

Shri Shivaji Education Society Amravati's  
Science College, Congress Nagar, Nagpur

**P.G. Department of Microbiology**

**M. Sc. Semester-IV (2022-2023)**

**Microbiology Paper I**

Name of Teacher –Ms. Manali Kakde

| <b>Sr No.</b> | <b>Name of Student</b> | <b>Seminar Topic</b>                    |
|---------------|------------------------|---|
| 1.            | Aishwarya S Mohatkar   | Brief outline on discovery of viruses   |
| 2.            | Akshara A. Irkulwar    | Morphology and structure of viruses     |
| 3.            | Bhagyashree K. Uikey   | Chemical composition of viruses         |
| 4.            | Dipti A. Charde        | Bacteriophages- Structural organization |
| 5.            | Gauri R. Bhutad        | Bacteriophage typing                    |
| 6.            | Harsha J. Poddar       | One step growth curve                   |
| 7.            | Hiteshi R. Wadibhasme  | Picorna, Orthomyxo                      |
| 8.            | Janhvi R. Zade         | Rhabdovirus and HIV                     |
| 9.            | Khushbu U. Choukiker   | Adeno and Hepatitis viruses             |
| 10.           | Mansi S. Bramhankar    | TMV                                     |
| 11.           | Neha D. Mahant         | Cauliflower mosaic virus                |
| 12.           | Rutika D. Kowe         | Complement fixation                     |
| 13.           | Savita B. Khandate     | Ganciclovir, Ribavirin                  |
| 14.           | Shraddha P Tiwari      | Delavirdine and Efavirenz               |
| 15.           | Shudhanshu Pandharey   | Amantadine, Rimantidine                 |
| 16.           | Siddhi S. Uplenchwar   | Types of IFN                            |

|     |                        |                              |
|-----|------------------------|------------------------------|
| 17. | Tanavi W. Raut         | Haemagglutination inhibition |
| 18. | Tanuja C. Sable        | ELISA                        |
| 19. | Triveni S. Pardhi      | Radioimmunoassays            |
| 20. | Vaishnavi I. Wairagade | Types of IFN                 |

(MK)

Signature of Teacher

Ms. Mandali Kukde



*Pranita Gulhane*

Dr. Pranita Gulhane  
Head of the Department

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**Microbiology Paper II**

Name of Teacher –Dr. Sapna Baghel

| Sr No. | Name of Student       | Seminar Topic  |
|--------|-----------------------|--|
| 1.     | Aishwarya S Mohatkar  | Bioreactor types                                       |
| 2.     | Akshara A. Irkulwar   | Immobilized bioreactors                                |
| 3.     | Bhagyashree K. Uikey  | Types of fermentation                                  |
| 4.     | Dipti A. Charde       | Growth kinetics and Monod's Model                      |
| 5.     | Gauri R. Bhutad       | Ntr and Pho system                                     |
| 6.     | Harsha J. Poddar      | Growth limiting substrate                              |
| 7.     | Hiteshi R. Wadibhasme | Maintenance energy, growth yield and product formation |
| 8.     | Janhvi R. Zade        | Rheology of fermentation fluid                         |
| 9.     | Khushbu U. Choukiker  | Downstream processes                                   |
| 10.    | Mansi S. Bramhankar   | Scale up   |
| 11.    | Neha D. Mahant        | Xanthan, Polyhydroxyalkanoates                         |
| 12.    | Rutika D. Kowe        | Biosurfactants: a comparative account                  |
| 13.    | Savita B. Khandate    | SCP  |
| 14.    | Shraddha P Tiwari     | Carotenoids  |
| 15.    | Shudhanshu Pandharey  | Riboflavin   |
| 16.    | Siddhi S. Uplenchwar  | Vit. B12   |

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|-----|------------------------|------------------------|
| 17. | Tanavi W. Raut         | Fatty acids            |
| 18. | Tanuja C. Sable        | Lysine, Glutamic acid  |
| 19. | Triveni S. Pardhi      | Proteases              |
| 20. | Vaishnavi I. Wairagade | Chemostat, turbidostat |



