
Sri Umamaheswari Government Degree College
Kondanagula, Nagarkurnool(dist) 509401.

DEPARTMENT OF CHEMISTRY



DEPARTMENT OF CHEMISTRY

DEPARTMENTAL PROFILE
SUBMITTED TO NAAC PEER TEAM

IMPORTANCE OF CHEMISTRY:

Chemistry, a branch of physical science, is the study of the composition, structure, properties and change of matter. Chemistry is chiefly concerned with atoms and their interactions with other atoms - for example, the properties of the chemical bonds formed between atoms to create chemical compounds. As well as this, interactions including atoms and other phenomena—electrons and various forms of energy—are considered, such as photochemical reactions, oxidation-reduction reactions, changes in phases of matter, and separation of mixtures. Finally, properties of matter such as alloys or polymers are considered.

Chemistry is sometimes called "the central science" because it bridges other natural sciences like physics, geology and biology with each other. Chemistry is a branch of physical science but distinct from physics.

Chemistry is a big part of everyday life. We find chemistry in daily life in foods we eat, the air we breathe our emotions and literally every object we can see or touch. Many of the changes that occur in the world around us are caused by chemical reactions like cooking of food, the emotions that we feel are also as a result of chemical messengers known as neuro transmitters. So the study of chemistry is nothing but study life.

OUR MOTTO IS

“ENTER TO LEARN, LEAVE TO SERVE”

INTRODUCTION:

- The Department of CHEMISTRY was established since the very inception of the college in 1989 with under graduation course for the first time in this rural area.
- Later in 2004, to keep in pace with the growing demand of B.Sc. course, another section was sanctioned in English medium.

- The Department has taken up some of the additional curriculum programmers like Guest Lectures, Extension Lectures, Field Trips, Group Discussions and Quiz's to enrich the student knowledge. The Department also provides the study projects to merit students and conduct the student seminars to improve their presentation skills. The Department is also giving additional coaching for students to get the admission into M.Sc., (chemistry) Course conducted by various universities.

I. COURSES OFFERED:

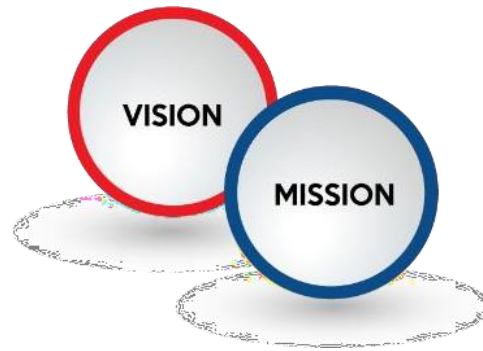
At present, chemistry is offered in B.Sc. course with three combinations i.e.,

1. Chemistry-Physics-Mathematics-T/M&E/M
2. Chemistry-Botany-Zoology-E/M&T/M

II. FACULTY PROFILE:

. At present one (01) faculty members is working in this department. Among these one of the faculty G Laxman Goud. The faculty member is constantly updating themselves a modern method of teaching by attending various, seminars and workshops. The department provides excellent learning in chemistry through its dedicated faculty member by means of new teaching and learning methods. It's a matter of pride that students studied here have been highly placed in society.

VISION AND MISSION



VISION

To impart education that generates good citizens with academic excellence and strong commitment to society. To perpetuate value based education favorable to the progress of students and society so as to promote peace and harmony.

MISSION

Our mission is to offer high quality education dedicated to building minds with conviction, integrity, social and moral responsibility. We are committed to educating the students beyond the confines of a class room to make them better individuals and develop their personalities, enabling them to face the challenges of the modern world.

SWOC ANALYSIS

STRENGTH	WEAKNESS
Experience faculty expertise in Teaching and Research	Single faculty limiting the development and quality and approach
Well Equipped zoology lab with OHP	No PG Programme in Chemistry
Well ventilated and spacious class room	
Availability of research microscope	

OPPORTUNITIES	CHALLENGES
Availability of many learning resources on campus in an effort to ensure academic excellence	To enhance self reliance among the students
To offer certificate courses related to Vermi culture and complete Blood profile test	Few of the students dropped out in the middle of the academic year due to getting marriages and poor background.
To be start in PG Programme	



Name of the Faculty	G Laxma Goud
Date of Appointment	12-10-2007
Date of birth	01-04-1979
Post Graduate M.Sc Chemistry	Completed in 2004 under Kakathiya University,
Ph.D	Pursuing at SJJTU ,Rajasthan
Address	H.No : 2-114/2 Chandapur (Street) Tadwai (M) Kama Reddy (Dist) Telangana 503120.

TIME TABLE: 2022-2023**THEORY & PRACTICAL:**

Day	Class	I	II	III	IV	V	VI
Monday	Ist YEAR				CHEMISTRY LAB		
	IIInd YEAR						
	IIIrdYEAR		CHEMISTRY				
Tuesday	Ist YEAR	CHEMISTRY					
	IIInd YEAR			CHEMISTRY			
	IIIrd YEAR					CHEMISTRY	
Wednesda y	IstYEAR						
	IIInd YEAR					CHEMISTRY	
	IIIrd YEAR	CHEMISTRY					
Thursday	IstYEAR						
	IIInd YEAR		CHEMISTRY				
	IIIrd YEAR				CHEMISTRY LAB		
Friday	Ist YEAR			CHEMISTRY			
	IIInd YEAR						
	IIIrd YEAR				CHEMISTRY LAB		
Saturday	Ist YEAR	CHEMISTRY					
	IIInd YEAR			CHEMISTRY			
	IIIrd YEAR					CHEMISTRY	

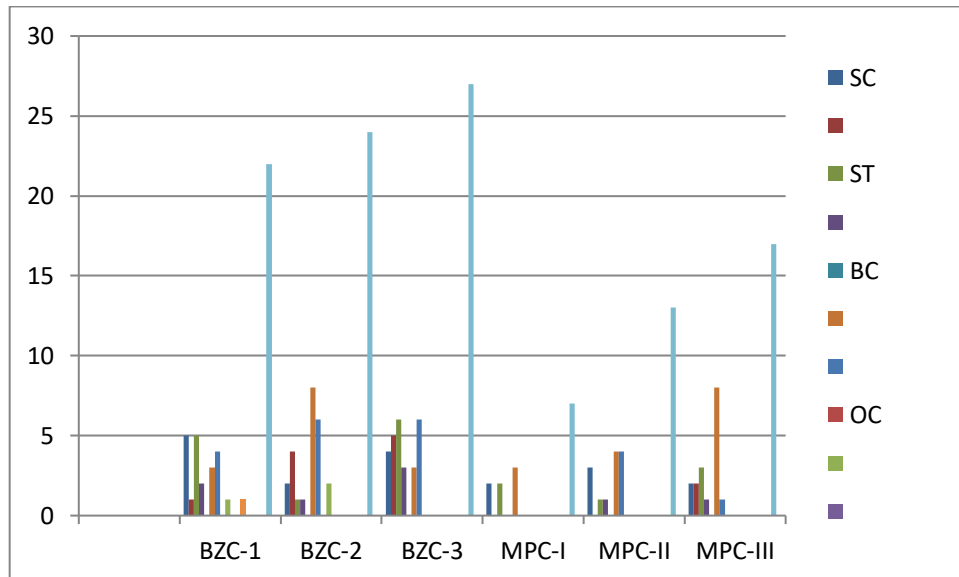
STUDENT STRENGTH PARTICULARS:

