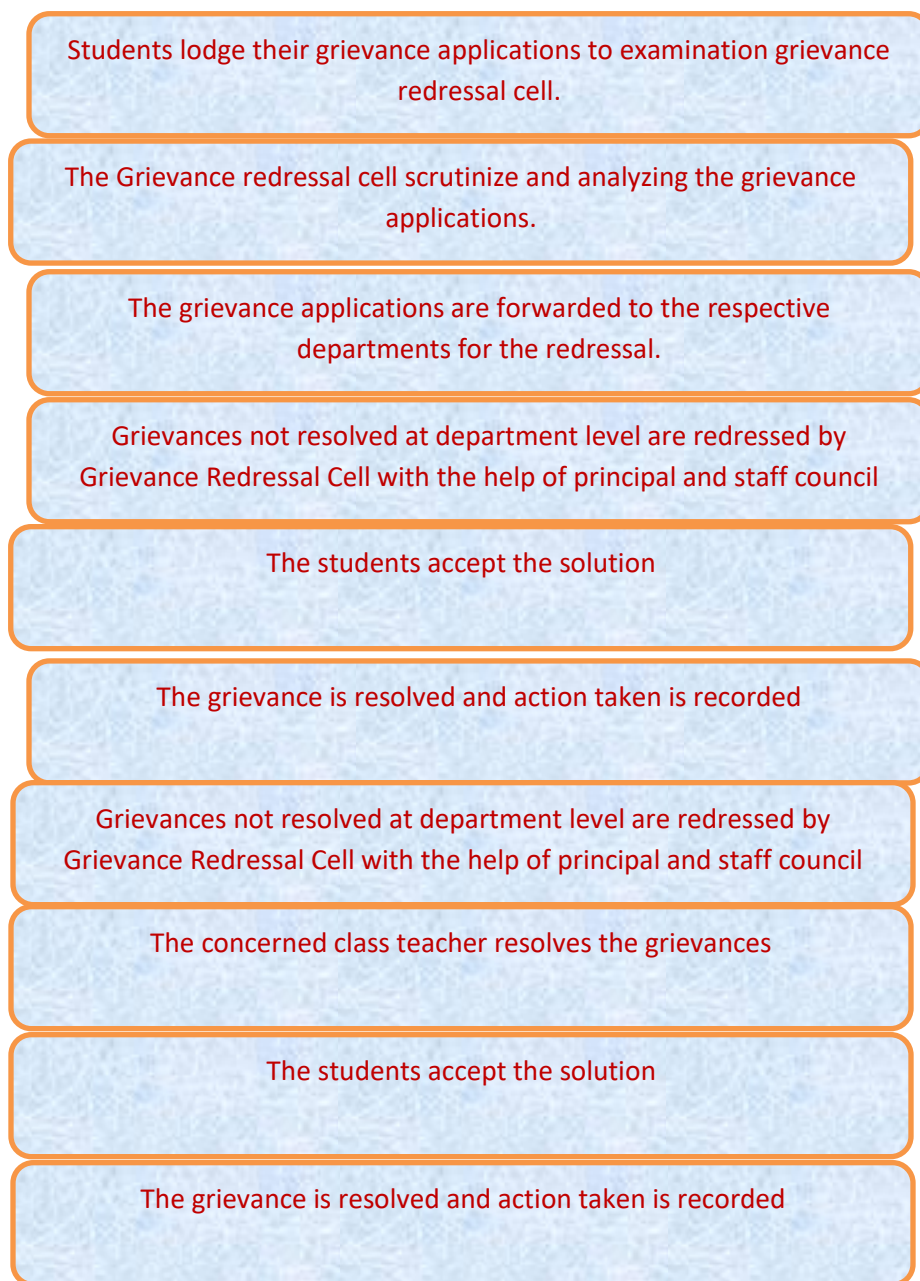


2.5.2: Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

Examination Grievance Redressal Mechanism for Internal Assessment



Students not willing to submit their grievance applications personally can drop them in writing at this complaint box.





