



**NABIRA MAHAVIDYALAYA, KATOL ,
DIST. NAGPUR (MAHARASHTRA)**



NABIRA MAHAVIDYALAYA, KATOL

Criterion 1 - Curricular Aspects

1.1 - Curricular Planning and Implementation

1.1.2 - The Institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

NABIRA MAHAVIDYALAYA, KATOL



K.K. Chandak Marg, Dhantoli, Katol
Distt. Nagpur (M.S.) Pin - 441 302

**Graduation & Post Graduation in
Arts, Commerce, Science & Management**

Phone : 07112 - 222004 Mobile : 8857026884

Email : nmv.college@rediffmail.com Website : www.nabiracollegecampus.com



Ref.No. :

Date : 09/11/2024

DECLARATION

This is to declare that the information, reports, true copies and numerical data etc. furnished in this file as supporting documents are verified by IQAC and found correct.

Hence this is certificate.


Dr. Punit Raut
Co-Ordinator
IQAC, NMV Katol


Dr. S. K. Navin
Principal
Nabira Mahavidyalaya,
Katol, Dist. Nagpur.



Assignment / Internal Submission 2023-24 SEM-III



NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY

INTERNAL ASSESSMENT (Assignment)

SUMMER 2023-24

CLASS:- M.Sc. SEM-III

SUBJECT: MB

Paper Paper I

Name of Teacher Dr. D.M. Ridhorkar

Sr. No.	Name of Student	Title	Signature	Viva Remark
1.	Harshada M. Satpute	Chromatin remodeling	H. Satpute	
2.	Achal N. Nasse	Gene mapping in bacteria by conjugation	A. Nasse	
3.	Vaishnavi A. Bhalerao	Gene mapping by transduction	V. Bhalerao	
4.	Disha R. Bobhulkar	Protein degradation control	D. Bobhulkar	
5.	Puja T. Chorghade	Tap operon	P. Chorghade	
6.	Disha N. Jambhulkar	DNA Repair Mechanism	D. Jambhulkar	
7.	Muskan Pathan	Transposons	M. Pathan	
8.	Meeta M. Bhojar	Post transcriptional event	M. Bhojar	
9.	Mahima S. Satpute	Lac operon	M. Satpute	
10.	Rupesh B. Gatkine	Antisense RNA	R. Gatkine	
11.	Prajyot Murchapure	Comparative study of prokaryotic and Eukaryotic transcription process	P. Murchapure	
12.	Tanuja Tapare	REC BCD. pathway	T. Tapare	
13.	Madhuri Bhojar	Transformation & transduction	M. Bhojar	
14.	Nilima M. Kharshe	Transcription	N. Kharshe	

Date 2/11/2023



Dr. D.M. Ridhorkar
Head

Signature of Teacher

Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya Katol



**DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24**

CLASS:- _____

SUBJECT: _____

Paper _____

Name of Teacher _____

[illegible]

Date 2/11/2023



Department of Microbiology
& Biotechnology, Nairā
Mahavidyalaya Katol


Signature of Teacher



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY

INTERNAL ASSESSMENT (Assignment)

SUMMER 2023-24

CLASS:- M.Sc. SEM-III

SUBJECT: MB

Paper Paper II

Name of Teacher Miss. S.M. Sheikh



Sr. No.	Name of Student	Title	Signature	Viva Remark
1	Haashala M. Satpute	Onase footprinting	H. Satpute	
2	Shubhangi B. Chand-pure	Suspension culture technique	Shchandpure	
3	Puja T. chorghade	RT-PCR	Pujaji	
4	Prajyot Morchpure	Serum free media	Prajyot	
5	Rupesh B. Gatkine	Microarray		
6	Pallavi D. Kokate	Transgenic plant and plant product		
7	Tanuja R. Tapre	concept of Biotechnology and	R. Tapare	
8	Devashree D. Kinekar	DNA fingerprinting	Devashree	
9	Madhuri S. Bhoys	Multipotent stem cell	Madhuri	
10	Mahima S. satpute	Tissue culture media and supplements	Mahima	
11	Maya S. Manohar	DNA sequencing Dideoxy	Maya	
12	Nidhima M. Khawshhe	stem cell technology	Nidhima	
13	Megha M. Bhoys	PDGF	Megha	
14	Disha R. Babhulkar	cDNA library	Disha	
15	Disha A. Tambulkar	screening and identification of gene	Disha	

Date 2/11/23



Signature of Teacher

Miss. S.M. Sheikh
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY

INTERNAL ASSESSMENT (Assignment)

SUMMER 2023-24

CLASS:- M.Sc. SEM-III

SUBJECT: M/13

Paper Paper-IV

Name of Teacher Mrs. S. P. Nabira



Sr. No.	Name of Student	Title	Signature	Viva Remark
1)	Muskan A. pathan	Drug lantention and prodrug	<u>Mpathan</u>	
2)	mayuri S. manohar	Host Relationship	<u>Manohar</u>	
3)	Shubhangi B. chand- pure	oxyphenbutanzone	<u>Shubhangipure</u>	
4)	Megha M. Bhoyar	morphine and their Deriv- atives	<u>Megha</u>	
5)	Hrushika M. Sutpute	Antimicrobial Drugs	<u>H. Sutpute</u>	
6)	Disha R. Babhulkar	Anticancer drugs Rfymy	<u>Disha</u>	
7)	Nilima M. Khawsh	clotrimazole and ketoconazole	<u>Nilima</u>	
8)	Puja T. chorghade	Drug resistance including MDR	<u>Puja</u>	
9)	Muhima S. Sutpute	Primaquine phosphate, pyri- methoarnine	<u>Muhima</u>	
10)	Dewashree D. Kinkar	Mechanism of Drug action	<u>Dewashree</u>	
11)	Madhuri S. Bhoyar	omeprazole	<u>Madhuri</u>	
12)	Pallavi D. Kokate	Gentian violet, mercury compound		
13)	Disha N. Jambhulkar	metronidazole, 5 hydroxyquin- ione	<u>Dishambhulkar</u>	
14)	Tanuja R. Tapre	Tolnafted and Amphotericin B	<u>Tapre</u>	
15)	Aachal N. Daste	Nystatin and Griseofulvin	<u>Daste</u>	

Date 2/11/23



Signature of Teacher

Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
University SEMINAR

2023-24

CLASS:- M.Sc. SEM-III

SUBJECT:- M/B

Power Point Presentation



Total No. of
Students. 20

Sr. No.	Name of Student	Seminar Title	Signature	Viva Remark
1.	Achal N. Maske	PCR		
2.	Darshana Handag	Green ^{Sulphur} sulphur bacteria		
3.	Dewashree D. Kinkar	Stem cell Technology		
4.	Disha Jambhulkar	Replication		
5.	Disha Babhulkar	Antiprotozoal agents		
6.	Hemshada Satpute	Restriction enzymes		
7.	Madhuri Bhoyar	Transcription in prokaryotic		
8.	Malima Satpute	Antifungal Drug		
9.	Megha Bhoyar	RNA World		
10.	Mayuri Manohar	MDR		
11.	Nilima Khawsh	Plant tissue Culture		
12.	Pallavi Kokate	Free-living nitrogen-fixing bacteria		
13.	Puja Choughele	Lac operon		
14.	Prajyot Mouchapkar	Sulphur oxidizing bacteria		
15.	Rupesh Gatkine	Anti-tubercular Drug		

Date 2/11/2023



Signature of Examiner
Head
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya Katol


Signature of Examiner
Head
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
University SEMINAR
2023-24



CLASS:- _____

SUBJECT:- _____

Power Point Presentation

Sr. No.	Name of Student	Seminar Title	Signature	Viva Remark

Date

Signature of Examiner



Session 23-24
NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24

CLASS:- B.Sc. SEM-I

SUBJECT: Microbiology

Paper I

Name of Teacher Dr. N.B. Hishikar

Sr. No.	Name of Student	Title	Signature 2-11-2023	Viva Remark
1	Ashwini M. Sonekar	Autoclave	<u>Am Sonekar</u>	
2.	Mahima T. Tijare	Antonie Van Leeuwenhoek	<u>M Tijare</u>	
3.	Akshata K. Dhanwale	Types of culture media	<u>Akshata</u>	
4.	Shruti P. Mohod	Soil Microbiology	<u>Shruti</u>	
5.	Bharti S. Kinkar	Hot air oven	<u>Bharti</u>	
6.	Aparna S. Dhankorkar	Formation & Germination of Endospore	<u>Aparna</u>	
7.	Pranali M. Topale	Ti plasmid	<u>P.M. Topale</u>	
8.	Tanuja R. Deshmukh	Joseph lister	<u>T Deshmukh</u>	
9.	Witesh T. Mundghare	HIV - viruses	<u>Witesh</u>	
10.	Latika D. Wankhede	plasmids	<u>Latika</u>	
11.	Himani H. Barai	TMV.	<u>H. Barai</u>	
12.	Vishali M. Jugsejga	viruses structures	<u>Vishali</u>	
13	Nandini N. Chavde	Robert Koch	<u>Nandini</u>	
14)	Aachal L. Manmode	Martinus Beijerinck	<u>Aachal</u>	
15)	Neha R. Khandait	Basic Nutritional Requirement	<u>N.R. Khandait</u>	

