Shri Shivaji Science College, Amravati

E – Contents for Post Graduate Students

Department of Bioinformatics

M. Sc. Part – I (Semester – I)

Google Classrooms			
S.N.	**Name of the Teacher**	**Joining Link**	**Class Code**

Notes and PowerPoints			Links to Video Lectures		
Topic	**Link**	**Teacher**	**Topic**	**Link**	**Teacher**
Introduction to Bioinformatics	https://drive.google.com/file/d/1mnqiaGFt-ZW6ytGdGszXJs7Vr8-YS0qm/edit	**S. G. Ingle**			
A SHORT HISTORY OF BIOINFORMATICS	https://drive.google.com/file/d/1c43o4De2TMEYEz4PYQZWW1DXbRkHczTg/edit	**S. G. Ingle**			
History in details	https://drive.google.com/file/d/1tFDk8xp2Bm0pIsuwXmNjPVoJRp2eaCVt/edit	**S. G. Ingle**			
Introduction to Computational Biology and Bioinformatics	https://drive.google.com/file/d/1mhNCyHMSD9R5mP4NLTgX1Xgyp3RHXU5d/edit	**S. G. Ingle**			
Bioinformatics_multidiciplinary_approach	https://drive.google.com/file/d/16EemkWtL7BX-I8uiobVDuFXcJ55XRVdl/edit	**S. G. Ingle**			
Role of internet and www in bioinformatics	https://drive.google.com/file/d/1WiHDYf8hIa6KIXWfkfLlTYdXjbRv0mfr/edit	**S. G. Ingle**			
Types of dna sequences	https://drive.google.com/file/d/1j6Yb_uM3N15YIlPwflNV9vFFiDFE8uba/edit	**S. G. Ingle**			
automated DNA sequencing	https://drive.google.com/file/d/1e_KBjxPy_7WLPSNX1q_iAiANvZI7DYMs/edit	**S. G. Ingle**			
Gene Expression data	https://drive.google.com/file/d/1mBnOu_rQxGsVFjOYQwHXqP8sgK2rabJL/edit	**S. G. Ingle**			
capillary_array	https://drive.google.com/file/d/15ORkOdRKRlu-nX5YbJctrWbRvrkWTSHV/edit	**S. G. Ingle**			
Capillary electrophoresis1	https://drive.google.com/file/d/1waLusjPnp6fCP_IB4o1wG7YZaob4quGg/edit	**S. G. Ingle**			
Capillary electrophoresis2	https://drive.google.com/file/d/1_U4sJEch	**S. G. Ingle**			

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capillary-electrophoresis-principles-and-applications	https://drive.google.com/file/d/1TyOc6QDb-TCOQDRkaPDAMy6p3gqC2aFS/edit	**S. G. Ingle**			
PDB_file_Format	https://drive.google.com/file/d/0B6Sbju1MOtoIRWMwcWZoSzEtZFE/edit	**S. G. Ingle**			
The forms of biological information	https://drive.google.com/file/d/0B6Sbju1MOtoIekxYQXYwLWlXenM/edit	**S. G. Ingle**			
Dna sequencing	https://drive.google.com/file/d/0B6Sbju1MOtoIVHhVdDV2TUU4b3c/edit	**S. G. Ingle**			
IInd unit notes point	https://drive.google.com/file/d/0B6Sbju1MOtoIR3VxT2lVWkZIVE0/edit	**S. G. Ingle**			
Assignment 1st protocol	https://drive.google.com/file/d/0B6Sbju1MOtoINE5VSjNXVWkyc0k/edit	**S. G. Ingle**			
Gene structure	https://drive.google.com/file/d/1OFKTAxHroOH9N67i5l6oA0JiVQr_G2Vh/edit	**S. G. Ingle**			
Automated sequencing	https://drive.google.com/file/d/1t7X4DA67nOi8--0bVCy3T7aasHe8R1SW/edit	**S. G. Ingle**			
cap_elec_dna_rev	https://drive.google.com/file/d/1odp2PtVCmsrdEkT3nMHGQbT87lrrRvMM/edit	**S. G. Ingle**			
X-ray crystallography	https://drive.google.com/file/d/19VsflvTGx6BBel1cJUetxMM0GIx19BjS/edit	**S. G. Ingle**			

