VISVODAYA GOVERNMENT DEGREE COLLEGE

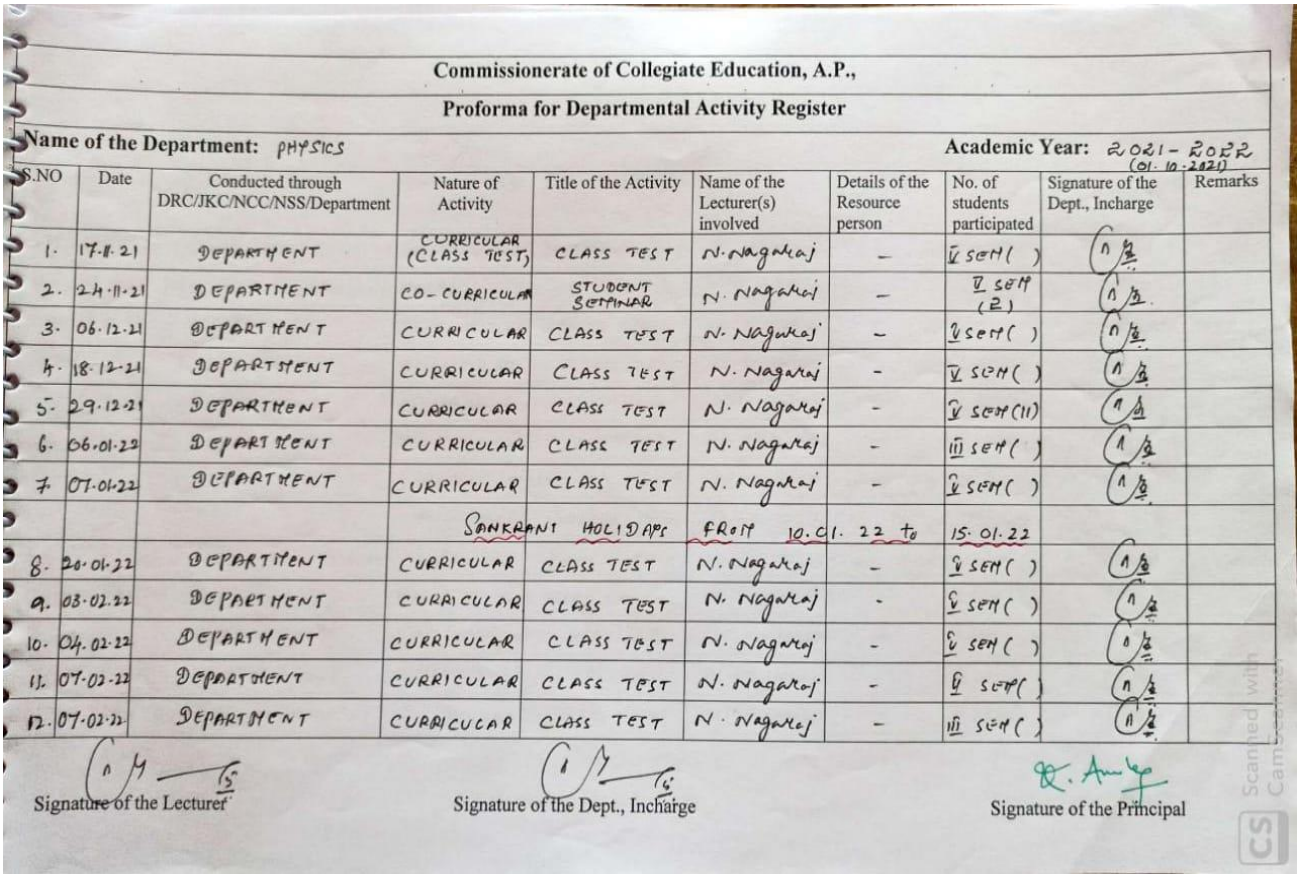
VENKATAGIRI, TIRUPATI DISTRICT, ANDHRAPRADESH.

Criteria – I – Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment.

Departmental Activity Register



Commissionerate of Collegiate Education, A.P.,

Proforma for Departmental Activity Register

Name of the Department: PHYSICS — Academic Year: 2021-2022 (01.10.2021)

S.NO	Date	Conducted through DRC/JKC/NCC/NSS/Department	Nature of Activity	Title of the Activity	Name of the Lecturer(s) involved	Details of the Resource person	No. of students participated	Signature of the Dept., Incharge	Remarks
1.	17.8.21	DEPARTMENT	CURRICULAR (CLASS TEST)	CLASS TEST	N. Nagaraj	-	V SEM ( )		
2.	24.11.21	DEPARTMENT	CO-CURRICULAR	STUDENT SEMINAR	N. Nagaraj	-	V SEM (2)		
3.	06.12.21	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
4.	18.12.21	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
5.	29.12.21	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM (II)		
6.	06.01.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	III SEM ( )		
7.	07.01.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
			SANKRANTI HOLIDAYS		FROM 10.01.22 to		15.01.22		
8.	20.01.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
9.	03.02.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
10.	04.02.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
11.	07.02.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	V SEM ( )		
12.	07.02.22	DEPARTMENT	CURRICULAR	CLASS TEST	N. Nagaraj	-	III SEM ( )		

Signature of the Lecturer — Signature of the Dept., Incharge — Signature of the Principal

Annual Curricular Plans

VISVODAYA GOVT. DEGREE COLLEGE

Annual Curricular Plan (Lecturer Wise) : 2020-2021

Month-January

Name of the Department : Zoology **Name of the Lecturer :** Dr. D. Sujatha

Class : III B.Sc (B.Z.C), V Semester **Year : 2020-2021** **Paper :** Animal Biotechnology (Paper V)

Month	Week	Hours Available	Syllabus Topic	Additional Input/ Value Addition Provided/ taught	Curricular Activity					Extra / Co-Curricular Activity					Remarks
					Activity Conducted	Hours Allotted	Whether Conducted	Whether Conducted	If not alternate	Activity Conducted	Hours Allotted	Whether Conducted	Whether Conducted	If not alternate	
January 2022	1st	T P 3+2	Fermentation - types - Submerged Continuous Stirred Tank Airlift Fixed Bed and Fluidized [Practical]		Assignment 100-(5)	1	Yes			Field Trip	1 Day	Yes			
January 2022	2nd	T P 3+2	Downstreaming Processing - Filtration Centrifugation, extraction, Spraydrying chromatography and lyophilization [Practical]		Internal Exam-(2)	1	Yes			lab cleaning	1 Hours	Yes			
January 2022	3rd	T P 3+2	Agriculture Ethenics - Monoculture Polyploidy, DNA fingerprinting [Practical]		Pre final Exam Medal Practical Exam	3 3	Yes Yes								
January 2022	4th	T P 3+2	Revision of the syllabus 24/01/2022 Commencement of Theory Exams												
January 2022	5th														

