## **Lecture Plan** Name of the College: Government College of Arts, Science and Commerce. Sanguelim- Goa Mr. Subject: Zoology of Faculty: Name Sanjeet Gaonkar Paper code: ZOO 201 Program: S.Y BSc **Division:** Academic year: 2025- 2026 Semester: III **Total Lectures: 15 Course Objectives:** 1. Imparting understanding of the cellular organisation. 2. Understanding the genetic basis of inheritance. 3. Analyze the structure and function of cells, organelles, and cellular components. 4. Gain practical experience in laboratory techniques used in cell biology and genetics research. **Expected Course Outcome:** At the end of the course, students will be able to 1. Explain the cellular organisation. 2. Distinguish between prokaryotic and eukaryotic cell 3. Interpret the transmission of traits based on the laws of inheritance. 4. Predict the outcome of monohybrid and dihybrid genetic crosses Student Learning Outcome: Students will gain knowledge of the mechanism of homeostasis through hormonal regulation No. of Topic, Subtopic to be covered Exercise/ **ICT** Reference books Month **Lecture From Lecture To** Assignment lectures Tools allotted

June/July	30/06/2025	05/07/2025	1	Generalised Prokaryotic cell	PPT
July	07/07/2025	12/07/2025	1	Extremophiles	PPT
July	14/07/2025	19/07/2025	1	• PPLO	PPT
July	21/07/2025	26/07/2025	1	Eukaryotic cell	PPT
July/August	28/07/2025	02/08/2025	1	<ul> <li>Plasma membrane, structure (Fluid mosaic Model)</li> </ul>	PPT

August	04/08/2025	09/08/2025	1	Plasma membrane- composition and functions     (Passive and active transport)	PPT
August	11/08/2025	16/08/2025	1	Cell organelles—Structure and functions of - Mitochondria, Endoplasmic reticulum	PPT
August	18/08/2025	23/08/2025	1	Cell organelles—Structure and functions of - Golgi complex, Ribosomes, Lysosomes	PPT
September	02/09/2025	06/09/2025	1	Cell organelles—Structure and functions of - Centriole,	PPT
September	08/09/2025	13/09/2025	1	Cytoskeletal elements  • Nucleus- Interphase nucleus	
September	15/09/2025	20/09/2025	1	Nuclear envelope (structure including the pore complex)	PPT
September	22//09/2025	27/09/2025	1	Chromatin (heterochromatin and Euchromatin), Nucleolus (structure and function)	PPT
September	29/09/2025	04/10/2025	1	Cell junctions: Occluding junctions (Tight junctions)	PPT

October	06/10/2025	11/10/2025	1	Anchoring junctions (desmosomes), Communicating junctions (gap junctions)	PPT
October	13/10/2025	18/10/2025	1	Communicating junctions (gap junctions) and Plasmodesmata.	PPT