M. Sc. Part – I (Semester – II)

Google Classrooms			
S.N.	Name of the Teacher	Joining Link	Class Code

Notes and PowerPoints			Links to Video Lectures		
Topic	**Link**	**Teacher**	**Topic**	**Link**	**Teacher**
Current DNA sequencing technologies	https://drive.google.com/file/d/1xzMZOF4KI8UqqrC7JMsJrgX9Of0Q7nBd/edit	**S. G. Ingle**			
Sequencing of the entire human genome	https://drive.google.com/file/d/1SCpqSVJeO1yOVP9aG4ZqHI4spEIGVyzc/edit	**S. G. Ingle**			
Relevance of comparative	https://drive.google.com/file/d/1luEK6PRgpbW5QTSMYXYA6NdRd3WUbOAH/edit	**S. G. Ingle**			
Construction of Physical mapping	https://drive.google.com/file/d/1oB3ckUtOi1oVCzcjfy1QZxQ-rKewmRF1/edit	**S. G. Ingle**			
Gene order and chromosome rearrangement	https://drive.google.com/file/d/1aUu8Gzy8KUyfrBCIr_7Ncvn28udqP3z/edit	**S. G. Ingle**			
Sequence repeats and other	https://drive.google.com/file/d/1W-wFRjAr32zwqph3nqv0sRNXBNxtr3rn/edit	**S. G. Ingle**			
Gene Expression, Analysis Methods, Global Expression	https://drive.google.com/file/d/18dnyK9ZUhMwg3Iw-vJsjKDI3aokxxNBF/edit	**S. G. Ingle**			
CLADISTICS and ontology	https://drive.google.com/file/d/1goE9--wSgIN33jesWZfUH7ZD0Zv7u U9/edit	**S. G. Ingle**			
Minimal genome	https://drive.google.com/file/d/1QysW7yAXWqCWdZj4v-4Ay8YEvvWdtgTt/edit	**S. G. Ingle**			
Introduction to genome Analysis, Gene analysis	https://drive.google.com/file/d/1xh8oo3Xmvmp9PVaaCDmAe47280tT3pXw/edit	**S. G. Ingle**			
Concepts of SNP	https://drive.google.com/file/d/1sQ1XbGVNokJXLCMl0jpWN2N4J61JsMl /edit	**S. G. Ingle**			
Applications of DNA microarray	https://drive.google.com/file/d/1FjjGw4E2Pk126LDu4LIIaahMViDSuJNN/edit	**S. G. Ingle**			
Basics of radiation hybrid mapping	https://drive.google.com/file/d/1GzhOr0NOo17QToGJyu29Slfn7OVegn4T/edit	**S. G. Ingle**			
Genome diversity	https://drive.google.com/file/d/1AnEbmcIG38FSfQ FF7y4TdZ806AIMKzX/edit	**S. G. Ingle**			
Genome annotation	https://drive.google.com/file/d/1XXirfFi7g7a	**S. G. Ingle**			