Date 2/11/2023

Signature of Teacher



Dr. N.B. Hishikar
Head
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



Session 23-24
NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24

CLASS:- B.Se. SEM-I

SUBJECT: Microbiology

Paper I

Name of Teacher Dr. N.B. Hirulkar

Sr. No.	Name of Student	Title	Signature 2-11-2023	Viva Remark
1	Ashwini M. Sonekar	Autoclave	<u>Am Sonekar</u>	
2.	Mahima T. Tijare	Antonie Van Leeuwenhoek	<u>M Tijare</u>	
3.	Akshata K. Dhewale	Types of culture media	<u>Akshata</u>	
4.	Shruti P. Mohod	Gail Microbiology	<u>Shruti</u>	
5.	Bharti S. Kinkar	Hot air oven	<u>Bharti</u>	
6.	Aparna S. Phanorkar	Formation & Germination of Endospore	<u>Aparna</u>	
7.	Pranali M. Topale	Ti plasmid	<u>P.M. Topale</u>	
8.	Tanuja R. Deshmukh	Joseph lister	<u>T Deshmukh</u>	
9.	Witesh T. Nandghare	HIV viruses	<u>Witesh</u>	
10.	Latika D. Wankhede	plasmids	<u>Latika</u>	
11.	Himani H. Borai	TMV.	<u>H. Borai</u>	
12.	Vishali M. Jugsejya	viruses structures	<u>Vishali</u>	
13)	Nandini N. Chavde	Robert Koch	<u>Nandini</u>	
14)	Aachal L. Manmode	Martinus Beijerinck	<u>A. Manmode</u>	
15)	Neha R. Khandait	Basic Nutritional Requirement	<u>N.R. Khandait</u>	

Date 2/11/2023

Signature of Teacher



Dr. N.B. Hirulkar
Head

Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24



CLASS:- _____

SUBJECT: _____

Paper _____

Name of Teacher _____

Sr. No.	Name of Student	Title	Signature	Viva Remark
16)	Nishigandha Nehare	Nutritional Requirement of Bacteria	<u>Nehare</u>	
17)	Komal Tadase	structure of flagella	<u>Tadase</u>	
18)	Gymini Thakre	eukaryotes & prokaryotes	<u>Gymini</u>	
19)	Radhika Kalede	eukaryotes & prokaryotes	<u>Radhika</u>	
20)	Divya D. Behaniye	structure of DNA	<u>Divya</u>	
21)	Tanuja P. Bhalavi	Bacterial growth curve		
22)	Snehal U. Ahake	Endospores.		
23)	Leena Y. Doble	simple microscope	<u>Leena</u>	
24)	Komal N. Vaidya	food microbiology.	<u>K.N. Vaidya</u>	
25)	Gayatri P. Narnaware	Exo Biology	<u>G. Narnaware</u>	
26)	Tuba Mahorash. U. Khan	Replica plating	<u>Tuba</u>	
27)	Vaishnavi V. Bagde	medical microbiology.	<u>V. V. Bagde</u>	
28)	Tanuja P. Bhalavi	growth of bacteria.	<u>Bhalavi</u>	
29)	Snehal Ahake	structure of endospore	<u>Ahake</u>	
30)	Ashlesha Bhavan	Types of plasmids	<u>Ashlesha</u>	

Date _____



Dr. _____
Department of Microbiology
Nabira Mahavidyalaya, Katol

Signature of Teacher _____



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24



CLASS:- _____

SUBJECT:- _____

Paper _____

Name of Teacher _____

Sr. No.	Name of Student	Title	Signature	Viva Remark
30	Ashlesha Bhajan	Transmission Electron Microscopy (TEM)	A.Y. Bhajan	
31	Diksha Borghate	Bacterial growth curve	Borghate	
32	Nazia Khan	TEM	NKhan	
33	Mayuri, dhopre	Absorbance & Biotic	Mayuri	
34	Samiksh Kawalkar	Micology	Samiksh	

Date 2/12/2023



Head
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol

Signature of Teacher

Name of Teacher _____



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24

CLASS:- B.Sc. SEM-I

SUBJECT: Microbiology

Paper II

Name of Teacher Ku. D.M. Ridhorakar



Sr. No.	Name of Student	Title	Signature 2/11/23	Viva Remark
1)	Ashwini D. Saneve	Fluorescence microscope	<u>Ashwini</u>	
2)	Kanchan N. Nathe	Biofertilizer	<u>Kanchan</u>	
3)	Tejaswini M. Manmode	Factor affecting of microbial growth	<u>M. Manmode</u>	
4)	Tanuja R. Deshmukh	Confocal microscope	<u>Deshmukh</u>	
5)	Monika S. Khawshke	Endospore staining	<u>Monika</u>	
6)	Hemakshi M. Gharad.	Discovery of microbes.	<u>Hemakshi</u>	
7)	Nandini A. Chavale	Robert Koch	<u>Nandini</u>	
8)	Mayuri D. Jore	Gram Stain	<u>Mayuri</u>	
9)	Manisha M. Tijare	Process of Pasteurization	<u>Manisha</u>	
10)	Bhrenti S. Desai	Autoclave machine	<u>Desai</u>	
11)	Sahil S. Sheikh	Dark Field microscopy	<u>Sheikh</u>	
12)	Aditya V. Chavhan	Heavy metals and compound	<u>Aditya</u>	
13)	Abhimanyu A. Mahalle	Mechanism of Cell Injury	<u>Abhimanyu</u>	
14)	Shubhanguini Somkumar	Moist heat Sterilization	<u>Somkumar</u>	
15)	Pooja P. Khawshke	MPN method	<u>Khawshke</u>	

Date 2/11/2023



Dr. M. R. D. M. Ridhorakar
2/11/2023
Head

Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol

D.M. Ridhorakar
Signature of Teacher



NABIRA MAHAVIDYALAYA, KATOL

DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT (Assignment)
SUMMER 2023-24



CLASS:- _____

SUBJECT:- _____

Paper _____

Name of Teacher _____

Sr. No.	Name of Student	Title	Signature	Viva Remark
16)	leena Y. Doble	gram staining		
17)	Nishagandha Nehore	Compound Microscope		
18)	Chetna P. Meshram	Selective Media		
19)	Shalaka P. Atram	Replica plate method		
20)	Monika G. Raut	Microbiology		
21)	Asfiya A. Syed	Concept of oil immersion lens of microscope		
22)	Resham Kawade	plant cell and animal cell		
24)	Komal N. Vaidya	Capsule Staining	K.N.vaidya	
25)	Jyoti P. Narware	Pour plate Method		
26)	Kanak L. Bagde	Differential media		
27)	Mansi R. Wangal	John Tyndall		
28)	Tanuja P. Shalavi	growth of Bacteria		
29)	Sheetal H. Aher	structure of endospore		
30)	Puja M. Aode	Martinus Beijerinck		
31)	Vedanti D. Rewalkar	Bacterial chromosome		

Date 2/11/23



Head
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol

Signature of Teacher

Signature of Teacher

CLASS:- _____

[illegible]



RASTRASANT TUKADOJI MAHARAJ
NAGPUR UNIVERSITY, NAGPUR

NABIRA MAHAVIDYALAYA, KATOL



DEAPRTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT
2024
(SUMMER)

Sr. No.	Name of Students	Test I 13.3.24	Test II 13.3.24	Test III 22/4/2024	
1	Gayatri M. Mahule	13/3/2024 Mahule	13/3/2024 Mahule	Mahule	Mahule
2	Komal L. Raul	13/3/24 Raul	13/3/24 Raul	Raul	Raul
3	Nikita R. Mahalle	13/3/2024 Mahalle	13/03/2024 Mahalle	Mahalle	Mahalle
4	Bhawna V. Dharammali	B.V. Dhali	B.V. Dhali	B.V. Dhali	B.V. Dhali
5	Minali S. Dharammali	Minali	Minali	Minali	Minali
6	Vaishnavi V. Dutkar	Dutkar	Dutkar	Dutkar	Dutkar
7	Palak D. Upadhyay	Upadhyay	Upadhyay	Upadhyay	Upadhyay
8	Suruchi R. Badode	Badode	Badode	Badode	Badode
9	Manisha H. Solanki	Manisha	Manisha	Manisha	Manisha
10	Bhumika P. Banjewar	Banjewar	Banjewar	Banjewar	Banjewar
11	Puja M. Ghumde	P. Ghumde	P. Ghumde	P. Ghumde	P. Ghumde
12	Mahima V. Gajbe	M.V. Gajbe	M.V. Gajbe	M.V. Gajbe	M.V. Gajbe

[illegible]

Name of teacher - Mrs. S.P. Nabira SP Nabira



RASTRASANT TUKADOJI MAHARAJ
NAGPUR UNIVERSITY, NAGPUR

NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT

2024
(SUMMER)

Sr. No.	Name of Students	Name of Topic	Date of Submission	Signature	Remark
1	Pulavi Devanand Kokate	Antibiotic assay in body fluids	6/04/2024	P Kokate	
2	Vaishnavi A. Shalegaon	Herpes Simplex Virus	6/04/2024	V Shalegaon	
3	Oisha R. Babhulkar	BCG vaccine	06/04/2024	O Babhulkar	
4	Megha Bhoyar	Drug Designing	6/04/2024	M Bhoyar	
5	Tanuja R. Tapare	Rapid test susceptibility	06/04/2024	T Tapare	
6	Oisha N. Jambhulkar	Vaccine adjuvant and additives	06/04/2024	O Jambhulkar	
7	Achal N. Nasse	Exhalation and Attenuation	06/04/2024	A Nasse	
8	Rupesh B. Ghatge	Active and passive prophylaxis measures	06/04/2024	R Ghatge	
9	Mahima Satpute	DPT Vaccine	6/4/24	M Satpute	
10	Madhuri Bhoyar	Influenza vaccines	6/4/24	M Bhoyar	
11	Dewashree W. Kinekar	Definition & Discovery of vaccine	06/04/24	D Kinekar	
12	Pooja T. Chorghade	Vaccine in Development	06/04/24	P Chorghade	

MSc - 1st yr $\Rightarrow$ Immunology



RASTRASANT TUKADOJI MAHARAJ
NAGPUR UNIVERSITY, NAGPUR

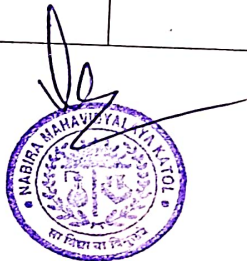
NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT

2024
(SUMMER)

Sr. No.	Name of Students	Name of Topic	Date of Submission	Signature	Remark
1.	Khushali G. Sonwane	Autoimmune diseases	30-4-24	<u>Sonwane</u>	
2.	Nisha P. Tarte	Immunoelectron microscopy	30-4-24	<u>Tarte</u>	
3.	Chaitali S. Lade	transplantation immunology	30-4-24	<u>Lade</u>	
4.	Neha Dhude	Hypersensitivity	30-4-24	<u>Dhude</u>	
5.	Immunodiffusion disorders				
5.	Achal Maske	Immunodiffusion disorders	30-4-24	<u>Maske</u>	
6.	Ruchita D. Hiwase	Tumor Antigen	30-4-24	<u>Hiwase</u>	
7.	Yuvraj L. Malode	Cancer & Immune system	06-05-24	<u>Yuvraj</u>	



Head
30/4/24
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



RASTRASANT TUKADOJI MAHARAJ
NAGPUR UNIVERSITY, NAGPUR

NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT
2024 (SUMMER)

CLASS Msc - I

PAPER I

NAME OF TEACHER Sana. M. Sheikh.