Tirumala Tirupati Devasthanams
S.G.S Arts College, T.T.D, Tirupati

(Accredited with 'A+' by NAAC)
(Affiliated to Sri Venkateswara University, Tirupati)
ISO Certified Institution
Tiruchanoor Road, Tirupati – 517501



Date : 23- 09 -2023

Notice

The students of I, III & V semesters of Microbiology Group are here by informed to go through the marks they have secured in the first internal examination from 11 -09-2023 to 19-09-2023. Their doubts or corrections etc. if any may be brought to the notice of the respective class teacher /HOD of the department before 27-09-2023.


HEAD OF THE DEPARTMENT

HOD of Microbiology
S.G.S. Arts Degree College
T.T.D., TIRUPATI-517 501.

Grievances related to internal examinations.

The examination Grievances Redressal Cell has received the letters from the students regarding their grievances pertaining to internal assessment for the academic year 2023-24.

Date:- 06/01/2024
Tirupati.

From.

K. Chiranjeevi

IIIrd B.S.C (MZC)

Vth Semester

HT No:- 0322 008275

S.G.S. ARTS College,

Tirupati.

To,

The examination grievance

Redressal cell,

S.G.S. ARTS College

Tirupati.

Respected Sir,

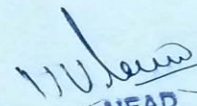
I am K. Chiranjeevi, Vth sem MZC in S.G.S. ARTS College, Tirupati, writing this letter here requesting you that I'm absent on the day when Microbiology internal exam is conducted because of health issues. So kindly permit to reappear for the exam.

Thank you.

Yours faithfully

K. Chiranjeevi

A. Sider

 0322008275
HEAD
DEPT. OF MICROBIOLOGY
SGS ARTS COLLEGE
TIRUPATI-517501 (A.P.)

S.G.S ARTS COLLEGE, TTD, TPT																			
DEPARTMENT OF MICROBIOLOGY,BATCH 2022-2025																			
COMPONENTS AND BREAKUP OF MARKS FOR THEORY COURSES FOR CONTINUOUS INTERNAL ASSESMENT (CIA)																			
BSC -EM III YEAR V SEMESTER 2023-2024(Environmental And Agriculture Microbiology:-3-5-115 7A)																			
S.NO	H.T.NO	Name of the student	INTERNAL-1					INTERNAL-2					I N T E R N A L B E S T O F T W O (2 5 M)	INTERNAL PRACTICAL					
			AT TE ND AN CE (5 M)	AS SIG NM EN T/ QU IZ/ SE MI NA R (5M)	M O D E L E X A M (5 M)	MI D T E S T (1 0 M)	TO T A L (2 5 M)	AT TE ND AN CE (5 M)	AS SIG NM EN T /Q UI Z/S EM IN AR (5M)	M O D E L E X A M (5 M)	MI D T E S T (1 0 M)	TO T A L (2 5 M)		CO ND UCT OF EXP ERI ME NT (10 M)	CLA SS TES T (5 M)	MO DEL TES T (20 M)	VIV A (5 M)	REC OR D(1 0M)	TOT AL (50 M)
1	0322008261	A.NIKHIL	4	5	5	10	24	5	5	5	9	24	24	10	4	19	4	9	46
2	0322008262	B.BHAVYA	5	5	4	10	24	5	5	5	10	25	25	10	5	20	5	10	50
3	0322008264	B.UMESH	4	4	4	9	21	5	4	4	9	22	22	8	4	18	4	8	42
4	0322008266	B.SIDDESH	5	4	4	9	22	4	4	5	10	23	23	10	5	18	4	9	44
5	0322008267	B.VENKATESH	4	4	4	9	21	3	4	4	10	21	21	8	4	18	3	8	41
6	0322008268	C.SIVA	4	3	5	9	21	5	4	4	9	22	22	8	4	17	3	8	40
7	0322008269	D.HOMANJALI	5	5	4	10	24	4	5	5	10	24	24	10	4	19	4	10	47
8	0322008270	E.BHARGAVI	5	5	5	10	25	5	5	5	10	25	25	10	4	20	4	10	48
9	0322008272	G.MADHU	4	5	4	10	23	4	4	4	10	22	23	9	4	18	3	8	42
10	0322008274	K.AJAY KUMAR	4	5	5	8	22	4	4	4	9	21	22	8	3	17	4	8	40
11	0322008275	K.CHIRANJEEVI	A	A	A	A	A	5	4	5	10	24	24	10	5	19	5	10	49
12	0322008276	K.LAKSHMI NARAYAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	0322008278	K.UPENDRA REDDY	5	5	5	10	25	5	5	5	10	25	25	10	5	20	5	10	50