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Gene Identification and prediction	https://drive.google.com/file/d/1Av1XnibJpJs4pU8iHkO0-QgyCaobdrkC/edit	**S. G. Ingle**			
Genome Mapping	https://drive.google.com/file/d/1QiIW9epw3LE65tcP0P4RaY01TL5nHOoA/edit	**S. G. Ingle**			
Genome maps and types	https://drive.google.com/file/d/1EsQ1ypXPVfBDOuDOqGfzZSEqoqdD8RAk/edit	**S. G. Ingle**			
Computational Genomics	https://drive.google.com/file/d/1722qz5qfUeizDtxwbrLQPzOJ YFsltM0/edit	**S. G. Ingle**			
Introduction to genomics	https://drive.google.com/file/d/11WuqwIfIF6aWyVSJbNMehQX0hBXjyW 5/edit	**S. G. Ingle**			
Introduction to Phylogenetic	https://drive.google.com/file/d/1pbu0cnhOU1ScFY X5Y8dZ8-A9Pim6S x/edit	**S. G. Ingle**			
Comparative genomics of prokaryotes	https://drive.google.com/file/d/1ox4B21j1isBfIN5L4zlNIqGLknIvSxOf/edit	**S. G. Ingle**			
Vertical and horizontal gene transfer	https://drive.google.com/file/d/1B5JMyaugVbuexAtCb56XJz70KGIyzkhS/edit	**S. G. Ingle**			
BLAST TOOL	https://drive.google.com/file/d/1BFkHNp6Ly3sYq pe2Yh8LUDH309X9pz/edit	**S. G. Ingle**			
Epitope prediction	https://drive.google.com/file/d/1Fibyt7KjMxkh4045x46Q6By0xEtnQskT/edit	**S. G. Ingle**			
Clustering of genes and composite gene	https://drive.google.com/file/d/1BLJpANnsy1z2iNL8F4KD6 -E0Heriou/edit	**S. G. Ingle**			
SNPs	https://drive.google.com/file/d/1kaZs98Q5m9JaaeI48iVsZXh5zKUSrvSI/edit	**S. G. Ingle**			
Chromosomal rearrangement	https://drive.google.com/file/d/1KxO9zBwcTCVdLwJshohITv52z3vHtDpV/edit	**S. G. Ingle**			
DNA array for global expression profile	https://drive.google.com/file/d/10PMEOPU2T2 WvxdQ773g1IF6YBsNzFRP/edit	**S. G. Ingle**			
Gene Expression	https://drive.google.com/file/d/1QP7t7GN2r6R5aFGjgfpQUA01oiuOaS-4/edit	**S. G. Ingle**			
Genome databases	https://drive.google.com/file/d/1WLCWij9oywAvhDeUnvI5v4jlhoQkZk-P/edit	**S. G. Ingle**			
Gene Prediction	https://drive.google.com/file/d/1c2qjCwv-bDGmeMtbyA1009uFxLp2GMYU/edit	**S. G. Ingle**			
Genome organisation prokaryotic	https://drive.google.com/file/d/1KsuELnM6n0u9TaS3wa0sWy5CxfQ8Rdvv/edit	**S. G. Ingle**			
Gene ontology	https://drive.google.com/file/d/1yBcLW6JH	**S. G. Ingle**			

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Neighbour joining method	https://drive.google.com/file/d/1XxzTSnktw0Ff8xsT9Lomhg1wzjuv51cP/edit	**S. G. Ingle**			
Phylogenetic lecture	https://drive.google.com/file/d/172nspOBtoqhb-P1G9ezzUSWjUgMXHE7f/edit	**S. G. Ingle**			
Prediction of ORFs	https://drive.google.com/file/d/1f5uPzAfipLVPf-U3LfH3zecPUufVPWY/edit	**S. G. Ingle**			
Microarray	https://drive.google.com/file/d/1eIUafSjxP2mVPDYm92Rik9Uq5V36Xc6k/edit	**S. G. Ingle**			
Organization of the prokaryotic and eukaryotic genome	https://drive.google.com/file/d/1tkwszHSrVVGbrYHHV7qimA4h05NP05zk/edit	**S. G. Ingle**			
CLADISTICS	https://drive.google.com/file/d/1u7huZYLjWHFuHee9T06g-m4hxyhTuWTi/edit	**S. G. Ingle**			
dbSNP	https://drive.google.com/file/d/1ayF8nC19mCoFaoNJRtseBXUKQPtBcwf7/edit	**S. G. Ingle**			
Principles genome analysis and genomics	https://drive.google.com/file/d/1ucDMvMo9vZALRcv0oPWiSGh0hcR8xr80/edit	**S. G. Ingle**			

M. Sc. Part – II (Semester – III)

Google Classrooms			
S.N.	**Name of the Teacher**	**Joining Link**	**Class Code**