D. Sujatha
Signature of the Lecturer

D. Sujatha
Signature of the Department In Charge

Signature of the Principal

VISVODAYA GOVT. DEGREE COLLEGE

Annual Curricular Plan (Lecturer Wise) : 2020-2021

Name of the Department : PHYSICS **Name of the Lecturer :** N. Nagaraj

Class : III B.Sc (MPCs); V SEM **Year : 2020-2021** **Paper :** VI (MODERN PHYSICS)

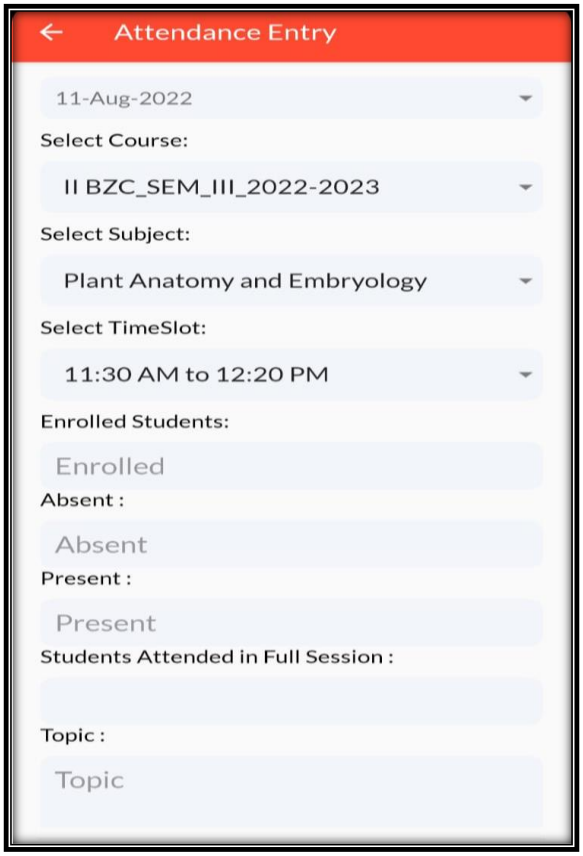
Month	Week	Hours Available	Syllabus Topic	Additional Input/ Value Addition Provided/ taught	Curricular Activity					Co-Curricular Activity					Remarks
					Activity Conducted	Hours Allotted	Whether Conducted	Whether Conducted	If not alternate	Activity Conducted	Hours Allotted	Whether Conducted	Whether Conducted	If not alternate	
OCTOBER	1	-													
	2	3[TH] 2[PR]	UNIT-1 :- Bohr's atomic model- Sommerfield's elliptical orbits - vector atom model-	Structure of an atom.	Teaching	02	YES								
	3	4[TH] 2[PR]	Stern - Gerlach experiment - Quantum numbers associated with it - L-S & J-J coupling Zeeman effect		Teaching	03	YES			Class Test	01	YES	YES		
	4	4[TH] 2[PR]	Raman effect - Quantum theory of Raman effect - Exp., arrangement - Applications of Raman effect.	About Matter.	Teaching	04	yes								
	5	4[TH] 2[PR]	UNIT-2 :- Matter waves, debroglie hypothesis - Properties of matter waves - Davisson & Germer exp.,		Teaching	05	yes			STUDENT SEMINAR	01	YES			

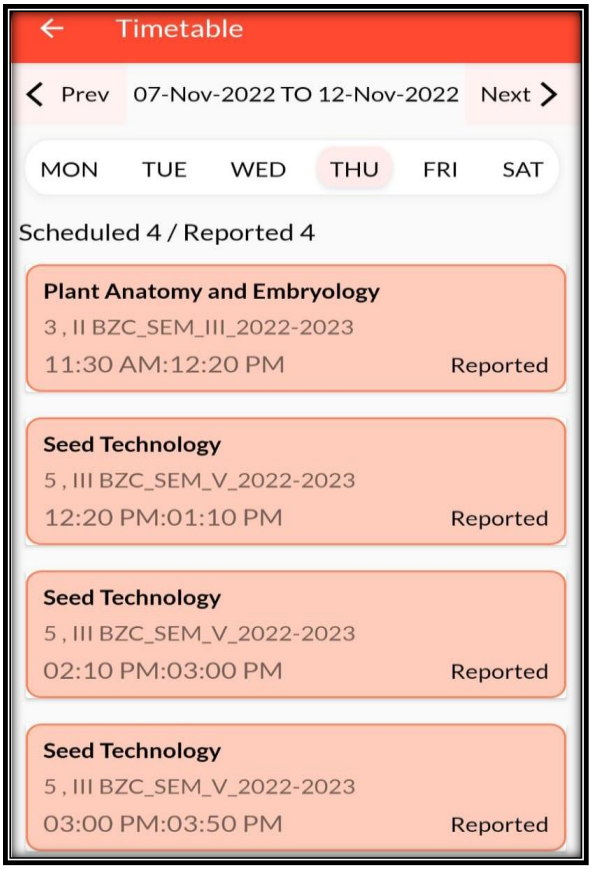
Signature of the Lecturer

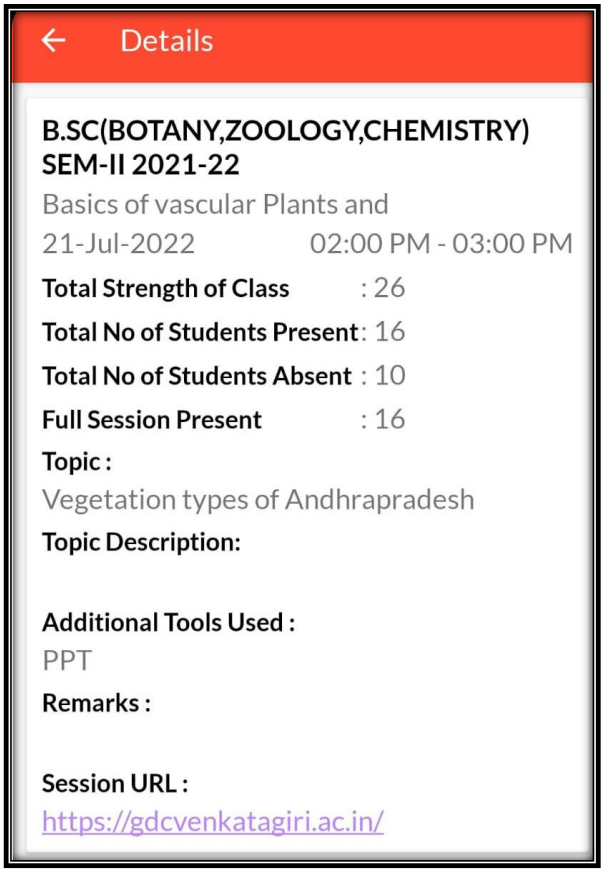
Signature of the Department In Charge

Signature of the Principal

Usage of Teaching – Learning Process (TLP) Mobile App for reporting of curriculum transactions.