14	0322008281	M.PAWAN KALYAN	5	4	5	9	23	5	5	4	10	24	24	10	5	19	4	9	47
15	0322008282	M.DINESH	4	4	4	10	22	5	5	4	8	23	23	9	4	19	4	8	44
16	0322008283	M.GAJENDRA NAIK	5	5	5	9	24	5	5	5	10	25	25	9	5	20	5	9	48
17	0322008284	M.NITHISH Koushik	5	4	5	10	24	5	5	5	10	25	25	10	4	20	4	10	48
18	0322008285	M.BABY PRIYANKA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	0322008287	N.VISHNU VARDHAN	4	5	5	10	24	4	5	4	10	23	24	9	4	19	4	9	45
20	0322008289	P.ABISHAI BABU	4	5	4	10	23	4	5	5	10	24	24	10	4	18	5	10	47
21	0322008290	P.AMRUTHA RAJ	5	4	4	9	22	5	4	4	10	23	23	10	4	18	4	9	45
22	0322008291	P.RAMYA	5	4	5	10	24	5	5	5	10	25	25	10	4	20	5	9	48
23	0322008292	P. MAHESH	5	4	4	10	23	5	5	5	9	24	24	10	5	19	4	9	47
24	0322008293	P.V.NYNAKSHITHA	5	5	5	10	25	5	5	5	10	25	25	10	5	20	5	10	50
25	0322008295	R.VASAVI	5	5	5	10	25	5	5	5	10	25	25	10	5	20	5	10	50
26	0322008296	R.DIVYA	4	4	4	9	21	4	4	4	10	22	22	8	3	18	3	8	40
27	0322008297	S.SATHISH	4	4	5	10	23	5	5	5	8	23	23	10	4	18	4	8	44
28	0322008298	B.SONU PRAKASH NAIK	4	5	5	9	23	4	5	5	10	24	24	10	4	19	4	9	46
29	0322008299	T.ANIL	4	4	4	9	21	4	4	4	9	21	21	10	4	18	3	7	43
30	0322008300	T.NIVEDHA	5	5	5	10	25	5	5	5	10	25	25	10	5	20	5	10	50
31	0322008301	T.P.NIKHIL	4	4	4	10	22	4	4	4	9	21	22	8	4	18	4	7	41
32	0322008302	V.C.TRIVENI	5	5	4	9	23	5	5	5	9	24	24	10	4	19	4	9	46

K. Sidi

HEAD
DEPT. OF MICROBIOLOGY
SGS ARTS COLLEGE
TIRUPATI-517501 (A.P.)

Sample answer papers for Internal Examinations To ensure transparency the students are allowed to write the Internal Examinations in the answer papers provided by the Institution. A sample answer sheet provided by the Institution for the Internal Examinations is shown below

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25

Tirumala Tirupati Devasthanams Degree & PG Colleges, Tirupati.
S.V. ARTS COLLEGE / S.P.W. COLLEGE / S.G.S. ARTS COLLEGE

Name of the Examination: Internal examination - I Date: 08/01/2020

Name of the Student: K. Chiranjeevi Roll No.: 0322008275

Class: BSC Group: MZC Medium: E.M. Subject: Microbiology

Environmental And Agriculture Paper: 7

No. of Additional sheets used ☐ Microbiology Q. Code: 3-5-115-7A P20

⑥ Bioremediation of common pesticides:

Most of the organic pesticides used are extensively biodegraded within the time of one growing season (or) less as a result of biochemical processes alone (or) a pesticide may make it "recalcitrant" or non biodegradable. The chemical structures of some biodegradable and some biodegradable and some recalcitrant pesticides are the herbicide 2, Trichlorophenoxy acetic acid). which differs only by an additional chlorine substitution in the meta-position, persists for years the 1,1,1, - trichloro - bis - (p - chlorophenyl) - ethane) because the parameethoxy groups are subject to dealkylation and the para - chloro substitution renders DDT with one portion of the pesticide attack herbicide propanil and cleave its propionate moiety (aliphatic portion) which is subsequently mineralised.