➤ The following is the strength and Social Status of the Students:

Academic Year: 2016–2017

10 th M	SC		ST		BC		OC		Minority		PHC		TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	
BZC-1	05	01	05	02	03	04	01	0	01	0	0	0	22
BZC-2	02	04	01	01	08	06	02	0	0	0	0	0	24
BZC-3	04	05	06	03	03	06	0	0	0	0	0	0	27
MPC-I	2	0	2	0	3	0	0	0	0	0	0	0	7
MPC-II	3	0	1	1	4	4	0	0	0	0	0	0	13
MPC-III	2	2	3	1	8	1	0	0	0	0	0	0	17

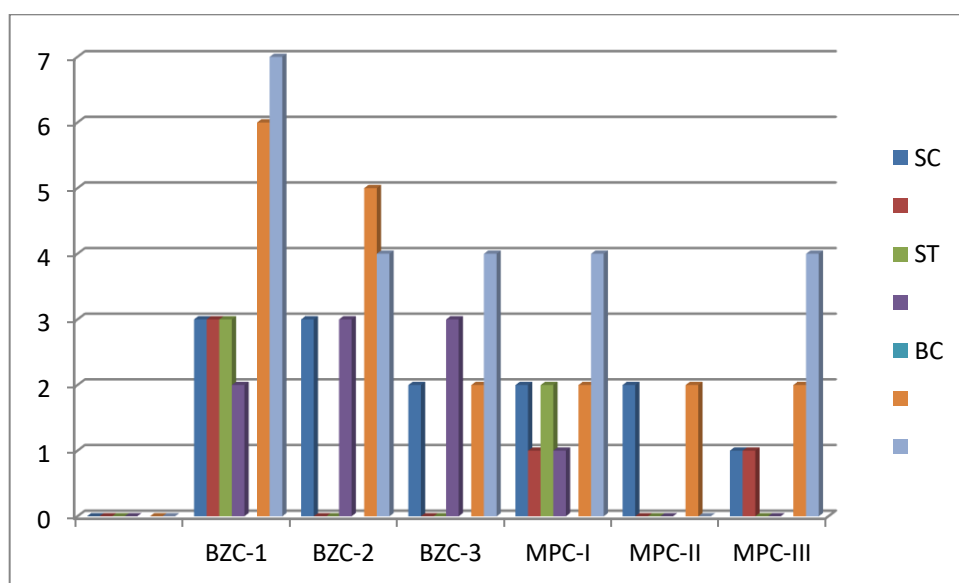
Graphical representation of the social status during 2016-17



Social status of the students 2017-2018

	SC		ST		BC		OC		Minority		PHC		TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	
BZC-1	4	0	0	4	6	6	0	0	0	0	0	0	20
BZC-2	05	01	05	02	04	03	0	0	0	0	0	0	20

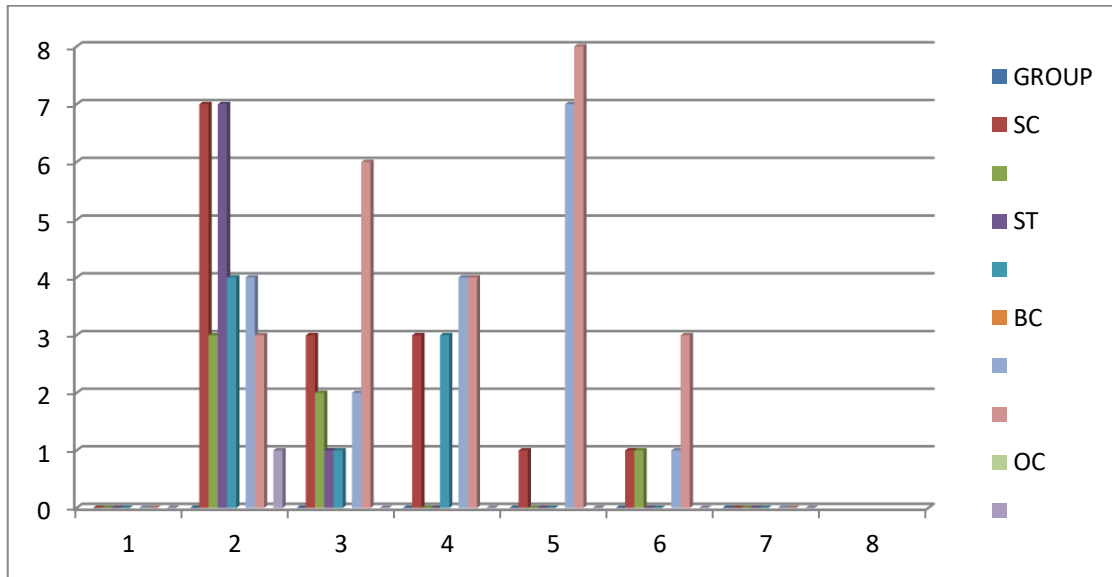
Graphical representation of the social status during 2018-19



Social status of the students 2019-2020

10	SC		ST		BC		OC		Minority		PHC		TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	
BZC-1	7	3	7	4	4	3	1	0	0	0	0	0	28
BZC-2	3	2	1	1	2	6	0	0	1	0	0	0	16
BZC-3	3	0	0	3	4	4	0	0	0	0	0	0	14
MPC-I	1	0	0	0	7	8	0	0	0	0	0	0	16
MPC-II	1	1	0	0	1	3	0	0	0	0	0	0	6
MPC-III	0	0	0	0	0	0	0	0	0	0	0	0	0