Teaching diaries

VISVODAYA GOVT. DEGREE COLLEGE, VENKATAGIRI.

Teaching Diary : 2020-2021

Month – January 2022

Name of the Department /Subject: ZOOLOGY

Name of the Lecturer : Dr. D. Sujatha

S. No	Day	Date	Period/ Time	Class	Medium	Theory/ Practical	Topic Covered	Methodology Adopted	No. of Students Attended	Teaching Adis used	Students Activity Conducted	Remarks
19	Wed	19/1/22	1 10.00-11.00	V Sem	EN&TM	Theory	Reproductive Technologies	Lecture	15	Black Board	Pt-Questions	
			2 11.00-12.00				class preparation					
			3 12.00-1.00	III BSc-I	ENGTH	Theory	Health and Hygiene. (MPCs 2B2C)	Lecture	12	Black Board	Pt Questions	
			4 2.00-3.00									
			5&6 3.00-5.00	V Sem B-1(P)	EN&TH	Practical	Transgenic animals					
20	Thu	20/1/22	1 10.00-11.00	II Sem	ENGTH	Theory	complementary & Supplementary genes	Lecture	11	Black Board	Pt Questions	
			2 11.00-12.00	V Sem	EN&TH	Theory	Embryo transfer	Lecture	14	Black Board	Pt Questions	
			3 12.00-1.00									
			4 2.00-3.00									
			5&6 3.00-5.00									
21	Fri	21/1/22	1 10.00-11.00	III Sem	EN&TH	Theory	Dominant epistasis & recessive epistasis	Lecture	8	Black Board	Pt Questions	
			2 11.00-12.00	V Sem	EN&TH	Theory	Embryo transfer and embryo cloning	Lecture	17	Black	Pt questions	
			3 12.00-1.00									
			4 2.00-3.00				Lab work. Solution Preparations (Formaldehyde)					
			5&6 3.00-5.00									

D. Sujatha
Signature of the Lecturer

D. Sujatha
Signature of the Department In Charge

Signature of the Principal

VISVODAYA GOVT. DEGREE COLLEGE, VENKATAGIRI.

Teaching Diary : 2021-2022

Name of the Department /Subject: PHYSICS

Name of the Lecturer : N. Nagaraj

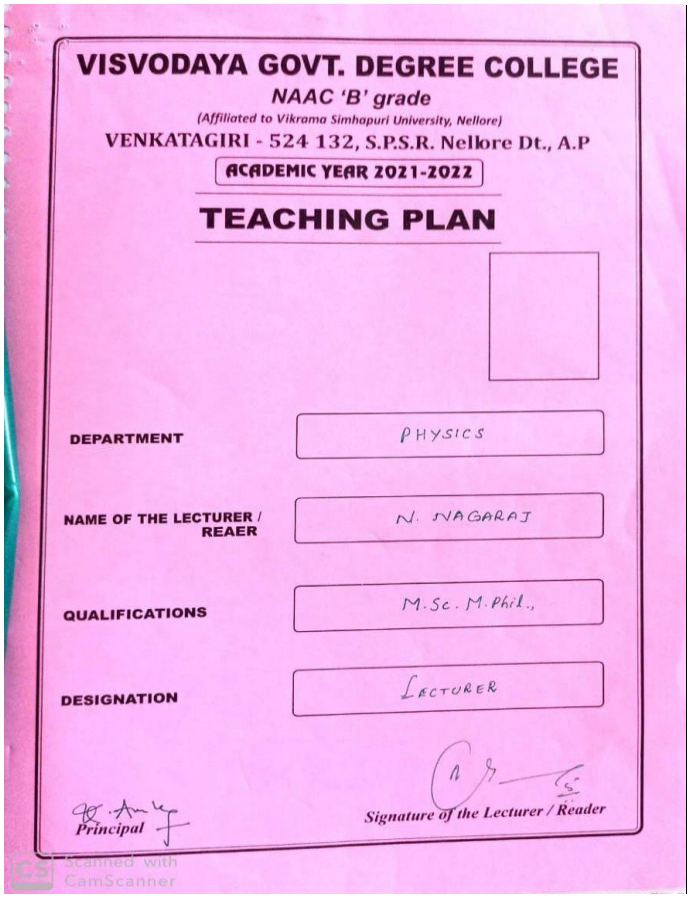
S. No	Day	Date	Period/ Time	Class	Medium	Theory/ Practical	Topic Covered	Methodology Adopted	No. of Students Attended	Teaching Adis used	Students Activity Conducted	Remarks
1.	01.02.22 TUE	01.02	I				preparation for class work.					
			II	II Bsc	TEL & ENG	Theory	Adiabatic demagnetization & Liquification of helium.	Teaching Questing	02	Computer		
			III	III Bsc	TEL & ENG	Theory	Interaction with students on examination	Interaction	03	Board		
			IV				preparation for class work.					
			V & VI				Preparation of 3rd Criteria for NAAC.					
2.	WED	02.02	I				preparation for class work.					
			II	II Bsc	TEL & ENG	Theory	Revision on Matter waves	Teaching Questing	05	Board.		
			III				preparation for class work.					
			IV	II Bsc	TEL & ENG	Theory	Liquifcation of helium	Teaching Questing	03	Computer Board		
			V & VI				preparation of evidences for 2nd Criteria.					
3.	THU	03.02	I				preparation for class work					
			II	III Bsc	TEL & ENG	Theory	Exam on Meissner effect	Teaching Questing	03	-		
			III	II Bsc	TEL & ENG	Theory	Principle of Refrigeration, effect of CFCs on Ozone layer, applications of IR for NAAC Record work	Teaching Questing	04	Computer		
			IV									
			V & VI				Record work for NAAC.					