Sr. No.	Name of Students	Name of Topic	Date of Submission	Signature	Remark
1.	Khushali G. Sonwane	Eutrophication	29-4-24		
2.	Chaitali Lude	Biotransformation	29-4-24		
3.	Neha Dhude	Biodegradation	29-4-24		
4.	Nisha Tante	Revegetation	30-4-24		
5.	Achal Maske	Biomagnification	30-4-24		
6.	Ruchita Hiwase	Biodegradation	30-4-24		
7.	Yuvani L. Malode	Phytoremediation & its Application	06-05-24		



Head
Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol



RASTRASANT TUKADOJI MAHARAJ
NAGPUR UNIVERSITY, NAGPUR

NABIRA MAHAVIDYALAYA, KATOL



DEPARTMENT OF MICROBIOLOGY AND
BIOTECHNOLOGY
INTERNAL ASSESSMENT
(2024
(SUMMER)

Sr. No.	Name of Students	Name of Topic	Date Submission	Signature	Remark
1.	Purva R. Wankhede	Complement fixation test	15-9-2024	P.R. Wankhede	
2.	Ruchita J. Gaur	Agglutination Test	15-9-2024	R. Gaur	
3.	Divya K. Demase	precipitation test	15-9-2024	Demase	
4.	Gaurav G. Dangore	Autoimmunity.	16-4-24	G. Dangore	
5.	KARAN. A. KADU	Antibody structure and classes	16-4-2024	K. Kadu	
6.	Yamini M. Bannagare	Monoclonal Antibodies and application	22-4-2024	Y. Bannagare	
7.	Resham D. Gulete	Immuno diffusion	24-4-24	R. Gulete	

Name of teacher - Mrs. S. P. Nabirga S. P. Nabirga



Rastrasant Tukadoji Maharaj Nagpur
University, Nagpur
Department of Microbiology & Biotechnology
Nabira Mahavidyalaya Katol



INTERNAL ASSESSMENT

Assignment On

Concept of Transgenic Animals

Submitted By Nikita Ratnakan Mahalley

Class BSc. III Year

Subject Biotechnology

Paper Plant and animal biotechnology

Submitted To Mrs. A.S. Chandak Mam

Date of Submission 12-04-2024

N. Mahalley

Student Signature

Dr. P. S. Patil
29.4.24
Signature of Head

AS. 12/4/2024

Teachers Signature

DEPARTMENT OF MICROBIOLOGY & BIOTECHNOLOGY
NABIRA MAHAVIDYALAYA, KATOL

CONCEPT OF TRASGENIC ANIMALS

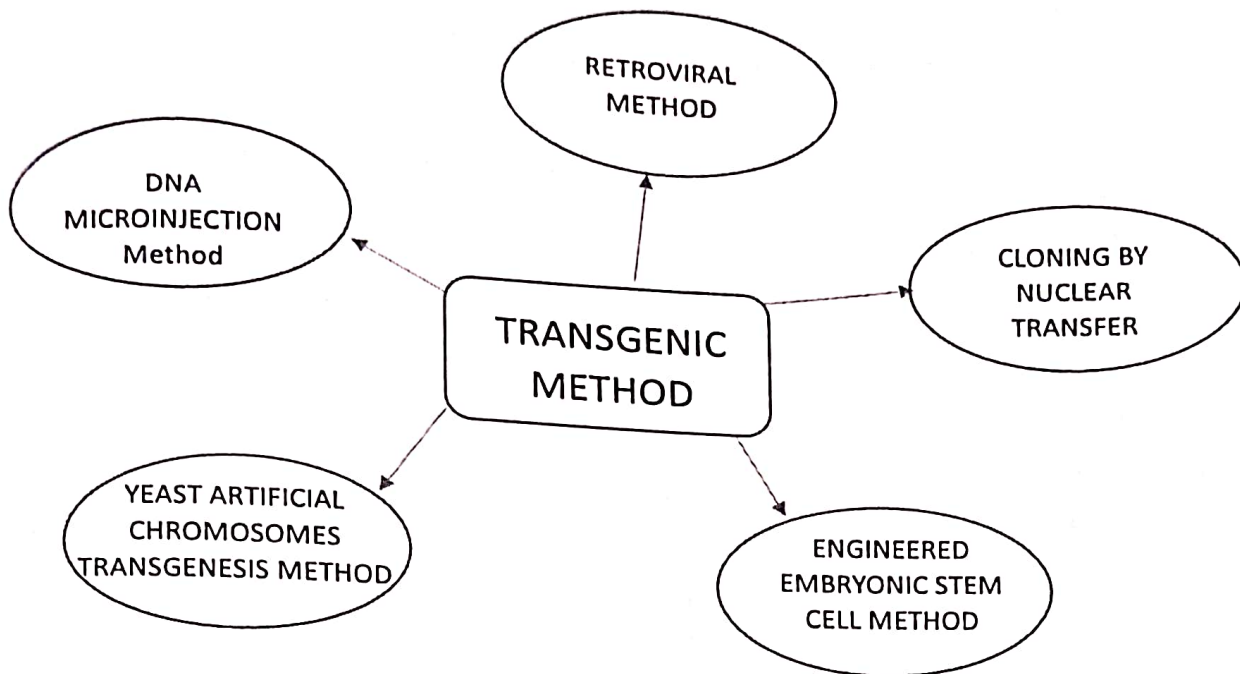
CONTENT

- ❖ Introduction
- ❖ Methods used to produce transgenic
Animals
- ❖ Examples
- ❖ Application
- ❖ Advantages and Disadvantage
- ❖ References

❖ Introduction

- A transgenic animal is one that carries a foreign gene that has been deliberately inserted into its genome.
- Transgenesis is the process by which mixing up of genes takes place.
- Foreign genes are inserted into the germ line of the animals, so it can be transmitted to the progeny.
- There are a number of ways to genetically modify bacterial cell & eukaryotic cell. One of the most common procedures used in laboratories is known as transformation and transfection respectively.
- Transformation is the process in which the genetic makeup of a cell is changed by the introduction of DNA from the surrounding environment. Transfection is a process by which foreign nucleic acids are delivered into a eukaryotic cell to modify the host cell's genetic makeup.
- Transgenic technology has led to the development of fishes, live stocks and other animals with altered genetic profiles which are useful to mankind.
- First transgenic animal was a 'Supermouse' created by Ralph Brinster (U Pennsylvania) and Richard Palmiter (University of Washington) in 1982.
- It was created by inserting a human growth hormone gene into the mouse genome.

❖ Methods used to produce transgenic animals



• **Method**

- Eventhough There are many methods for producing transgenic animals, there are three basic methods used for producing them :
- i) DNA Microinjection
 - ii) Retrovirus Mediated Gene Transfer
 - iii) Embryonic Stem Cell Mediated Gene Transfer

i) **DNA Microinjection**

- The mouse was the first animal to undergo successful gene transfer using DNA Microinjection.
- This Method Involves :-
- Transfer of a desired gene construct lot a single gene or a combination of genes that are recombined and then cloned from

another membranes of the same species or for a different species into the pronucleus of a reproductive cell.

- The manipulated cell which first must be cultured in vitro to develop to a specific embryonic phase is then transferred to the recipient female.