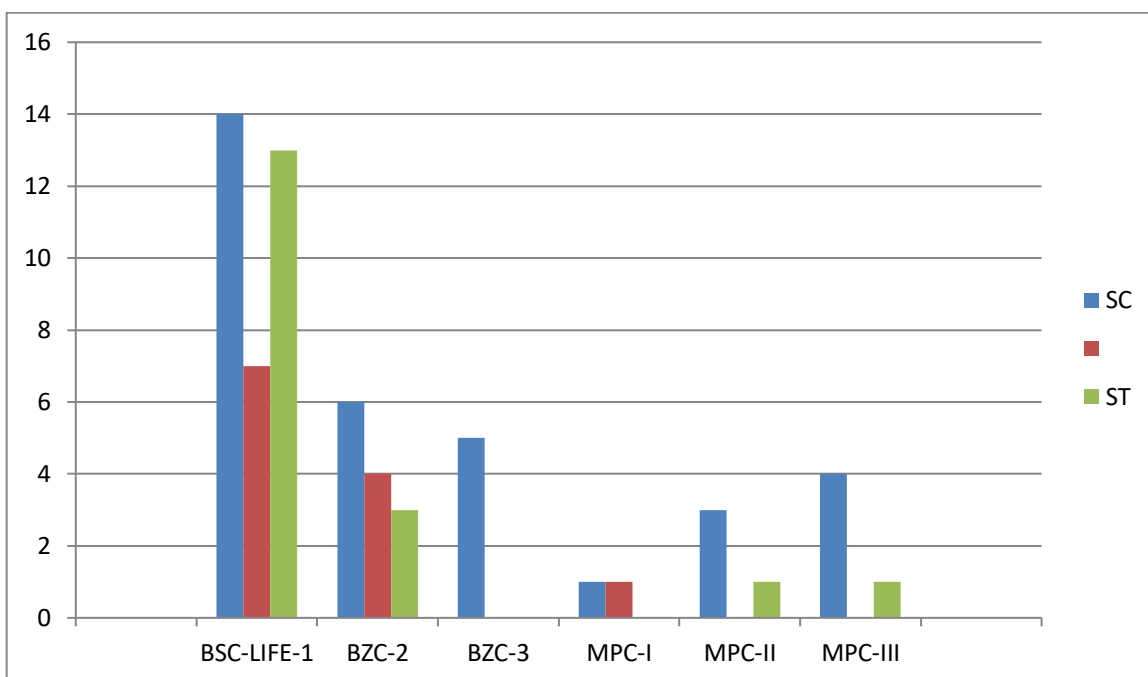
Graphical representation of the social status during 2019-20



Social status of the students 2020-2021

GROUP	SC		ST		BC		OC		Minority		PHC		TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	
BSC-LIFE-1	14	7	13	4	14	7	1	0	0	0	0	0	60
BZC-2	6	4	3	1	3	2	0	0	0	0	0	0	19
BZC-3	5	0	0	0	2	5	0	0	1	0	0	0	13
MPC-I	1	1	0	0	1	3	0	0	0	0	0	0	6
MPC-II	3	0	1	3	7	5	0	0	0	0	0	0	19
MPC-III	4	0	1	0	10	2	0	0	0	0	0	0	17

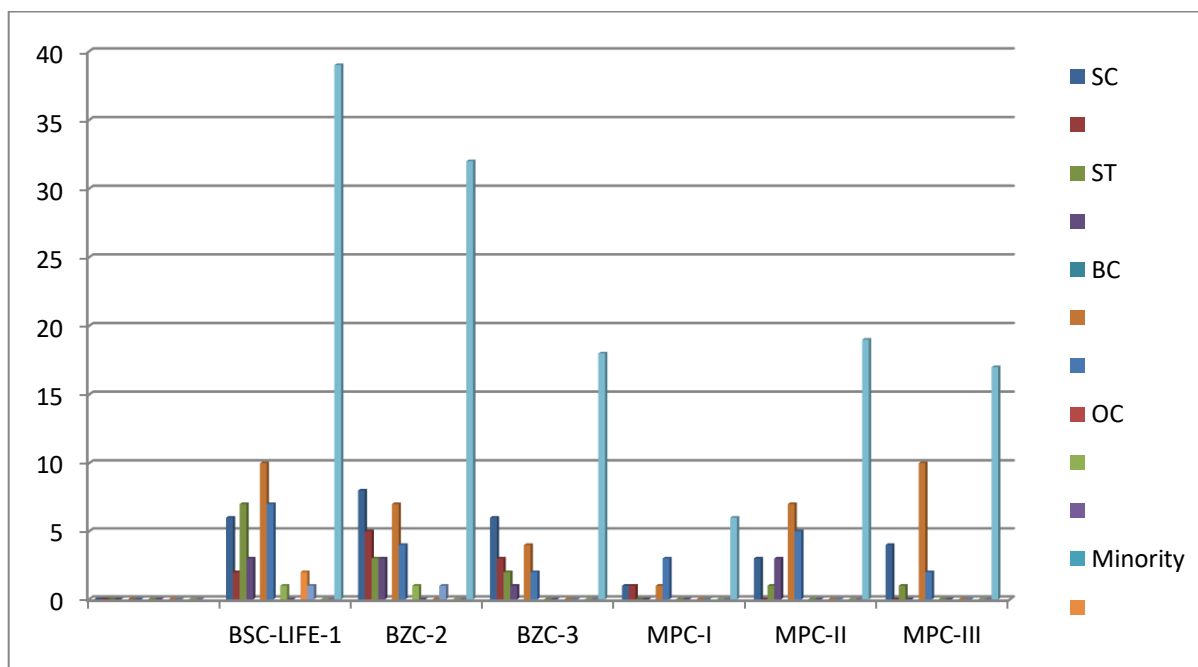
Graphical representation of the social status during 2020-21



Social status of the students 2021-2022

GRO UP	SC		ST		BC		OC		Minorit y		PHC		TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	
BSC- LIFE- 1	6	2	7	3	10	7	1	0	2	1	0	0	39
BZC- 2	8	5	3	3	7	4	1	0	0	1	0	0	32
BZC- 3	6	3	2	1	4	2	0	0	0	0	0	0	18
MPC- I	1	1	0	0	1	3	0	0	0	0	0	0	6
MPC- II	3	0	1	3	7	5	0	0	0	0	0	0	19
MPC- III	4	0	1	0	10	2	0	0	0	0	0	0	17

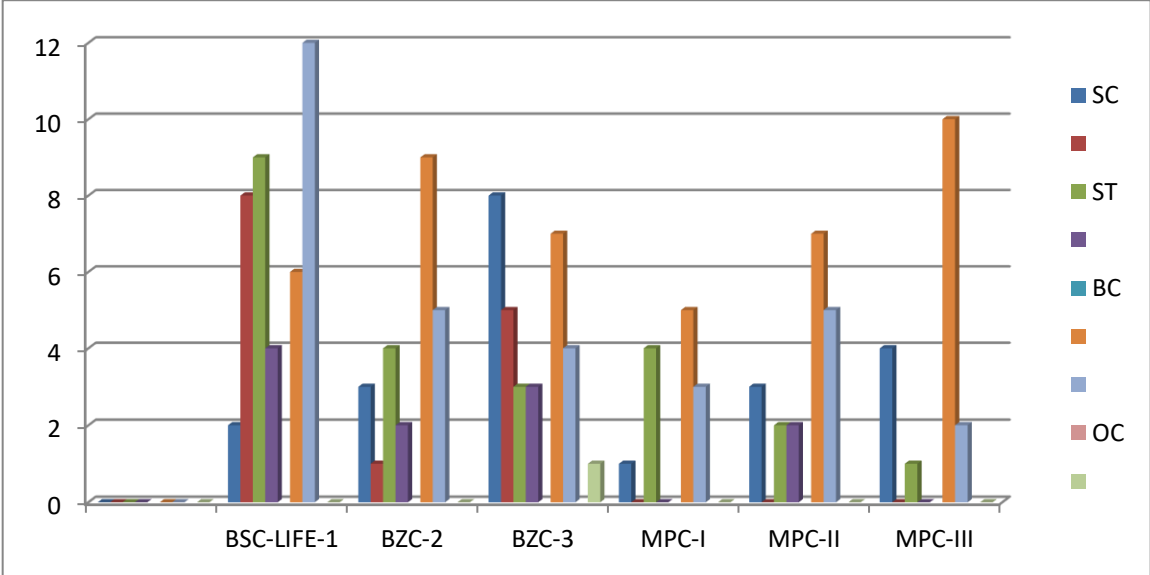
Graphical representation of the social status during 2021-22