Signature of the Lecturer

Signature of the Department In Charge

Signature of the Principal

Teaching plans & Synopsis



VISVODAYA GOVT. DEGREE COLLEGE

NAAC 'B' grade

(Affiliated to Vikrama Simhapuri University, Nellore)

VENKATAGIRI - 524 132, S.P.S.R. Nellore Dt., A.P

ACADEMIC YEAR 2021-2022

TEACHING PLAN

DEPARTMENT: PHYSICS

NAME OF THE LECTURER / REAER: N. NAGARAJ

QUALIFICATIONS: M.Sc. M.Phil.,

DESIGNATION: LECTURER

Principal

Signature of the Lecturer / Reader

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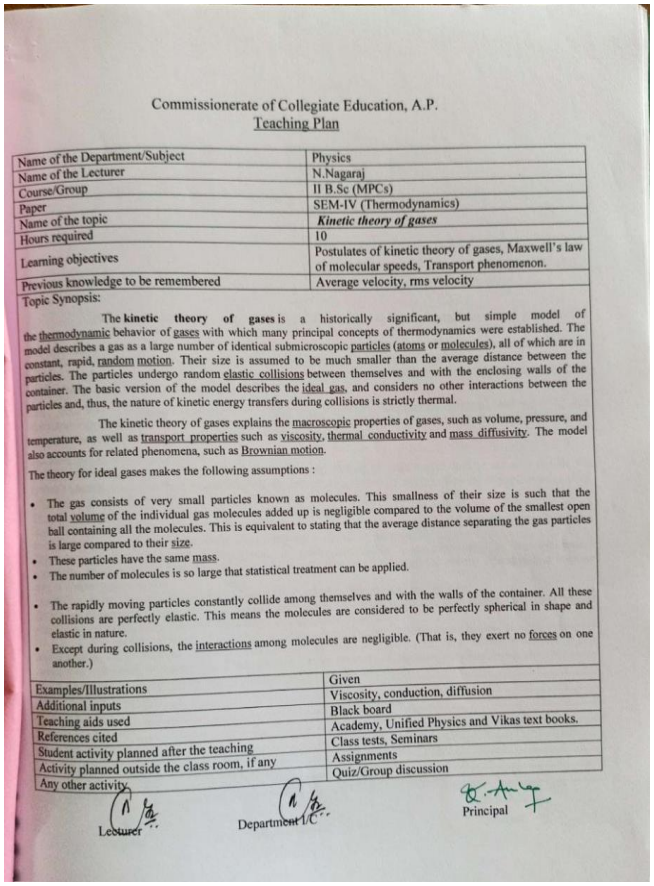


Commissionerate of Collegiate Education, A.P.

Teaching Plan

Name of the Department/Subject	Physics
Name of the Lecturer	N.Nagaraj
Course/Group	II B.Sc (MPCs)
Paper	SEM-IV (Thermodynamics)
Name of the topic	***Kinetic theory of gases***
Hours required	10
Learning objectives	Postulates of kinetic theory of gases, Maxwell's law of molecular speeds, Transport phenomenon.
Previous knowledge to be remembered	Average velocity, rms velocity

Topic Synopsis:

The **kinetic theory of gases** is a historically significant, but simple model of the thermodynamic behavior of gases with which many principal concepts of thermodynamics were established. The model describes a gas as a large number of identical submicroscopic particles (atoms or molecules), all of which are in constant, rapid, random motion. Their size is assumed to be much smaller than the average distance between the particles. The particles undergo random elastic collisions between themselves and with the enclosing walls of the container. The basic version of the model describes the ideal gas, and considers no other interactions between the particles and, thus, the nature of kinetic energy transfers during collisions is strictly thermal.

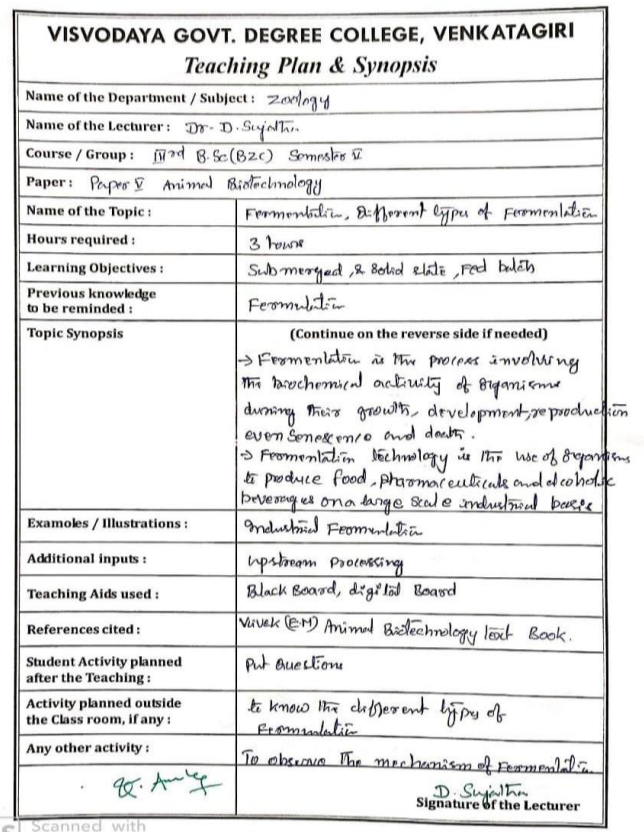
The kinetic theory of gases explains the macroscopic properties of gases, such as volume, pressure, and temperature, as well as transport properties such as viscosity, thermal conductivity and mass diffusivity. The model also accounts for related phenomena, such as Brownian motion.

The theory for ideal gases makes the following assumptions :

- The gas consists of very small particles known as molecules. This smallness of their size is such that the total volume of the individual gas molecules added up is negligible compared to the volume of the smallest open ball containing all the molecules. This is equivalent to stating that the average distance separating the gas particles is large compared to their size.
- These particles have the same mass.
- The number of molecules is so large that statistical treatment can be applied.
- The rapidly moving particles constantly collide among themselves and with the walls of the container. All these collisions are perfectly elastic. This means the molecules are considered to be perfectly spherical in shape and elastic in nature.
- Except during collisions, the interactions among molecules are negligible. (That is, they exert no forces on one another.)

