GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

LESSON-PLAN (Session 2024-25) EVEN SEMESTER

Name of Teacher: **Dr Surender Singh**

Designation: **Professor**

Class: **MSc 2nd Sem**

Subject/ Paper: **Biology of Vertebrates**

S. No.	Month	Topics to be covered	Teaching Learning Strategy	Learning Outcomes of Students	Remarks
1.	January 2025	Introduction to Chordates with their general characters. Integument and its derivatives	Group Learning & Teaching	Students will be able to get detailed knowledge of chordates	
2.	February 2025	Skeletal system Digestive system Respiratory system	Group Learning & Teaching	Students will be able to study these systems in comparative way	
3.	March 2025	General plan of circulation in various groups Evolution of Urinogenital system in vertebrate series	Group Learning & Teaching	Students will be able to study circulatory system and urinogenital system evolution	

4.	**April & May2025**	**Nervous system Sense organs**	**Group Learning & Teaching**	**Students will be able to study the evolution of these systems**	

- **Seminar/Presentation/Assignment/Quiz/Class Test /Mid-Term Exam will be taken as per schedule.**

Signature of Teacher **Principal**

GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

LESSON-PLAN (Session 2024-25) EVEN SEMESTER

Name of Teacher: **Dr Surender Singh**

Designation: **Professor**

Class: **MSc 2nd Sem**

Subject/ Paper: **Population and Community Ecology**

S. No.	Month	Topics to be covered	Teaching Learning Strategy	Learning Outcomes of Students	Remarks
1.	January 2025	Concepts of evolution and theories of evolution Neo-Darwinism-Neutral Hypothesis Hardy-Weinberg law of genetic equilibrium A detailed account of destabilizing forces	Group Learning & Teaching	Students will be able to get basic knowledge of Evolution	
2.	February 2025	Quantifying genetic variability Molecular population genetics Genetics of quantitative traits in populations	Group Learning & Teaching	Students will be able to study population genetics	
3.	March 2025	Genetics of speciation Molecular Evolution Origin of higher categories	Group Learning & Teaching	Students will be able to study speciation and various aspects of molecular evolution	

4.	**April & May2025**	**Molecular phylogenetics** **Population genetics and ecology**	**Group Learning & Teaching**	**Students will be able to prepare phylogenetic trees**	

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Signature of Teacher **Principal**

GOVT. P.G. COLLEGE FOR WOMEN, SECTOR-14, PANCHKULA

LESSON-PLAN (Session 2024-25) EVENSEMESTER

Name of Teacher: Kiran Bala

Designation: Assistant Professor

Class: M.Sc I (2nd Sem)

Subject/ Paper: Computer Programming With MATLAB

S. No.	Month	Topics to be covered	Teaching Learning Strategy	Learning Outcomes of Students	Remarks
1.	**January/February**	Basics of Programming, Anatomy of a program; Constants, Variables; Data types; Assigments; Operators; functions Working with Vectors, Matrices M-files, The find function, format function; SuPPressing outPut	**Group-Learning and Teaching** **Learning through Problem Solving**	Get familiar with the importance and rvorking of MATLAB as computation platform through the knowledge of characters, variables, operators, functions and expressions as used for elementary operations in matrix algebra along with the editing, load/save data and compilation/execution/quitting of source programs	
2.	**March**	Flow Control Data Structures Scripts and Functions Linear differential equation of order n with constant coefficients Characteristic roots, Fundamental set	**Group-Learning and Teaching** **Learning through Problem Solving**	Leam the process of writing a source progr,rm in MATLAB as a programming language making use of the statements for input/output, conditional/non-sequential processing involving functions, arrays and structures.	
3.	**April**	Graphics, Basic , Plotting Functions, Mesh and Surface Plots, Printing and Handle Graphics: Using the handle; Graphics object; Setting object Properties; Specifying the axes or figure, Finding the handles of	**Group-Learning and Teaching** **Learning through Problem Solving**	Leam the plotting ofthe curves and surfaces, which can be edited, modified. accumulated, handled, printed, exported	

		existing objects. Animations: Erase mode method. Creating movies			
4.	**May**	Symbolic Math: Symbolic objects; Creating symbolic variables and expressions; The findsym Command; The default symbolic variable constructing real and complex variables; Creating abstract function reating symbolic math functions; Creating an M-file Calculus: Limits; Differentiation; lntegration; Symbolic summation Taylor series; Examples; Simplifications and substitutions, Variabel precision arithmetic examples. Linear Algebra, Jordan canonical form; Solving Equations: System of algebraic equations	**Group-Learning and Teaching** **Learning through Problem Solving**	Write source programs with objects, variables, expressions, [bstract functions, math functions in symbolic form and their bubsequent use for the operations/ concepts/ problems in calculus, inear algebra and differential equations.	

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