A portion of the released 3,4-dichloroaniline (DCA) is acted upon by microbial oxydase and peroxidases resulting in highly persistent residues such as TCAB (3,3',4,4'-tetrachloroazobenzene) are related to 30 compounds.

Genetic engineering may help degrading the recalcitrant pesticides by combining various plasmids in a bacterium for convenience. Microorganisms harbouring a variety of plasmids, encoding degradation of various aromatic compounds were incubated with 2,4,5-T and after 8-10 months microbes.

There are different types of bioremediation:

1. Phytoremediation
2. Bioaugmentation
3. Biostimulation
4. Bioventing
5. Bio reactor
6. In situ bioremediation
7. Land farming
8. Biosparging
9. Ex situ bioremediation

⑧ Nitrogen cycle:-

Nitrogen forms the main bulk of the atmosphere 78% as well as the biological systems various nitrogenous compounds. eg:- proteins, enzymes, chlorophylls, nucleic acids, etc. play vital roles in the life processes of organisms. The atmospheric nitrogen is chemically inert and is not directly taken by most of the living organisms and the microorganisms will convert these organic compounds and can be observed by the organisms and converted into the compounds which can be observed by the nature and ecosystem.

⇒ Nitrogen cycle

⇒ Carbon cycle

⇒ Sulphur cycle

⇒ Phosphorous cycle.

Nitrogen cycle:-

Group 1:- These microorganisms which are capable of fixing atmospheric nitrogen of combination.

Group 2:- Those microorganisms which bring about the production of ammonia. ^{nbio}

Group 3:- The microorganisms which oxidize ammonia to nitrate i.e. nitrification.

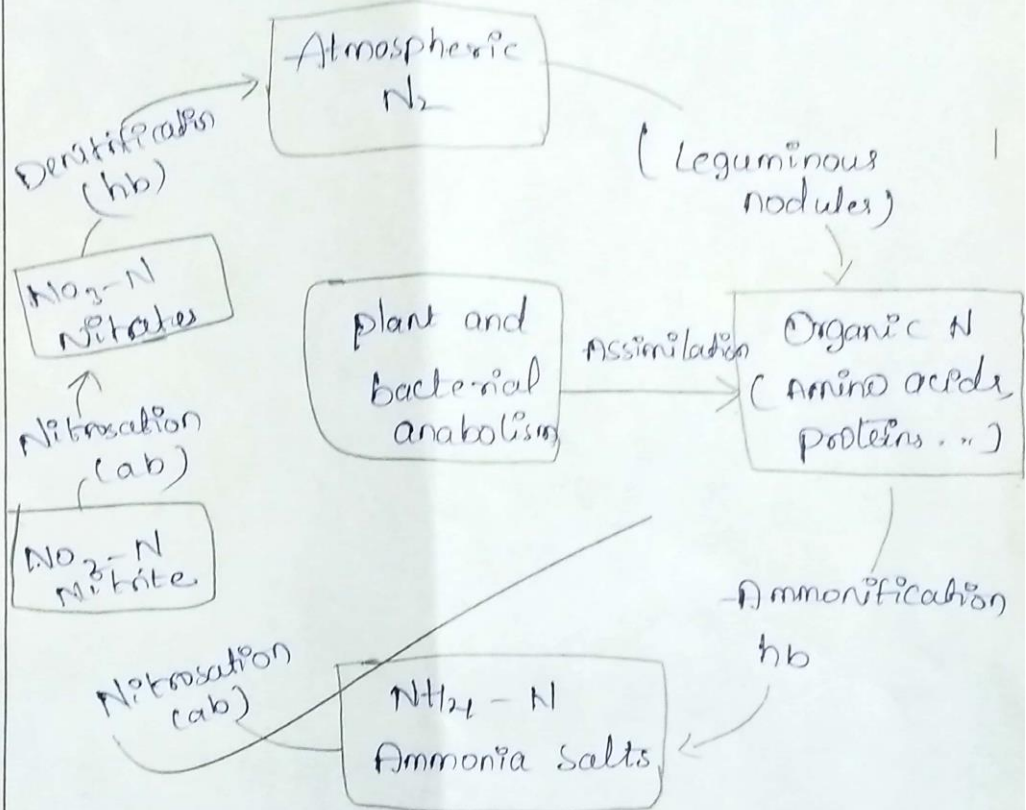
→ Microbes play a crucial role in biogeochemical cycles of nitrogen, an essential element for life.

