

**Shri Jivanrao Sitaram Patil Munghate Arts, Comm., & Science  
College, Dhanora, Dist. Gadchiroli**

(Affiliated to Gondwana University, Gadchiroli)

**DEPARTMENT OF ENGLISH**

**Teacher Name: Prashant G. Walke**

**Course Outcome of B. A. First**

<b>COURSE OUTCOME</b> <b>B. A. Semester-I</b>	
<b>Course</b>	<b>Outcomes</b>
	<b>After completion of the courses' students should be able to;</b>

<p><b>Compulsory English</b></p>	<p><b>CO-1:</b> To understand the Prose with better comprehension and to Develop the interest among the learner of English as Second Language (ESL) by the given lessons.</p> <ol style="list-style-type: none"> <li>1. The Romance of a Busy Broker - O. Henry</li> <li>2. The Rocking – Horse Winner - D.H. Lawrence</li> <li>3. The Bet - Anton Chekov</li> <li>4. The Highway - Ray Bradbury</li> </ol> <p><b>CO-2:</b> To understand the Poetry with beauty of images.</p> <ol style="list-style-type: none"> <li>1. Lucy - William Wordsworth</li> <li>2. The Duck and the Kangaroo - Edward Lear</li> <li>3. Escape at Bedtime - R. L. Stevenson</li> <li>4. The Wild Swans - W. B. Yeats</li> </ol> <p><b>CO-3:</b> To understand the Communication Skill for better communication ability.</p> <p><b>CO-4:</b> To discuss and to Comprehend Unseen Passage.</p> <p><b>CO-5:</b> To Learn the Grammar:</p> <ol style="list-style-type: none"> <li>1. Articles</li> <li>2. Prepositions</li> <li>3. Tenses (use of appropriate form of verbs)</li> </ol> <p><b>CO-6:</b> To understand the Mechanism of sentence building By Transformation of Sentences i) Remove ‘too’ ii) (Use “No Sooner.....than”)</p> <ol style="list-style-type: none"> <li>iii) Question tag</li> <li>iv) Exclamatory Sentences- Assertive Sentence</li> <li>v) Wh-question</li> </ol>
<p><b>COURSE OUTCOME</b> <b>B.A – Semester-II</b></p>	
<p><b>Course</b></p>	<p><b>Outcomes</b></p>
	<p><b>After completion of these courses’ students should be able to;</b></p>

<b>Compulsory English</b>	<p style="text-align: right;">better</p> <p><b>CO-1:</b> To understand the Prose and to develop the Comprehension skill for language learning.:</p> <ol style="list-style-type: none"> <li>1. A Canary for One E. Hemingway</li> <li>2. Lawley Road R.K. Narayan</li> <li>3. The Mother of a Traitor Maxim Gorky.</li> <li>4. Kong Yigi Lu Xun</li> </ol> <p><b>CO-2:</b> To understand the Poetic Images by the Poetry :</p> <ol style="list-style-type: none"> <li>1. All in June W.H.Davies</li> <li>2. The Little waves of Breffny Eva Gore Booth</li> <li>3. The Best School D.H. Lawrence</li> <li>4. To the Indians Who Died in Africa T.S. Eliot</li> </ol> <p><b>CO-3:</b> To Develop the ability of better communication. Communication Skills</p> <ol style="list-style-type: none"> <li>1. Making Inquiries on the Phone</li> <li>2. Making Requests and Responding to Requests</li> <li>3. Thanking Someone and Responding to Thanks</li> <li>4. Inviting, and Accepting and Refusing an Invitation.</li> <li>5. Congratulating and Responding to Congratulations.</li> </ol> <p><b>CO-4:</b> To understand and to develop the writing ability. Letter Writing:</p> <p><b>CO-5:</b> To learn the grammar for better understanding and accuracy in learning of English as Second language.(ESL). Grammar:</p> <ol style="list-style-type: none"> <li>1. Kinds of sentences (Simple, Compound &amp; Complex)</li> <li>2. Active and Passive Voice</li> <li>3. One Word Substitution</li> </ol>
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**Course Outcome of B. A. Second**

<b>Course Outcome-B. A. Second Year Semester III</b>	
<b>Course</b>	<b>Outcomes</b> <b>After completion of the courses' students should be able to;</b>

<p><b>Compulsory English</b></p>	<p><b>CO-1:</b>To understand the Prose and to develop the better Comprehension skill for language learning PROSE</p> <ol style="list-style-type: none"> <li>1. Speech of Indian Independence : Jawaharlal Nehru</li> <li>2. Water : The elixir of Life : C. V. Raman</li> <li>3. The Human Environment : Indira Gandhi</li> <li>4. Mother Teresa : John Frazer</li> </ol> <p><b>CO-2:</b> To understand the Poetry with beauty of images</p> <ol style="list-style-type: none"> <li>1. Sonnet 29 : William Shakespeare</li> <li>2. She Walks in Beauty : Lord Byran</li> <li>3. Gandhi Maharaj : R. Tagore</li> <li>4. Stopping by Woods on a Snowy Evening : Robert Frost.</li> </ol> <p><b>CO-3:</b>To Develop the ability of better communication. Communication Skills</p> <ol style="list-style-type: none"> <li>1.Giving Personal Information</li> <li>2.Taking and Leaving Messages</li> <li>3.Giving Introductions and Seeking Clarifications</li> </ol> <p><b>CO-4:</b> To understand and to develop the writing ability. Paragraph Writing</p> <p><b>CO-5:</b>To learn the grammar for better understanding and accuracy in learning of English as Second language.(ESL). Grammar:</p> <ol style="list-style-type: none"> <li>1.Subject- Verb Agreement</li> <li>2.Do as Directed <ol style="list-style-type: none"> <li>a) Interrogative</li> <li>b) Negative</li> <li>c)Assertive</li> <li>d)Exclamatory</li> <li>e)Degree of Comparison.</li> </ol> </li> </ol>
<p><b>Course Outcome- B.A.SemesterIV</b></p>	
<p><b>Course</b></p>	<p><b>Outcomes</b></p>
	<p><b>After completion of these courses' students should be able to;</b></p>

**Compulsory  
English**

- CO-1:**To understand the Prose and to develop the better Comprehension skill for language learning PROSE
1. Wings of Fire : A. P. J. Abdul Kalam
  2. Education : Indian and American : Anurag Mathur
  3. Mohammad Yunus : An Economist for Peace : Farida Khan.
  4. Making History along the Way : Barack Obama : Domenick Di Pasanale
- CO-2:** To understand the Poetry with beauty of images
1. Bangle Sellers :Sarojini Naidu
  2. See off the Shine : Imogen Grosberg.
  3. An old Woman :ArunKolatkhar
  4. Father Returning Home :DilipChitre
- CO-3:**To Develop the ability of better communication.  
Communication Skills
- 1.Apologizing
  - 2.Asking For Giving and Refusing Permission
  - 3.Describing Daily Routine
- CO-4:** To understand and to develop the comprehensive skills  
Unseen Passage
- CO-5:** To learn the grammar for better understanding and accuracy in learning of English as Second language.(ESL).  
Grammar:
- 1.Punctuation
  - 2.Use of Idioms and Phrases
  - 3.Formation of Adjectives, Nouns , Adverbs
  - 4.Narration ( Direct and Indirect Speech)

**Course Outcome of B.A. Third**

<b>Course Outcome- B.A.Semester V</b>	
<b>Course</b>	<b>Outcomes</b>
	<b>After completion of these courses' students should be able to;</b>

**Compulsory English**

**CO-1:**To understand the Prose and to develop the better Comprehension skill for language learning PROSE

1. The Thief-Ruskin Bond
2. What is courage? William Slim
3. Three Hermits-Leo Tolstoy
4. A Cup of Tea-Katherine Mansfield

**CO-2:** To understand the Poetry with beauty of images

1. Money Madness : D. H. Lawrence
2. Where the mind is without fear :R.Tagore
3. The felling of the Banyan Tree :DilipChitre

**CO-3:**To Develop the ability of better communication.  
Communication Skills

1. Apologizing
2. Asking For Giving and Refusing Permission
3. Describing Daily Routine

**CO-4:** To understand language and to develop the better comprehensive skills

One Act play (Villa for sale : SachaGuitry)

**CO-5:**To learn the idea of writing for better learning of English as Second language.(ESL).

Writing Skills

1. Report writing (News reports and official reports)

<b>Course Outcome- B.A.SemesterVI</b>	
<b>Course</b>	<b>Outcomes</b>
	<b>After completion of these courses' students should be able to;</b>
<b>Compulsory English</b>	<p><b>CO-1:</b> To understand the Prose and to develop the better Comprehension skill for language learning PROSE</p> <ol style="list-style-type: none"> <li>1. The Gold Frame : R. K. Laxman</li> <li>2. Socrates and the School Maser- F.L.Brayne</li> <li>3. The Sun, The Planets and the Stars : C. Jones.</li> <li>4. Why is the Sea Blue :G.Venkataraman</li> </ol> <p><b>CO-2:</b> To understand the Poetry with beauty of images</p> <ol style="list-style-type: none"> <li>1. Ulysses G. M. Lord Tennyson</li> <li>2. A River ; A.K. Ramanujan</li> <li>3. Success is counted Sweetest Periods : Emily Dickinson.</li> </ol> <p><b>CO-3:</b> To understand language for better comprehension and to develop the language skills like listening and speaking One Act play (Day of Atonement-Margaret Wood)</p> <p><b>CO-4:</b> To learn the idea of writing for better learning of English as Second language.(ESL) with a critical thinking. Writing Skills</p> <ol style="list-style-type: none"> <li>1. Essay Writing.</li> </ol>

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**DEPARTMENT OF MARATHI**

**PROGRAM OUTCOMES**

**B.A. MARATHI LITERATURE**

1. Develop Attitude of Literary Forms. (Marathi Poetry, Drama, Novel, Story & n Travelogue )
2. Develop Reading, Writing & Communication Skills of Students.
3. Information about Literary Theory.
4. Develop Attitude of Marathi Linguistics & Grammar.
5. Gain Knowledge, skill and positive attitude towards Marathi Literature.
6. Develop critical and analytical thinking & social interaction and cultural understanding.
7. Understand how society has changed and developed from past to present.
8. Improve their creative writing abilities towards writing in Marathi to enable them to  
Contribute towards Marathi literature.
9. The relation between language and literature
10. Introduction and practice of subjects covered in the study of literature
11. The ancient and medieval versions of Marathi and the types of literature involved.
12. Study of principal types of the novel and the drama.

**COURSE OUTCOMES**

**MARATHI LITERATURE**

**B.A. SEM. I**

**After completion of B. A. Sem I with Marathi Literature students will be able to-**

1. Gain knowledge about stories of different writers like GangadharGadgil, VenkateshMadgulkar, Shankar Patil, BaburaoBagul, G .A. Kulkarni, Kamal Desai
2. Learn to analyze, interpret and develop employable skills.
3. Learn to understand and analyze the character value of Heroes of the story.
4. Develop communicative and practical skills.



5. Develop literary criticism attitude and Students Learn Literary Criticism and Theory from Sahityvichar

### **B.A. SEM. II**

**After completion of B. A. Sem II with Marathi Literature students will be able to-**

1. Gain knowledge about Novel of S.. N. Pendase - "Garambichabapu".
2. Learn to understand and analyse the character value and real life hero of social work.
3. Learn about social, moral and religious values.
4. Develop communicative and practical skills.
5. Develop literary criticism attitude and Students Learn Literary Criticism and Theory from Sahityvichar

### **B.A. SEM. III**

**After completion of B. A. Sem III with Marathi Literature students will be able to-**

1. Gain knowledge about criticism of books, its characters, style, plot, language and expression.
2. Learn to understand and analyze the character value of hero of the drama "Natsamrat".
3. Understand the difference between drama and Act- play. Also develop social, moral and critical value from the role of characters played in the text book of Tragedy "Natsamrat" writer by V.V. Shirwadkar.
4. Gain knowledge about criticism (sahityavichar) and develop critical and analytical thinking.
5. Develop communicative and practical skills.

### **B.A. SEM. IV**

**After completion of this course, students will be able to:**

1. Learn poetries of Keshaosut, B. S. Mardhekar, Narayan Surve, VitthalWagh, BhujangMeshram, DayaPawar, Niraja, HemantDivate.
2. Learn and enjoy poems. Those are sort of parodies which enhance philosophy of human.
3. Develop literary criticism attitude and Students Learn Literary Criticism and Theory from Sahityvichar

### **B.A. SEM. V**

**After completion of this course, students will be able to:**

1. Learn about characters from the Biography of mahanubhavSantGovind- Prabhu.
2. Analyze depth in the Powada and Lawani poem.