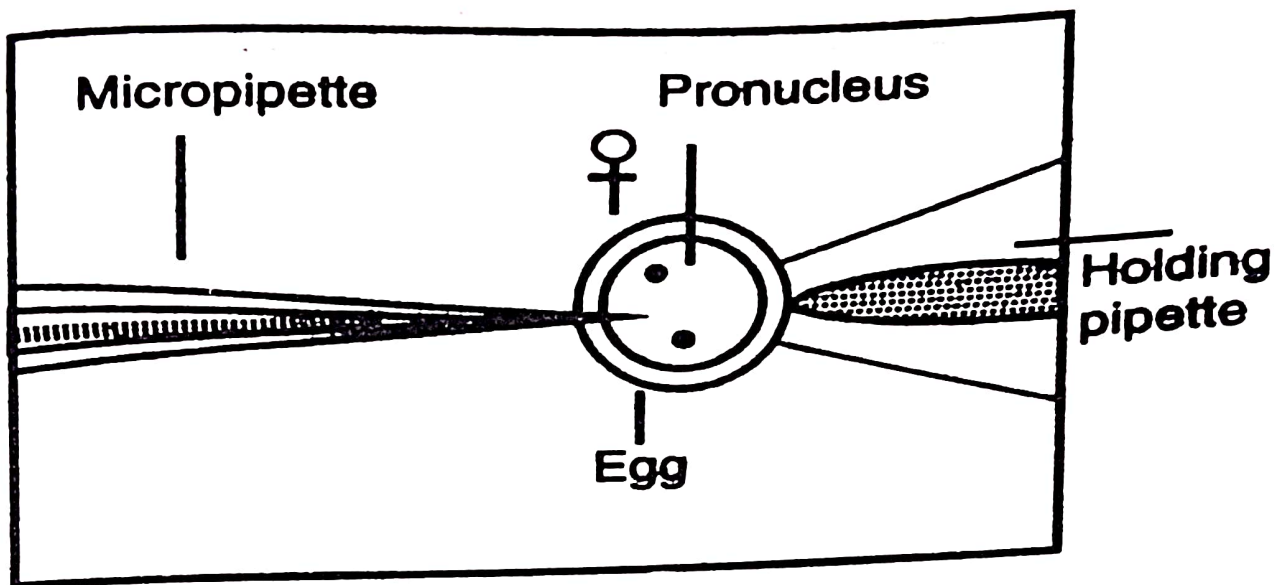
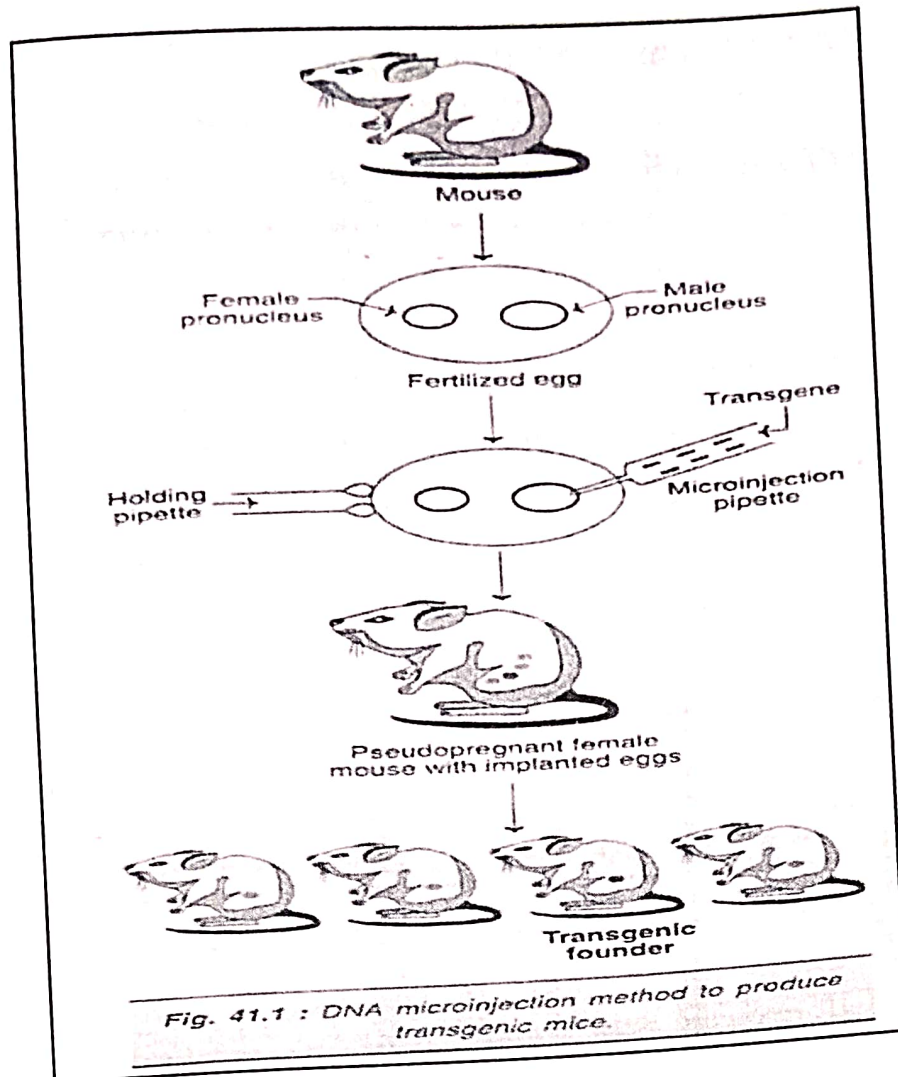


Fig :- DNA Microinjection Method



- **Retroviral Mediated Gene Transfer**

- A Retroviral is a virus that carries its genetic material in the form of RNA rather than DNA.
- This Method involves:
- Retroviral used as vector to transfer genetic material into the host cell resulting in a chimaera on organism consisting of tissues or parts of diverse genetic constitution.

• Embryonic stem cell mediated gene transfer

This method involves:

- Isolation of totipotent stem cells (Stem cells that can develop into any type of specialized cell) from embryos.
- The desired gene is inserted into these cells.
- Cells containing the desired DNA are incorporated into the host embryo resulting in a chimeria animals.
- Unlike the other two methods, which require live transgenic offspring to test for the presence of the desired transgene this method allow testing for transgenes at the cell stage.

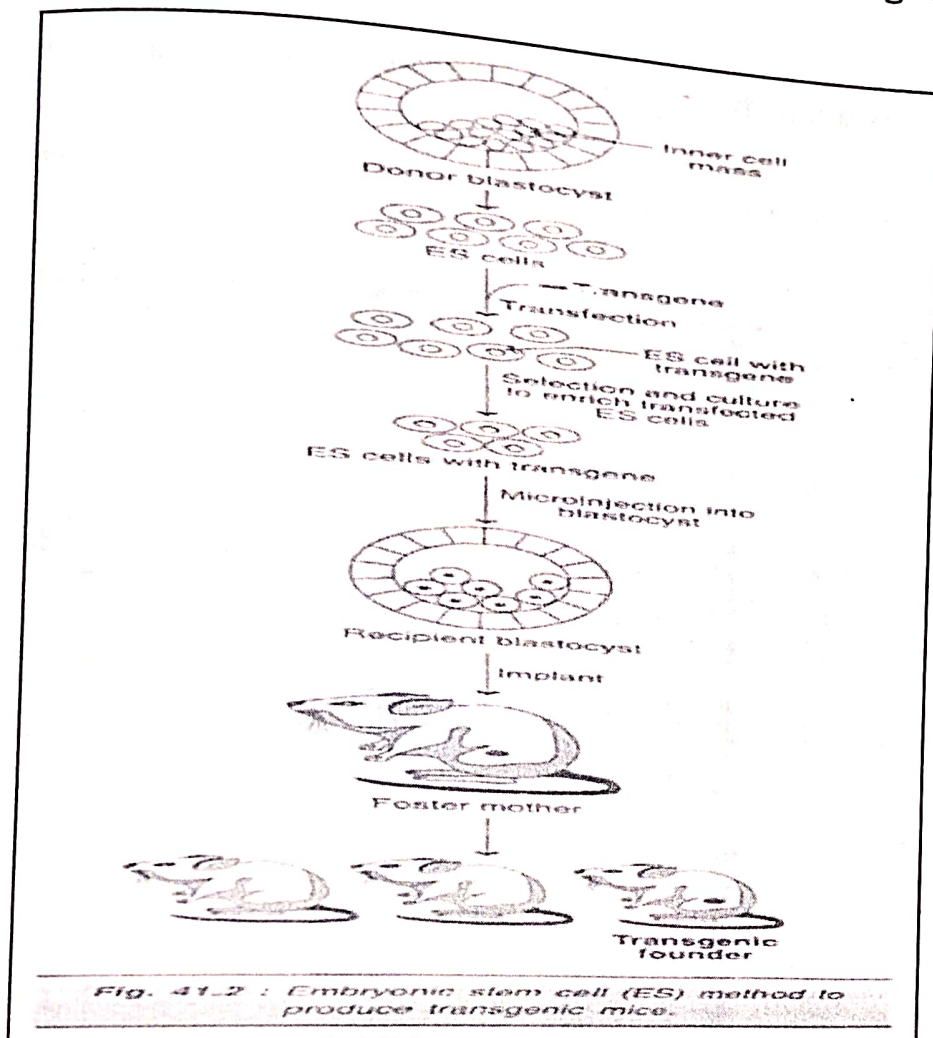


Fig. 41-2 : Embryonic stem cell (ES) method to produce transgenic mice.

❖ Examples :

- i) Transgenic Mouse
- ii) Transgenic Cow
- iii) Transgenic Monkey
- iv) Transgenic Rabbit
- v) Transgenic Fish

i) **Transgenic Mouse**

- **Smart Mouse**

- Biological model engineered to Overexpress NR2B receptor in the synaptic pathway
- This makes the mice learn faster like juveniles throughout their lives
 - **Oncomouse**
- Mouse Model to study cancer
- Made by inserting activated oncogenes.

ii) **Transgenic Cow**

- Transgenic Cows are made to produce proteins lactoferrin and interferon in their milk
- Prion free cows resistant to mad cow disease.

iii) **Transgenic Monkey**

- **ANDi** was the first transgenic monkey, born in 2000.
- "**ANDi**" Stands for "Inserted DNA" spelled backward.
- An engineered virus was used to insert the harmless gene for green florescence protein (GFP) into ANDi's rhesus Genome.

Transgenic Rabbit

iv)

- Alba the EGFP (Enhanced Green fluorescent protein) Bunny.
- Created in 2000 as a transgenic artwork.

Transgenic Fish

v)

- ✓ **Superfish**
 - Increased growth and size
 - Growth hormone gene inserted into fertilized egg.
 - Transgenic salmon grown about 10-11 times faster than normal fish.
- **Glo Fish**
 - GM freshwater zebra fish (Danio Rerio)
 - Produce by integrating a fluorescent protein gene from jelly fish into embryo of fish.