Notes and PowerPoints			**Links to Video Lectures**		
Topic	**Link**	**Teacher**	**Topic**	**Link**	**Teacher**
Basic principles _protein struct generations	https://drive.google.com/file/d/13lzLJqU3KdHdbFhDVVcB-259SRdlkRSZ/edit	**S. G. Ingle**			
26 Ab initio - threading	https://drive.google.com/file/d/1Uew8WuU8RO1e9JG-qgAbHLViHYdemhD7/edit	**S. G. Ingle**			
ab-initio_protein_structure_modelling	https://drive.google.com/file/d/1QPz_lf9GO8K22AZQaRz7Z1axg4k9t6yr/edit	**S. G. Ingle**			
GOR_algorithum	https://drive.google.com/file/d/1E5Qc2F2y0SGuZNxDk0laQsDYlLqzzyx-/edit	**S. G. Ingle**			
Homology Modeling	https://drive.google.com/file/d/1JAOtWUd7oZHvS8975FesmiEa1RIeIIht/edit	**S. G. Ingle**			
Concepts in measuring the accuracy of	https://drive.google.com/file/d/1zY8_wgqhd3Sr1CEaD6-UNK5BRvJKrkni/edit	**S. G. Ingle**			
Protein structure validation	https://drive.google.com/file/d/1BI29sktp8zIVEFX7m9GrwDUcx04BOOQi/edit	**S. G. Ingle**			
Theoretical basis of the methods for structure prediction	https://drive.google.com/file/d/14oonY1nhvqBBfIODL074i8Np0y0dBdG5/edit	**S. G. Ingle**			
PMDB - Protein Model Database.	https://drive.google.com/file/d/13fqWMqHhO4tNSzob_X7psXVPNBTh4gv-/edit	**S. G. Ingle**			
Example	https://drive.google.com/file/d/1IgZ4oQd08hnD7O6mtA_w9nVRTK0SVzh	**S. G. Ingle**			

	K/edit				
q3scor	https://drive.google.com/file/d/1nHPbaZhqO4dpDqxcBruTW6kHA_nNGk6v/edit	**S. G. Ingle**			
chou-fasman-1974	https://drive.google.com/file/d/12V4Rc4oCzwyACkBnd6HhjTROHVyY0MyZ/edit	**S. G. Ingle**			
3d_structure_validation	https://drive.google.com/file/d/1d7oFtlIFVf1KXyjGso6WAD16kv-bOaWG/edit	**S. G. Ingle**			
Unit 1-Life cycle,Infectivity,Demographic distribution of Malaria	**https://docs.google.com/presentation/d/1VUTg5OoEXP_vsIkkplpXRL1BkQ0GQ9aT/edit#slide=id.p1**	**M. B. Ghormade**			
Unit 1-Life cycle,Infectivity,Demographic distribution of Leishmania	**https://docs.google.com/presentation/d/1hEtGLPq0IhRiG_wdswnMVFcb3D4LBT7G/edit#slide=id.p1**	**M. B. Ghormade**			
Unit 1-Life cycle,Infectivity,Demographic distribution of Trypanosoma	https://docs.google.com/presentation/d/1924SHmotwN-ObX6aFm-VulQyx8xz6EnS/edit#slide=id.p1 **https://youtu.be/_mZIzMU10OY**	**M. B. Ghormade**			
Unit 1-Life cycle,Infectivity,Demographic distribution of Filariasis	https://docs.google.com/presentation/d/1jGy-cnFWlRALYboEH0EjPHE7FTQ94b-0/edit#slide=id.p1 **https://youtu.be/BBWePqINg9s**	**M. B. Ghormade**			
Unit1-Role of Bioinformatics in disease monitoring	https://docs.google.com/presentation/d/1kHIZelMfaaq8S8WFsODIGKm0h3IHWyx9/edit#slide=id.p1	**M. B. Ghormade**			
Unit2-Parasite Genome and Proteome Databases (AnoBase,ENSEMBL,NotreDame,PlasmoDB)	https://docs.google.com/presentation/d/1nmyKFYrKbmHyC8DRVJxLiEMG_2qPIpxn/edit#slide=id.p1 **https://youtu.be/rz2TmDsMhHM**	**M. B. Ghormade**			