3. Learn to write critical appreciation of the poems.
4. Gain knowledge about the writer and poets of ancient era.
5. Study about Marathi WangmyachaItihas written by Nasirabadkar
6. Gain knowledge about Saint Tukaram, Saint Dnyaneshwar, Saint Namdev and Saint Ekanath.
7. Gain knowledge about the poets and poems of critical period (1600-1900)
8. Gain knowledge about the writer and poets of modern era like kayyashastra

### **B.A. SEM VI**

**After completion of this course, students will be able to:**

1. Students Learn travelogue written by P. L. Deshpande.
2. Gain knowledge of descriptions of London, Paris, Germany, Scotland.
3. Students aware of tourist Place and their Culture and Society.
4. Develop Attitude of Marathi Linguistics.
5. Learn about special writers and their literature like P.L.Deshpandey's Apuravai
6. Study about Marathi language phonetics in Bhashavighayan by Dr S.G.Malshe.
7. Gain knowledge about different cultures and traditions by travelling through different countries while reading Deshpandey's Apuravai

## **PROGRAM OUTCOMES**

### **B.A. MARATHI**

1. Develop competency in Literary Forms (Marathi poetry, autobiography, novel, short story, drama & performing prose)
2. Develop Reading, Writing & Communication Skills in Marathi.
3. Get Information about the history of Saint Literature.
4. Get Information about the history of MODERN Marathi Literature.
5. Apply the study of Marathi Linguistics & Grammar in their practical life.
6. Study News Writing for Media. Nurture themselves in soft skills and develop research aptitude.
7. Find jobs for their livelihood be motivated for their further education.
8. The development of the basic language skill- listening, speaking, reading and writing communication skills.

9. Develop Social and moral values and responsibility

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10. Develop communication skill

11. Comprehension of the writers and poets

12. Develop an interest for the Marathi Language

13. Improve Language Skill, Speaking Skill, Listening Skill, Reading Skill and Writing Skill

14. Develop Philosophical and Social thoughts by studying prose and poetry

## **COURSE OUTCOMES**

### **MARATHI**

#### **B. A. SEM I**

**Students after completion of B.A. Semester I with compulsory Marathi will be able to-**

1. Gain knowledge about different writers like Sane Guruji, Mhainbhatt ,Dr. B. R. Ambedkar , P. K. Attre, V. S. Khandekar ,and VijayaRajadhaksha. Poets like Sant Namdeo, SantTukadojiMaharaj, AnantFandi ,BahinabaiChaudhari, MangeshPadgawkar and IndrajitBhalerao and real life social workers like BaburaoBagul.
2. Learn about social, moral and religious values.
3. Develop logical, critical and analytical thinking aptitude.
4. Develop reading, writing and communicative skills.
5. Understand the philosophical values and notion for life

#### **B. A. SEM II**

**Students after completion of B.A. Semester II with compulsory Marathi will be able to-**

1. Gain knowledge about different writer like G. G. Agarkar, Gadgebaba, Y.Waghamare, N. Mirjkar, B.Kale and UrmilaPawar& poet Saint Dhyaneswar, B. S. Mardhekar, ShantaShelake, VitthalWagh, SudhakarGaydhani, KusumAlam.
2. Understand and analyze the social work and Self work and develop logical, critical and analytical thinking aptitude.
3. Learn tradition and culture of Indian villages and develop reading, writing and communicative skills.
4. Develop social responsibility by understanding prose and poetry

### **B. A. SEM III**

**Students after completion of B.A. Semester III with compulsory Marathi will be able to-**

1. Gain knowledge about different writers like Lokhitwadi, Mahatma phule, Narendra Dabholkar, MadhukarwakodeWakode, B. L. Bhole and IsadasBhadke& poet like that Saganbhau, SavitrybaiPhule, YeshwantManohar, KalpanaDudhal, P. Vitthal and Erfan Sheikh stories while reading text.
2. Learn to understand and analyze the character value and real life hero of social work.
3. Learn about social moral and religious values.
4. Gain knowledge of social structure and problems of society.
5. Learn moral ethics of humanity

### **B.A. SEM IV**

**Students after completion of B.A. Semester IV with compulsory Marathi will be able to**

1. Gain knowledge of about different writers like ShahuMaharaj, JyantNarlikar, Social worker like Dr.Abhay Bang, Shankar Kharat, SharachhandraMuktibodh and Anil Awachat. Poets like Kusumagraj, Baba Amate, Indira Saint, Chandrakant Patil, BabanSaradkar and Anuradha Patil, while reading their text.
2. Learn about characters, Biography and social workers.
3. Develop the skills of writing poems and articles.
4. Learn moral ethics of humanity
5. Develop ability to understand shadows of words

### **B.A. SEM V Communicative Marathi**

**Students after completion of B.A. Semester V with communicative Marathi will be able to-**

1. Learn about role and applications of communicative Marathi language.
2. Develop writing skills and Learn to write precise, reports and translations. .
3. Broaden the knowledge of Marathi language.
4. Learn to transfer information and also learn about techniques used to face and write reports of interviews.
5. Learn to comprehend and write notices and also learn the role and importance of internet in learning Marathi language
6. Develop Writing skills, vocabulary, and expression through presentations.
7. Gain knowledge of Editing Process, Magazine Editing, Report Writing and Interview Skill

8. Develop soft skill among the students

### **B.A. SEM VI Communicative Marathi**

**Student after completion of B.A. Semester VI with communicative Marathi will be able to**

1. Develop knowledge of vocabulary and grammar. Learn expression and translation.
2. Learn to analyze interpret and write advertisement and report which also develops employable skills.
3. Learn to write invitations of different forms. and also learn about journal front page and last page writing and News in news paper, Television and Radio.
4. Develop skills to write and read news at radio & T.V. station.
5. Develop the practical approaches and opportunities for the employment among the students by using Functional Marathi Language
6. Gain knowledge of Creative Writing, Letter Writing, Advertisement Writing, Proof Reading, Paragraph Writing and Travelogue Writing

### **COURSE OUTCOMES B.Sc. PART I**

#### **SEMESTER I**

**After completion of B. Sc. SEM I with Marathi students will be able to-**

1. Gain knowledge of about different writers, poet and novels, social workers, get introduction of different types of people while reading text. Writer by Gadgebaba, Dr. B. R. Ambedkar, JyantNarlikar, KachruGirhe and UttamKamble. Poet by Saint Dyaneshawar, Keshawsut, B. S. Mardhekar, Kusumagaj and UshakiranAtram
2. Learn to analyze, interpret and write advertisement and reports.
3. Develop writing and communicative skills
4. To acquire conversational skill in daily life
5. To understand the basic concept of literary genre, poem, prose and stories.
6. To sharpen their critical, creative and analytical skills and enhance their proficiency in Marathi Language

**SEMESTER II**

**After completion of B. Sc. SEM II with Marathi students will be able to -**

1. Gain knowledge of about different writers V. D. Sawarkar, RastantTukdojiMaharaj , P. L. Deshapende ,VasantWarhadpande and Baba Bhand. Poet by Saint Tukaram , Sane Guruji , Keshavkumar , ShantaShelake , DyaneshWakudkar
2. Develop skill of Grammar and Letter writing
3. Learn tradition and culture of Indian villages
4. Aware the Problems of Society
5. To sharpen their critical, creative and analytical skills and enhance their proficiency in Marathi Language

**Dr.Ganesh N. Chudari**  
Professor & HOD  
Department of Marathi



**Shri Jivanrao Sitarampatil Munghate Arts, Science & Comm.  
College, Dhanora, Dist. Gadchiroli**

(Affiliated to Gondwana University, Gadchiroli)

**Department of Sociology**

**Programme Outcome:**

**B A in Sociology**

**Course offered: UG**

<b>Class</b>	<b>Semester</b>	<b>Course</b>	<b>Type (Optional, Elective, Compulsory, etc)</b>
B.A.I	Sem-I	Introduction to Sociology	Compulsory
	Sem-II	Introduction to Sociology	Compulsory
B.A.II	Sem-III	Indian Society: The Structural Issues	Compulsory
	Sem-IV	Social Problems in Contemporary India	Compulsory
B.A.III	Sem-V	Sociology of Tribal Society	Compulsory
	Sem-VI	Sociology of Tribal Society	Compulsory



## Programme & Course Outcomes

Program Name	Course code	Name of the course	Programme Outcomes
B.A.I		Introduction to Sociology	<ol style="list-style-type: none"> <li>1 .Students are Introduced the basic concepts in Sociology.</li> <li>2. Students are familiarized with the theoretical aspect of different concepts.</li> <li>3. Students understand the scope and importance of Sociology, which increase their interest in Sociology.</li> <li>4. Students will understand the relationship of Sociology with other social Sciences.</li> <li>5.The study of all basic concepts develops the sociological approach in the students.</li> </ol>
B.A.Sem-III		Indian Society: The Structural Issues	<ol style="list-style-type: none"> <li>1. Students are awarded towards contemporary issues.</li> <li>2 .Students inculcate responsibilities and promote equality.</li> <li>3. Students familiar with the problems of Poverty and Unemployment.</li> <li>4. Students will understand Structural issues and problems like Inequality on the basis of Caste, also Understand the discrimination on the basis of Socio, Economic, Cultural and Religious factor.</li> <li>5. Students will understand the correlation of various problems with the population issue. they also get knowledge about population policy, Family planning , and importance of population education for development.</li> </ol>

B.A.Sem-IV		<b>Social Problems in Contemporary India</b>	<ol style="list-style-type: none"> <li>1. Students will know the meaning of social problems, and real common causes of various social problems. So they get insight about reality of Indian society.</li> <li>2. Students understand the complexities and multifaceted contemporary issues and problems of Indian Society.</li> <li>3. Students prepare for various competitive examinations, Major role of this syllabus in various important examination, improve their interest in Study.</li> </ol>
B.A.B.A.Sem-V & VI		<b>Sociology of Tribal Society</b>	<ol style="list-style-type: none"> <li>1. Students will aware about the reality of Tribal society. so they will be more conscious about tribal society.</li> <li>2. Students understand the major problems of Tribal society in India, and try to find out the remedies on these problems, which develop diagnostic approach in them.</li> <li>3. Students familiar with the Social Mobility and change in tribal society.</li> <li>4. Students familiar with the major tribes in India, Maharashtra and Vidarbha.</li> <li>5. Students will understand the nature and functions of various Tribal social institutions like Family, Marriage and Kinship.</li> </ol>

**Shri Jivarao Sitaram Patil Munghate Arts, Comm., & Science College**  
**DhanoraDist -Gadchiroli**  
**Department of History (UG)**  
**Discipline - Humanities**  
**Bachelor of Art Three Year Degree Course in Choice Based Credit System**

**Objectives**

To provide a coherent historical understanding of Indian history from ancient history to modern history and world modern history.

To familiarise students with significant developments in the history of India and certain other parts of the world, through different time periods.

The course aims to make the students challenge the idea of history as seamless, or historical knowledge as a fixed/finished product that the textbooks at the school level create.

It seeks to expose students to various problems and conflicts that are an inherent part of the historical exercise of reconstructing the past.

The purpose is to sensitize students to the existence and desirability of multiple perspectives through which knowledge about the past is constructed. Probably the most important goal is to enable students to cultivate a historically sensitive way of thinking with due regard to time, place, context and roles of human agencies involved.

Thus, the students are encouraged to think critically, analyse different perspectives and actively process Information about the past rather than become passive recipients of singular historical knowledge.

## **Programme Outcomes (POs)**

- 1 **Historiographical Literacy.** Students will be able to identify and describe the on tours and stakes of conversations among historians within defined historiographical fields.
- 2 **Critical Thinking.** Students will learn to apply historical methods to evaluate critically the record of the past and how historians and others have interpreted it.
- 3 **Research Skills.** Students will acquire basic historical research skills, including (as appropriate) the effective use of libraries, archives, and databases.
- 4 **Communication Skills.** Students will learn to organize and express their thoughts clearly and coherently both in writing and orally.
- 5 **Writing and Intellectual Integration.** Students should demonstrate their mastery of the knowledge and skills involved in historical practice by conceptualizing and executing a significant piece of original research.
- 6 **Historian.** With so much debate over the authenticity of historical books, there is ever increasing demand for historian.
- 7 Integrate student's learning across all facets of their lives.

### **Programme Specific Outcomes (PSOs)**

1. Students understand background of our religious, customs institutions, administration and so on.
2. Students understand the present existing social, political religious and economics condition of the people.
3. Analyze relationship between past and present is lively presented in the history
4. Develop practical skill helpful in the study and understanding of historical events. They draw historical maps, charts & diagrams. Prepare historical model, tools.
5. Students develop interest in the study history & activities relating to history. They collect ancient arts, old coin, write article on historical topic,
6. Students visit places of historical site, museums & archives.
7. The study of history helps to impart moral education
8. Understand the history of world with comparative approach.
9. For history graduate, the option of public services like UPSC & MPSC are always open
10. Travel & tourism expert with an extensive knowledge of history & historical monuments, history graduate can work as a travel expert for tourist spot of historical importance.

### **Course Outcomes (COs)**

## **B.A. Semester I**

### **Indian History (Earliest time to 1351 A.D.)**

#### **Course Outcomes**

1. From this segment of the syllabus student learn about the history of Ancient Civilizations of India
2. Sources of ancient, Mediaeval India, Civilizations like Indus and Aryan, political and religious changes in 6th to century B.C to 12th. Mauryan Empire etc are studied.
3. Develop the ability to understand the origin and tents of Jainism and Buddhism.
4. From this segment of the syllabus student aware about the history of Ancient India to 1200 A.D.