Application

- In some cases transgenic animals may be designed to be visually interesting to study to yield more meat or to perform a specific task better.
- GMOs are Created and/or modified in the laboratory to amplify desired characteristics which are beneficial to mankind
- Transgenic technology hold great potential in many field, mainly in agriculture, medical & industry .

➤ Medical Importance

- Disease model
- Xenotransplantation
- Bioreactors for pharmaceuticals
- Human gene therapy

➤ Agriculture Importance

- Disease resistant animals
- For improving quality and quantity of milk, meat, egg and wool production
- Breeding

➤ Industrial importance

- Toxicity sensitive transgenic animals to test chemicals
- Spider silk in milk of goat.

❖ ADVANTAGES

- Increase growth rate
- Improved disease resistance
- Improved food conversion rate
- Improved muscle mass
- Improved nutritional value
- Improved wool quality

❖ DISADVANTAGES

- Inserted gene has multiple functions
 - breeding problem
 - sometimes leads to mutagenesis and functional disorder.
 - Low survival rate of transgenic animals
- 

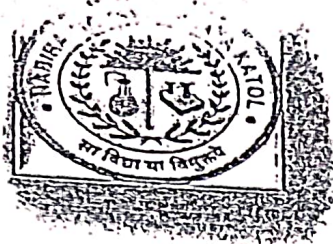


References

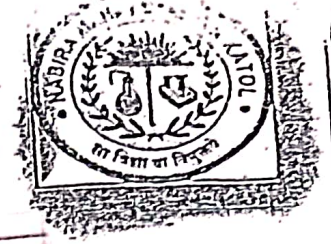
- Biotechnology – By U. Satyanarayana – Pg. No. 480-487
- Elements of Biotechnology – BY P K. Gupta – Pg. No. 172 – 176
- A Textbook of Biotechnology – By R.C Dubey – Pg. No. 266-268

Internet Resources

- <https://www.whatisbiotechnology.org/index.php/science/summary/transgenic/transgenic-animals-have-genes-from-other-species-inserted>
- <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/transgenic-animal>



INTERNAL ASSESSMENT



Session 2023-24

SUBJECT:- Microbiology

ASSIGNMENTS ON

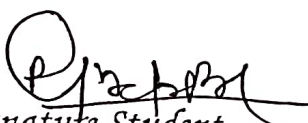
Chemical composition of viruses.

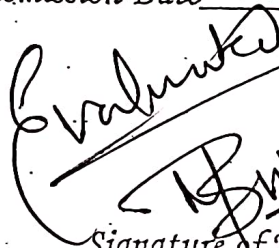
Submitted By
PRAJYOT GATANAN MORCHAPURE
Class MSC 2nd year
Subjects Microbiology
Semester IV sem
Paper 1 (MFT)

Submitted To: Ridhokra. Mam

Department of Microbiology & Biotechnology
NMV Katol

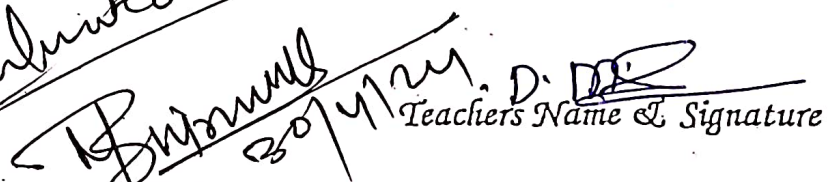
Submission Date 06/04/24


Signature Student


Signature of HEAD

Head

Department of Microbiology
& Biotechnology, Nabira
Mahavidyalaya, Katol


Teachers Name & Signature

Department of Microbiology & Biotechnology
Nabira Mahavidyalaya, Katol



Assignment Topic: Chemical Compositions of Viruses

Submitted By: Prajyot Gajanan Morchapure

Class: M.sc 2nd year (Forth Semester)

Department: Microbiology (PG)

Index –

- Introduction
- Information
- Conclusions
- References

Chemical Compositions of Viruses

Introduction

Several hundred virus diseases are now recognized as such, but the chemical compositions of relatively few viruses have been reported. The main reasons for this situation are that many interesting experiments can be done without precise information about viral composition, and it is not easy to obtain all viruses in a state of purity adequate for analysis. Finally, it is somewhat tedious to perform complete and thorough analyses of viruses even when they can be obtained in adequate amounts and in sufficient purity. Consequently, it is common for investigators to make just those analyses most pertinent to a particular topic under investigation. Tobacco mosaic virus proved to be a nucleoprotein, that is, a specific combination of nucleic acid and protein. The same characteristic nucleoprotein was obtained from a variety of hosts infected with tobacco mosaic virus (TMV). In each instance the virus nucleoprotein appears to be foreign to its host as judged from its absence in normal plants and its lack of serological relationship to the normal host constituents. This holds true for many other viruses, although among the more complex viruses, those that acquire envelope structures at and bud out through cell membranes typically contain some host cell constituents in their envelopes. Most viruses give rise during multiplication to occasional mutants, or variants; when isolated, these are found to be of the same general composition as that of the parent virus. It now seems generally true that strains of a given virus have identical proportions of protein and nucleic acid, although exceptions to this rule have been observed in mutants of the more complex viruses. All types of viruses, including plant, bacterial, higher animal, and insect viruses, contain either ribonucleic acid (RNA) or deoxyribonucleic acid (DNA). At one time it was thought that some viruses, such as influenza virus, contained both types of nucleic acid, but, as a consequence of more refined methods for purification and analysis of viruses, no virus is presently known that contains both RNA and DNA. This may be contrasted with bacteria including *Rickettsia* and *Bedsonia*, which appear to have both DNA and RNA (see Allison and Burke 1962). Almost all of the many plant viruses that have been obtained in a highly purified state, as well as some small animal and bacterial viruses, have proved to be simple nucleoproteins. However, some of the larger animal and bacterial viruses also possess lipid, polysaccharide, and other components. It should be noted that a few plant and bacterial viruses have also been found to contain some lipid.

The chemical composition of viruses includes nucleic acid, protein, and lipid. The nucleic acid is the genome, which is either DNA or RNA. The protein coat, or shell, surrounds and protects the nucleic acid. All viruses have protein, and some also have lipid in their envelope. The lipid envelope can contain viral proteins, and the source of the envelope is from the membranes of the host cell.

Viruses are about 64% protein, 21–25% dsDNA, and 5–10% lipid. The virus contains at least 50 structural proteins, ranging in size from 10–200 kDa. The minimum chemical requirement for virus activity is nucleic acid and protein, which together form specific nucleoproteins. Nucleic acid and protein are the only components common to all viruses. You can study the structure of a virion using electron microscopy, X-ray crystallography, or X-ray diffraction.

Information

The main chemical composition of plant viruses

a) Protein

b) Nucleic acid (either DNA or RNA never both)

A) Protein

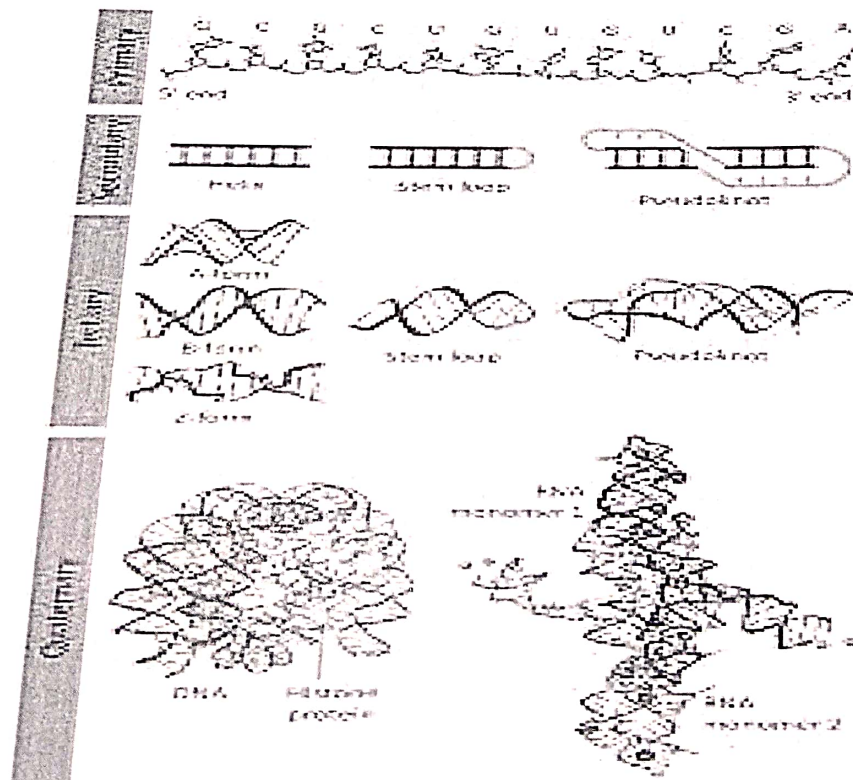
- Major structural component of plant viruses.
- Serving as a protective coat for the delicate nucleic acid genome.
- It provides the basis for serological differentiation of plant viruses.
- Proteins are composed of about 150-600 or more residues of some 20 amino acid.
- Most plant viruses are built of one kind of protein sub units.
- In protein contain amino acid, and they carry an amino group (-NH₂) and the carboxyl group (-COOH) of atom carrying the chemical residues as a side chain.
- The amino acid condensed to polymerize into a linear polypeptide chain.
- The specific sequence of amino acid, linked by peptide bonds, is the first level of protein organization and called Primary structure.
- The polymerized peptide structures are usually spirally or helically bound to form the Secondary structure.
- Further bending or folding of polypeptide chain over itself is called Tertiary structure.
- The linear polypeptide has two ends that is C-terminal end and N-terminal end.
- The primary structure of protein molecules results from strong covalent peptide bonds (-CO-NH-).
- The secondary and tertiary structures are maintained by a few strong covalent disulphide (-S-S-) bonds but mostly by a large number of weak hydrogen bonds.
- There are few plant viruses such as potato yellow dwarf and rhabdoviruses which contain complex protein configuration containing more than one type polypeptides and forms quaternary structure.