Examples/Illustrations	Given
Additional inputs	Viscosity, conduction, diffusion
Teaching aids used	Black board
References cited	Academy, Unified Physics and Vikas text books.
Student activity planned after the teaching	Class tests, Seminars
Activity planned outside the class room, if any	Assignments
Any other activity	Quiz/Group discussion

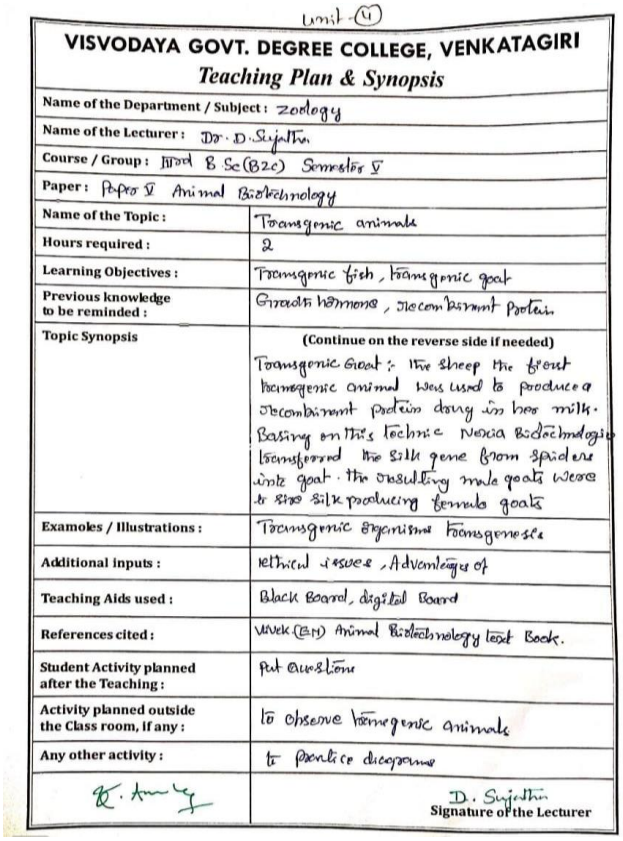
Lecturer Department I/C Principal



VISVODAYA GOVT. DEGREE COLLEGE, VENKATAGIRI

Teaching Plan & Synopsis

Name of the Department / Subject :	Zoology
Name of the Lecturer :	Dr. D. Sujatha
Course / Group :	IIIrd B.Sc(B2C) Semester V
Paper :	Paper V Animal Biotechnology
Name of the Topic :	Fermentation, Different types of Fermentation
Hours required :	3 hours
Learning Objectives :	Sub merged, & Solid state, Fed batch
Previous knowledge to be reminded :	Fermentation
Topic Synopsis	**(Continue on the reverse side if needed)** → Fermentation is the process involving the biochemical activity of organisms during their growth, development/reproduction even senescence and death. → Fermentation technology is the use of organisms to produce food, pharmaceuticals and alcoholic beverages on a large scale industrial bases
Examples / Illustrations :	Industrial Fermentation
Additional inputs :	Upstream processing
Teaching Aids used :	Black Board, digital Board
References cited :	Vivek (Edn) Animal Biotechnology text Book.
Student Activity planned after the Teaching :	Put Questions
Activity planned outside the Class room, if any :	to know the different types of Fermentation
Any other activity :	To observe the mechanism of Fermentation
	D. Sujatha **Signature of the Lecturer**



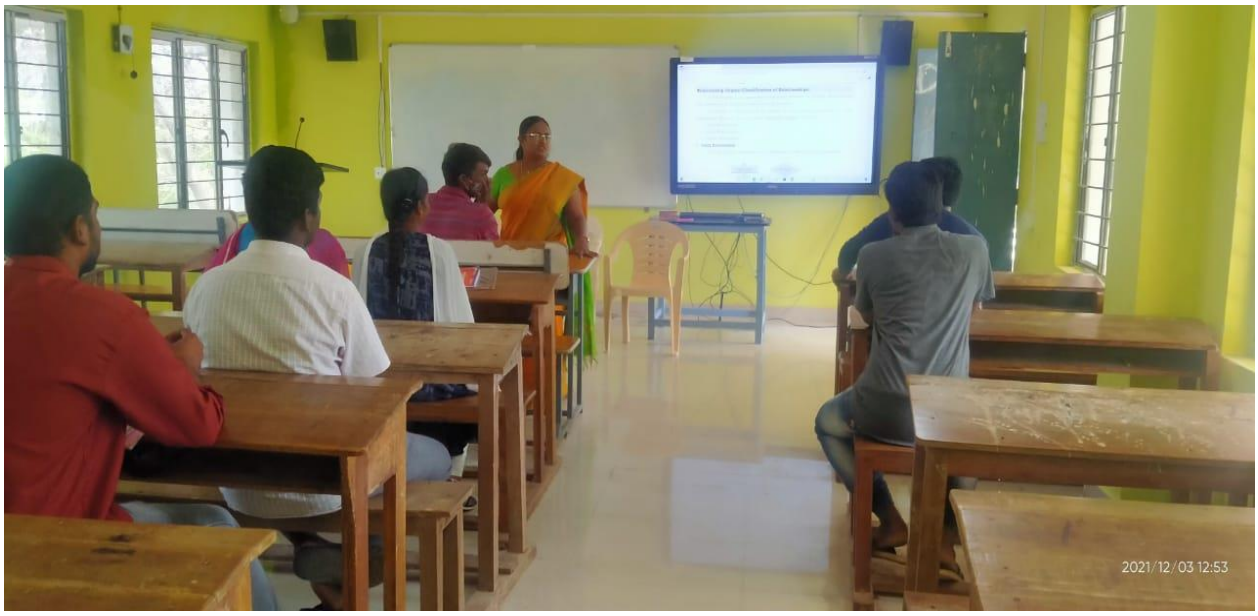
Unit-(4)

VISVODAYA GOVT. DEGREE COLLEGE, VENKATAGIRI

Teaching Plan & Synopsis

Name of the Department / Subject :	Zoology
Name of the Lecturer :	Dr. D. Sujatha
Course / Group :	IIIrd B.Sc(B2C) Semester V
Paper :	Paper V Animal Biotechnology
Name of the Topic :	Transgenic animals
Hours required :	2
Learning Objectives :	Transgenic fish, transgenic goat
Previous knowledge to be reminded :	Growth hormone, Recombinant Protein
Topic Synopsis	**(Continue on the reverse side if needed)** Transgenic Goat :- The sheep the first transgenic animal was used to produce a recombinant protein dairy in her milk. Basing on this technic Nexia Biotechnologies transferred the silk gene from spiders into goat. The resulting male goats were to sire silk producing female goats
Examples / Illustrations :	Transgenic Organisms Transgenesis
Additional inputs :	ethical issues, Advantages of
Teaching Aids used :	Black Board, digital Board
References cited :	Vivek (Edn) Animal Biotechnology text Book.
Student Activity planned after the Teaching :	Put Questions
Activity planned outside the Class room, if any :	to observe transgenic animals
Any other activity :	to practice discourse
	D. Sujatha **Signature of the Lecturer**