## **B.A. Semester II**

### **Course Code- 02BAHISIH Indian History (1526 to 1761 A.D.)**

#### **Course Outcomes**

1. This paper deals with political, economic and social changes of India
2. To understand rise and establishment of Mughal dynasty in India.
3. Students can demonstrate knowledge and comprehension of social change, Social Control, stratification and social structure of Medieval India.
4. Know about the war of succession or Shahjahan and understand the Deccan Policy of Aurangzeb. 3. Introduction to history of Marathas; understand significance of coronation and administrative system of Chhatrapati Shivaji.

## **B.A. Semester III**

### **Modern India (1757 to 1920 A.D.)**

#### **Course Outcomes**

1. This paper studies about Formation, Expansion and Consolidation of British Empire in India under East India Company
2. Student will be able to understand and describe the concept of Political & social problems, Indian Society, and how to fight
3. Analyse policies of Governor-Generals in India under East India Company's rule.
4. Analyse the causes of rise of Indian nationalism and emergence of local organisations.

## **B.A. Semester IV**

### **Modern India (1920 to 1971 A.D.)**

#### **Course Outcomes**

1. This paper gives an idea about the British Empire in India under the British Crown and also the consequences of national Movement of India.
2. Understand the phases of Indian National Movement and its impact under the leadership of Mahatma Gandhi.
3. Examine role of Subhash Chandra Bose and his formed INA in struggle of Indian Independence.
4. Student will be able to describe and understand the basic concepts and Salient Features of Indian Constitution

## **B.A. Semester V**

## **Modern World (1775 to 1920 A.D.)**

### **Course Outcomes**

1. Introduction to landmark events in World history.
2. Student will be able to describe and understand and deals with changes of Europe after the American, French and Russian Revolution and political changes in the countries like Prussia, Italy and Russia etc
3. Understand policy of imperialism and changes in world political order.
4. Critically analyze background of First World War and international peace making attempts that followed.

## **B.A. Semester - VI**

### **Modern World (1920 to 2000 A.D.)**

### **Course Outcomes**

1. Analyses causes for the rise of dictatorship in Europe.
2. Understand international crisis; inter world war period politics and events leading to Second World War and its aftermath.
3. Understand world politics after World War and attempts to restore World peace.
4. The students to analyse and critique the ideas. This paper deals with political, economic and Social changes of European countries like America, Germany, France, Spain, Austria, Russia, Japan etc
5. Students understand the world development of Science and Technology & able to acquire knowledge about 20th century world

### **Learning Outcomes (LOs)**



## **B.A. Semester - I**

### **Indian History (Earliest time to 1351 A.D.)**

#### **Learning Outcomse**

1. From this segment of the syllabus student learn about the history of Ancient Civilizations of India
2. Sources of ancient, Mediaeval India, Civilizations like Indus and Aryan, political and religious changes in 6th to century B.C to 14<sup>th</sup>. Mauryan Empire etc are studied.
3. From this segment of the syllabus student aware about the history of Ancient India from 300 A.D. TO 1200 A.D.

## **B.A. Semester II**

### **Indian History (1526 to 1761A.D.)**

#### **Learning Outcomes**

1. From this paper student can get idea about Islamic (1206-1526) role in India.
2. This paper deals with political, economic and social changes of India
3. Students can demonstrate knowledge and comprehension of social change, Social Control, stratification and social structure. Of Medieval India

**B.A. Semester III**  
**Modern India (1757 to 1920 A.D.)**

**Learning Outcomes**

1. This paper studies about Formation, Expansion and Consolidation of British Empire in India under East India Company
2. Student can learn about the Development of indigenous science and technology of India before the advent of east India company
3. Student will be able to understand and describe the concept of Political & social problems, Indian Society, and how to fight

**B.A. Semester IV**  
**Modern India (1757 to 1920 A.D.)**

**Learning Outcomes**

1. This paper gives an idea about the British Empire in India under the British Crown and also the consequences of national Movement of India.
2. Student will obtain proper knowledge and Evaluate consolidation of English Power in India
3. Analyses social religious consciousness in India
4. Comparison of Nationalist movements- Pre-Gandhian and Post-Gandhian Era
5. Student will be able to describe and understand the basic concepts and Salient Features of Indian Constitution.

## **B.A. Semester V**

### **Modern World (1775 to 1920 A.D.)**

#### **Learning Outcomes**

1. From this segment of the syllabus student learn about the history of Ancient Civilizations like Mesopotamia, Greece, China, Roman, Egypt.
2. This paper deals with political, economic and social changes of European countries like America, Germany, France, Spain, Austria, Russia etc
3. Focus on what happened during a specific time period to a focus on putting that period into its broader, dynamic context and then to considering how we use the past to help make sense of the present

## **B.A. Semester VI**

### **Modern World (1920 to 2000 A.D.)**

#### **Learning Outcomes**

1. Student will be able to describe and understand the basic concepts of modern world
2. Student will obtain proper knowledge about world also laws and justice, world religion and freedom movement for human being.
3. Student will be able to describe and understand and deals with changes of Europe after the American, French and Russian Revolution and political changes in the countries like Prussia, Italy and Russia etc.
4. Student will be able Acquire knowledge about 20th century world

# GONDWANA UNIVERSITY GADCHIROLI

## CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

FOR

### B.A. GEOGRAPHY

#### Semester wise Distribution of Marks

Sr. No.	Class	Semester	Subject	Subject Code	Theory paper Marks	Internal Assessment	Practical Mark	Total Mark
1	B.A. Part I	I	Core Subject Introduction to Geography	01BA GEO01	50	20	30	100
2	B.A. Part I	II	Core Subject Climatology	02BA GEO01	50	20	30	100
3	B.A. Part II	III	Core Subject Geomorphology	03BA GEO01	50	20	30	100
4	B.A. Part II	IV	Core Subject Geomorphology and Oceanography	04BA GEO01	50	20	30	100
5	B.A. Part III	V	Elective Subject I) Geography of Maharashtra	05BA GEO01	50	20	30	100
			II) Bio Geography	05BA GEO01				
			III) Geography of Tourism	05BA GEO01				
6	B.A. Part III	VI	Elective Subject I) India – A Geographical Analysis	06BA GEO01	50	20	30	100
			II) Cultural Geography	06BA GEO02				
			III) Geography of Health	06BA GEO03				
					300	120	180	600

**GONDWANA UNIVERSITY GADCHIROLI**  
**CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS**  
**B.A. GEOGRAPHY**

**PATTERN OF EXAMINATION (ALL SEMESTER)**

**Theory:**

**One theory paper of 50 marks each and of three hours duration will be conducted at the end of each semester.**

**Practical's:**

- 1) **One Practical examination of 30 marks and of four hours duration** of each semester will be conducted at the end of the same semester.
- 2) Practical examinations of Odd semesters will be conducted by **internal examiner** and Even semester by the **Internal and External examiners** appointed by the University.

**Internal Assessment:**

- 1) Head of the department will carry out internal assessment of the students on the basis of evaluation report from the concerned teacher/ teachers, under the supervision of the principal of the college and will be done at the end of each semester.
- 2) **Distribution of 20 marks of internal assessment is as under –**

i)	Class Attendance	05 marks
ii)	Home Assignment	05 marks
iii)	Group discussion / seminar	05 marks
iv)	Excursion /Visit to a Geo. sites/G.P.A.*	05 marks

\* G.P.A. =Group Project Activities

**Rules and Regulation**

1. There will be **four periods** per week for theory papers.
2. The batch of Practical class should **not be exceeding 16** students.
3. There will be **two periods per batch per week** for practical's.
4. The minimum passing marks of Theory paper and internal Assessment is 28(20+08) & Passing Marks for Practical are 12.
5. The student has to pass practical separately.
6. Marks will not be allotted to student if he found absent in excursion/study tour.



**Gondwana University, Gadchiroli**  
**New syllabus on**  
**Learning outcome-based curriculum frameworks(LOCF)**  
**subject - Geography**

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**B.A.I - SEMESTER -I (CBCS)**  
**INTRODUCTION TO GEOGRAPHY**

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**Learning Outcome**

- 1.The students will have an introduction with the basic principle of geography, its objectives and relevance's.
2. The students will become environmental campaigner and resources conservator in their respective areas.
3. The students will have a comprehensive knowledge of world oceans, continents, rives, mountains and other major geomorphic landforms.
4. The students will know thecareer opportunities for geography and will become self-reliant.

**Objective:** - Thebasic objectives of this curriculum are as following –

- 1.To arouse the curiosity of the student regarding the size&shape of the earth, longitude, latitude, international date line, time zone.
  2. To inform the students about the origin of the earth, the solar system, the origin of universe, the earth is a unique planet.
  3. To study geography while studying human and environment.
  4. To aware students aboutSolar eclipses, lunar eclipses and other astronomical phenomena.
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## **B.A.I - SEMESTER -II (CBCS)**

### **CLIMATOLOGY**

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#### **Learning Outcome**

1. The students will have the knowledge of solar energy, temperature, heat balance of the earth, evaporation, rainfall and other climatological phenomena.
2. The students will have the comprehensive knowledge of atmospheric pressure, pressure belt, Air Masses and Fronts and wind system.
3. The students will become familiar to a many weather instruments including thermometers, barometers, wind vane, rain gauge, wet and dry bulb thermometers, hygrometers and can take the reading.
4. The students will become environmental thinkers, climate campaigners and planners regarding local temperature, global warming and climate change.

#### **Objective :-** The basic objectives of this curriculum are as following

1. To impart knowledge to the concerned student on various meteorological factors like evaporation, humidity, condensation, dew, fog etc.
  2. Raising awareness about the effects of temperature, solar energy on the earth and human life.
  3. To aware students about the fundamental of triangulations and chain survey, weather instruments and weather reports.
  4. To aware students about monsoon winds and its importance,
  5. To study the classification of global climate and the effects of climate on human life.
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## **B.A.I - SEMESTER -III (CBCS)**

### **GEOMORPHOLOGY**

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#### **Learning Outcome**

1. The students will become aware about various geomorphic processes and phenomena's like mountain building, continental drifting, plate tectonics etc.
2. The students will become able surveyor of various topographic region and can handle the surveying instruments like plane table survey, prismatic compass and will have the good career opportunities in surveying.
3. The students will become a good geomorphic observer and can give various geomorphic solutions on flood, land slide, avalanche and other geomorphic hazards.
4. The students will have the comprehensive knowledge of geomorphology which will help in various competitive examination.

**Objective :-** The basic objectives of this curriculum are as following

1. To know the work of the river as well as the erosion transportation and depositional work of river and Associate landforms.
  2. In depth study of different regions from the map through climatic and topographic maps.
  3. Provide information on the origin, composition and types of rocks and their industrial uses.
  4. To make aware the students about causes and consequences of earthquake, volcanic eruption, sea floor spreading and mountain building.
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**B.A.I - SEMESTR -IV (CBCS)**  
**OCENOGRAPHY**

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**LearningOutcome**

1. The students will have a comprehensive knowledge of various oceans, ocean floors, reliefs Continental shelf, Continental slope,abyssal plane, mid oceanic ridges and trenches.
2. The students will have an introduction with present challenges and their solutions like Al - Nino and LA - Nino etc.
3. The students will aware about Marine pollution, marine deposits, foods and minerals resources of the sea, exclusive economic zones.
4. The students will become a good cartographer having a knowledge of various map projections, can reduced and enlarge the map on various scale which will create the job opportunities.

**Objective :-** The basic objectives of this curriculum are as following

1. To Provide information regarding definition of Oceanography, surface configuration of ocean floor, Continental shelf, Continental slope, aby plane, mid oceanic ridge and trenches.
  2. To make aware about the importance of the ocean as storehouse of resource.
  3. To make aware about the various map projections, their merits and demerits.
  4. The students will know the causes of Waves, tides and ocean currents.
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**B.A.III - SEMESTER -V (CBCS)**  
**GEOGRAPHY OF MAHARASHTRA**

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**Learning Outcome**

1. The students will become aware regarding geography of Maharashtra, major administrative and physical division of Maharashtra.
2. The students will know the main crops of agriculture in Maharashtra, to explain to the students the characteristics of rice, wheat, sugarcane, cotton.
3. The students will have the knowledge of causes and consequences of migration of population. They can become a population policy maker.
4. The students will become a skilful geographer having a knowledge of GPS, Google Earth software and its utility.

**Objective :-** The basic objectives of this curriculum are as following

1. To know information about location, extension, administrative division of Maharashtra.
  2. To inform the students about the river system in Maharashtra, importance of rivers, types of rivers.
  3. To inform the students about the population of Maharashtra, population density, distribution, factors affecting the density.
  4. To make the student aware about the growth of population, its causes and consequences in Maharashtra.
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**B.A.III - SEMESTR -VI (CBCS)**  
**INDIA: A GEOGRAPHICAL ANALYSIS**

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**Learning Outcome**

1. The students will become familiar regarding physiographic division, climate and population issues in India
2. The students will know economic importance of minerals and energy resources in India, their present status and need of conservation.
3. The students will have a knowledge of population distribution and density, problems of population and population policies in India.
4. The students will become the skilly GIS operator, can handle and create various GIS maps which will boost the job opportunities to the students.
5. The students can carry out the deep socio- economic survey, find out various social and demographic processes and give the solutions on problems.

