gases using Vander Waal's equation, Localized and delocalized chemical bond, van der Waals in teractions, resonance: conditions, resonance effect and its applications, hyperconjugation, inductive effect, Electromeric effect & their comparison.
Sept,22	General principles of periodic table: Aufbau and Pauli exclusion principles, Hund's multiplicity rule. Electronic configurations of the elements, effective nuclear charge, Slater's rules. Atomic and ionic radii, ionization energy, electron affinity and electronegativity, Critical temperature, Critical pressure, critical volume and their determination. PV isotherms of real gases, continuity of states, Liquification of gases, Concept of isomerism. Types of isomerism. Optical isomerism, elements of symmetry, molecular chirality, enantiomers, stereogenic centre, optical activity, properties of enantiomers, chiral and achiral molecules with two stereogenic centres, diastereomers, threo and erythro diastereomers, meso compounds, R & S systems and E & Z system of nomenclature, Conformational isomerism.
Oct,22	Valence bond theory and its limitations, various types of hybridization and shapes of simple inorganic molecules and ions (BeF2, BF3, CH4, PF5, SF6, IF7 SO42 -, ClO4-) Valence shell electron pair repulsion (VSEPR)5 theory to NH3, H3O+, SF4, ClF3, ICI2- and H2O. MO theory of heteronuclear (CO and NO) diatomic molecules, Properties of liquids – surface tension, viscosity vapour pressure and optical rotations and their determination, Curved arrow notation, drawing electron movements with arrows, half-headed and double-headed arrows, homolytic and heterolytic bond breaking. Types of reagents – electrophiles and nucleophiles. Types of organic reactions. Energy considerations, Reactive intermediates carbocations, carbanions, free radicals, carbenes, arynes and nitrenes (formation, structure & stability), Assigning formal charges on intermediates and other ionic species.
Nov,22	Ionic structures (NaCl, CsCl, ZnS(Zinc Blende), CaF2) radius ratio effect and coordination number, limitation of radius ratio rule, lattice defects, semiconductors, lattice energy and Born-Haber cycle, solvation energy and its relation with solubility of ionic solids, polarizing power and polarizability of ions, Fajan's rule, unit cell & space lattice, Bravais lattices, crystal system. Xray diffraction by crystals, Derivation of Bragg equation, Determination of crystal structure of NaCl, KCl, Liquid crystals: Difference between solids, liquids and liquid crystals, types of liquid crystals, Isomerism in alkanes, sources, methods of formation (with special reference to Wurtz reaction, Kolbe reaction, Corey-House reaction and decarboxylation of carboxylic acids), physical properties, Cycloalkanes nomenclature, synthesis of cycloalkanes and their derivatives – photochemical (2+2) cycloaddition reactions, dehalogenation of -dihalides, pyrolysis of calcium or barium salts of dicarboxylic acids, Baeyer's strain theory and its limitations, theory of strainless rings.

Department of Geography

Lesson Plan of M.A. Geography. II sem

Regional Development and Planning.

Dr Sunita Sharma.

August :- Conceptual and theoretical framework of development.

September :- Regional development, Concept of region and regional planning, geography and regional planning, selection of indicators and measures of regional disparities.

October :- Regional Growth theories; Friedman's Core periphery theory; polarisation and trickle-down effe theory of Hirschman, Circular and Cumulative Caus model of Myrdal: Planning process, characteristics, hierarchy and deterioration, planning regions of India

Nov :- Experience of regional development and planni in India. multi level planning. Regional policies in Ind five years plans. planning policies for regional develop strategy and programmes for backward area develop

Dr. Sunita Sharma