Amino acids	
Alanine	(Ala)
Arginine	(Arg)
Aspartic acid	(Asp)
Asparagine	(Asn)
Cysteine	(Cys)
Glutamine	(Gln)
Glutamic acid	(Glu)
Glycine	(Gly)
Histidine	(His)
Isoleucine	(Ile)
Leucine	(Leu)
Lysine	(Lys)
Methionine	(Met)
Phenylalanine	(Phe)
Proline	(Pro)
Serine	(Ser)
Tryptophan	(Trp)
Tyrosine	(Tyr)
Threonine	(Thr)
Valine	(Val)

- The capsid proteins fundamentally do not differ from other types of proteins in any way except that they may be deficient in some commonly occurring amino acid such as histidine and methionine in TMV and tryptophane in Closter viruses.
- The organizational and constitutional configuration of protein molecules of capsid confers it resistance to enzyme like protease and high temperature.
- The protective role of viral protein has two very important biological functions, determining serological affinity and vector transmission.

Nucleic acid

- The plant viruses contain either DNA or RNA as a genetic material.
- Most of the plant viruses contain RNA except a few such as caulimoviruses, Gemini viruses, banana bunchy top and badnaviruses which contain either single or double stranded DNA.
- The nucleic acid may be presents as a single continuous strand in a particle or may be distributed in two or more pieces in different particles are called multipartite virus or divided genome.
- The RNA and DNA may again be either single stranded or double stranded.
- Most of the plant viruses are ssRNA with a few exceptions such as clover wound tumour and rice dwarf virus which have dsDNA.
- The structural configurations of nucleic acid are similar to protein in the form of primary, secondary and tertiary structures.
- The sequence of nucleotides into a long poly-nucleotide chain constitutes the primary structure.
- The ssRNA in a free state fold upon itself into loop or helix due to trans molecular hydrogen bonding between A, U and G, C base pair this structure called secondary structure.



Conclusions

Viruses are grouped on the basis of size and shape, chemical composition and structure of the genome, and mode of replication. Helical morphology is seen in nucleocapsids of many filamentous and pleomorphic viruses. Helical nucleocapsids consist of a helical array of capsid proteins (protomers) wrapped around a helical filament of nucleic acid. Icosahedral morphology is characteristic of the nucleocapsids of many "spherical" viruses. The number and arrangement of the capsomeres (morphologic subunits of the icosahedron) are useful in identification and classification. Many viruses also have an outer envelope.

Chemical Composition and Mode of Replication: The genome of a virus may consist of DNA or RNA, which may be single stranded (ss) or double stranded (ds), linear or circular. The entire genome may occupy either one nucleic acid molecule (monopartite genome) or several nucleic acid segments (multipartite genome). The different types of genome necessitate different replication strategies.

References

1. Almeida J.D. Morphology: virus structure. In: Brown F., Wilson G., editors. Vol. 4. Williams and Wilkins; Baltimore: 1984. p. 14. (In "Topley and Wilson's Principles of Bacteriology, Virology and Immunity"). [Google Scholar]
2. Caspar D.L.D. Design principles in virus particle construction. In: Horsfall F.L. Jr., Tamm I., editors. Lippincott; Philadelphia: 1965. p. 51. (In "Viral and Rickettsial Infections of Man"). 4th edition. [Google Scholar]
3. Compans R.W., Klenk H.-D. Viral membranes. In: Fraenkel-Conrat H.C., Wagner R.R., editors. Vol. 12. Plenum Press; New York: 1979. p. 293. (In "Comprehensive Virology"). [Google Scholar]
4. Harrison S.C. Structures of viruses. In: Mahy B.W.J., Pattison J.R., editors. Vol. 36. Cambridge University Press; Cambridge: 1984. p. 29. (In "The Microbe 1984. Part I. Viruses"). Soc. Gen. Microbiol. Symp. [Google Scholar]
5. McGeogh D.J. Structural analysis of animal virus genomes. J. Gen. Virol. 1981; 55:1. [PubMed] [Google Scholar]
6. Palmer E.L., Martin M.L. "An Atlas of Mammalian. CRC Press; Philadelphia: 1982. [Google Scholar] Caspar DLD: Design principles in virus particle construction. In Horsfall FL, Tamm I (eds): Viral and Rickettsial Infections in Man. 4th Ed. JB Lippincott, Philadelphia, 1975.
7. Fields BN (ed): Virology. 3rd Ed. Lippincott-Raven Press, 1995.
8. Gajdusek DC. Unconventional viruses and the origin and disappearance of kuru. Science. 1977; 197:943. [PubMed]
9. Gelderbloom HR. Assembly and morphology of HIV: potential effect of structure on viral function. AIDS. 1991;5:617-637. [PubMed]
10. Mattern CFT: Symmetry in virus architecture. In Nayak DP (ed): Molecular Biology of Animal Viruses. Marcel Dekker, New York, 1977.
11. Morse SS (ed): The Evolutionary Biology of Viruses. Raven Press, New York, 1994.
12. Murphy FA, Fauquet CM, Bishop DHL, et al. (eds): Virus Taxonomy: Sixth Report of the International Committee on Taxonomy of Viruses. Springer-Verlag, New York, 1995.



**RASHTRASAT TUKADOJI MAHARAJ NAGPUR UNIVERSITY,
NAGPUR**

Internal Marks Sheet

Exam Name : FOURTH SEMESTER M.Sc. (MICROBIOLOGY) (CBCS)
Subject Name : CORE SUBJECT CENTRIC : VACCINES AND DELIVERY SYSTEM
College Name : (325) NABIRA MAHAVIDYALAYA
Session : SUMMER-2024

Sr. No.	SEAT NO	ENROLLMENT NO	STUDENT NAME	Marks / Max 20
1	382151	20201032503303	ACHAL NIRANJAN NASARE	18
2	382152	20173031506587	DARSHINA RAJENDRA LANDGE	15
3	382153	20181006404375	DEWASHREE DINESHRAO KINEKAR	19
4	382154	20201032503323	DISHA NAMDEORAO JAMBHIULKAR	18
5	382155	20181031511302	DISHA RAVINDRA BABHIULKAR	18
6	382156	20201032503337	HARSHALA MANOHAR SATPUTE	17
7	382157	20191031507794	MADHURI SAHEBRAO BHOYAR	17
8	382158	20201032503363	MAHIMA SHRIDHAR SATPUTE	17
9	382159	2015016602243154	MAYURI SARANG MANOHAR	18
10	382160	20191031507797	MEGHA MURLIDHAR BHOYAR	19
11	382161	20181031511335	MONU ISHWAR DHURVE	16
12	382162	20231032504330	MUSKAANPRAVIN AFROJ PATHAN	19
13	382163	20181031511348	NILIMA MURLIDHAR KHAWSHE	18
14	382164	2018031511354	PALLAVI DEVANAND KOKATE	18
15	382165	20201032503396	PUJA TILAK CHORGHAD	19
16	382166	20191031507871	SHUBHANGI BHJAGWAN CHANDPURE	18
17	382167	20201032503451	TANUJA RAJENDRA TAPARE	17
18	382168	20201032503456	VAISHNAVI ASHOKRAO BHALERAO	18
19	382169	20173031506712	PRAJYOT GAJANAN MORCHAPURE	15
20	382170	20201032503501	RUPESH BHAGWAN GATKINE	15
21	382176	2021016600588055	APEKSHA ASHOKRAO GHORMADE	--
22	382180	2021016600576015	ROSHANI SANJAYRAO SAWARKAR	--



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Signature of Examiner

[Signature]
Principal
Nabira Mahavidyalaya
Katol

**RASHTRASAT TUKADOJI MAHARAJ NAGPUR UNIVERSITY,
NAGPUR**

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College Name : (325) NABIRA MAHAVIDYALAYA
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Katol.

DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGY
NABIRA MAHAVIDYALAYA, KATOL
INTERNAL ASSESSMENT METHADODOLOGY

SESSION 2023-24

**SUBJECT: -
THEORY INTERNAL MARKS**

Name of Student.....Roll Number.....
Class.....
Name of Teacher.....
Paper: -

Sr. No.	Mode of Internal Assessment	Maximum Marks allotted	Mark Obtained	Maximum Marks allotted	Mark Obtained
		SEM -		SEM-	
1	Attendance and curricular activity	02		02	
2	Seminars	02		02	
3	Assignment	02		02	
4	Unit Test I	01		01	
5	Unit Test II	01		01	
6	Unit Test III	01		01	
7	Unit Test IV	01		01	
8	Term Exam	02		02	
9	Field Work/ Project	02		02	
10	Extracurricular Activity	02		02	
11	Any Other Mode	02		02	
Total (Not more than 10 in each semester)					

Total Internal Marks Obtained.....

Signature of Student...For SEM ...:-SEM:-.....

Signature of Teacher.....

Date.....



[Handwritten Signature]
HOD

Department of Microbiology and Biotechnology
Nabira Mahavidyalaya, Katol
2023-24

METHOD FOLLOWS FOR INTERNAL AND EXTERNAL ASSESSMENT OF STUDENTS

UNIT TEST:

Regular class wiser unit tests are held on the portions completed in the class.