→ Nitrogen is abundant in the Earth's atmosphere, but most organisms cannot use it directly in its gaseous (N_2) form. Nitrogen must be converted into other forms, such as ammonia (NH_3), nitrate (NO_3^-), and nitrite (NO_2^-), through a series of biological and chemical reactions.

→ Some microbes, such as nitrogen fixing bacteria, have the ability to convert atmospheric nitrogen into a usable form that can be then used by plants.

→ Microbes play a role in the nitrogen cycle by breaking down organic matter, such as dead plants and animals and releasing nitrogen back into the soil or water.

→ This process known as nitrogen mineralisation, is critical for maintaining the availability of nitrogen for plant growth.



ab = autotrophic bacteria

hb = heterotrophic bacteria



Tirumala Tirupati Devasthanams Degree & PG Colleges, Tirupati.
S.V. ARTS COLLEGE / S.P.W. COLLEGE / S.G.S. ARTS COLLEGE

Name of the Examination: Internal examination

Date :

Name of the Student : K. Chiranjeevi

Roll No. : 321465

Class : BSC Group : MZC Medium : E.M

Subject : Microbiology

Paper : 7

No. of Additional sheets used

Q.Code :

③ Microbial interaction

① microbial interaction is depend on the [positive interactions]

② Negative interaction

③ Nutrient cycling interaction

④ The importance of understanding the principle of microbial interaction.

⑤ Symbiosis:-

An associated of two or more different species.

Ectosymbiosis

One organism can be located with in another organisms as an ectosymbiosis in case, the ectosymbiont usually is a smaller organism located on the surface of a large organisms.

Endosymbiosis

One organism can be located with in another organism as an endosymbiosis

Ecto & endosymbiosis

Micro organisms live on both the inside and the outside of another organisms.

Positive interactions

- ⇒ Mutualism
- ⇒ Proto cooperation
- ⇒ Commensalism

Negative interactions

- ⇒ predation
- ⇒ parasitism
- ⇒ Amensalism
- ⇒ competition.

Mutualism

Defines the relationship in which some reciprocal beneficial occurs to both partners.

- ⇒ Relationship with some degree of obligation.
- ⇒ Partners of cannot live separately
- ⇒ mutualist and host are dependent on each other.

Negative interactions

- ⇒ when one organism, the predator, engulfs and digests another organism the prey
- ⇒ The prey can be large organism or smaller than the predator and this normally results in the death of the prey.

② Solid waste management

Besides the inert part such as glass metal and plastic the solid wastes also contain dehydrated organic waste such as kitchen scraps paper and other household and industrial sewage sludge derived from cattle liquid wastes, animal waste from cattle feed lots and poultry and swine farms are also major sources of solid organic waste.

In rural areas these may be recycled into land as fertiliser. However in areas the pose an environmental problems.

Sanitary land fills

The material placed in a land fill to allow it to decompose, both organic and inorganic solid wastes are deposited together in a low lying land.

To avoid foul odor and attraction of insects and rodents each day waste deposit is covered over with a layer of soil, creating a sanitary land.

A developed land fill can be used for construction and purposes, for the organic manure undergoes slow and steady microbial decomposition and the products which results include CO_2 , H_2O , CH_4 low mol wt alcohols and acids which diffuses in the surrounding air and water.

2) Ecosystem

→ An ecosystem is a community of living organisms interacting with each other and their physical environment. It is a dynamic and complex system where organisms rely on each other for survival and contribute to the functioning of the ecosystem.