Social status of the students 2022-2023

GROUP	SC		ST		BC		OC		Minority		PHC		TOTAL
	M	F	M	F	M	F	M	F	M	F	M	F	
BSC-LIFE-1	2	8	9	4	6	12	0	0	3	1	0	0	43
BZC-2	3	1	4	2	9	5	0	0	2	1	0	0	27
BZC-3	8	5	3	3	7	4	1	0	0	1	0	0	32
MPC-I	1	0	4	0	5	3	0	0	0	0	0	0	13
MPC-II	3	0	2	2	7	5	0	0	0	0	0	0	19
MPC-III	4	0	1	0	10	2	0	0	0	0	0	0	17

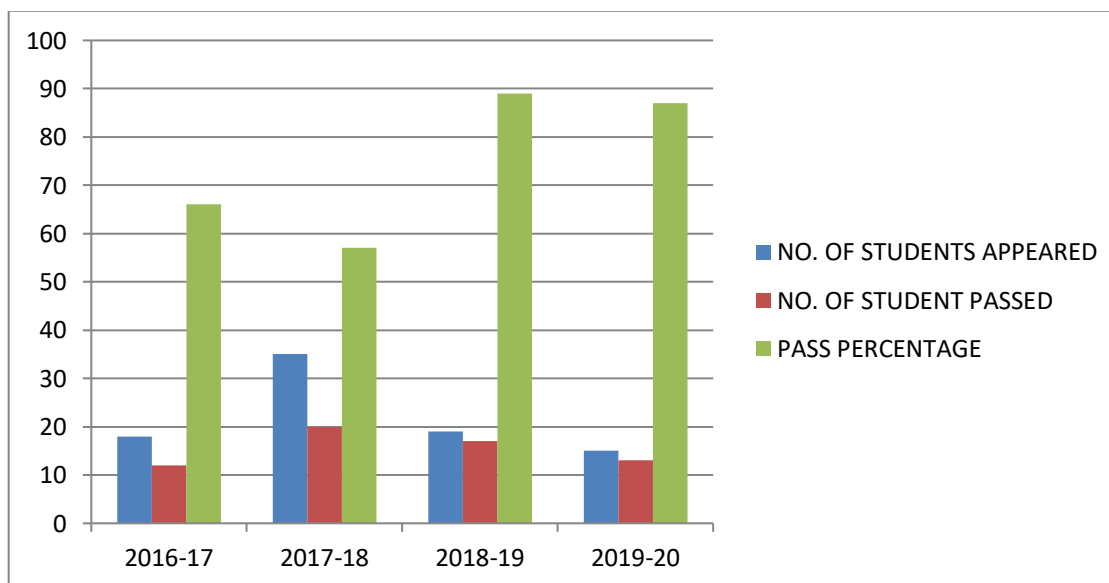
Graphical representation of the social status during 2022-23



RESULT ANALYSIS:

Year Wise Result analysis:

	NO. OF STUDENTS APPEARED	NO. OF STUDENT PASSED	PASS PERCENTAGE
2016-17	18	12	66
2017-18	35	20	57
2018-19	19	17	89
2019-20	15	13	87
2020-21	25	25	100
2021-22	28	25	89



CURRICULAR ASPECTS:

- Faculty of the department prepares the annual action plan at the start of the academic year based on the academic calendar supplied by the Commissioner of Collegiate Education.
- Faculty frequently assembled and discusses the events conducting for students and these are recorded in minutes register.

NON-CBCS:

In entire B.Sc. Chemistry course, there are 4 papers theory each of 100 marks and 4 practical papers each of 50 marks.

I. Theory Course:

I Year	Paper - I	Inorganic, Organic, Physical and General chemistry
II Year	Paper - II	Inorganic, Organic, Physical and General chemistry
III Year	Paper - III	Inorganic, Organic, Physical and General chemistry
	Paper – IV	Analytical chemistry and Spectroscopy, Drugs and Agro Chemicals, Macro molecules

II. Practical Course:

I Year	Paper - I	Semi micro analysis
II Year	Paper - II	Volumetric analysis
III Year	Paper - III	Preparation of Organic compounds, functional group Identification
	Paper – IV	Chemical kinetics, Conductometry and one project work

- Each section has 04 hr theory and 12 hr practical per week for I and II year.
- 6 theories 12 practical hours for III year, total work load 124 theories and 112 practical hrs.

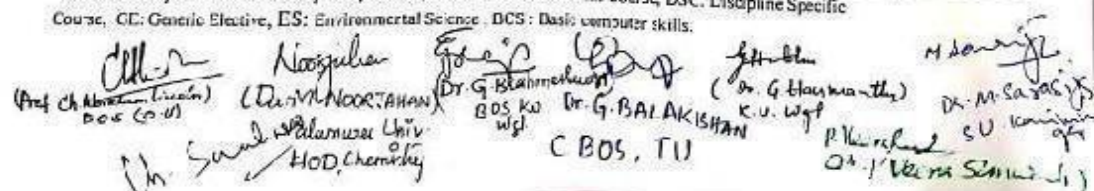
CBCS:

- From 2016 on word following CBCS Syllabus under Palamuru University: Details of the CBCS Scheme

Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common
Core Syllabi for all Universities in Telangana
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN
B.Sc., Chemistry from 2019-2020
FIRST YEAR- SEMSTER I

CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS
	Ability Enhancement Compulsory Course AECC-1	ES	2	2
	English	CC-1A	4	4
	Second language	CC-2A	4	4
	Optional I	DSC-1A	4T+3P=7	4+1=5
	Optional II	DSC-2A	4T+3P=7	4+1=5
	Optional III- Chemistry - I			
	Laboratory Course - I (Qualitative Analysis)	DSC-3A	4T } 3P } = 7	4 } 1 } = 5
	Total Credits		31	25
FIRST YEAR- SEMSTER II				
BS 201	Ability Enhancement Compulsory Course AECC-2	BCS	2	2
BS 202	English	CC-1B	4	4
BS 203	Second language	CC-2B	4	4
BS 204	Optional I	DSC- B	4T+3P=7	4+1=5
BS 205	Optional II	DSC-2B	4T+3P=7	4+1=5
BS 206	Optional III- Chemistry - II			
	Laboratory Course - II (Quantitative Analysis)	DSC-3B	4T } 3P } = 7	4 } 1 } = 5
	Total Credits		31	25
SECOND YEAR- SEMSTER III				
BS 301	Ability Enhancement Compulsory Course AECC-3 Remedial methods for pollution, drinking water and Soil fertility	SEC-1 SEC-2	2 2	2 2
BS 302	English	CC-1C	3	3
BS 303	Second language	CC-2C	3	3
BS 304	Optional I	DSC-1C	4T+3P=7	4+1=5
BS 305	Optional II	DSC-2C	4T+3P=7	4+1=5
BS 306	Optional III- Chemistry - III			
	Laboratory Course - III (Synthesis of Organic compounds)	DSC-3C	4T } 3P } = 7	4 } 1 } = 5
	Total Credits		31	25
SECOND YEAR- SEMSTER IV				
BS 401	Materials and their Applications Chemistry of Cosmetics and Food Processing	SEC-3 SEC-4	2 2	2 2
BS 402	English	CC-1D	3	3
BS 403	Second language	CC-2D	3	3
BS 404	Optional I	DSC-1D	4T+3P=7	4+1=5
BS 405	Optional II	DSC-2D	4T+3P=7	4+1=5
BS 406	Optional III- Chemistry - IV			
	Laboratory Course - IV (Qualitative and Spectral Analysis of Organic Compounds)	DSC-3D	4T } 3P } = 7	4 } 1 } = 5
	Total Credits		31	25

AECC: Ability Enhancement Compulsory Course, SEC: Skill Enhancement Course, DSC: Discipline Specific Course, CC: Generic Elective, ES: Environmental Science, DCS: Basic computer skills.