SEMINAR:

Classroom seminar by the students are arranged on various selected topics from the syllabus

QUESTION BANKS:

Unit wise/paper wise question banks are prepared for ready reference for the students. Model answer for various question are regularly discussed in the classes.

VIVA:

Oral question answer sessions are arranged during theory as well as practical classes

HOME ASSIGNMENTS:

Occasionally home assignments are given keeping in view the overall pace of progress of the student.

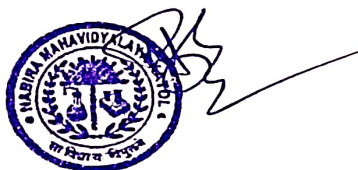
OBJECTIVE TESTS:

Objective tests have been introduced from the session 2012-13 for infusing interest of the students toward the subject and their rapid evaluation

CCE SYSTEM:

A **comprehensive continuous evaluation** are held at the end of each month with the help of various modes like semi surprise test, poster competition, assignments on general topics, seminar on optional topics etc.

DEPARTMENT OF MICROBIOLOGY AND BIOTECHNOLOGY



**P.G. DEPARTMENT OF MICROBIOLOGY
NABIRA MAHAVIDYALAYA, KATOL
INTERNAL ASSESSMENT METHADODOLOGY**

SESSION 2023-24

**SUBJECT: -
THEORY INTERNAL MARKS**

Name of Student.....Roll Number.....

Class.....

Name of Teacher.....

Paper: -

Sr. No.	Mode of Internal Assessment	Maximum Marks allotted	Mark Obtained	Maximum Marks allotted	Mark Obtained
		SEM :-		SEM :-	
1	Attendance and curricular activity	04		04	
2	Seminars	04		04	
3	Assignment	04		04	
4	Unit Test I	02		02	
5	Unit Test II	02		02	
6	Unit Test III	02		02	
7	Unit Test IV	02		02	
8	Term Exam	04		04	
9	Field Work/ Project	04		04	
10	Extracurricular Activity	04		04	
11	Any Other Mode	04		04	
Total (Not more than 20) in each semester					

Total Internal Marks Obtained...SEM.....SEM.....

Signature of Student...SEM.....SEM.....

Signature of Teacher.....

Date.....




HOD
Department of Microbiology
Nabira Mahavidyalaya, Katol
Dist. Solapur, Maharashtra - 431 004

NABIRA MAHAVIDYALAYA, KATOL
INTERNAL ASSESSMENT METHADODOLOGY

SESSION 2023-24

SUBJECT: -
THEORY INTERNAL MARKS

Name of Student.....Roll Number.....
Class.....
Name of Teacher.....
Paper: -

Sr. No.	Mode of Internal Assessment	Maximum Marks allotted	Mark Obtained	Maximum Marks allotted	Mark Obtained
		SEM -		SEM-	
1	Attendance and curricular activity	02		02	
2	Seminars	02		02	
3	Assignment	02		01	
4	Unit Test I	01		01	
5	Unit Test II	01		01	
6	Unit Test III	01		01	
7	Unit Test IV	01		02	
8	Term Exam	02		02	
9	Field Work/ Project	02		02	
10	Extracurricular Activity	02		02	
11	Any Other Mode	02			
Total (Not more than 10 in each semester)					

Total Internal Marks Obtained.....

Signature of Student...For SEM ...:-SEM:-.....

Signature of Teacher.....

Date.....




HOD
Date:



**RASHTRASAT TUKADOJI MAHARAJ NAGPUR UNIVERSITY,
NAGPUR**

Internal Marks Sheet

Exam Name : SIXTH SEMESTER BACHELOR OF SCIENCE (B.SC.)

Subject Name : MICROBIOLOGY (PAPER II)

College Name : (325) NABIRA MAHAVIDYALAYA

Session : SUMMER-2024

Sr. No.	SEAT NO	ENROLLMENT NO	STUDENT NAME	Marks / Max 10
1	309659	20210166006794	ACHAL JANARDHAN MALODE	08
2	309663	20210166004785	ANAMIKA DAMODHAR ASOLE	08
3	309664	20210166004785	ANKITA SUDHAKAR KHUSPARE	08
4	309665	20210166006794	ASHWINI BANDUJI DHORE	08
5	309667	20210166004688	AVANTIKA AVINASH KHARABE	08
6	309671	20210166006769	BHAWNA VASANTRAO DHARAMMALI	08
7	309672	20210166004963	BHUMIKA PRAMOD LANJEWAR	08
8	309673	20210166004688	CHAITALI ANIL ANTURKAR	09
9	309676	20210166004688	DNYANESHWARI ASHOK THAKRE	08
10	309678	20210166004824	EKTA LAXMIKANT KHARWADE	08
11	309680	20210166004963	GAYATRI MORESHWAR MAHURE	08
12	309681	20210166006705	GUNJANA GIRIDHAR WAILKAR	08
13	309682	20210166004891	HIMANSHI MILIND MANKAR	08
14	309690	20210166004797	KHUSHALI MORESHWAR BHURE	08
15	309692	20210166004844	KOMAL LAXMAN RAUT	08
16	309694	20210166006705	MAHIMA VINOD GAJBE	08
17	309695	20210166004797	MANISHA HARIRAM SOLANKI	09
18	309696	20210166004736	MANISHA MANOJ BAGDE	08
19	309699	20210166006794	MONALI PRAMOD DHOTARKAR	08
20	309700	20210166006738	MRINALI SURESH DHARAMMALI	08
21	309701	20210166004939	NEHA RAJU PERODIYE	08
22	309703	20210166006705	NIKITA RATNAKAR MAHALLEY	08
23	309704	20210166004797	NUTAN PURUSHOTTAM MOHOD	08
24	309705	20210166004844	PALAK DEEPAK UPADHYAY	08
25	309708	20210166006735	PRANJALI SANJAY KHANDATE	08
26	309709	20210166004919	PRIYANKA GANESH SATIMESHARAM	08
27	309711	20210166004978	PUJA MADHAV GHUMDE	08
28	309713	20210166004875	RESHMA VILAS DHOLE	08

Signature of Examiner

**RASHTRASAT TUKADOJI MAHARAJ NAGPUR UNIVERSITY,
NAGPUR**

Internal Marks Sheet

Exam Name : SIXTH SEMESTER BACHELOR OF SCIENCE (B.SC.)
Subject Name : MICROBIOLOGY (PAPER II)
College Name : (325) NABIRA MAHAVIDYALAYA
Session : SUMMER-2024

Sr. No.	SEAT NO	ENROLLMENT NO	STUDENT NAME	Marks / Max 10
29	309718	20210166005124	SAKSHI ISHWAR NANDAGAYE	08
30	309719	20210166006667	SAKSHI KIHUSHALRAO NARNAWARE	08
31	309720	20210166005040	SAKSHI MANOHAR SURJUSE	08
32	309723	20210166006738	SANIA SHARFUDDIN SYED	08
33	309728	20210166004978	SHRUTI RAJENDRA BANSOD	08
34	309729	20210166004962	SHRUTIKA PARSHURAM VALLORWAR	08
35	309730	20210166004688	SHWETA HARISHCHANDRA MENDHE	08
36	309733	20210166005040	SURUCHI RAJENDRA BADODE	08
37	309734	20210166007437	UTKARSHA JAGDISH PANCHBHAI	08
38	309736	20210166004736	VAISHNAVI MORESHWAR TIKHE	08
39	309738	20210166004845	VAISHNAVI VILAS DUKARE	08
40	309753	20210166004687	PRATHMESH KESHAV PANDE	08
41	309754	20210166005124	RUTIK YOGRAJ ZELGONDE	08
42	309756	20210166004963	SAHIL VIJAYRAO MAHALLEY	08
43	309758	20210166006794	SHUBHAM ASHOK BANSOD	08
44	309761	20210166006042	VEDANT VASANTRAO DHAGE	08
45	309786	20211032506308	PALLAVI LILADHARRAO MALODE	--
46	309804	20211032506369	SUJATA VINOD KHANDASKAR	--
47	309809	20211032506429	UJWAL NANDKISHOR BALPANDE	--

Print Date & Time: 15-05-2024 01:46-04 PM


Principal
Nabira Mahavidyalaya,
Katol, Dist. Nagpur.


Signature of Examiner

Head
Department of Microbiology
& Biotechnology Nabira
Mahavidyalaya, Katol



**RASHTRASAT TUKADOJI MAHARAJ NAGPUR UNIVERSITY,
NAGPUR**

Internal Marks Sheet

Exam Name : FIFTH SEMESTER BACHELOR OF SCIENCE (B.SC.)

Subject Name : BIOTECHNOLOGY (PAPER I)

College Name : (325) NABIRA MAHAVIDYALAYA

Session : Winter-2023

Sr. No.	SEAT NO	ENROLLMENT NO	STUDENT NAME	Marks / Max 10
1	179348	2021016600676995	BHAWNA VASANTRAO DHARAMMALI	10
2	179349	2021016600496324	BHUMIKA PRAMOD LANJEWAR	09
3	179358	2021016600496355	GAYATRI MORESHWAR MAHURE	09
4	179371	2021016600484482	KOMAL LAXMAN RAUT	10
5	179373	2021016600670534	MAHIMA VINOD GAJBE	10
6	179374	2021016600479794	MANISHA HARIRAM SOLANKI	10
7	179379	2021016600673865	MRINALI SURESH DHARAMMALI	09
8	179382	2021016600670542	NIKITA RATNAKAR MAHALLEY	10
9	179384	2021016600484497	PALAK DEEPAK UPADHYAY	09
10	179390	2021016600497834	PUJA MADHAV GHUMDE	10
11	179398	2021016600666745	SAKSHI KHUSHALRAO NARNAWARE	09
12	179412	2021016600504024	SURUCHI RAJENDRA BADODE	09
13	179417	2021016600484524	VAISHNAVI VILAS DUKARE	10
14	216623	20211032506241	DARSHIKA MUNIRAJ GULALE	--
15	216625	20211032506395	DHANSWI RAMESHRAO KHARBADE	--
16	216637	20211032506268	KHUSHITA SANJAY DHANORKAR	--
17	216651	20211032506295	NANDINI RAVINDRA SARODE	--
18	216654	20211032506299	NIDHI DINDAYAL PANDE	--
19	216656	20211032506302	NIKITA GOPAL CHAFALE	--

Print Date & Time: 04-12-2023 11-29-40 AM


Principal
Nabira Mahavidyalaya
Katol




Signature of Examiner
Aditi chaudale



NABIRA MAHAVIDYALAYA, KATOL

Department Of Computer Science
Bachelor of Science (B.Sc.) Semester -I Examination
COMPUTER SCIENCE (Programming in "C")
2023-2024

Paper-I (Programming in C)

Max. Marks=10

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Illustrate your answers with suitable diagrams wherever necessary.