ICT Enabled Teaching



Learning by Doing

Field visits

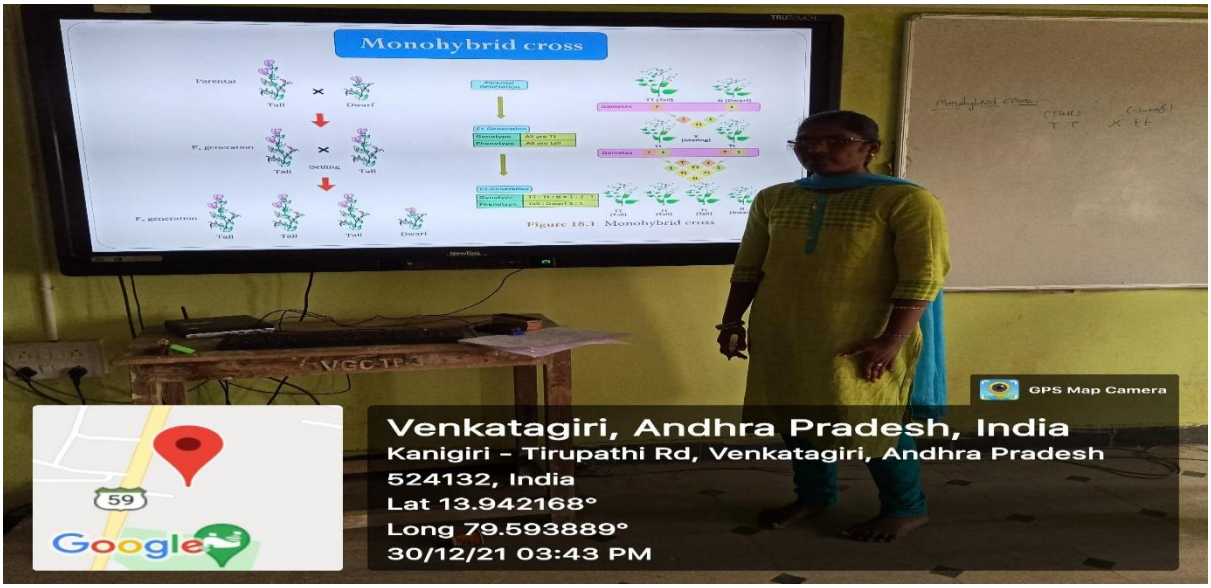
Botany department field visit to Jayaramaiah nursery