Signature of Teacher

Dr. Sapna Baghel



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**Microbiology Paper III**

Name of Teacher – Ms. Asmita Phophate

| <b>Sr No.</b> | <b>Name of Student</b> | <b>Seminar Topic</b>                            |
|---------------|------------------------|---|
| 1.            | Aishwarya S Mohatkar   | Population, guilds                              |
| 2.            | Akshara A. Irkulwar    | Environment and microenvironment                |
| 3.            | Bhagyashree K. Uikey   | Biofilms  |
| 4.            | Dipti A. Charde        | Terrestrial environment                         |
| 5.            | Gauri R. Bhutad        | Fresh water environment                         |
| 6.            | Harsha J. Poddar       | Marine Microbiology                             |
| 7.            | Hiteshi R. Wadibhasme  | Shannon index                                   |
| 8.            | Janhvi R. Zade         | Diversity indices                               |
| 9.            | Khushbu U. Choukiker   | Intermediate-disturbance hypothesis             |
| 10.           | Mansi S. Bramhankar    | Tolerance and inhibition patterns of succession |
| 11.           | Neha D. Mahant         | Theories of succession                          |
| 12.           | Rutika D. Kowe         | Genotype frequency, allele frequencies          |
| 13.           | Savita B. Khandate     | Random genetic drift                            |
| 14.           | Shraddha P Tiwari      | Hardy-Weinberg natural selection                |
| 15.           | Shudhanshu Pandharey   | Assortative mating                              |
| 16.           | Siddhi S. Uplenchwar   | Inbreeding                                      |

|     |                        |                             |
|-----|------------------------|-----------------------------|
| 17. | Tanavi W. Raut         | Competetion and coexistence |
| 18. | Tanuja C. Sable        | Gause hypothesis            |
| 19. | Triveni S. Pardhi      | Commensalism and Mutualism  |
| 20. | Vaishnavi I. Wairagade | Predation, parasitism       |

*Phophate*

Signature of Teacher

Ms. Asmita Phophate



*Gulhane*

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**M. Sc. Semester-IV (2022-2023)**

**Microbiology Paper IV**

Name of Teacher –Dr. Pranita Gulhane

| <b>Sr No.</b> | <b>Name of Student</b> | <b>Seminar Topic</b>                     |
|---------------|------------------------|--|
| 1.            | Aishwarya S Mohatkar   | Definition and discovery of vaccines     |
| 2.            | Akshara A. Irkulwar    | Active and passive prophylactic measures |
| 3.            | Bhagyashree K. Uikey   | Exhaltation& attenuation                 |
| 4.            | Dipti A. Charde        | Subunit vaccines                         |
| 5.            | Gauri R. Bhutad        | DNA vaccines                             |
| 6.            | Harsha J. Poddar       | Vaccines additives and adjuvants         |
| 7.            | Hiteshi R. Wadibhasme  | BCG, Hepatitis vaccine                   |
| 8.            | Janhvi R. Zade         | DPT, MMR                                 |
| 9.            | Khushbu U. Choukiker   | Malaria vaccines                         |
| 10.           | Mansi S. Bramhankar    | Epstain Barr virus vaccines              |
| 11.           | Neha D. Mahant         | Cytomegalo virus vaccines                |
| 12.           | Rutika D. Kowe         | HIV vaccines                             |
| 13.           | Savita B. Khandate     | Herpes simplex viral vaccines            |
| 14.           | Shraddha P Tiwari      | Drug designing                           |
| 15.           | ShudhanshuPandharey    | Rapid tests for susceptibility testing   |
| 16.           | Siddhi S. Uplenchwar   | Drugs & vaccines delivery system         |

|     |                        |                           |
|-----|------------------------|---------------------------|
| 17. | Tanavi W. Raut         | Polio vaccine             |
| 18. | Tanuja C. Sable        | Influenza vaccine         |
| 19. | Triveni S. Pardhi      | Cytomegalo virus vaccines |
| 20. | Vaishnavi I. Wairagade | BCG, Hepatitis vaccine    |



Signature of Teacher

Dr. Pranita Gulhane



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