**Objective :-** The basic objectives of this curriculum are as following

1. To make aware about the issues of energy resources and minerals in India.
2. To emphasize the importance of agriculture by discussing with the students on various topics related to agriculture in India, the place of Indian agriculture in the economy, features of Indian agriculture, problems of Indian agriculture.
3. To enhance the skills of cartography, elevation profile of region, statistical method, GIS and Remote Sensing.
4. To make analyst about climatic regions of India, Monsoon, distribution of rainfall in India.

## **Program Outcome**

### **BSC (PCM, CBZ)**

- Bachelor of Science offers theoretical as well as practical knowledge about different subject areas.
- This course forms the basis of science for coherent understanding of the academic field to pursue multi and interdisciplinary science careers in future. These subject areas include Physics, Chemistry, Mathematics, Botany and Zoology.
- Able to plan and execute experiments or investigations, analyze and interpret data information collected using appropriate methods
- It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research.
- Think critically, follow innovations and developments in science and technology

## Department of Physics

### Programme Outcome

- Physics is a branch of science that studies matter and its motion through space and time, along with related concepts such as energy and force.
- Physics is one of the fundamental sciences because the other natural science deal with systems that seems to obey the law of Physics. According to Physics, the physical laws of matter, energy and the fundamental forces of nature govern the interactions between particles and physical entities (such as plants, molecules, atoms or the subatomic particles).
- Physics deals with a wide variety of systems, certain theories are used by all physicists. Each of these theories were experimentally tested numerous times and found to be an adequate approximation of nature.
- Physics uses mathematics to organize and formulate experimental results and from which new predictions can be made. The results from physics experiments are numerical measurements. Technologies based on mathematics, made computational physics as active area of research.

### DEPARTMENT OF PHYSICS Programme Specific Outcome

**PSO-1** Accumulation of facts, understand the basic laws, principles of physics and explore the fundamental concepts and ability of student to link them to observe and discover the laws of nature for the society by applying knowledge of the basic Physics.

**PSO-2** Ability to use this knowledge to enhance the student's academic abilities, personal qualities, transferable skills, new situations and tools like ICT, Lab technology, Research to find the solution, interpret the results and make predictions for the future developments.

To produce graduates who excel in the competencies and values required for leadership to serve a rapidly evolving global community To motivate the students to pursue PG courses in reputed institutions

**PSO-3** To create different types of professionals related to the subject area of Physics, including professionals engaged in pursue PG courses in reputed institutions, Research and Development in various sectors, Teaching and Government/Public service for the beneficiary in the society.

# PHYSICS COURSE OUTCOMES

## SEMESTER 1

### USPHTO1 Mechanics and Relativity

On successful completion of the course the student will be able to

- CO-1 explain the laws of motion and centre of mass
- CO-2 distinguish between inertial and non-inertial frame of reference
- CO-3 Familiar with the concept of momentum and energy, collision with application
- CO-4 Understand the concept of dynamics of rigid body and rotational motion
- CO -5 recall theory of relativity and know the significance of special theory of relativity

## SEMESTER 1

### USPHT02 Gravitation, Oscillation & Properties of Matter

On successful completion of the course the student will be able to

- CO-1 Understand the concept of simple harmonic motion, kinetic and potential energy
- CO-2 distinguishes between damped and forced harmonic oscillations.
- CO-3 familiar with the terms like power dissipation, resonance etc.
- CO-4 recalls Kepler's law and understand on global positioning system
- CO -5 know the concept of Viscosity and surface tension
- CO-6 Gain knowledge to determine rigidity modulus with their application

## SEMESTER 1

### Practical USPHT01

On successful completion of the course the student will be able to

- CO-1 determine surface tension by Poiseuille's flow and capillary rise method
- CO-2 study compound pendulum and flywheel
- CO-3 understands and determines the young modulus and modulus of rigidity.

## SEMESTER 2

### USPHT03 Vector Analysis and Electrostatic

On successful completion of the course the student will be able to

- CO-1 describe Gauss theorem and its applications
- CO-2 understands the concept of electric field, nature of electric field etc..
- CO-3 distinguishes between parallel plate, spherical and cylindrical condenser.
- CO-4 determine scalar and vector products, gradient and divergence etc.

## **SEMESTER 2**

### **USPHT04 Magnetostatics and Electromagnetic waves**

On successful completion of the course the student will be able to

- CO-1 understands basic concepts of Magnetostatics and electromagnetic waves.
- CO-2 gain the knowledge on concept of Biot-Savarts law and its applications
- CO-3 distinguishes between straight conductor, circular coil and solenoid current
- CO-4 Learn about Kirchhoff's law and its applications,
- CO-5 Acquire knowledge of alternating electric current
- CO -6 understand the concept of Maxwell equation and electromagnetic wave propagation

## **SEMESTER 2**

### **Practical USPHP02**

On successful completion of the course the student will be able to

- CO-1 study decay of current in LR Circuits, Transformer etc
- CO-2 determine high resistance, capacitance, low resistance
- CO-3 verifies different theorem and networks.
- CO-4 calibrate ammeter by potentiometer

## **SEMESTER 3**

### **USPHT05 THERMAL PHYSICS**

On successful completion of the course the student will be able to

- CO-1 Understands kinetic theory of gases with various terms/definitions of thermodynamics.
- CO-2 learn about the concept of internal energy
- CO -3 Understand Laws of thermodynamics and their applications
- CO-4 gain the knowledge on concept thermodynamic function
- CO-5 differentiate between entropy change in reversible and irreversible process
- CO-6 understand basic of heat and temperature and relation with energy, work, radiation and matter

## **SEMESTER 3**

### **USPHT06 RADIATION AND STATISTICAL PHYSICS**

On successful completion of the course the student will be able to

- CO-1 Understands concept of Black Body Radiation, energy density, Planck's law etc.
- CO-2 describe the postulates of M-B statistics, F-D statistics & B-E statistics
- CO -3 apply the statistical distribution in real life problems.
- CO-4 gain the knowledge on statistical basis of thermodynamic



### **SEMESTER 3**

#### **USPHP03 (PRACTICAL)**

On successful completion of the course the student will be able to

CO-1 gain practical knowledge about heat and radiation

CO-2 determine variation in thermodynamics, thermo emf , RTD etc

CO -3 study random decay, statistical distribution, probability distribution etc.

### **SEMESTER 4**

#### **USPHT07 WAVES, ACOUSTICS AND LASER**

On successful completion of the course the student will be able to

CO-1 learn super position of simple harmonic motion

CO-2 apply on formation of Lissajou's figures

CO-3 familiar with acoustic of building and its application formula

CO-4 Attain the knowledge on ultrasonic waves of production

CO -5 Understand the concept of waves motion and Fourier's theorem

CO-6 Understand basic Laser principles, Properties & Different types of Lasers

### **SEMESTER 4**

#### **USPHT08 OPTICAL PHYSICS**

On successful completion of the course the student will be able to

CO-1 Understand principle of wave motion and superposition.

CO-2 explain the physics of interference, diffraction and polarization

CO-3 learn different application on light pattern

CO-4 distinguishes between uniaxial and biaxial crystal

### **SEMESTER 4**

#### **USPHP04 PRACTICAL**

On successful completion of the course the student will be able to

CO-1 gain practical knowledge about optics with their application

CO-2 determine variation in velocity, frequencies and wavelength

CO -3 study divergence, mono chromaticity and characteristics of laser

## **SEMESTER 5**

### **USDSEPHT09**

#### **ELEMENTS OF MODERN PHYSICS**

On successful completion of the course the student will be able to

- CO-1 familiar with wave-particle duality, Heisenberg Uncertainty principle etc
- CO-2 describe the process of Radioactivity substance and emission of  $\alpha$ ,  $\beta$  and  $\gamma$  rays
- CO -3 understand the concept of Schrodinger wave equation and application
- CO-4 Acquire knowledge on the basic concept of Fission and Fusion, nucleus and its stability

## **SEMESTER 5**

### **USDSEPHT10 SOLID STATE PHYSICS**

- CO-1 Understanding of condensed matter physics, including Dielectric and Ferroelectric, superconductivity etc.
- CO-2 Distinguish between conductor, semiconductor and insulator on the basis of band theory.
- CO-3 Understand the use of X-ray diffraction measurements in determining crystalline structures.
- CO-4 Explain superconductors- zero resistivity, Meissner effect, critical field, critical current density.
- CO-5 know magnetic properties of matter with BH curve and energy loss

## **SEMESTER 5**

### **USDSEPHP05 PRACTICAL**

On successful completion of the course the student will be able to

- CO-1 determine work function of material, Planck's constant, absorption and wavelength
- CO-2 gain practical knowledge about element of modern physics and solid state physics
- CO-3 measures the magnetic susceptibility, dielectric constant and resistivity.
- CO-4 study hysteresis loop, BH curve, NTC/PTC etc.

## **SEMESTER 5**

### **SKILL ENHANCEMENT COURSES**

#### **USSECPH01 PHYSICS WORKSHOP SKILL**

On successful completion of the course the student will be able to

- CO-1 gain practical knowledge to design L section filter,  $\pi$  section filter & basic gates
- CO-2 learns electrical and electronic skill on PCB.
- CO -3 study measurement and prime movers machine with gear system.
- CO-4 apply the knowledge on bread board for designing rectifier circuit

## **SEMESTER 5**

### **SKILL ENHANCEMENT COURSES**

#### **USSECPH02 ELECTRICAL CIRCUITS AND NETWORK SKILLS**

On successful completion of the course the student will be able to

CO-1 learn to draw symbols of capacitors, inductors, diode and transistor

CO-2 understands basic electricity principles and electric circuits.

CO -3 study electric motors, solid state devices and electrical protection

## **SEMESTER 6**

#### **USDSEPHT13 NUCLEAR AND PARTICLE PHYSICS**

On successful completion of the course the student will be able to

CO-1 Study general properties of nuclei with their size, energy, spin etc.

CO-2 explain nuclear reaction and interaction of nuclear radiation with matter

CO-3 describes various nuclear models and shell structure

CO-4 Learn about detector for nuclear radiations and particle accelerators

## **SEMESTER 6**

#### **USDSEPHT14 DIGITAL AND ANALOG CIRCUITS AND INSTRUMENTATION**

CO-1 Distinguish between Analog and Digital circuit with number system.

CO-2 Identify the various digital ICs and understand their operation.

CO-3 Apply Boolean laws to simplify the digital circuits.

CO-4 Analyze operational amplifier and application

CO-5 Learn about bipolar junction transistor

CO-6 describes P and N-type semiconductors with their application and power supply devices

## **SEMESTER 6**

#### **USDSEPHP06 PRACTICAL**

On successful completion of the course the student will be able to

CO-1 verifies and Design basic and universal Gates. Distinguish between different types of voltmeter

CO-2 study and design Operational Amplifiers

CO-3 investigate uses of op-amp in integrator and differentiator

## **SEMESTER 6**

### **SKILL ENHANCEMENT COURSES**

#### **USSECPH03 BASIC INSTRUMENTATION SKILLS**

On successful completion of the course the student will be able to

- CO-1 Distinguish between different types of voltmeter
- CO-2 Identify the various problems in digital circuits and instruments.
- CO-3 Apply the knowledge in laboratory electronic equipment.
- CO-4 understand operation of CATHODE RAY OSCILLOSCOPE
- CO-5 Gain and identify basic measurement and multimeter.

## **SEMESTER 6**

### **SKILL ENHANCEMENT COURSES**

#### **USSECPH04 RENEWABLE ENERGY AND ENERGY HARVESTING**

On successful completion of the course the student will be able to

- CO-1 understand fossil fuels and alternate source of energy
- CO-2 Gain the knowledge on ocean energy and hydro power
- CO-3 Apply to design different model on solar and bio gas plant
- CO-4 To find solution on wind harvesting and geothermal energy

## **Goals**

The study of animals, including their structure, embryology, evolution, classification, behaviors, distribution, and interactions with their ecosystems, is the subject of the science known as zoology. An undergraduate degree in zoology, the B.Sc. in Zoology, is designed to introduce students to the study of zoology at the organismal and organ function levels. The program's theoretical portion covers the fundamental concepts of both traditional and contemporary zoology. The course introduces students to contemporary developments in zoology, including those in systematics, evolution, reproduction, development, animal diversity, biochemistry, cytology, and animal ecology. Candidates who are interested in learning about animals can take this course. The bare minimum of time needed.

## **Programme Outcome**

1. PO1 - Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms
2. PO2 – Analyze complex interactions among the various animals of different phyla, their distribution and their relationship with the environment
3. PO3 – Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.
4. PO4 – Understands the complex evolutionary processes and behaviour of animals
5. PO5 – Correlates the physiological processes of animals and relationship of organ systems
6. PO6 – Understanding of environmental conservation processes and its importance, pollution control and biodiversity and protection of endangered species
7. PO7 – Gain knowledge of Agro based Small Scale industries like sericulture, apiculture, fish farming and vermicompost preparation.
8. PO8 – Understands about various concepts of genetics and its importance in human health
9. PO9 - Apply ethical principles and commit to professional ethics and responsibilities

in delivering his duties

10. PO10 – Apply the knowledge and understanding of Zoology to one's own life and work

11. PO11 – Develops empathy and love towards the animals

### Course Outcomes (CO)

#### First Semester Course Outcome

##### USCZOT01 : Nonchordates Protozoa to Annelida

CO1. Get a concrete idea of the evolution, hierarchy and classification of invertebrate phyla

CO2. Understand the basics of systematics by learning the diagnostic and general characters of various groups

CO3. Getting an overview of typical examples in each phyla

CO4. Student should be able to recognize life functions & the ecological role of protozoa, porifera, coelenterate and helminthes.