Zoology department field visit to Swarna Milk diary

Physics department Educational tour to Regional Science Centre

History department field visit to Mahabalipuram

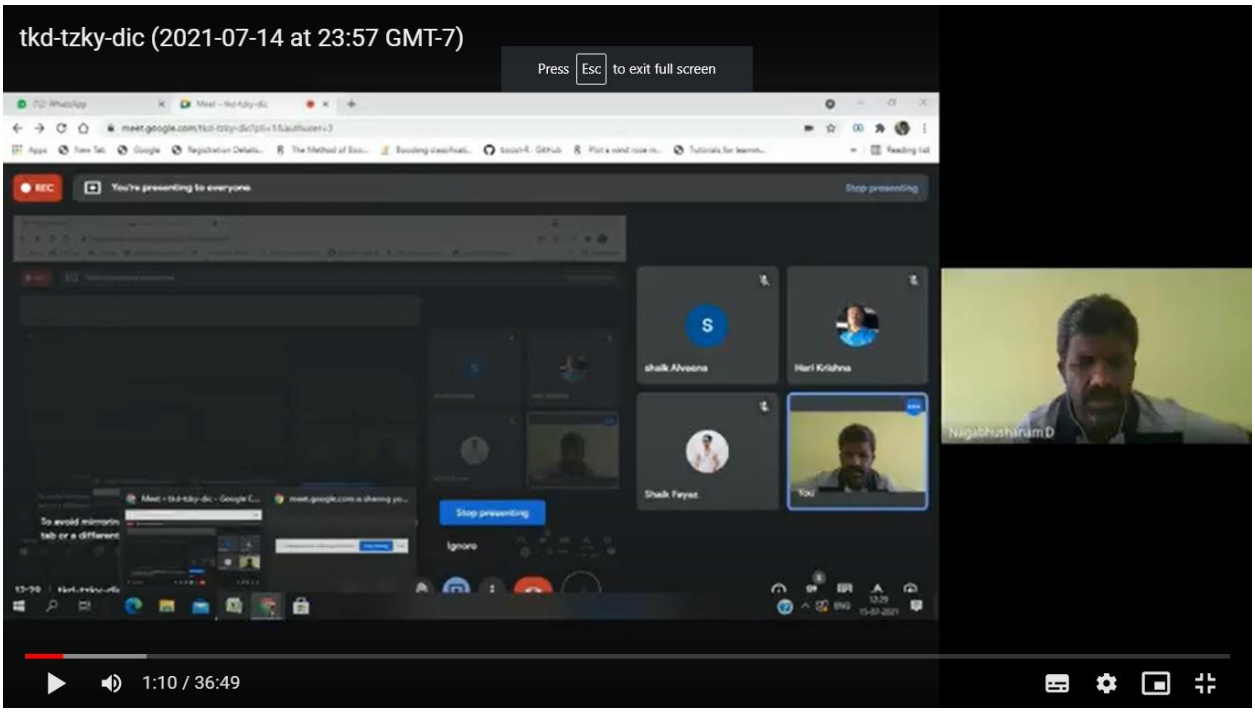
Student seminars



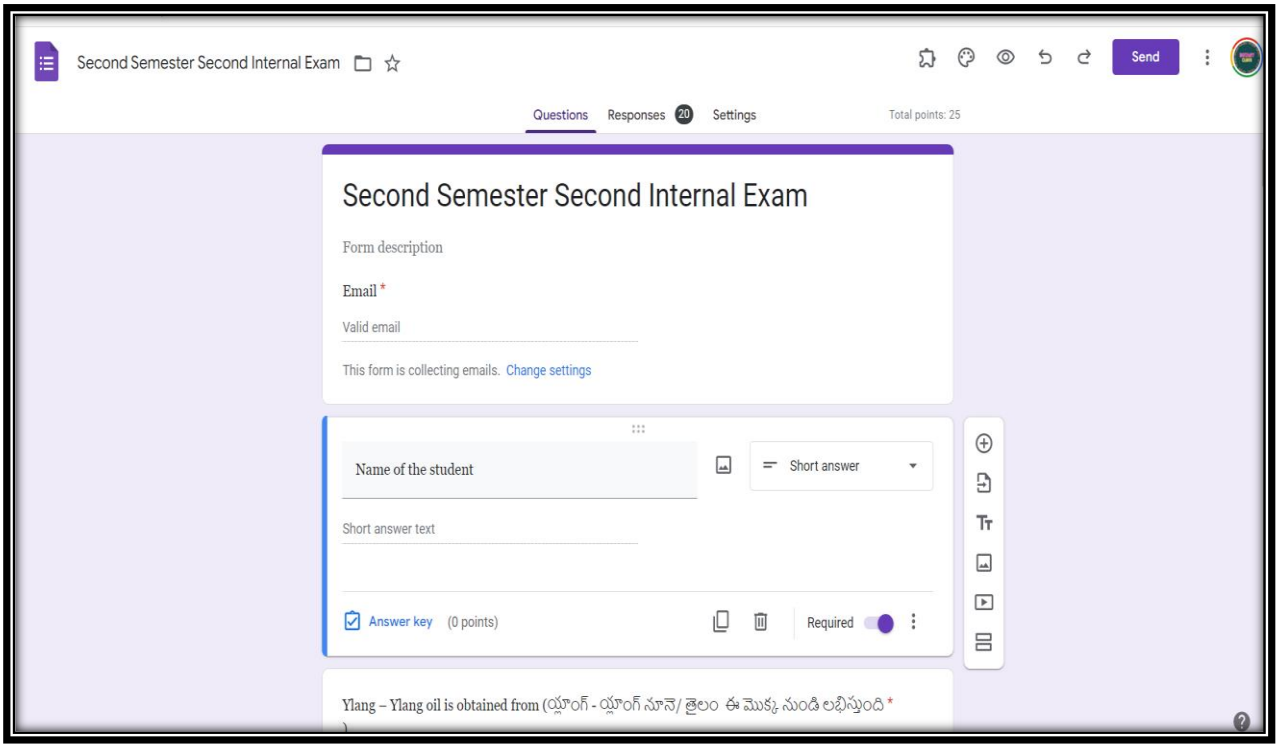
Student Quiz programmes

Group discussions

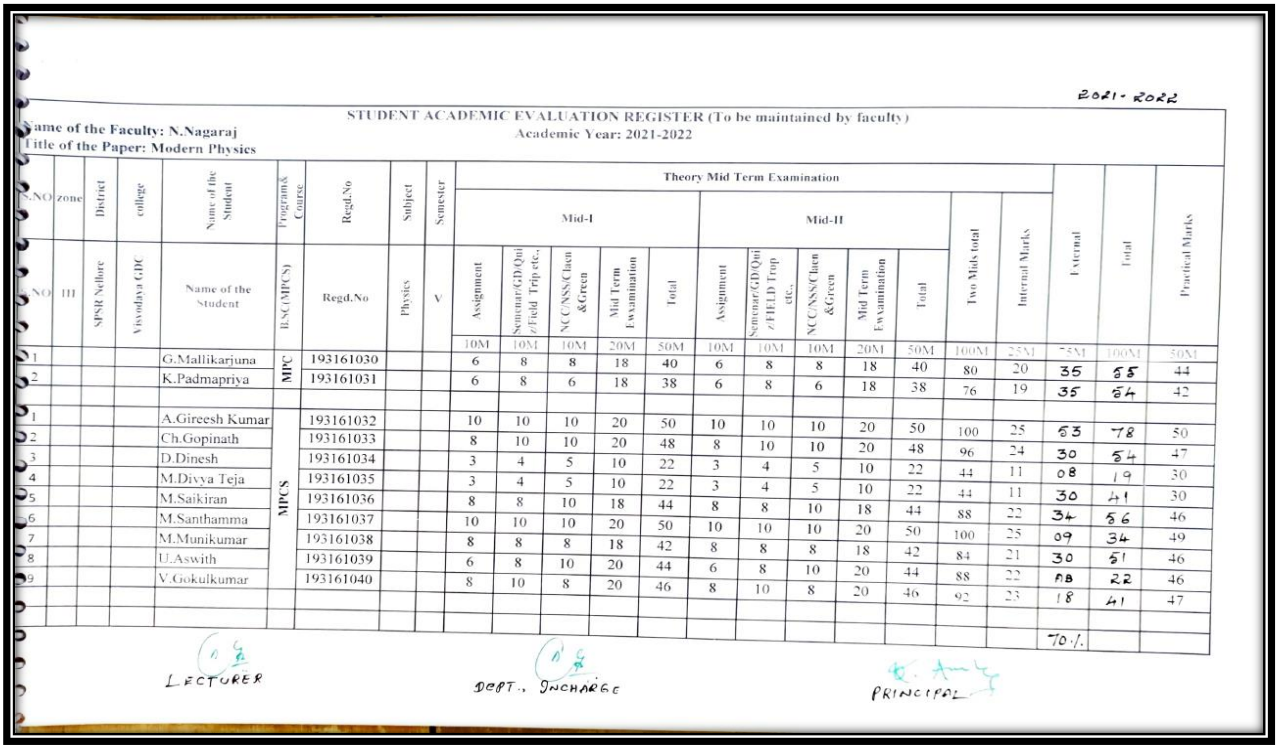
Conducted online classes through Google meet during lockdown period.