→ Ecosystems are made of two main components: biotic and abiotic. The biotic components are the living organisms that make up the ecosystem.

→ While the abiotic components include the non-living physical and chemical factors such as air, water, soil, sunlight, temperature, and nutrients.

→ Ecosystem can vary size and complexity from a small pond to a vast rainforest.

T.T.D. DEGREE COLLEGE

ADDITIONAL SHEET

- They Can be Classified into different types, including terrestrial ecosystems, such as forests, grasslands and deserts, and aquatic ecosystems such as oceans, rivers and lakes.
- The interactions between organisms and their environment within an ecosystem are interconnected and interdependent.
- Energy flows through the ecosystems from the sun, and nutrients are cycles between the biotic and abiotic components.
- Each organism has a role to play in maintaining the balance and functioning of the ecosystem.
- Human activities such as deforestation, pollution and climate change can have a significant impact on ecosystems, disrupting their balance and causing irreversible damage.
- Understanding the concepts of ecosystems, disrupting the crucial for

promoting Sustainable practices and...
preserving biodiversity.

1) An ecosystem consists of certain components.

1) Biotic Components: The biotic components of an ecosystem are the living organisms that make up the community.

2) Producers: Producers are organisms that use sunlight to produce their own food through photosynthesis.

3) Consumers: Consumers are organisms that obtain their energy by feeding on other organisms.

4) Decomposers: Decomposers are organisms that break down dead organic matter and recycle nutrients back into the ecosystem.

5) Abiotic Components: The abiotic components of an ecosystem are the non-living physical and chemical factors that influence the community.

6) Climate: The long term patterns of temperature, precipitation, and wind that determine the conditions of an ecosystem.

2023 – 24

Grievance Redressal Committee

Chief Convener	:	Dr. B. Sathyanarayana
Convener	:	Dr. V. Madhu Kumar
Co-Convener	:	P. Muni Bhaskar Rao
Members	:	Dr. K. Rajesh
		Dr.P.MadhusudhanaRao
		Smt.B.Sulochana Rani
		Mr. I. Romeswara Rao

3. Research & Extension Activities Committee

Convener : Dr. K. Ravindranath Reddy
 Members : Dr. V. Venkata Lakshmi
 Smt. T. Sakuntala
 Sri K. Rajesh
 Sri P.M. Ravikumar
 Dr. B. Triveni
 Sri J. Sridhar
 Dr. B. Yuvaraja Reddy

CRITERION – 4**Committee for Infrastructural Development:****1. Library:**

Convener : Sri.D.Parameswara
 Members : Dr.K.Vijaya Kumar
 Sri J. Sridhar
 Sri. J. Seshadri

2. Labs :

Convener : Dr.K.Ravindranadha Reddy
 Members : Smt. N.Jayalakshmi
 Smt. B.Revathi.
 Dr.D.Sudhakar
 Dr.N.Jagadeesh Kumar
 Sri.B.Venkata Chalapathi
 Dr. B. Ravi

CRITERION – 5**Committee for Student Progression and Support:****1. Alumni Association:**

Convener : Dr.D.Chandrakesavulu Naidu
 Members : Dr.K.Vijaya Kumar
 Dr.K.Koteswaraiah
 Dr.K.Venkatesh

2. Career Guidance & Placement:

Convener : Dr.P.Chandraiah
 Members : Sri K. Pratap
 Dr.S.Anilkumar
 Sri P.M.Ravi Kumar
 Dr.G.Manjula

నిర్మల హృదయమే దేవుని ఆలయం

3. Women Empowerment, Protection & Anti Harassment:

Convener : Dr.V.Venkatalakshmi
 Members : Dr.B.Uma Maheswari
 Smt. T.Sakunthala
 Dr. A. Venkata Ramanamma
 Dr.S.Vasanth Kumari
 Dr.G.Manjula
 Smt. N.Jayalakshmi
 Dr.K.Sridevi

4. Echo Club:

Convener : Smt.P.Srujana
 Members : Smt.B.Revathi
 Dr.P.Saritha

5. Grievances Redressal Committee:

Convener : Dr.V.Madhu Kumar
 Sri P. Muni Bhaskar Rao
 Members : Dr.K.Rajesh
 Dr.P.Madhusudhana Rao
 Smt.B.Sulochana Rani
 I.Romeswara Rao