##### USCZOT02 : Cell Biology

CO1. From this segment of the syllabus student aware about the size, shape, structure and function of cells and different cell organelles. This will help the students for a better understanding of cell and its cycle.

CO2. Develop deeper understanding of what life is and how it functions at cellular level.

CO3. Understanding on the details of the basic unit of life at the molecular level.

CO4. Students will understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles.

CO5. Students will understand how these cellular components are used to generate and utilize energy in cells.

CO6. Students will understand the cellular components underlying mitotic cell division.

CO7. Students Able to Understand how the endoplasmic reticulum and Golgi apparatus interact with one another and know with which other organelles they are associated..

#### Second Semester

##### USCZOT03: Nonchordates Arthropoda to Hemichordata

CO1. Familiar with the non-chordate world that surrounds us.

CO2. Able to appreciate the process of evolution (unicellular cells to complex, multicellular

organisms)

CO3. Able to identify the invertebrates and classify them up to the class level with the basis of systematic

CO4. Understand the basis of life processes in the non-chordates and recognize the economically important invertebrate fauna.

### **USCZOT04: Genetics and Evolution**

CO1. Appreciate the contribution of great scientists

CO2. Students gain knowledge of Mendelian and non mendelian inheritance.

CO3. Concept behind genetic disorder, gene mutations- various causes associated with inborn errors of metabolism.

CO4. Learn the mechanism of Inheritance in Man.

CO5. Students gain knowledge of eras and evolution of species.

CO6. Imparts knowledge regarding the various theories of evolution, evolutionary process such as variation, speciation, natural selection, origin of primates and man.

Third Semester

USCZOT05: Animal Diversity ( Chordates) and Comparative Anatomy

CO1. Students able to describe the diversity in form, structure and habits of vertebrate.

CO2. Students able to understand general characteristics and classification of different classes of vertebrates.

CO3 Imparts conceptual knowledge of vertebrates, their adaptations and associations in relation to their environment.

### **USCZOT06: Physiology & Biochemistry I**

CO1. Understand the chemical nature of life and life process.

CO2 Get an idea on structure and functioning of biologically important molecules.

CO3. Understand the importance of Bio molecules

CO4. Familiar with various biochemical pathways

CO5. Help to explore new developments in biochemistry.

CO6. Enable the students to illustrate various Biochemical pathways.

CO7. Develop an interest in the debates and discussions associated with Lifestyle Diseases

CO8. Imparts knowledge about various metabolic and physiological mechanisms of the human body.

CO9. Students are able to describe the role and functions of different biomolecules.

CO10. Able to describe the physiology of digestion

## **Fourth Semester**

### **USCZOT07 : Developmental biology**

- CO1.Familiar with various stages involved in the developing embryo
- CO3.Understand the initial developmental procedures involved in Amphioxus, frog and chick
- CO4.Familiar with types of placenta
- CO5.Ability to explain various Prenatal Diagnosis
- CO6. Familiarise with the principle of developmental biology
- CO7.Familiarise with various Techniques and tools of Embryology.
- CO8.The course will provide a broad area from embryology to developmental biology. The students will be able to understand the embryonic development, reproductive function and fertilization

### **USCZOT08 : Physiology & Biochemistry II**

- CO1.Understand the function of various systems
- CO2.Familiar with various biochemical pathways
- CO3. Understand the chemical nature of life and life process.
- CO4 Get an idea on structure and functioning of biologically important molecules.
- CO5.Imparts knowledge about various metabolic and physiological mechanisms of the human body.
- CO6.Understands about neurophysiology and receptors
- CO7. Students Gain knowledge about hormones and their effects and disorders.
- CO8.Understanding of stress physiology and endocrine mechanisms will allow them to control their stress and emotions there by diverting their energy towards the positive nation building activities.
- CO9. Able to describe the physiology of respiratory, renal, endocrine and reproductive systems to define normal and abnormal functions.

## **Fifth Semester**

### **USCZOT09 : Parasitology**

- CO1. Students gain knowledge about the endemic parasites, national parasitic problems and common parasites worldwide.
- CO2.Students able to understand pathogenesis, clinical presentations and complications of parasitic infections.
- CO3.Imparts the knowledge to know basic diagnostic features, general outline of mode of transmission, symptoms, treatment, prevention and control of these diseases.



CO4.Students able to describe the morphology and the life cycle of parasites of medical importance.

### **USCZOT11 : Insect vector and Diseases**

CO1.The course will focus on the insects and arthropods that impact human health as well as the associated diseases, such as malaria, chickungunya, plague, typhus fever, filariasis, dengue, , Chagas disease, etc.

CO2.The countries of the inter tropical zone are primarily concerned by these vector-borne diseases, but temperate zones become more and more concerned because of the recent introduction of vectorial diseases and spread of invasive vector species.

CO3.Understanding the relationships between vectors, pathogens and vertebrates is fundamental in the study of vector-borne diseases.

CO4. Students get an idea that many of vector-borne diseases are preventable, through protective measures, and community mobilisation.

### **Sixth Semester**

#### **USCZOT13 : Immunology**

CO1 Provides basics knowledge about immune system and allows the student to create insight as how to improve their immune system and good health.

CO2 Students able to understand types of immunity, antigens-antibodies and their properties

CO3 Students able to understand Complement system, MHC's and immune responses

CO4 Understanding of types of hypersensitivity reactions and auto immune diseases.

#### **USCZOT14 : Animal Biotechnology**

CO1 It gives insight into various cell/tissues culture techniques

CO2 Understanding of in vitro culturing of organisms and production of transgenic animals.

CO3 Understanding of cloning of mammals, large scale culture and production from recombinant microorganisms

CO4 Gains skills in medical, environmental biotechnology, biopesticides, Biotechnology of aquaculture and use of animals as bioreactors

CO5 This insight allows students to take into consideration about ethical issues involved in production transgenic animals and BT products.

### **Skill Enhancement Courses**

#### **Fifth Semester Apiculture Outcome**

CO1.Students able to understand economic importance of honey bees and developments taking place in modern beekeeping.

- CO2. Students become familiar with different species and sub-species of honey bees found in the world and know their economic importance.
- CO3. To become familiar with different body parts of honey bees and their modifications as per their food habit and social life.
- CO 4. Students able to observe organization of a honey bee colony and become familiar with duties of different castes.
- CO5. To become familiar with developmental stages and life cycle of different castes of honey bees.
- CO6. To become familiar with parameters required for selection of good apiary site.
- CO7. To learn handling of bee colonies, recording of colony data and precautions required.
- CO8. Students understand basic principles of honey bee management.
- CO9. Learn about the various species of honey bees in India, their social organisation and importance.
- CO10. Be aware about the opportunities and employment in apiculture – in public, private and government sector.
- CO11. Gain thorough knowledge about the techniques involved in bee keeping and honey production.
- CO12. Know about various products obtained from beekeeping sector and their importance.
- CO13. Develop entrepreneurial skills necessary for self-employment in beekeeping sector.
- CO14. Enhance collaborative learning and communication skills through practical sessions, team work, group discussions, assignments and projects.

## **Fifth Semester                      Medical Diagnostics Outcome**

- CO1. Identify structures and describe functions of each of the body systems.
- CO2. Students should be able to understand common diseases and disorders within each of the body systems.
- CO3. Students should be able to perform common laboratory tests and medical procedures.
- CO4. Students will be able to apply practical skills in science courses with the understanding of general laboratory practices.
- CO5. The students should be able to gain knowledge about various infectious, non-infectious and lifestyle diseases, tumors and their diagnosis.
- CO6. Understand the use of histology and biochemistry of clinical diagnostics and learn about the molecular diagnostic tools and their relation to precision medicine.
- CO7. Develop their skills in various types of tests and staining procedure involved in hematology, clinical biochemistry and will know the basics of instrument handling.
- CO8. Learn scientific approaches/techniques used in the clinical laboratories to investigate various diseases and will be skilled to work in research laboratories.
- CO9. Gain knowledge about common imaging technologies and their utility in the clinic to diagnose a

specific disease.

## **CAREER OPPORTUNITIES:**

1. After the completion of course student has the option to go for higher studies i.e. M.Sc and can do research for the welfare of mankind.

2.They can opt M.Sc in medical field and non medical field. In medical field one can perceive M.Sc in anatomy, physiology, medical biochemistry, medical microbiology, embryology, M.Sc in neuroscience , biotechnology ,forensic science, pharmacology ,medical biotechnology, cell and molecular biology and genetics. In non medical field one can opt M.Sc in applied zoology, general zoology, bioscience, entamology, food and nutrition, environmental science , biostatistics and bioinformatics.

3.After higher studies student can join as scientist in central research institutions and in universities. They can even look for professional job oriented courses.

4. Graduates and post graduates can enter teaching field both in secondary and higher education departments.

5.Animal biologist can work as administrator in zoological parks, zoos and sanctuaries.

6. Under graduates can join as research assistant in animal tissue culture lab and fisheries research institution.

7. Students can opt jobs in clinical research centers ,toxicology labs, forensic department, pollution control board and medical coding centers.

8. Student can get jobs as animal nutritionist, ecologist, environmental consultant, field trial officer, marine scientist, nature conservation officer, research scientist in life science, science writer.

9.Sericulture, poultry, aquaculture, vermitechology and dairy are agro based industries in India that enables students to get self employment. 10.Students have the option to join Indian civil services.

Shri Jivanrao Sitaram Patil Munghate Arts, Comm. & Science College,  
Dhanora, Dist. Gadchiroli

(Affiliated to Gondwana University, Gadchiroli)

**Department of Chemistry**

**Programme - B. Sc. Chemistry**

**Programme Outcomes**

PO Numbers	Programme Outcomes
PO -1	Understand the basic concepts of Chemistry & its branches.
PO -2	The branches of Chemistry such as Organic Chemistry, Inorganic Chemistry, Physical Chemistry and Analytical Chemistry expose the diversified aspects of chemistry where the students experience a broader outlook of the subject.
PO -3	B.Sc. Chemistry curriculum is so designed to provide the students a comprehensive understanding about the fundamentals of chemistry covering all the principles and perspectives.
PO -4	The practical exercises done in the laboratories impart the students the knowledge about various chemical reagents and reactions.
PO -5	Improve the skills of handling the corrosive, poisonous, explosive and carcinogenic chemicals making themselves employable in any kind of Chemical industries.
PO -6	The introduction of Skill Enhancement Courses (SEC) would help to gain more powerful knowledge not only in their core Chemistry subject but also in interrelated multidisciplinary subjects both theoretically and practically.
PO -7	Acquire the ability to engage in independent and life- long learning in the broadest context socio- technological changes. Critical sensibility to lived experiences, with self-awareness and reflexivity of both and society.