Unit2-Biology of vector	https://docs.google.com/presentation/d/1pUlR1lx44rMng-bwE4tmaSyXw8ddeeAj/edit#slide=id.p1 **https://youtu.be/q3-zoPGiEkI**	**M. B. Ghormade**			
Unit2- Application of Bioinformatics Data Mining tools for Identification of: Parasite-specific genes/gene products(e.g.housekeeping genes,gene essential for survival)	**https://docs.google.com/presentation/d/1QzZgnJqPfQPKUXhQgZZ3aCy4ntwkWTbI/edit#slide=id.p1**	**M. B. Ghormade**			
Unit2-Resistant genes	**https://docs.google.com/presentation/d/1lJNdk9w4VNqK7eBbfvbhg3JERVO-3RVd/edit#slide=id.p1**	**M. B. Ghormade**			
Unit3-Full genome comparison	https://docs.google.com/presentation/d/1SNrSQtJsN3m5DCzaG57s6Ce4cE94Q-Qx/edit#slide=id.p1 **https://youtu.be/Vk-6OW5bTxE**	**M. B. Ghormade**			
Unit3-Gene prediction	https://docs.google.com/presentation/d/1FjFt2Dfyu_wugVPVU0ro9OPFWNgHRo-k/edit#slide=id.p1 **https://youtu.be/AoqcWGJv-W4**	**M. B. Ghormade**			
Unit3-Signal sequence prediction	**https://docs.google.com/presentation/d/1FjFt2Dfyu_wugVPVU0ro9OPFWNgHRo-k/edit#slide=id.p1**	**M. B. Ghormade**			
Unit3-Protein sequence comparison and analysis	**https://docs.google.com/presentation/d/19g7t8JeISXClQkfW6pGtKHpe**	**M. B. Ghormade**			

	JrGf8Tcb/edit#slide=id.p1				
Unit3-Protein structure comparison and analysis	https://docs.google.com/presentation/d/1EKwjIgjn0gZaaow1gaVeYigqMLP-6GpE/edit#slide=id.p1 **https://youtu.be/PPJ7C3hcnPw**	**M. B. Ghormade**			
Unit3-Microarray data analysis	https://docs.google.com/presentation/d/13Iqbd7_SGZnQzuamRz_D-UnLb_xA90mZ/edit#slide=id.p1 **https://youtu.be/7SXpxwcpgNc**	**M. B. Ghormade**			
Unit3-Proteomics data analysis	**https://docs.google.com/presentation/d/1rda-uK45nOX5OwLtZa4JaZDnMKTI4Eh2/edit#slide=id.p1**	**M. B. Ghormade**			
Unit4-Recognition and entry process of different pathogens like bacteria and viruses into animal and plant host cells	**https://docs.google.com/presentation/d/1xaX7hfOfhgs8o-_ejws0kR-LIwkgDW09/edit#slide=id.p1**	**M. B. Ghormade**			
Unit4-Alteration of host cell behavior by pathogens	**https://docs.google.com/presentation/d/11KtysMEA1v8isxfMofm_qXxKJ5-whP6G/edit#slide=id.p1**	**M. B. Ghormade**			
Unit4-Virus-induced cell transformation	**https://docs.google.com/presentation/d/1Ext8wN5SCVnLoojf3f-ivPydT4Oqcinm/edit#slide=id.p1**	**M. B. Ghormade**			
Unit4-Pathogen induced diseases in animal and plants	**https://docs.google.com/presentation/d/1BXigbQgwecxnnjPzQhzUnQ0WXHzqbafg/edit#slide=id.p2**	**M. B. Ghormade**			
Unit5-Host vector parasite	**https://docs.google.com/presentati**	**M. B. Ghormade**			

interaction	**on/d/1Y_CacEDel9kbsbNA7T15jiSfEaARirI1/edit#slide=id.p1**				

M. Sc. Part – II (Semester – IV)

Google Classrooms			
S.N.	**Name of the Teacher**	**Joining Link**	**Class Code**