Online assessment through Google forms



Continuous Internal Assessment Register



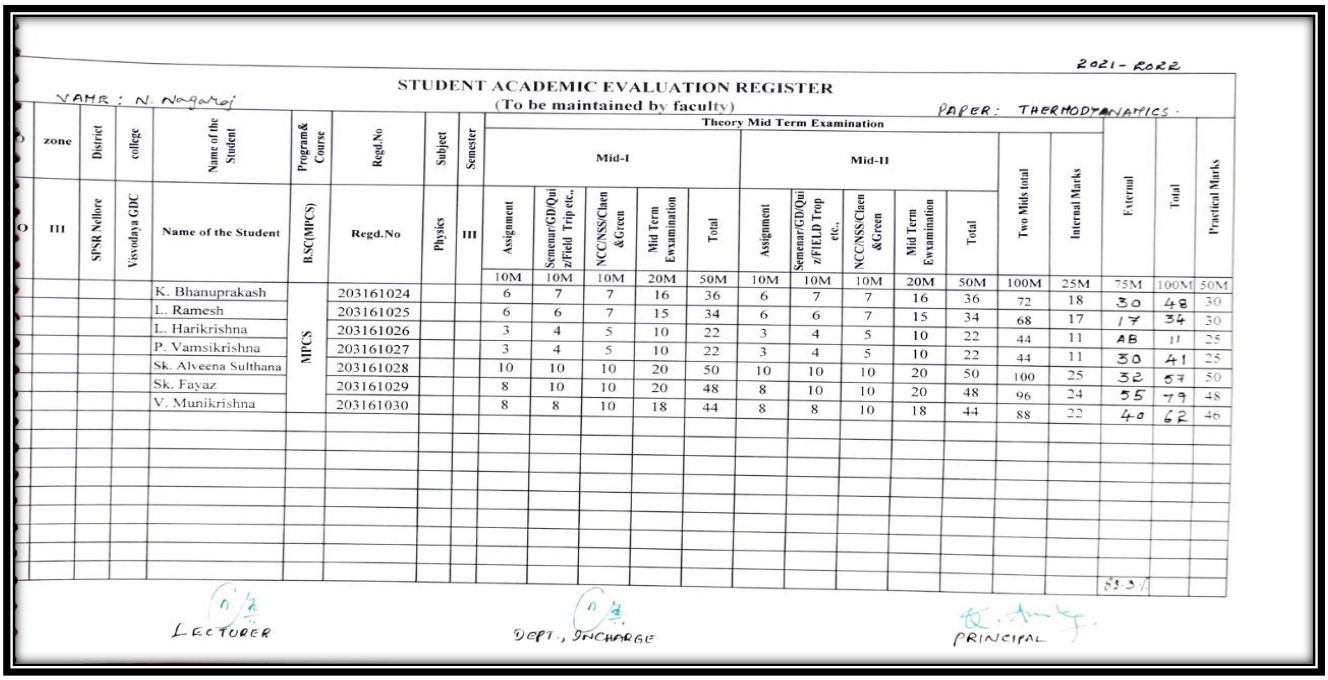
2021-2022

STUDENT ACADEMIC EVALUATION REGISTER (To be maintained by faculty)

Name of the Faculty: N.Nagaraj
Academic Year: 2021-2022
Title of the Paper: Modern Physics

S.NO	zone	District	college	Name of the Student	Program& Course	Regd.No	Subject	Semester	Theory Mid Term Examination														
									Mid-I					Mid-II					Two Mids total	Internal Marks	External	Total	Practical Marks
S.NO	III	SPSR Nellore	Visvodaya GDC	Name of the Student	B.SC(MPCS)	Regd.No	Physics	V	Assignment	Semenar/GD/Quiz/Field Trip etc.,	NCC/NSS/Clean &Green	Mid Term Exxamination	Total	Assignment	Semenar/GD/Quiz/FIELD Trip etc.,	NCC/NSS/Clean &Green	Mid Term Exxamination	Total					
									10M	10M	10M	20M	50M	10M	10M	10M	20M	50M	100M	25M	75M	100M	50M
1				G.Mallikarjuna	MPC	193161030			6	8	8	18	40	6	8	8	18	40	80	20	35	55	44
2				K.Padmapriya		193161031			6	8	6	18	38	6	8	6	18	38	76	19	35	54	42
1				A.Gireesh Kumar	MPCS	193161032			10	10	10	20	50	10	10	10	20	50	100	25	53	78	50
2				Ch.Gopinath		193161033			8	10	10	20	48	8	10	10	20	48	96	24	30	54	47
3				D.Dinesh		193161034			3	4	5	10	22	3	4	5	10	22	44	11	08	19	30
4				M.Divya Teja		193161035			3	4	5	10	22	3	4	5	10	22	44	11	30	41	30
5				M.Saikiran		193161036			8	8	10	18	44	8	8	10	18	44	88	22	34	56	46
6				M.Santhamma		193161037			10	10	10	20	50	10	10	10	20	50	100	25	09	34	49
7				M.Munikumar		193161038			8	8	8	18	42	8	8	8	18	42	84	21	30	51	46
8				U.Aswith		193161039			6	8	10	20	44	6	8	10	20	44	88	22	AB	22	46
9				V.Gokulkumar		193161040			8	10	8	20	46	8	10	8	20	46	92	23	18	41	47
																					70.1.		

LECTURER DEPT., INCHARGE PRINCIPAL



2021-2022

STUDENT ACADEMIC EVALUATION REGISTER
(To be maintained by faculty)

NAME: N. Nagaraj PAPER: THERMODYNAMICS.

O	zone	District	college	Name of the Student	Program& Course	Regd.No	Subject	Semester	Theory Mid Term Examination														
									Mid-I					Mid-II					Two Mids total	Internal Marks	External	Total	Practical Marks
O	III	SPSR Nellore	Visvodaya GDC	Name of the Student	B.SC(MPCS)	Regd.No	Physics	III	Assignment	Semenar/GD/Quiz/Field Trip etc.,	NCC/NSS/Clean &Green	Mid Term Exxamination	Total	Assignment	Semenar/GD/Quiz/FIELD Trop etc.,	NCC/NSS/Clean &Green	Mid Term Exxamination	Total					
									10M	10M	10M	20M	50M	10M	10M	10M	20M	50M	100M	25M	75M	100M	50M
				K. Bhanuprakash	MPCS	203161024			6	7	7	16	36	6	7	7	16	36	72	18	30	48	30
				L. Ramesh		203161025			6	6	7	15	34	6	6	7	15	34	68	17	17	34	30
				L. Harikrishna		203161026			3	4	5	10	22	3	4	5	10	22	44	11	AB	11	25
				P. Vamsikrishna		203161027			3	4	5	10	22	3	4	5	10	22	44	11	30	41	25
				Sk. Alveena Sulthana		203161028			10	10	10	20	50	10	10	10	20	50	100	25	32	57	50
				Sk. Fayaz		203161029			8	10	10	20	48	8	10	10	20	48	96	24	55	79	48
				V. Munikrishna		203161030			8	8	10	18	44	8	8	10	18	44	88	22	40	62	46
																					53.5/.		

LECTURER DEPT., INCHARGE PRINCIPAL

VISVODAYA GOVT. DEGREE COLLEGE Venkatagiri 524132

PRINCIPAL
Visvodaya Govt. Degree College
Venkatagiri - 524132
Tirupati Dt. A.P.