 (Prof. Ch. Abhishek) (Dr. M. Noorjahan) (Dr. G. Balakrishna) (Dr. G. Balakrishna) (Dr. M. Sastry)

 HOD, Chemistry C.B.O.S., T.U. P. K. Reddy (SU Commission)

Scanned by CamScanner

Theory:

IYear	Semester-I	Paper-I	Inorganic,Organic,Physicaland Generalchemistry
	Semester-II	Paper-II	Inorganic,Organic,PhysicalandGeneral chemistry
IIYear	Semester-III	Paper-III	Inorganic,Organic,Physicaland Generalchemistry
	Semester-IV	Paper-IV	Inorganic,Organic,Physicaland Generalchemistry
IIIYear	Semester-V	Paper-V	Inorganic,Organic,PhysicalandGeneral chemistry
		Paper-VI	Elective:InstrumentalMethodsofAnalysis
	Semester-VI	Paper-VII	Inorganic, Organic, Physical and General chemistry
		Paper-VIII	Elective:Medicinalchemistry

Laboratory course:

IYear	Semester-I	Paper-I	Qualitative Analysis-Semi micro analysis of mixtures
	Semester-II	Paper-II	QuantitativeAnalysis
IIYear	Semester-III	Paper-III	Organic Synthesis
	Semester-IV	Paper-IV	QuantitativeAnalysisofOrganicCompounds
IIIYear	Semester-V	Paper-V	Organicsynthesisand TLC
		Paper-VI	Experiments in Physical chemistry-I
	Semester-VI	Paper-VII	Quantitative and Spectral Analysis Of Organic Compounds
		Paper-VIII	Experiments in Physical chemistry-II

2. TEACHING LEARNING EVALUATION:

- Department of Chemistry follows the syllabus and other curricular aspects framed by Palamuru University, Mahabubnagar.
- The teaching staff has freedom to adopt their own teaching methods and innovations, teaching modules to make the students understand the topics in their respective papers.
- Department of Chemistry encouraged participating in group discussions, seminars and quiz programs.
- Some are the programs we conducted in my department under teaching learning evaluation.

I. Quiz competition

SUM GOVERNMENT DEGREE COLLEGE

KONDANAGULA

DEPARTMENT OF CHEMISTRY

DETAILS OF QUIZ PROGRAMME

S.NO	ACADEMIC YEAR	GROUP/SEM	DATE	NAME OF THE PROGRAMME	NAME OF THE LECTURER INVOLVED
1	2016-17	BSCI,II & III YEARS	26.10.2016	QUIZ COMPETITION	A.GANGADAR M.NAGU
3	2017-18	BSCI,II & III YEARS	22.10.2017	QUIZ COMPETITION	M.NAGU
4	2018-19	BSCI,II & III YEARS	26.11.2018	QUIZ COMPETITION	K.RAVI KUMAR

➤ These figures shows faculty conducting group discussion.



I. Group discussion

These figures shows conducting quiz competition.



-
- Further they are guided to do some projects to strengthen their application skills in the subject required during their study
 - The students are encouraged to take active part in extra-curricular activities like campus clean and green programme, blood donation camp, etc.

Teaching

- The teaching involves mainly lecture and discussion methods supplemented by seminars.
- In this process models, charts, CDs (PPT), OHP sheets are used.
- In the beginning of each academic year the annual academic plans are prepared by each lecturer. The syllabus is covered as per the academic plan.
- Teaching diary and teaching notes are maintained by every staff member
- Study material is supplied to the students.
- Most of the students admitted in 1st year B.Sc courses, come mainly from rural areas. So the department conducts bridge classes to cope with the syllabus, as there is marginal gap in the standards of intermediate and graduation.
- Students are encouraged to participate in seminars, quiz and group discussions conducted by the lecturers in their respective classes.
- The educationally backward students in each class are identified and are given remedial coaching.
- The students have been encouraged to collect different clippings related to the subject from newspapers and magazines.
- E-lessons: students are encouraged to watch MANA TV programmes
- Study material for some of the topics in the syllabus is downloaded from the internet and is supplied to the students and also kept in departmental library for ready reference.
- Some pictures are shown here using Information and Communication Technology (ICT)



Lecturers teaching with ICT in Classroom

Additional curricular modules: The following additional topics are in the curriculum for more exposure of the students to the subject:

- (a) Identification of chemical structure by spectroscopy
- (b) Theories of pericyclic reaction
- (c) d-orbital splitting pattern in different geometry of complexes
- (d) uses of Grignard reagent in organic synthesis

Learning:

- The students are encouraged to read textbooks from the college main library as well as the department library and discuss difficult topics with the staff members.
- The slow learners are identified and given remedial classes. Study material has been supplied on some selected topics
- Average students are encouraged to write assignments on the topics useful for the university examinations.
- The bright students are encouraged to undertake study projects.

SUM GOVERNMENT DEGREE COLLEGE

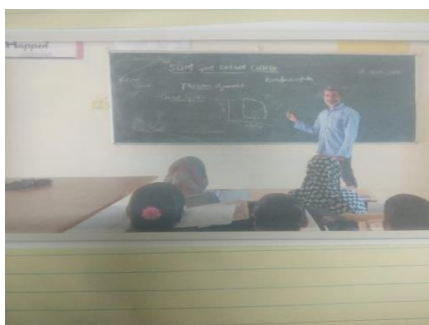
KONDANAGULA

DEPARTMENT OF CHEMISTRY

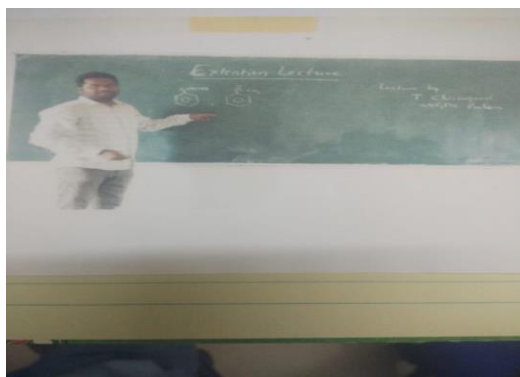
DETAILS OF EXTENSION LECTURES

S.NO	ACADEMIC YEAR	NAME OF GUEST LECTURER INVITED	DESIGNATION	NAME OF THE COLLEGE	DATE	EXTENSION LECTURE TOPIC
1	2016-17	Smt.K.RADHA	LECTURER IN CHEMISTRY	GOVT DEGREE COLLEGE, AMRABAD	18.11.2016	IMPORTENCE OF ELEMENTS
2	2017-18	SRI.T.CHIRANJEEVI	LECTURER IN CHEMISTRY	SV.GOVT DEGREE COLLEGE, PALEM	14.10.2017	IMPORTENCE OF ORGANIC CHEMISTRY
3	2018-19	SRI.C.RAMESH KUMAR	LECTURER IN CHEMISTRY	GOVT DEGREE COLLEGE, KOLLAPUR	13.02.2019	THERMODYNAMICS
4	2019-20	Smt.K.RADHA	LECTURER IN CHEMISTRY	GOVT DEGREE COLLEGE, AMRABAD	30.18.2019	C.F.T