**Programme Specific Outcomes**

PSO Numbers	Programme Specific Outcomes
PSO -1	Scientific Problem solving skill Sound knowledge of fundamentals which can develop the problem solving skills using chemical principles.
PSO -2	Upon completion of these courses the students would academic excellence with an aptitude for higher studies , research and to compete in competitive

	exams
PSO -3	Develop analytical skills such as synthesizing, separating, characterizing chemical compounds and chemical reaction with the help of sophisticated instruments.
PSO -4	Students will be able to explain how Plants function at gene, cellular and tissue level Develop deep knowledge in some applied areas of chemistry such as pesticides chemistry, pharmaceutical chemistry etc. which helps in employability
PSO -5	Develop basic understanding the role of chemistry in natural products as well as biological system
PSO -6	Students will learn to estimate inorganic salt mixtures and organic compounds both qualitatively and quantitatively using the classical methods of analysis in practical classes..
PSO -7	Students will grasp the mechanisms of different types of reactions both organic and inorganic and will try to predict the products of unknown reactions.
PSO -8	Students will be able to conceive the importance of conservation of nature & its components.
PSO -9	Chemistry graduates are expected to be technically well trained with modern devices and Chemistry based software and has powerful knowledge in different disciplines of Chemistry so they can easily involve themselves in theory and laboratory-based Research activities.
PSO -10	Global level research opportunities to pursue Ph.D. Programme targeted approach of CSIR – NET examination.
PSO -11	Specific placements in R & D and synthetic division of polymer industries & Allied Division
PSO -12	Discipline specific competitive exams conducted by service commission

### **Course Outcome- B.Sc. (Chemistry)**

#### **Course Outcome- B.Sc. Chemistry Semester I**

After successful completion of three year degree program in Chemistry student should be

Course	Code	Outcomes
<b>Chemistry Paper – I (Inorganic Chemistry)</b>	<b>USCChT01</b>	<p><b>CO-1:</b> To know the fundamental and shape s, p and d atomic orbital and their electronic configuration</p> <p><b>CO-2:</b> To study periodic table through periodic trends and their properties.</p> <p><b>CO-3:</b> Explore the concept of VBT and MOT using bonding and antibonding molecular orbital.</p> <p><b>CO-4:</b> Known the effect of hydrogen bonding, viscosity, solubility, melting and boiling point.</p>

<p><b>Chemistry Paper – II (Organic Chemistry)</b></p>	<p><b>USCChT01</b></p>	<p><b>CO-1:</b> To understand the structure and bonding in organic Molecules, reactive intermediates, mechanism of organic reactions.</p> <p><b>CO-2:</b> To understand the stereochemistry of organic compounds and knows the basic concept of isomerism and concept of chirality.</p> <p><b>CO-3:</b> To understand the nomenclature, methods of preparation, physical and chemical properties of Alkane, Cycloalkane, Alkene and Diene.</p> <p><b>CO-4:</b> To discuss the preparation of benzene with their chemical properties.</p> <p><b>CO-5:</b> Explain the aromaticity and Huckel`s rule of aromatic compounds.</p> <p><b>CO-6:</b> To understand the Mechanism of Electrophilic Aromatic Substitution.</p> <p><b>CO-7:</b> To understand the Orientation Effect of substituent groups. Activating and deactivating groups.</p>
<p align="center"><b>Chemistry Practical's, Semester-I</b></p>		
<p><b>Chemistry Practical (Inorganic and Organic)</b></p>	<p><b>USCChP01</b></p>	<p><b>CO-1:</b> Semi micro qualitative analysis of inorganic salt mixture containing two acidic Radicals of different group and two basic radicals of same groups.</p> <p><b>CO-2:</b> Purification of an impure organic compound by crystallization / Sublimation method and determination of melting point of purified sample.</p> <p><b>CO-3:</b> Organic Preparations</p> <ol style="list-style-type: none"> <li>1. Preparation of acetanilide (Acetylation of Aniline)</li> <li>2. Preparation of Benzanilide (Benzoylation of Aniline)</li> </ol>

		3. Preparation of Iodoform from ethanol or Acetone. 4. Preparation of m-di-Nitrobenzene (Nitration) 5. Preparation of tri-Bromoaniline from Aniline (Bromination) 6. Preparation of Benzoic acid from Benzamide (Hydrolysis) 7. Preparation of Benzoic acid from Benzaldehyde (oxidation) Preparation of Semicarbazone from Acetone
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<b>Course Outcome- B.Sc. Chemistry Semester II</b>		
After successful completion of three year degree program in Chemistry student should be		
<b>Course</b>	<b>Code</b>	<b>Outcomes</b>
<b>Chemistry Paper – I (Organic Chemistry)</b>	<b>USCChT03</b>	<b>CO-1:</b> To study the mechanical nucleophilic substitution reaction ( $SN^1$ , $SN^2$ and $SN^1$ ) <b>CO-2:</b> Learn chemical properties and different approaches to obtained alcohols, Phenol ether and their uses. <b>CO-3:</b> To know the nomenclature, structure and reactivity of the carbonyl group through organic named reaction.
<b>Chemistry Paper – I (Physical Chemistry)</b>	<b>USCChT04</b>	<b>CO-1:</b> To understand the some basic Mathematical concepts <b>CO-2:</b> To understand the concept of nucleus, nuclear reaction and applications of radioisotopes. <b>CO-3:</b> To understand the kinetic gas theory its equation, various molecular velocities and its interrelationships equation. <b>CO-4:</b> To understand the ideal and real gases. Van der Waal's equation and its isotherm. <b>CO-5:</b> To know the structure of liquids, its classification and properties.



<b>Chemistry Practical's, Semester-II</b>		
		<p><b>CO-1:</b> Determination of boiling point of given mixture of organic compounds.</p> <p><b>CO-2:</b> Qualitative Analysis of simple Organic Compound 1.Detection of extra elements (N.S. and halogen) Functional group detection</p> <p><b>CO-3:</b>Expt. 2. To determine percentage composition (v/v) of the given mixture of ethyl alcohol and water by viscosity measurement. Expt. 3 To determine surface tension of liquid by Stalagmometer. Expt. 4 To determine Parachor value of –CH<sub>2</sub> group by Stalagmometer. Expt. 5. To compare cleaning power of detergents by Stalagmometer. Expt. 6. To determine refractive index of the given liquid by Abbe's refractometer.</p>
<p><b>Course Outcome- B. Sc. Chemistry Semester III</b></p> <p>After successful completion of three year degree program in Chemistry student should be</p>		
<p><b>Chemistry Paper – I (Inorganic Chemistry)</b></p>	<p><b>USCChT05</b></p>	<p><b>CO-1:</b> Redox and acid base titration <b>CO-2:</b> To learn the Chemistry of transition series of lanthanides and actinides. <b>CO-3:</b> To known the basic properties and understanding of iodine and interhalogen compound. <b>CO-4:</b> Explain Error in Chemical analysis</p>

<p><b>Chemistry Paper – II</b> <b>(Physical Chemistry)</b></p>	<p><b>USCChT06</b></p>	<p><b>CO-1:</b> To understand the Recapitulation of thermodynamic terms.</p> <p><b>CO-2:</b> To understand the Statements of first law of thermodynamics, Carnot's cycle &amp; its efficiency, thermodynamic scale of temperature.</p> <p><b>CO-3:</b> To understand the concept of Thermochemistry and its applications.</p> <p><b>CO-4:</b> To understand Free energy functions</p>
<p><b>Chemistry Practical's, Semester-III</b></p>		
<p><b>Practical chemistry</b> <b>(Inorganic Chemistry and Physical chemistry)</b></p>	<p><b>CO-1:</b> Volumetric analysis (Preparation of standard solution by weighing)</p> <p><b>CO-2-</b> To determine heat of solution <math>\text{KNO}_3</math></p> <p><b>CO-3-</b> To determine heat of ionization of weak acid (acetic acid)</p> <p><b>CO-4-</b> To determine the solubility of benzoic acid at different temperature</p>	
<p style="text-align: center;"><b>Course Outcome- B.Sc. Chemistry Semester IV</b></p> <p>After successful completion of three year degree program in Chemistry student should be</p>		

<p><b>Chemistry Paper – I (Inorganic Chemistry)</b></p>	<p><b>USCChT07</b></p>	<p><b>CO-1:</b> To study the effective atomic number, magnetic properties and the colour of splitting of d- orbital in octahedral, tetrahedral and square planar complexes.</p> <p><b>CO-2:</b> To understand the Stability metal of complexes by formation constant and calculate thermodynamics parameter.</p> <p><b>CO-3:</b> Learn to explain Parsons SHAB concept and familiar with its application.</p> <p><b>CO-4:</b> To study in depth about principle, instrumentation of colorimetry and spectrophotometer.</p>
<p><b>Chemistry Paper – II (Organic Chemistry)</b></p>	<p><b>USCChT08</b></p>	<p><b>CO-1:</b> To learn the preparation and properties of nitro and amino compound.</p> <p><b>CO-2:</b> To introduced the concept of preparation and classification of amino acid , organometallic and heterocyclic compound.</p> <p><b>CO-3:</b> To known classification and chemical properties of carbohydrates and learn the preparation of synthetic dye.</p> <p><b>CO-4:</b> Make them aware with some functional classes of synthetic drugs.</p>
<p><b>Chemistry Practical's, Semester-IV</b></p>		
<p><b>Practical chemistry (Inorganic Chemistry and Organic Chemistry)</b></p>	<p><b>CO-1:</b> Semi micro qualitative analysis of inorganic salt mixture containing two acidic Radicals of different group and two basic radicals of same groups.</p>	
<p style="text-align: center;"><b>Course Outcome- B.S c. Chemistry Semester V</b></p> <p>After successful completion of three year degree program in Chemistry student should be</p>		

<p><b>Chemistry Paper – I (Organic Chemistry)</b></p>	<p><b>USCChT09</b></p>	<p><b>CO-1:</b> To know about spectroscopic technique nuclear magnetic resonance (NMR)  <b>CO-2:</b> Learn the claisen condensation reaction and study synthesis of ketone, diketone, 4- methyl uracil from acetoacetic ester.  <b>CO-3:</b> Understand introduction classification and reaction of polymers and fabrics.  <b>CO-4:</b> understand twelve principles of green chemistry</p>
<p><b>Chemistry Paper – II (Physical Chemistry)</b></p>	<p><b>USCChT10</b></p>	<p><b>CO-1:</b> To Study the types of cells, types of reversible electrodes and applications of emf.  <b>CO-2:</b> To study the failure of classical mechanism with example of different theories.  <b>CO-3:</b> To study the wave mechanics, Schrodinger wave equation, Derivation of box, Graphical representation of <math>\Psi</math> and its square <math>\Psi^2</math>. Applications of particle in a Schrodinger wave equation from postulates</p>
		<p>of quantum mechanics. Particle in a one dimensional one dimensional box.  Numerical problems.  <b>CO-4:</b> To understand the Solutions And Colligative Properties.  <b>CO-5:</b> To study the Magnetic Properties and its applications.</p>
<p><b>Chemistry Practical's, Semester-V</b></p>		

<p style="text-align: center;"><b>Practical chemistry</b> <b>(Organic Chemistry and Physical Chemistry )</b> <b>(USCChPT05)</b></p>	<p><b>CO-1:</b> Separation and identification of organic compounds from the given binary mixture.</p> <p><b>CO-2:</b> Estimation of 1. Estimation of glucose. 2. Estimation of amide. 3. Saponification value of oil.</p> <p><b>CO-3:</b> Preparation of 1. Preparation of aspirin. 2. Preparation of paracetamol</p> <p><b>CO-4:</b></p> <p>1) To determine the strength of strong acid and a weak acid in a given mixture conductometrically by titrating it with standard alkali solution.</p> <p>2) To determine the solubility and solubility product of a sparingly soluble salt conductometrically.</p> <p>3) To titrate potentiometrically ferrous ammonium sulphate solution using potassium dichromate solution as titrate and calculate the redox potential of Fe<sup>2+</sup>/Fe<sup>3+</sup> system on hydrogen scale.</p> <p>4) To determine the dissociation constant of weak acid potentiometrically by titrating it against alkali.</p>
<p><b>Course Outcome- B.Sc. Chemistry Semester VI</b></p> <p>After successful completion of three year degree program in Chemistry student should be</p>	
<p><b>Chemistry Paper – I</b> <b>(Inorganic Chemistry)</b></p>	<p style="text-align: center;"><b>USCChT11</b></p> <p><b>CO-1:</b> To know modern instruments Flame photometry and study basic principles, instrumentation and application of it.</p> <p><b>CO-2:</b> To develop basic skill required for chromatography, ion exchange, crystallization, TLC and Column.</p> <p><b>CO-3:</b> To understand the basic principles of soil chemistry through collection of samples.</p>

<p><b>Chemistry Paper – II (Physical Chemistry)</b></p>	<p><b>USCChT12</b></p>	<p><b>CO-1:</b> To study the dipole moment and it's applications.</p> <p><b>CO-2:</b> To study the Rotational Spectroscopy and its applications.</p> <p><b>CO-3:</b> To study the Vibrational Spectroscopy and its applications.</p> <p><b>CO-4:</b> To understand the Adsorption, Chemisorption's, Application of adsorption, adsorption of gases by solid, Freundlich adsorption isotherm, Langmuir's theory of adsorption, Adsorption from solution, Adsorption chromatography.</p>
<p><b>Chemistry Practical's, Semester-VI</b></p>		
<p><b>Practical chemistry (Inorganic Chemistry and Physical Chemistry ) (USCChPT06)</b></p>	<p><b>CO-1:</b> Preparation of Metal complexes. i)Potassium trioxalato ferrate (III) <math>K_3[Fe(C_2O_4)_3].H_2O</math> ii)Copper tetramine complex <math>[Cu(NH_3)_4] . 2H_2O</math></p> <p><b>CO-2:</b> Colorimetry i)Jobs method of determination of composition of Fe- SSA complexii)Mole Ratio Method of determination of composition of Fe- SSA complex.</p> <p><b>CO-3:</b> i)Ion exchange method, separation and estimation of Mg (II) and Zn (II). Chromatographic separation of binary mixtures(at least Two) containing Cu(II), Co(II) and Ni(II) ions by paper</p>	

chromatography and determination of Rf values. **CO-4:**

1) To verify Beer-Lambert law for  $\text{KMnO}_4$  /  $\text{K}_2\text{Cr}_2\text{O}_7$  and determine the concentration of the given solution of  $\text{KMnO}_4$  /  $\text{K}_2\text{Cr}_2\text{O}_7$ .

2) To verify law of refraction for mixture (glycerol-water) using Abbe's refracto meter.

3) To determine the specific rotation of a given optically active compound by polarimetry. (D- glucose, D / L Lactic acid).  
To determine molecular mass of a non-volatile solute by Rast method.