CRITERION – 6**IQAC Committee:**

Convener : Sri D.Parameswara
 Members : Sri P.Udaya
 Dr.P.Suguna
 Dr. K. Vijaya Kumar
 Dr.T.L.Narasimha Reddy
 Dr. K. Koteswaraiah
 Sri P.Harish Reddy
 D. Mahendra

CRITERION – 7**1.Discipline and Code of Conduct:**

Convener : Dr.D.Chandrakesavulu Naidu
 Members : Sri. S.N.Shameer
 Dr.D.Sudhakar

లోకం బలవంతులను, శక్తిమంతులను మాత్రమే ఆదరిస్తుంది.

STUDENT WARD SYSTEM

The following faculty members are assigned certain member of students, who will be under their ward. The faculty members will supervise their attendance, academic progress and advise them on matter of their general welfare.

Course & Group	Name of I Year Class Teacher
B.Sc., Mathematics	Sri I. Romeswar Rao
Physics	Sri J. Sreedhar
Computer Science	Smt. N. Jayalakshmi
	Dr. B. Triveni
Data Science	Dr. K. Vijaya Kumar
Statistics	Dr. K. Vijaya Kumar
Biotechnology	Sri. P.M. Ravi Kumar
Botany	Dr. P. Saritha
Zoology	Dr. B. Ravi
Micro-Biology	Dr. K. Sridevi
Food Science & Technology	Smt. M. Prada
B.A., History	Dr. S. Anil Kumar
Economics	Sri K. Rajesh
Political Science	Dr. S. Anil Kumar
Special Telugu	Dr. S. Vasantha Kumari
Special English	Dr. A. Venkata Ramanamma
Tourism and Travel Management	Smt. Priya Singh
B.Com., CA (EM) - 1	Dr. B. Yuvaraja Reddy
CA (Em) - 2	Sri. V. Kamalanathan
GEN (EM) - 1	Dr. P. Madhusudhana Rao
GEN (EM) - 2	Sri P. Chandraiah

ఆకాశం కన్నా ఉన్నతమైనది తండ్రి హృదయం

Course & Group	Name of II Year Class Teacher
B.Sc., MPC (EM)	Smt. P. Srujana
MSCs (EM)	Sri J. Seshadri
MPCs (EM)	Sri J. Sreedhar
MPS (EM)	-
MZC (EM)	Dr. B. Ravi
BBC (EM)	Dr. B. Sulochana Rani
CBZ (TM)	Dr. P. Latha
CT & HM (EM)	Smt. M. Prada
B.A., HEP (EM)	Sri K. Pratap
HPT (EM)	Dr. S. Vasantha Kumari
MES (EM)	-
ASCA (EM)	Dr. M. Vasudeva Reddy
B.Com., CA(EM) - 1	Sri Harish Reddy
CA(EM) - 2	Dr. P. Siva Kumar
GEN (EM)	Dr. G. Munjala
Course & Group	Name of III Year Class Teacher
B.Sc., MPC (EM)	Smt. K. Revathi
MSCs (EM)	Sri D. Chaitanya Kumar
MPCs (EM)	Dr. K. Koteswaraiah
MPS (EM)	Dr. K. Venkatesh
MZC (EM)	Dr. K. Sridevi
BBC (EM)	Dr. P. Sudhakar
CBZ (TM)	Dr. P. Suguna
CT & HM (EM)	Smt. Priya Singh
B.A., HEP (TM)	Dr. B. Ajad Chandrasekhar
HEP (EM)	Dr. J. Kondala Rao
HPT (EM)	Dr. J. Kondala Rao
MES (EM)	Sri I. Romeswar Rao
ASCA (EM)	Dr. M. Vasudeva Reddy
B.Com., CA (EM)	Sri C. Divya
GEN (EM)	Dr. T.L. Narasimha Reddy

ఏకాగ్రతే జ్ఞానసముపార్జనకు కావలసిన ఏకైక మార్గం