Some of picture are shown here



Guest lecture by Dr.Ramesh Kumar, Dept. of chemistry, GDC Kolapur



Guest lecture by Chiramjeevi S V Govt Degree college Palem.



Guest lecture by K Radha Govt Degree college Ambrabad.

Classroom Seminars:

- To improve the presentation skills of the students, we are arranging the seminars regularly.
- The topics of seminar are given in advance to the students and the lecturer will guide them to present the seminar.
- Every year department of Chemistry conducted student Seminars

SUM GOVERNMENT DEGREE COLLEGE

KONDANAGULA

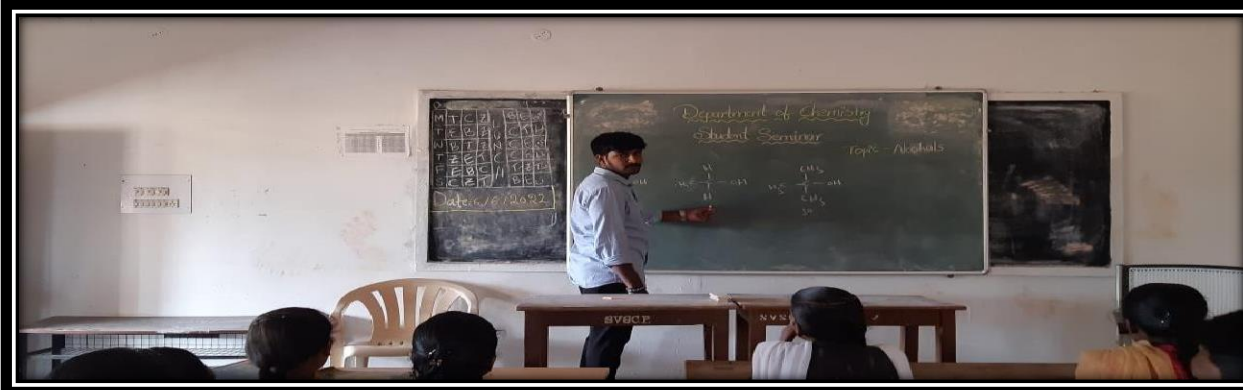
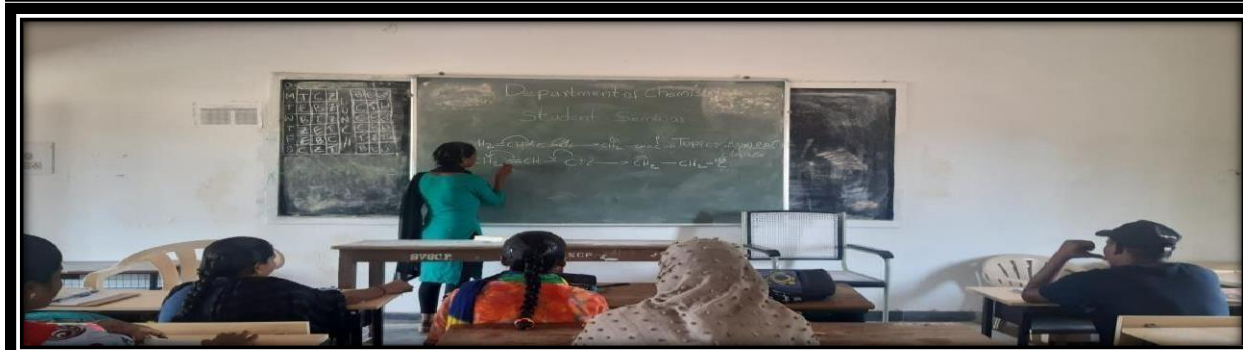
DEPARTMENT OF CHEMISTRY

DETAILS OF STUDENT SEMINARS

S.NO	ACADEMIC YEAR	NAME OF THE STUDENT INVOLVED	H.T.NO	GROUP	DATE	SEMINOR TOPIC	NAME OF THE LECTURER INVOLVED
1	2016-17	Y. VINOD	3051-14-445-529	BZC-III YEAR	15.11.2016	AMINO ACIDS	M.NAGU
		NIRANJAN BEE	3051-14-445-509	BZC-III YEAR	15.11.2016	JOBS METHOD	
		G.VASUNDHAR	3051-15-441-501	MPC-II YEAR	15.11.2016	KIRCHOFFS EQUATION	
		S.GANESH	3051-15-445-511	BZC-1 SEM	16.11.2016	HENS DECKER REACTION	
		A.MOUNIKA	305115445503	BZC-II YEAR	16.11.2016	ESTERIFICATION REACTION	
		J.PADMA	305115445508	BZC-II SEM	16.11.2016	PREPARATION OF PHEENOLS	
		CH.KRISHNAVENI	16033051441-503	BZC-1 SEM	17.11.2016	PREPARATION OF BOROZOLE	
2	2017-18	K.SHIVA	16033051445510	BZC-2 YEAR	12.10.2017	CFT OF T.D	M.NAGU
		CH.KRISHNAVENI	16033051441503	BZC-2 YEAR	12.10.2017	THERMO DINAMICS	
3	2018-19	K.GOWTHAMI	18033051445508	BZC-1 YEAR	01.10.218	M.O.T	K.RAVI KUMAR
		G.ANJALI	18033051441005	MPC-1 YEAR	01.10.2018	M.O.T	
		C.DEVI	18033051445001	BZC-II YEAR	02.01.2020	ALDOL CONDENTATION & REIMER-TIEMANN REACTION	
4	2019-20	C.ANITHA	17033051445503	BZC-II YEAR	02.01.2020	KOLBE SHMIDT REACTION	K.RAVI KUMAR
		T.RAJU	18033051445510	BZC-II YEAR	02.01.2020	CARBONYL COMPUNDS	
		M.PAVANI	18033051445511	BZC-II YEAR	02.01.2020	ALDOL CONDENTATION	

Student Seminars:





4. Research & Innovation :

Library as Learning Resource:

- Apart from the huge central library, the department has a library textbooks and rare collection of reference books and laboratory manuals. These books and manuals are lent to the students, which will be an additional reading material to them.
- The department has over head projector (OHP) which will be used for delivering extension lectures and additional inputs.