# **Shri. J.S.P.M Arts, Commerce and Science College, Dhanora.**

## **Department of Mathematics**

Mathematics is an area of knowledge that includes the topics of numbers, formulas and related structures, shapes, and the spaces in which they are contained, and quantities and their changes. These topics are represented in modern mathematics with the major subdisciplines of number theory, algebra, differential equations, analysis respectively.

### **Goals**

B.Sc. Mathematics is an undergraduate degree in the domain of mathematical studies. The course aims at providing knowledge about disciplines of maths such as Calculus, Differentiation, Integration, Linear Programming, etc.

The main emphasis of this course is to equip the student with necessary analytic and technical skills to handle problems of mathematical nature as well as practical problems. More precisely, main target of this course is to explore the different tools of higher order derivatives, to plot the various curves and to solve the problems associated with differentiation and integration of vector functions.

### **Programme Outcomes**

#### **B.Sc Mathematics**

PO1: Scientific temper will be developed in students.

PO2: Students will acquire basic skills and technical knowledge along with domain knowledge of different subjects in the science stream

PO3: Students become employable, they will be eligible for career opportunities in different sectors.

PO4: Students will possess basic subject knowledge required for higher studies, professional and applied courses like Management studies, Law etc.

PO5: Students will be aware of and able to develop solution oriented approach towards various social and environmental issues.



## Programme Specific Outcomes

PSO1: A student should be able to recall basic facts about mathematics and should be able to Display knowledge of conventions such as notations, terminology.

PSO2: A student should get adequate exposure to global and local concerns that explore them many aspects of mathematical sciences.

PSO3: Student is equipped with mathematical modeling ability, problem solving skills, creative talent and power of communication necessary for various kinds of employment.

PSO4: Student should be able to apply their skills and knowledge that is translate information Presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in

order to process the information and draw the relevant conclusion.

PSO5: Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.

## Course Outcome

### Semester I

#### USMT-01 Differential and Integral Calculus

**CO1:-** Compare and contrast the ideas of continuity and differentiability.

**CO2:-** To inculcate to solve algebraic equations and inequalities involving the sequence root and modulus function.

**CO3:-** To be able to calculate limits in indeterminate forms by a repeated use of L' Hospital rule.

**CO4:-** To know the chain rule and use it to find derivatives of composite functions..

**CO5:-** To find maxima and minima, critical points and inflection points of functions and to determine the concavity of curves.

**CO6 :-** Approximation techniques for integration;

**CO7 :-** To determine whether a sequence or a series is convergent or divergent and evaluate the limit of a convergent sequence or the sum of a

convergent series;

## **USMT-02 Differential Calculus and Trigonometry**

**CO1:-**Provide knowledge of Polynomials and division theorem.

**CO2:-**Familiar with Calculus of functions of two or more variables, Surface area and volume of solids.

**CO3:-** Provide knowledge of Triple integral and using it to compute volume.

**CO4:-** An understanding of exponential, logarithmic, trigonometric and inverse trigonometric functions, as well as their applications and their graphs.

**CO5-** The ability to use inverse functions to solve equations, specifically to solve exponential and trigonometric equations.

**CO6-** An understanding of angle measure in degrees and radians, of the unit circle as it relates to the trigonometric functions, and of right triangle trigonometry.

**CO7-** Knowledge of trigonometric identities and experience deriving identities.

**CO8:-** An understanding of polar coordinates, equations and graphs, the complex plane and DeMoivre's Theorem

## **Semester II**

### **USMT-03 Ordinary Differential Equations and Difference Equations**

**CO1:-**Explain Applications of Differential equations to physics, chemistry and biology.

**CO2:** -Familiar with Differential equations with constant coefficients and their solutions.

**CO3:** -Familiar with Second order equations with variable coefficients and their solutions.

**CO4-** Students will learn what an ODE is, what constitutes a solution, what initial value problems are, and what constitutes a solution. They will learn to classify ODEs

**CO5:-** Students will recognize certain basic types of first order ODEs for which exact solutions may be obtained and to apply the corresponding methods of solution.

**CO6:-** Difference equations can be viewed either as a discrete analogue of differential equations

**CO7:-** Difference equations are used for approximation of differential operators, for solving mathematical problems with recurrences

#### **USMT-04 Partial Differential Equation**

**CO1:-**Introduce students to partial differential equations.

**CO2:-** On successful completion of this **course** students will be able to: use knowledge of **partial differential equations** (PDEs)

**CO3:-** Apply partial derivative equation techniques to predict the behaviour of certain phenomena.

**CO4:-** Identify real phenomena as models of partial derivative equations

**CO5:-** Apply specific methodologies, techniques and resources to conduct research and produce innovative results in the area of specialisation.

**CO6:-** Apply specific methodologies, techniques and resources to conduct research and produce innovative results in the area of specialisation.

### **Semester III**

#### **USMT-05 Real Analysis**

**CO1:-** Describe the fundamental properties of the real numbers that underpin the formal development of real analysis

**CO2:-** Demonstrate an understanding of the theory of sequences and series, continuity, differentiation and integration.

**CO3:-** Apply the theory in the course to solve a variety of problems at an appropriate level of difficulty.

**CO4:-** Gain knowledge of concepts of modern analysis, such as convergence, continuity, completeness, compactness and convexity in the setting of Euclidean spaces and more general metric spaces.

#### **USMT-06 Set Theory and Laplace Transform**

**CO1:-** Describe the relation between sets regarding membership equality, subset, and proper subset, using proper notation.

**CO2:-** Be able to draw and interpret venn diagrams of set relations and operations and use venn diagrams to solve problems

**CO3 :-** Gain the main subject of fuzzy sets.

**CO4 :-** Make calculation on fuzzy set theory.

## **Semester IV**

### **USMT-07 Algebra**

**CO1:-** Explain Groups.

**CO2:-** Familiar with Isomorphisms.

**CO3:-** Familiar with Group Homomorphisms, Classification of finite abelian groups up to order 15 .

**CO4:-** Familiar with Rings, Homeomorphisms, Construction of field of quotients.

**CO5:-** Explain Polynomial rings.

### **USMT-08 Elementary Number Theory**

**CO1:-** Students will be able to use the division algorithm,

**CO2:-** Students will be able to comprehend the primes numbers, their distributions and the notion of congruences,

**CO3:-** Students will be able to identify primitive roots and indices.

**CO4:-** Compute the greatest common divisor by help of Euclid's algorithm;

**CO5:-** Give an account of the proof of the fundamental theorem of arithmetic;

**CO6:-** Able to solve linear Diophantine equations

**CO7:-** Able to solve linear congruences.

## **Semester – V**

### **MAT : Linear Algebra**

**CO1:-** Provide knowledge in Algebra of matrices and some applications of matrices to conic sections and system of linear equations .

**CO2:-** Familiar with Invertible matrix and linear mappings.

**CO3:-** Describe Matrix connection.

### **MAT : Matrices and Theory of Equations**

**CO1:-**Demonstrate an understanding of the basic principles Matrices, Types of matrices.

**CO2:-** Perform basic calculations in Linear Equations.

**CO3:-** Demonstrate an understanding of the general properties of polynomial equations in one variable.

**CO4:-** Demonstrate an understanding reciprocal equations and Bi-quadratic equations.

### **Semester – VI**

#### **MAT : Complex Analysis and Vector calculus**

**CO1:-** Explains basic concepts about complex numbers.

**CO2:-** Introduce the idea of complex integration and differentiation.

#### **MAT : Linear Programming and Transportation Problem**

**CO1:-**Formulate a given simplified description of a suitable real-world problem as a linear programming model in general, standard and canonical forms

**CO2:-**Sketch a graphical representation of a two-dimensional linear programming model given in general, standard or canonical form.

**CO3:-**Classify a two-dimensional linear programming model by the type of its solution

**CO4:-**Solve a two-dimensional linear programming problem graphically

**CO4:-**Use the simplex method to solve small linear programming models by hand, given a basic feasible point.

**CO5:-**This course aims at introducing students into linear optimization theory and its applications

**CO6:-**The field of linear programming provides the appropriate methods for the efficient computation of optimal solutions of a problem which is modeled by a linear objective function and a set of linear constraints



**Shri Jivanrao Sitarampatil Munghate Arts, Science & Comm.  
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**Department of Sociology**

**DEPARTMENT OF SOCIOLOGY**

**M. A. I Sociology Sem I**

**Course Outcomes**

**CLASSICAL SOCIOLOGICAL THEORY**

**Course code SC451**

**POI** :Graduate has gained through understanding of the fundamentals of sociological concept, perspectives and methodological concerns.

CO 1: Ability to grasp the intellectual and social origins of the emergence of Sociological Theories.

CO 2:Ability to internalize the classical sociological concepts of Marx, Weber and Durkheim.CO 3: Ability to cultivate sociological perspective and apply those I'm understanding the social issues.

CO4:

The students will be able to

Understand the intellectual and historical background of emergence of sociology and understand the basic ideas and perspectives of Comte, Spencer, Durkheim.

C05: Assess Social and Sociological Theories; Phenomenon and Perspectives; Influence of Industrial and French Revolution on Sociological thought and contributions of August Comte.

C06:Describe the contributions of Herbert Spencer, Emile Durkheim Karl Marx, VilfredoPareto, Max Weber and Thorsten in Veblen.

C07:The course aims to provide a general introduction to sociological theory and thought. The paper acknowledges the contributions of both western and Indian scholars in the development of sociology. It provides the students an opportunity.

**M.A. I (I Sem.) Methodology of Social Research-I**

**SC 452**

C01: Meaning, scope, types and significance of Social Research.

C02:Importance of research design in Social Research and how to formulate it.

C03:How to collect, analyse data and how to write a field report.



C04: Understanding Sociology as a science, concepts and steps in research.C05:Differentiate between the Quantitative and Qualitative Research and understand different types of Research Design. Of Social Research –I  
SC 452

C01: Meaning, scope, types and significance of Social Research.

C02:Importance of research design in Social Research and how to formulate it.

C03:How to collect, analyse data and how to write a field report.

C04: Understanding Sociology as a science, concepts and steps in research.C05:Differentiate between the Quantitative and Qualitative Research and understand different types of Research Design.

### **M.A. I (I Sem.) Rural Society in India**

CO1:The course explores substantive issues in Rural Sociology.

CO2: It gives attention to Indian themes.

Studying the course students will be able to Define Rural Sociology and demonstrate nature, subject-matter and importance of studying Rural Sociology.

CO3:Understand and analyse social, economic and political aspects of rural society.

C04:Demonstrate how caste system operates and its importance in rural society. C05:Define and demonstrate democratic decentralization of power and importance of PanchayatiRaj Institution in bringing about changes in rural society

### **M.A. I (I Sem.) Social Movement In India**

CO1: Explain the meaning, scope and Types of of Social Movements.

CO2: Describe Social Reform Movements- SatyashodhakSamaj, Arya Samaj,

CO3: Elaborate Regional Movements –Jharkhand, Telangana, Vidarbha

CO4:Explain the impact of Social Movements on Society

### **M.A. I (II Sem.) Perspective on Indian Society**

C01: Understand the concepts and contributions of Indian social thinkers in the reform of Indian society as well as to enhance knowledge about society.

CO2: Know the contributions of Indian Sociologists in the development of sociological thought.

CO3:Understand the views of Ambedkar, Shrinivas, Mukherjee and Dubey

CO4:Understand structuralism, functionalism, and phenomenology

### **M.A. I (II Sem.) Methodology of Social Research –II**

CO1:Understand the various techniques of Data Collection-Observation, Questionnaire, Interview Schedule; Case Study, Social Survey, Content Analysis and Writing research reports.

C02:Elaborate on Data Processing and Data Analysis.

C03:Calculation of measures of central tendency –Mean, Median and Mode; Graphic Representation: Bar Graph and Histograms.

### **M.A. I (II Sem.) Urban Society in India**

C01:Explain Nature and Scope of Urban Sociology.

C02:Describe Social Structure of Rural & Urban Communities.

C03: Analyse major theoretical Perspectives in Urban Sociology and Patterns of Urban Growth –Urban.

C04: Describe Urban economy in India- Urban Development Initiatives; Urbanization and Industrial growth.

### **M.A. I (II Sem.) Sociology of Kinship, Marriage And Family**

C01:Understand the basic characteristics, types about Kinship, Marriage And Family.

C02:Understand relation between Kinship, Marriage And Family.

C03: Understand the recent theoretical concepts in Kinship.

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**Department of Sociology**

**MA. II Sociology**

**M.A. II (III Sem.) Theoretical Perspective in Sociology –I**

C01: Explain Theories of Talcott Parsons, C.W. Mills, George Simmel, Anthony Giddens, Alfred Schutz, Harold Garfinkel, Husserl and Goffman and Robert Merton.

C02: Understand structuralism, functionalism, and phenomenology and conflict theory.

C03: Understand the critical, post-structuralism, post-modern and other recent theories.

**M.A. II (III Sem.) Social Change and Development-I**

C01: Describing the Concepts and Indicators of development; Human Development and Economic Growth; Concepts of Social Development, Economic Development, and Sustainable Development.

C02: Understanding the role of International Institutions (World Bank, IMF, WTO, ILO, UNO, UNICEF) in Development Policies.

C03: Elaborate on victims of development, Rehabilitation and Resettlement – Role of Civil society and NGOs. SEZ and Development.