EITHER

1. (a) Explain selection programming structure giving suitable example. 5
- (b) Write limitations and advantages of flowchart. 5

OR

- (c) Define algorithm. Draw a flowchart to find greatest of three numbers. 5
- (d) Explain modular programming structure giving suitable example. 5


Head

Department of Computer Science



NABIRA MAHAVIDYALAYA, KATOL

Department Of Computer Science
Bachelor of Science (B.Sc.) Semester -III Examination
COMPUTER SCIENCE (Operating System)
2023-2024

Paper-II (Operating System)

Max. Marks=10

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Illustrate your answers with suitable diagrams wherever necessary.

EITHER

1. (a) What do you mean by process ? Explain process states in detail. 5

(b) Explain FCFS CPU scheduling algorithm. 5

OR

(c) What is thread ? Explain multithreading in detail. 5

(d) What are the characteristics of modern operating system ? 5

Head

Department of Computer Science



NABIRA MAHAVIDYALAYA, KATOL

Department Of Computer Science
Bachelor of Science (B.Sc.) Semester -V Examination
COMPUTER SCIENCE (Visual Programming)
2023-2024

Paper-I (Visual Programming)

Max. Marks=10

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Illustrate your answers with suitable diagrams wherever necessary.

EITHER

1. (a) Explain selection programming structure giving suitable example. 5
- (b) Write limitations and advantages of flowchart. 5

OR

- (c) Define algorithm. Draw a flowchart to find greatest of three numbers. 5
- (d) Explain modular programming structure giving suitable example. 5

MR
Head

Department of Computer Science

NABIRA MAHAVIDYALAYA, KATOL
DEPARTMENT OF COMPUTER SCIENCE
UNIT TEST REPORT
B.SC.III
SESSION 2023-2024

Sr.No.	Name Of Students	17/01/2024	07/02/2024
1.	Ku. A.R.Charde	06	05
2.	Mr. D.L.Maraskolhe	03	04
3.	Ku. G.D.Damedhar	05	04
4.	Ku. J.M.Thakre	05	05
5.	Mr. J.P.Kumeriya	04	04
6.	Ku. K.R.Gurao	06	05
7.	Mr. M.K.Shende	07	06
8.	Ku. M.A.Junankar	06	07
9.	Mr. M.G.Dharme	06	06
10.	Mr. R.A.Jodh	04	Absent
11.	Ku. R.E.Yenorkar	05	05
12.	Mr.S.H.Sheikh	05	04
13.	Mr. S.S.Taywade	04	04
14.	Ku. Sayama R.Sheikh	06	05
15.	Ku. S.S.Dhote	06	06
16.	Ku. S.M.Pandey	06	05
17.	Mr. Y.B.Mahalle	05	06

Madhuri

In-charge

NABIRA MAHAVIDYDLAYA,KATOL**DEPARTMENT OF COMPUTER SCIENCE****SESSION 2023-2024****B.SC.PART II (Sem III & IV)****UNIT TEST REPORT****TEACHER NAME: M. R. MESHRAM**

Sr.No.	Name of Students	07/10/2024	17/01/24
1.	AACHAL SUNIL BANAIT	02	03
2.	ABHAY DASHARATHRAO CHOPADE	03	04
3.	ADITYA HANUMANTRAO PATHADE	04	04
4.	ALFIYA AYUBKHAN PATHAN	05	05
5.	BHAGYASHRI DIWAKAR GHORSE	06	05
6.	CHINTU YUVRAJ HAJARE	04	05
7.	CHITRALEKHA VIJAYRAO GHADGE	06	07
8.	DHANASHRI GULAB KALAMBE	05	05
9.	DIVYA RAMDAS BONDRE	04	04
10.	DIVYA RAMESHWAR KUMBHARE	04	05
11.	DIVYANI RAJESH NIMJE	05	05
12.	DURGESH KAILASRAO UMALE	AB	AB
13.	EKTA RAMESH BARMASE	06	05
14.	GAURAV SUKHADEV BHUJADE	AB	AB
15.	HIMANSHU DILIPRAO NARNAWARE	04	04
16.	ISHANT UMESH GHAGARE	06	06
17.	JAYANT SUKHDEV MARSKOLHE	AB	AB
18.	KHUSHBU GAJANAN KADWE	AB	AB
19.	KIRTI VITTHAL PANCHBHAI	AB	AB
20.	LAKSHMIKANT SHRIDHAR KHANDAIT	04	04
21.	LEENA RAJENDRA TIPLE	05	04
22.	MAYURI DIGAMBAR KAPASE	06	05
23.	MINAL KISHOR DHAMDE	05	04
24.	NIKITA NARENDRA CHAUHAN	06	04
25.	PRITAM DEVENDRA INGOLE	05	04
26.	RUCHITA SURESH KALBANDE	AB	AB
27.	RUDRA RAMESH KUMBHARE	AB	AB
28.	RUTIKA GOPAL BORDE	AB	AB
29.	SAHIL VITTHALRAO GAIKWAD	AB	AB

30.	SAKSHI OMPRAKASH DHOPRE	06	04
31.	SAMIKSHA DURGADAS TARASE	05	04
32.	SAMYEK RAJKUMAR PANCHBHAI	AB	AB
33.	SHARUKH UMAR PATHAN	06	05
34.	SHREYA MUKUNDA SHEDAME	05	04
35.	TANUSHRI DILIPRAO DHOTE	06	04
36.	TOSHIKA KRISHANRAO DESHMUKH	06	05
37.	TUSHAR DHANRAJ WAGHMARE	AB	AB
38.	VAIBHAVI SPANJAY KADAWAWE	AB	AB
39.	VAISHALI TIKARAM DEWASE	03	04
40.	VAISHNAVI ARUN PAWADE	05	04
41.	YASH RAMDASJI JUNGHARE	03	04

madhuri

INCHARGE

NABIRA MAHAVIDYALAYA,KATOL

DEPARTMENT OF COMPUTER SCIENCE

B.Sc.I (Sem I and Sem-II)

Unit Test Report SESSION 2023-24

TEACHER NAME : Ms.MADHURI R.MESHRAM

SR.NO.	NAME OF STUDENTS	07/10/23	09/02/24
1.	ACHAL SURESH KAMDE	Absent	Absent
2.	AKANSHA GOPALRAO DHOTE	03	04
3.	ARJUN UMESHRAO PANDE	05	04
4.	ARPITA ASHOK KADU	04	04
5.	BHAGYASHRI DILIPRAO DHANDALE	05	05
6.	BHAIRAVI VIJAYRAO MARBATE	Absent	Absent
7.	DARSHAN ARVIND SARODE	Absent	Absent
8.	DEVINA RAJENDRA KHAWSE	05	04
9.	DIMPAL WASUDEV DONGRE	04	05
10.	GAURI PURUSHOTTAM BAGDE	04	03
11.	GRISHMA BHUSHANRAO BARDE	Absent	Absent
12.	GUNJAN DINESH REWATKAR	04	04
13.	HIRA PRABHAKAR DEWASE	04	04
14.	KAJAL RAJESH KATARE	Absent	Absent
15.	MAHENDRA RAJENDRA BHAKTE	04	05
16.	MAYUR RAJENDRA WADBUDHE	04	03
17.	PALLAVI MADHORA BANNAGARE	Absent	Absent
18.	MOHINI RAJENDRA PAWAR	Absent	Absent
19.	PAYAL SHESHRAOJI REWATKAR	05	04
20.	PRACHI SANDESH PADOLIYA	04	04
21.	PRAPTI MANOJ TALEKAR	Absent	Absent
22.	PRATIKSHA P.DANDHARE	05	05
23.	RANI IMRAT KHARPURIYA	06	07
24.	ROHANI ARJUN REWATKAR	06	07
25.	RUCHAL DEVENDRA SALAM	05	04
26.	RUTUJA AJAY RAUT	Absent	Absent
27.	SAKSHI PRAVIN NARNAWARE	05	04
28.	SAKSHI H. CHICHMALKAR	05	04
29.	SAMIKSHA SHANKAR CHAPLE	04	04
30.	SARANG DINESH REWATKAR	05	04
31.	SARANG DIWAKAR KOHALE	Absent	Absent
32.	SAYALI SUNIL SHRIRAME	05	04
33.	SHUBHAM H. MESHRAM	04	04
34.	SUHANI RAVICHANDRA BORKAR	05	04
35.	SUMIT GAJANAN DHARME	Absent	Absent
36.	VAISHNAVI H. TABHANE	05	04
37.	VARSHA NARAYAN DONGARE	Absent	Absent

38.	SANIKA ASHISH BIDKAR	05	04
39.	YISHIKA D.RAUT	04	04
40.	SHREYA AKHARE	05	04
41.	C.M.BHOYAR	Absent	Absent

madhuri

In-Charge