Promotion of Research: Study/Group Projects:

Every year faculty of the Department giving study projects to the meritorious students dividing into groups.

The objectives of the study projects are

- i. Enrich the student's knowledge.
- ii. Hands on experience.

The following study projects have been done by the students under the guidance of the faculty members.

Year wise Student study projects:

YEAR	COURSE	PROJECT NAME	NAME OF THE STUDENTS
2016-17	BZC(MPC& BZC)	Purification process in water plant	C Kalyani G Premalatha V Priyanka
2017-18	BSC(MPC& BZC)	Collection of Named reactions in Organic Chemistry	A Mounika G Narmada J Padma
2018-19	BSC(MPC& BZC)	To detect the presence of adulterants in sample of chilli powder and turmeric powder	CH Lingamaiah C Kalyani G Premalatha K Shiva K Sravani
2019-20	Bsc(MPC& BZC)	Determination of the contents of cold drinks and its side effects	A Ganesh N Sunitha P Rajitha
2021-22	BSC(MPC& BZC)	Water analysis	A Narendar K Renuka P Anil kumar B Saileela

5. INFRA STRUCTURE AND LEARNING RESOURCES:

LABS:

The department of chemistry consists of 2-well equipped lab catering to the needs of the students.

Lab1: Semi micro analysis

Analytical lab

Lab2: Volumetric analysis

Organic lab

Fig: students and Teachers in laboratory classes

In addition to these labs, there is well furnished staffroom and store room. Enough equipment is available for each student to do practical individually.



Apparatus are:

1. Conduct meters
2. PH Meters
3. Colorimeters
4. Centrifuges
5. Digital Balance
6. Simple Balance
7. Electric Water Baths
8. Chemistry Lab Glassware (Pipette, Burette, Flask....etc)
9. Hot Ovens, etc.

Library as learning resource:

Apart from the huge central library, the department has a library textbooks and rare collection of reference books and laboratory manuals. These books and manuals are lent to the students, which will be an additional reading material to them.

IT infrastructure:

- Department has internet system which is used by staff members as well as students
- The department has LCD projector which will be used for delivering extension lectures and additional inputs

5. STUDENT SUPPORT AND PROGRESSION:

- The Department maintains remedial coaching classes for academically backward students and their progress regularly monitored through tests.
- Department conducting M.Sc. (Chemistry) entrance coaching i.e. CPGET classes with P.G. faculty.
- Some of our students are pursuing higher education such as P.G. in different Universities.

-
- The students of recent past are working as teachers in various institutions.
 - Every year almost 2-3 students got P.G seats in various universities.
 - Some of the students resent pass joined in various courses.

6. GOVERNANCE LEADERSHIP AND MANAGEMENT:

Organization and management:

- The department functions under the supervision of the principal, through the head of the department.
 - The head of the department looks after day-to-day activities of the department.
 - Periodical meetings are held with the staff to discuss departmental activities and democratic are taken and implemented.
 - In addition to teaching work, the faculty looks after the admissions, examinations and other related works.
 - Faculty of the department prepares the annual action plan at the start of the academic year based on the academic calendar supplied by the Commissionerate of Collegiate Education.
 - Faculty frequently assembled and discusses the events conducting for students and these are recorded in minutes register.
 - Faculty member is working in various committees as members such as admission, Physical Education, UGC, NSS committees.
-
-

7. INNOVATIVE PRACTICES AND FUTURE PLANS

STRENGTH OF THE DEPARTMENT

- Some lectures are conducted through Power Point Presentation and PPT.
- Study Material and Question Bank are supplied to the slow learner students.
- Study Projects and Seminars presented by the students every year.
- Regular Field Trips are arranged to students for industrial exposure
- Additional inputs such as Paper clippings (subject wise and General) and Internet video lectures have been providing for students to enrich their knowledge.
- The Department encourages to take active part in extra-curricular activities like campus clean & green, awareness on Plastic ban & AIDS, blood donation camp, etc.

1. Best Practice: Hand sanitizer preparation

AIM: Clean hands are one of the surest ways to fight germs and keep yourself from getting sick. While washing them with soap and water is best, hand sanitizer is a good solution when you can't get to a sink.

Of course, at this covid pandemic situation department of chemistry SUM GDC Kondanagula planned to prepare alcohol based hand sanitizer

The composition of the sanitizer prepared is 75% isopropyl alcohol which effectively kills the corona virus undoubtedly

Chemical Required:

- 4 cups of isopropyl alcohol, also called rubbing alcohol (99%)
- ¼ cup household [hydrogen peroxide](#) (3%)
- 4 teaspoons [glycerin](#), sometimes called glycerol
- 1 cup [distilled water](#) (or water that has been boiled and cooled)
- A clean plastic or glass container that can hold around 8 cups
- Smaller containers if you want to divide up the final batch of sanitizer

You can halve or double the amounts in this recipe, depending on how much you need.

To make your [hand sanitizer](#) Procedure:

- [Wash your hands](#) to keep germs out of the mix.
- Clean the container you'll use to mix the sanitizer and any bottles you'll store it in. If the containers are heat-resistant, you can sterilize them in boiling [water](#) or in the dishwasher on high heat.
- Pour the isopropyl alcohol into the clean container.

- Mix in the hydrogen peroxide. It kills bacteria that can get into the bottles or the sanitizer as you make it. Take extra care with this step, since hydrogen peroxide may irritate your [skin](#)
- Add 4 teaspoons of glycerin. It helps protect your skin from drying out.
- Add 1 cup of sterile [water](#), and mix everything together.

If you divide the batch into smaller bottles, make sure that you use clean tools, like funnels, to transfer it. Then wait 72 hours before you use the sanitizer. That gives the hydrogen peroxide a chance to kill any germs that might have gotten into the solution while you made it.

The total alcohol in your hand sanitizer should be around 75%. You need 60% alcohol or more to effectively kill germs. A special instrument called an alcoholmeter can test levels if you're unsure.





Students giving filled sanitizer bottle to the Exam branch staff



Students with sanitizer for COVID FREE conduct of examinations

I. Awareness program on plastic Ban at Kondanagula village.



Field Trip :



As a part of Field trip students visited to learn Poultry management at Mailaram village