**M.A. II (III Sem.) Industry and Society in India –I**

C01: Describe the Nature and Scope of Industrial Sociology; Growth of Industrialization, Industrial Revolution and its impact on Society.

C02: Elaborating on Changing Structure of modern Industrial enterprises and principles of Organization – Formal and Informal.

C03: Describe Trade Union Movement in India; Workers Participation in Management and Collective Bargaining.

C04: Understand Labour Problems – Absenteeism, Alcoholism and Alienation. C05: Understand Impact of Globalization on Industry and Labour.

**M.A. II (III Sem.) Political Sociology-I**

C01: To study in depth Politics and Society.

C02: Getting information about political parties and system of justice in India.

C03: Knowing about the problems and challenges in Indian politics.

C04: Study of the local governing mechanism.

C05: Study of the contribution of political thinkers in independent movements and their need for modern society.

### **M.A. II (IV Sem.) Theoretical Perspective in Sociology –II**

C01: Describe the contributions of Charles Horton Cooley, George Herbert Mead, Herbert Blume, George Homans, Peter Blau with reference to Symbolic Interactionism and Exchange theory.

C02: Describe The Project of Modernity, Classical theories and Contemporary Theories.

C03: Present critique of Modernity and New Philosophy of Science

### **M.A. II (IV Sem.) Social Change And Development-II**

C01: Analyze the information Technology paradigm and Network Societies.

C02: Understand impact of Information Technology on Society ; interface between Bio Technology, Society and Sustainable Development.

C03: Elaborate the relation between Nano Technology, Development and Social Change and Explain approaches to the environment and sustainable development.

### **M.A. II (IV Sem.) Industry and Society in India –II**

C01: Explain Growth of Industrialization, Industrial Revolution and its Impact on Society, Changing Structure of Modern Industrial Enterprises, Principles of Organization -Formal and Informal.

C02: Explain Industrial Disputes and Settlements and describe the Labour Problems; Role of ILO and Commitment and Motivation of Workers.

C03: Understanding the workers' role and workers' relations with industrial organization.

### **M.A. II (IV Sem.) Political Sociology-II**

C02: Getting information about various concepts in Public Administration.

C02: Getting information about the system of the Constitution and Government.

C03: Understanding the government mechanism, its functions, duties and responsibilities. C04: It is possible to study how politics affects society in this way.

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**Department of Marathi**

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➤ **Programme Specific Outcome :-**

On the successful completion of the programme M. A. Marathi the students are able to :-

- 1) Students understood the history of knowledge of Marathi language.
- 2) Saint, Pand and Tant understood the nature of literature.
- 3) Learned the language of poetry and the language of literature.
- 4) Marathi saints were introduced.
- 5) Learned the nature of ancient Marathi medieval poets and modern poetry.
- 6) Prose literature became knowledge of verse literature and literary types.
- 7) The students became curious about reading literature and observing ancient literature.
- 8) Literature and Common language were understood.
- 9) The students learned the Yadav language, Shiva language and Peshwa language and literature.
- 10) Maharashtra name origin the period of creation of the Marathi language and the evidence of the formation of the Marathi language became known.
- 11) Identify major literary genres.
- 12) Do close textual analysis to interpret and evaluate literary text.
- 13) Demonstrate in discussion and writing and understanding of literary techniques that Marathi writers use in constructing their use.
- 14) Study and understand the Classical and Modern theories in Marathi literature.
- 15) Study the various literary trends in Marathi. 16) Develop literary competence.

➤ **Course Outcomes :-**

On the successful completion of the course M. A. - I years students are able to :- **M.**

**A. Semester - I**

**Paper :- Arvachin Kavita : Bhag - 1 (1885 to 1945)**

- 1) The students got acquainted with the origins of modern Marathi poetry and the poetry of prominent Marathi poets.
- 2) The nature of Keshavsuta's poetry was understood.
- 3) The students studied the poems in Balakvi's collection of poems 'Fulrani'. 4) The students studied Suresh Bhatt's poems edited by Shirishpai.

**M. A. Semester - II**

**Paper :- Arvachin Kavita : Bhag - 2 (1945 To 2000)**

- 1) The students understood the nature of B. S. Mardhekar's poetry.

- 2) The students got to know the poems of VamanNimbalkar's collection of poems 'VahtyaJakhamancha Pradesh'.
- 3) The students got an idea of the poems in N. D. Mahanor's collection of poems 'RanatlyaKavita'.
- 4) Students understood the nature of wool tribal poetry on the poems in BhujangMeshram's 'Ulgulan' poetry collection.
- 5) The students learned the nature of rural poetry from the 'Gramgeeta' of RastrasantTukdojiMaharaj.

### **M. A. Semester - I**

#### **Paper :-Sahityashastra : Bhag - 1**

- 1) The students learned the relation of literature to the purpose of literary lectures, production activities and other fine arts.
- 2) Students gained knowledge of the characteristics and literary values of literature.
- 3) The students learned how literature relates to social life.
- 4) Students became acquainted with the origins, development and vocabulary of Indian Marathi Literature. 5) Students learned about the theory of interest in Indian Marathi Literature and its types.

### **M. A. Semester - II**

#### **Paper :-sahityashastra : Bhag - 2**

- 1) The students got acquainted with Western literary thinkers and their literary ideas.
- 2) Students studied the literary ideas and opinion of Plato, Aristotle, Kroche Kant, Wordsworth etc.
- 3) Students studied Modern Marathi Literary Theorist and their Theories.
- 4) Students studied the literary theory of Mardhekar, Muktiboth and D. G. Godse.
- 5) Students study BhalchandraNemade's 'DeshiyataTheori' and R. B. Patankar's 'Dvyidhruvatmak Theory'.

### **M. A. Semester One**

#### **Paper :-Loksahitya : Bhag - 1**

- 1 ) While understanding the concepts of folk literature and people, contemporary students were able to understand the origins of folk literature and realized how natural the literature created by people is.
- 2 ) Students were able to examine the relationship between folklore, history, archaeology, sociology, anthropology, language, science, psychology, theology.

3 ) Marathi Scholars of Folklore Research done by the researchers and editing of the collection done by them Students were able to understand the research work of the researchers Sane

GurujiDurgaBhagwatDr.Sarojini Babar Dr.PrabhakarMande and Dr. Tara Bhawadkar.

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4 ) Oral literature and written folk literature in which folk theoretical study methods before binding study methods, poetic beauty in folk literature, composition, language ideas and inventive style as well as the mutual cooperation of folk literature and traditional literature and the difference between these students were able to understand.

5) Folk literature and saint literature were also treated by the students. Marathi folk tales and types of folk tales. Students could study many types of Marathi folk songs and folk songs through this study.

## **M. A. Semester - II**

### **Paper :- Loksahitya : Bhag – 2**

1) The students began to understand the nature and scope of the concept of folk theater which has been going on for generations since ancient times.

It helped to understand folk art and the place of folk drama in it. Also, while exploring the inspiration behind the creation of folk art and folk drama, students could also learn about the purposes behind performing folk drama and folk art.

2 ) Dandar, kathasar, Darama, Bhingi Song, Satshya, Powada, Tamasha, Lalit, Gangasar, Bharud, Tumbadi, Dashavatar, Bahruupi, Vasudev, Dahaka, Khadigammat, AmbedkariJalse The types of folk dramas were introduced to the students.

3) Gadchiroli ChandrapurBhandara and Gondia are the four districts of Jadi region, i.e. mainly in Jadipatti where the contribution of KanayaNannu, Gariba, MadhuBante, BudhaBhelaweParashramParsodiwale, MahadevUrkudeAmbadasNagdeve, Krishna Hazare could be understood.

4) Students were able to study both the amateur theater and the professional theater with the more

modernizing influence on the Zadhipattitheater while understanding the nature and characteristics of the Zadhipatti theatre.

### **M. A. Semester - I**

#### **Paper :-Natak : Bhag - 1**

- 1) The students studied the nature, style and features of Marathi Drama and Pre-independence plays.
- 2) The students studied the plot, style of play 'SangeetSaubhadra'.
- 3) The students studied the play 'EkachPyala' written by R. G. Gadkari.
- 4) The students studied the plot, style of play 'Kichakwadh'.
- 5) The students studied the plot, style of play 'Gharabaheer'.

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### **M. A. Semester - II**

#### **Paper :-Natak : Bhag - 2**

- 1) The students studied the plot, style of play 'ItheOshallaMrutyu'.
- 2) The students studied the plot, style of play 'KatyarKaljatGusali'.
- 3) The students studied the plot, style of play 'SangeetSaubhadra'.
- 4) In 'Kirwant', the students studied the Storytelling, Style, Characteristic of Dalit Drama.
- 5) The student studied the narrative style, Characteristic, Storytelling of the play 'Atmahatya' in the bush.
- 6) The students studied the storytelling plot, style, characteristic of the Gondi regional play 'Mawa Nate Mawa Sarkar'.

#### **➤ Course Outcomes :-**

On the successful completion of the course M. A. - I years students are able to :-**M.**

### **A. Semester - III**

#### **Paper :-PrachinMadhyayugin Marathi Kavita : Bhag - 1**

- 1) Students will understand the origin and development of ancient Marathi literature.
- 2) Students will know the nature of expression on ancient Marathi poetry 'Abhang' and 'Ovi'.
- 3) Students will realize the importance of Saint Dnyaneshwar's character and literary work.
- 4) Students will notice the nature of ancient poetry based on the book 'MahandambecheDhawale'.
- 5) Students will understand the literary work of the neglected saints on the basis of this text with the 'MahadwarachyaPaythyashi'.
- 6) Students will be introduced to the character and philosophy of Jesus Christ based on the book 'KristacheYatnageet



**M. A. Semester - IV****Paper :-PrachinMadhyayugin Marathi Kavita : Bhag - 2**

- 1) Students will be introduced to the nature and features of Madhyayugin Marathi Literature as well as Contemporary Poetry.
- 2) Based on this book 'ManacheShlok', students will get to know the style of Saint Ramdas' poetry and the nature of his teachings.
- 3) Based on this book on 'DamayantiSwayamvar', students will notice the nature of Panditi poetry and the difference in the language of that poetry.
- 4) While studying Saint Eknath'sBharudas, students will understand the philosophy and purpose of his Bharudas.
- 5) Students will understand the origin of planting material and its inspiration as well as special knowledge of planting material of Shahir.

**M. A. Semester - III****Paper :-Bhashavidnyan : Bhag - 1**

- 1) Students will understand the nature of human language, its functioning and the background of Marathi language.
- 2) Students studied different study methods of language.
- 3) The students studied the field of language, science, psychology, anthropology etc. 4)The students got knowledge of human language and the language of literature.

**M. A. Semester - IV****Paper :-Bhashavidnyan : Bhag - 2**

- 1)The students studied the nature, characteristics and features of sociolinguistics. 2)By studying social linguistics, the students came to know the relationship of Marathi language with the society.
- 3) The students got to know the origin of Marathi language, its expansion and the symptoms of Marathi language.
- 4) The students studied the linguistic inter-circle and outer-circle theory of language.
- 5)Students studied various types and forms of standard language and dialect of Marathi language.

**M. A. Semester - III****Paper :-VisheshGranthakar : Tukaram : Bhag - 1**

- 1) The students got an idea of the social, political and cultural status of the Saint TukaramMaharaj period.
- 2) The students got to know the character of Saint TukaramMaharaj and the nature of his abhanga.
- 3) While studying the abhanga of Saint TukaramMaharaj, the students came to know different types of abhanga.
- 4) While studying Saint TukaramMaharaj's abhanga, the students became aware of the social conditions and problems of the time.

**M. A. Semester - IV****Paper :- Vishesh Granthakar : Tukaram : Bhag - 2**

- 1) The students came to know the teachings of Saint Tukaram Maharaj through his abhanga.
- 2) The students got to know the features, characteristic and style of Saint Tukaram Maharaj's abhanga.
- 3) From the abhanga of Saint Tukaram Maharaj, the students got knowledge of the then farming methods and crop water.
- 4) The students studied some of Saint Tukaram Maharaj's abhanga about Bharud and Purankatha.

**M. A. Semester - III****Paper :- Marathi Gangamayacha Itihas : Bhag - 1 (Starting to 1818)**

- 1) The students studied the ancient forms of Marathi literature, different types, different currents of different periods.
- 2) The students got acquainted with the socio-political and cultural life of the time from the ancient history of Marathi literature.
- 3) Students understand the different periods of literature, the different literary streams of this period and the linguistic changes that have taken place in it.
- 4) The students studied various religious sects and philosophies from the ancient history of Marathi literature.

**M. A. Semester - IV****Paper :- Marathi Gangamayacha Itihas : Bhag - 2 (1818 to 2000)**

- 1) The students got acquainted with the nature of Marathi literature, the concept of literary history and the study methods of history.
- 2) The students got to know of the different streams and types of Marathi literature till the year 1818 AD.
- 3) The students underwent various religious streams as well as political and social changes through the study of Marathi literature.
- 4) The students were introduced to various stages of the period of modern Marathi literature and post-independence literary flow.

**Dr. Ganesh N. Chudari**  
(Professor) HOD  
Department of Marathi