Notes and PowerPoints			**Links to Video Lectures**		
Topic	**Link**	**Teacher**	**Topic**	**Link**	**Teacher**
Current Chemo-informatics	https://drive.google.com/file/d/1vF8Jjrn1gWNvFA4Kihp7aUXPfxHehWK6/edit	**S. G. Ingle**			
Database search methods	https://drive.google.com/file/d/1O67juVEll-umI07QzvyUJhU9dAmqcLhV/edit	**S. G. Ingle**			
Chemo informatics Introduction	https://drive.google.com/file/d/1eXeel5z164mqPdyTcbXxRePsa3sZFC-/edit	**S. G. Ingle**			
Chemo-informatics scope and applications	https://drive.google.com/file/d/1alEKwKakoTdR4uJGvwKELryIh-bmP8ke/edit	**S. G. Ingle**			
Copy of Database search methods	https://drive.google.com/file/d/1b1m-zLJCn1ZVUxAzjqGDv5XE26PkOfGF/edit	**S. G. Ingle**			
Combinatorial chemistry	https://drive.google.com/file/d/10XHOXzOQwvy2JXf1RkQfqq-5gqY19GTI/edit	**S. G. Ingle**			
Introduction to quantum methods	https://drive.google.com/file/d/1rsQzadQvwb0b5NS6Pvgmt-CraCcnuo0h/edit	**S. G. Ingle**			
Introduction to spectroscopy	https://drive.google.com/file/d/1kCve3dJ94n7rb82OBTJRRJC1Ls9iOiG/edit	**S. G. Ingle**			
Different types of Notations, SMILES Coding	https://drive.google.com/file/d/10pj8MyzIiJksGY-wRmZFBt3wbievltMb/edit	**S. G. Ingle**			
Different types of Notations, SMILES Coding	https://drive.google.com/file/d/1JyP	**S. G. Ingle**			

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Analysis and use of chemical reaction information	https://drive.google.com/file/d/1GkphItOvbOdE6QFwKgomMfiH95lIE5Kg/edit	**S. G. Ingle**			
Analysis and use of chemical reaction information	https://drive.google.com/file/d/1tY5i1cfvYTrKRnXdP5GPMPyvUwkCfV-v/edit	**S. G. Ingle**			
Lead(Drug) Identification	https://drive.google.com/file/d/1SksH6vIZzF1tiDVGvqI7RSR2KTDYEXQB/edit	**S. G. Ingle**			
Dragon molecular descriptor list	https://drive.google.com/file/d/1ox6ycyOFK14lVzR826Yn42jQgo14Vihu/edit	**S. G. Ingle**			
Lead(Drug) Identification	https://drive.google.com/file/d/1kngJmzLeO-QITGh9RwNw-L81mSrhO85Z/edit	**S. G. Ingle**			
Applications of Chemo informatics in Drug Research	https://drive.google.com/file/d/1DOvLuLpu8e8DQUHPbD3MCEFPk7gGiWNy/edit	**S. G. Ingle**			
Homology Modelling using Modeller	https://drive.google.com/file/d/1PihM3L39sjlJvai74qvkmpDOXM2X5Qe-/edit	**S. G. Ingle**			
Toxicity Analysis-Pharmacological Properties	https://drive.google.com/file/d/1gTJrL-rgJBT2sbd-bdJAWFhc-5h6iWrE/edit	**S. G. Ingle**			
Structure based drug designing	https://drive.google.com/file/d/1PvAu-kQlMXe4zRz6LyrJAhXvyEsw6BZn/edit	**S. G. Ingle**			
Target Identification	https://drive.google.com/file/d/1CHTHomaQKpUHHGvBeI5T8IKbpDFZfU9g/edit	**S. G. Ingle**			
Introduction to drug designing	https://drive.google.com/file/d/19lVysY54C8lVHdcOSSYaxZtttQ9wMAma/edit	**S. G. Ingle**			