PPT'S BY DEPARTMENT OF CHEMISTRY

1. <https://1drv.ms/p/s!Agfq3Ik4cx9ddHlmG1pCmRrLhvY>
 2. <https://1drv.ms/p/s!Agfq3Ik4cx9dgSEE8fK1mBrA7-AP>
 3. <https://1drv.ms/p/s!Agfq3Ik4cx9dgSOiaGn5RufssAsY>
 4. <https://1drv.ms/p/s!Agfq3Ik4cx9dcb0-bpj5dMx25TU>
 5. <https://1drv.ms/p/s!Agfq3Ik4cx9dgStqX48qd8V-Z1ZL>
 6. <https://1drv.ms/p/s!Agfq3Ik4cx9dgRbHGYZqgGaFRztP>
 7. <https://1drv.ms/p/s!Agfq3Ik4cx9dgRRUP8Xr-0hHDeOH>
 8. <https://1drv.ms/p/s!Agfq3Ik4cx9ddgJR-6RJxqzyKuk>
 9. https://1drv.ms/p/s!Agfq3Ik4cx9dgS1_qsjZzzMXrVCi
 10. <https://1drv.ms/p/s!Agfq3Ik4cx9deh4ulkFyKJ3A7m0>
 11. <https://1drv.ms/p/s!Agfq3Ik4cx9dgS-1XmmAgG1aNQY9>
 12. <https://1drv.ms/p/s!Agfq3Ik4cx9dgSn87OUR8uVdhXd6>
 13. <https://1drv.ms/p/s!Agfq3Ik4cx9dgRIF3SsgFwlsdX3i>
 14. <https://1drv.ms/p/s!Agfq3Ik4cx9dgRiahaY7SBRynF57>
 15. <https://1drv.ms/p/s!Agfq3Ik4cx9dfkfQ9FZyzy019-w>
 16. <https://1drv.ms/p/s!Agfq3Ik4cx9dgQCJ70IjW8VWAoKR>
-

17. <https://1drv.ms/p/s!Agfq3Ik4cx9dgQIiMTk55DVSpbGP>
18. <https://1drv.ms/p/s!Agfq3Ik4cx9dgQShesOD1e5mK42Y>
19. <https://1drv.ms/p/s!Agfq3Ik4cx9dgQZ02Vs-gBhhd5MY>
20. <https://1drv.ms/p/s!Agfq3Ik4cx9dgQrm8g76tFjWe4kN>

YOUTUBE VIDEO CLASSES LINKS BY DEPARTMENT OF CHEMISTRY

S.NO.	TOPIC	YOUTUBE LINK	DURATION
1	Alcohols	https://youtu.be/Sz-v-j4tDbw	22min
2	Carboxylic Acids	https://youtu.be/Sz-v-j4tDbw	36min
3	Introduction of Vitamins	https://youtu.be/Sz-v-j4tDbw	37min
4	Vitamins	https://youtu.be/NTbBVHbDEkY	37min
5	Vitamins	https://youtu.be/ZU6v45RPy9U	36min
6	Vitamins	https://youtu.be/u06kXBwjKZ0	37min
7	Alkyl Halides	https://youtu.be/G0uIIbFJCx8	36min
8	Alkyl Halides	https://youtu.be/QPKPFtsDHr8	32min
9	Preparation methods of Alkyl halides	https://youtu.be/ctmClvodLGU	41min
10	Coordination Compounds	https://youtu.be/ctmClvodLGU	32min
11	Bonding in Coordination Compounds	https://youtu.be/-0Iyr12PtGo	35min
12	Isomerism in Coordination Compounds	https://youtu.be/ht2zQ9HoSjg	35min
13	Types of Ligands	https://youtu.be/Z-uofR9AYWE	34min

14	Introduction of Coordination Compounds	https://youtu.be/ht2zQ9HoSjg	36min
15	Preparation of aminoacids	https://youtu.be/Z-uofR9AYWE	37min
16	Classification of aminoacids	https://youtu.be/kp3gpjVhudw	32min
17	structure of Chlorophyll	https://youtu.be/PHR9-EUlbIY	31min
18	Structure of Haemoglobin	https://youtu.be/i4gLLbw9220	26min
19	Introduction of Bioinorganic chemistry	https://youtu.be/Rt542uzxmhM	31min
20	Basics of Thermodynamics	https://youtu.be/1nStgLrL3BE	31min
21	Phase Rule	https://youtu.be/2bqhLti4I	44min
22	Terms in Phase Rule	https://youtu.be/VKdj mUr-dDE	40min

ONLINE CLASSES

4:28 VoLTE 4G 60%

Close **Participants (14)**

Search

- Department of Chemist... (me, host) [mute] [mic]
- .. [mute] [mic]
- A ABC [mute] [mic]
- B Afrin [mute] [mic]
- BL Bhagya laxmi [mute] [mic]
- B Bujji [mute] [mic]
- Girappa Raju kumar [mute] [mic]
- OA OPPO A15s [mute] [mic]
- PRAVEEN [mute] [mic]
- RR R. Rajeshwari [mute] [mic]
- SA Sheri Akhila [mute] [mic]
- SN Shetkar nikhitha [mute] [mic]
- S Sravani [mute] [mic]

Invite Mute All ...

3:04 VoLTE 4G 82%

Close **Participants (17)**

Waiting(1)

- N Neha Joining...

Participants(16)

Search

- Department of Chemist... (me, host) [mute] [mic]
- N Narsamma [mute] [mic]
- [emojis] [mute] [mic]
- B Afrin [mute] [mic]
- BL Bhagya laxmi [mute] [mic]
- GR Girappa Raju kumar [mute] [mic]
- KR K. Radhika chouhan [mute] [mic]
- LB lucky boy Ravi R [mute] [mic]
- PRAVEEN [mute] [mic]
- RR R. Rajeshwari [mute] [mic]

Invite Mute All ...

3:15 VoLTE 4G 87%

Close **Participants (15)**

Search

- Department of Chemist... (me, host) [mute] [mic]
- R RRR [mute] [mic]
- .. [mute] [mic]
- B Afrin [mute] [mic]
- BL Bhagya laxmi [mute] [mic]
- Girappa Raju kumar [mute] [mic]
- N Narsamma [mute] [mic]
- N Neha [mute] [mic]
- R Radhika [mute] [mic]
- R Redmi [mute] [mic]
- Shekhar m [mute] [mic]
- SN Shetkar nikhitha [mute] [mic]
- SM Shivaranjani Mudhiraj [mute] [mic]

Invite Mute All ...

3:36 VoLTE 4G 84%

Close **Participants (18)**

Search

- Department of Chemist... (me, host) [mute] [mic]
- B Afrin [mute] [mic]
- BL Bhagya laxmi [mute] [mic]
- Donga [mute] [mic]
- Girappa Raju kumar [mute] [mic]
- N Narsamma [mute] [mic]
- N Neha [mute] [mic]
- OA OPPO A15s [mute] [mic]
- PRAVEEN [mute] [mic]
- R Radhika [mute] [mic]
- R Redmi [mute] [mic]
- R RRR [mute] [mic]
- Shekhar m [mute] [mic]

Invite Mute All ...

WEAKNESS OF THE DEPARTMENT

- ✓ Lack of modern lab equipments
- ✓ Poor communication skill in both verbal and non-verbal
- ✓ Shortage of faculty members
- ✓ More number of skilled students are not available
- ✓ More dropouts due to admissions in technical courses.

FUTURE PLAN OF THE DEPARTMENT

- ✓ To start M.Sc., Analytical Chemistry course
- ✓ To develop the Labs with latest equipment
- ✓ To introduce a certificate course in analytical techniques
- ✓ To conduct program's P.G. level
- ✓ To develop life skills, to conduct development programmes regularly after the class hour
- ✓ To train the students for job opportunities
- ✓ To give various project works so as to develop the department.
- ✓ To aware utilizing the gobar gas (methane)for cooking.

THANK YOU