Department of Biotechnology

Sant Guru Ghasidas Govt. P.G. College, Kurud, District- Dhamtari (C.G.)

Session: July-Dec. 2024

Class: M.Sc. (Biotechnology) 3rd Semester

Class Presentation topics

S.No.	Name of Student	Topic
1.	Arpita Soni	1. Scope of Genetic Engineering 2. Antibody function 3. Preservation and Maintenance of industrial microorganisms 4. Measurement of water pollution
2.	Dhanendra	1. Cloning and patenting of life forms 2. Introduction to immune system 3. Kinetics of microbial growth 4. Environment: Basic concepts and issues
3.	Gitanjali Dewangan	1. Genetic engineering guidelines 2. Innate and acquired immunity 3. Kinetic of microbial death 4. Methodology of Environmental management & Limits
4.	Jitendra Kumar Dhankar	1. Restriction enzymes 2. Organization and structure of Primary lymphoid organs 3. Isolation of industrial Microorganisms 4. Air pollution and its control through Biotechnology
5.	Jyoti	1. Modification enzymes 2. Organization and structure of Lymph node & Spleen 3. Media for industrial fermentation 4. Types of Environmental pollution & methods of measurement
6.	Kalash Prajapati	1. Vector engineering 2. Macrophage mediated cytotoxicity 3. Industrial production of chemicals: solvents (glycerol) 4. Global Environmental Problems: Green-house effect
7.	Kiran/Tameshwar	1. Molecular markers 2. Nature and biology of antigens 3. Air and Media Sterilization 4. Sources of water pollution & Physical treatment methods
8.	Kiran/Santosh Kumar	1. mRNA enrichment & reverse transcription 2. Generation of TCR diversity 3. Specialized reactors fluidized bioreactors 4. Anaerobic process: Up flow anaerobic sludge blanket reactors
9.	Lalchand	1. Nucleic acid purification and yield analysis 2. Superantigens nature and Biology 3. Analysis of Batch bioreactor 4. Waste water treatment Chemical treatment
10.	Lav Kumar Sahu	1. S1Mapping 2. T - cell regulation 3. Whole cell Immobilization: industrial applications 4. Solid wastes: Sources and management: methane production)
11.	Laxmi	1. Southern blot

		2. Cytokines and their role in immune regulation 3. Whole cell Immobilization techniques 4. Solid wastes: Sources and management: wormi culture
12.	Madhu Vaishnav	1. Gene silencing 2. Transplantation: general concept and Applications 3. Use of microbes in mineral beneficiations and oil recovery 4. Ecological consideration of Pesticides
13.	Neha	1. Two hybrid systems 2. Cells of immune system 3. Downstream processing: Foam separation, precipitation, filtration 4. Treatment schemes for waste waters of sugar industries
14.	Parmeshwari	1. DNA Transfection 2. Activation of B - and T - lymphocytes 3. Effluent treatment: TDS, BOD and COD treatment and disposal of effluents 4. Solid wastes: Sources and management: composting
15.	Pinki Kanwar	1. Heterologous gene expression in Bacteria 2. Antibody engineering 3. Bioreactors-Analysis of continuous bioreactor 4. Waste water treatment - biological treatment processes (oxidation Ditches, oxidation ponds)
16.	Pushpanjali	1. Genome editing by CRISPR-CAS 2. Antigen - antibody interactions 3. Stability of microbial reactors 4. Waste water treatment - biological treatment processes: Trickling filter, towers
17.	Rahul	1. Restriction Mapping of DNA Fragments and Map Construction 2. Major histocompatibility complex 3. Analysis of mixed microbial populations 4. Waste water treatment - biological treatment processes: Rotating discs, rotating drums
18.	Renuka Sahu	1. RNase protection assay 2. Mechanism of T cell and NK cell mediated lysis 3. Industrial production of chemicals: Alcohol (ethanol) 4. Global Environmental Problems: Ozone depletion
19.	Roshan Lal	1. Phage display Technique and applications 2. Hematopoisis and differentiation 3. Measurements and control of bioprocess parameters 4. Treatment schemes for waste water of distillery industry
20.	Seema Sahu	1. Library construction and screening 2. Lymphocyte trafficking 3. Downstream processing: removal of microbial cell and solid matters 4. Treatment schemes for waste water of tannery industry
21.	Someshwari	1. Nucleic acid micro array assay 2. Antigen processing and presentation 3. Downstream processing: Centrifugation, cell disruption, liquid - liquid extraction, chromatography 4. Treatment schemes for waste waters of antibiotic industries
22.	Tushar Chiram	1. Site - directed mutagenesis 2. Generation of humoral immune responses

		3. Downstream processing: Membrane process, Drying and crystallization 4. Biopesticides in integrated pest management
23.	Vandana	1. Codon optimization 2. Hypersensitivity 3. Production of Single cell protein 4. Ecological consideration of oil pollution
24.	Vasni	1. Three hybrid system 2. Complement System 3. Elementary idea of canning and packing 4. Global Environmental Problems: Acid rain
25.	Veena	1. Protein Engineering 2. Autoimmune diseases 3. Sterilization and pasteurization of food products 4. Role of national organization in Biotechnology
26.	Venu Nagwanshi	1. Western blot 2. Generation of cell mediated immune response 3. Food Preservation 4. Global Environmental Problems: UV-B

Note:

1. There will be poster/oral/PPT presentation on the given topic based on the respective papers. The full marks will be 10 for each presentation.
2. Each student will be required to submit a brief **handwritten** write-up (not more than 20 pages) on his or her poster or oral presentation on or before the date of class presentation.
3. The presentation will be given as per the day and time/period mentioned in the time table. The delivery of presentation will be on first cum first serve basis.
4. The last date to deliver the presentation for this semester will be 15/11/2024.

Dr. Tarun Kumar Patel
Assistant Professor
विभागाध्यक्ष /जैव प्रौद्योगिकी विभाग
HOD/Department of Biotechnology
संत गुरू घासीदास शास.स्नातकोत्तर महा.कुरूद,धमतरी (छ.ग.)
Sant Guru Ghasidas Govt.P.G.College,Kurud,Dhamtari(C.G.)

PRINCIPAL
S.G.D. Govt. P. G. College
Kurud, Distt. Dhamtari (C.G.)