Shri Shivaji Mahavidyalaya, Barshi. Course Outcome Year: 2021-22

| Sr. No. | Course Name | Semester | Paper No. | Subject Name | Course outcome |
|------------|----------------|----------|-----------|--|--|
| 1 | B.A.I | I | Ι | Introduction to English Literature | To acquaint students with literary forms and linguistic terms. To initiate students and provide them a firsthand experience of reading and interpreting literary texts. |
| | | Π | П | Introduction to English Literature (One Act Plays and Literary Terms) | To acquaint students with structural and analytical techniques in poetry. To acquaint students with analysis of minor literary form i.e. short story. |
| 2 | B.A.I | I&II | - | English(Com) | Understand the concepts of communication. Expand their vocabulary after reading the prescribed texts. Attain writing, speaking, reading, & listening competence. Be aware of the correct usage of English grammar Become familiar with selected literary forms, develop and strengthen their imaginative ability and the ability to analyze different literary forms. |
| 3 | B.A.II | Ш | III | British Literature-I | Familiar with a few British writers Familiar with some of the dramas and dramatists Able to understand the features of the text |
| | | | IV | British Literature-II | Familiar with a few British writers Familiar with some of the dramas and dramatists Able to understand the |

Department of English

| | | | | | features of the text |
|---|---------|--------|------|---------------------------------------|--|
| | | IV | V | Indian Literature-I | Acquire language skills required for day to day and specific purpose. Be able to interpret and illustrate concepts of Communication, Prose and |
| | | | | | Poetry. Be able to analyze and interpret the text prescribed. Develop certain life skills and strengthen strategies to develop vocabulary. |
| | | | VI | Indian Literature-II | Acquire language skills required for day to day and specific purpose. Be able to interpret and illustrate concepts of Communication, Prose and Poetry. Be able to analyze and interpret the text prescribed. Develop certain life skills and strengthen strategies to develop vocabulary. |
| 4 | B.A.II | III&IV | - | English(Com) | • |
| | | | | | |
| 5 | B.A.III | V&VI | - | English (Com) | Use oral and written English effectively • Appreciate literary language • Use English language in creative writing • Apply English language skills in clearing |
| 6 | B.A.III | V | VII | Introduction to Literary Criticism | Understand the basics of literary criticism. Have a critical approach to literature. Understand the major trends in literary criticism. |
| | | | VIII | British Literature | Gain knowledge, stylistic strategies and diction of British literature. Be able to explore the creativity and the human experiences in fiction, poetry and drama. Be able to cultivate aesthetic and ethical values in life |

| | | | | | through literary texts. |
|---|-------|----|------|--|--|
| | | | IX | Indian English Literature Literatures in English | Understand gradual development of Indian English literature from mid-twentieth century to post 2000 period. • Get acquainted with major genres/themes through the study of texts prescribed. • Understand Afro-American |
| | | | Λ | | • Understand Ano-American fiction • Understand features of Postcolonial Fiction |
| | | | XI | Introduction to the Structure & Function of Modern English | Understand various concepts in linguists. • Get acquainted with various branches of linguistics. |
| | | VI | XII | Introduction to Literary Criticism | Understand the basics of literary criticism. Have a critical approach to literature. Understand the major trends in literary criticism. |
| | | | XIII | Indian English Literature | Understand gradual development of Indian English literature from mid-twentieth century to post 2000 period. • Get acquainted with major genres/themes through the study of texts prescribed. |
| | | | XIV | Literatures in English | Understand Afro-American fiction Understand features of Postcolonial Fiction |
| | | | XV | Introduction to the Structure & Function of Modern English | Understand various concepts in linguists. • Get acquainted with various branches of linguistics. |
| | | | XVI | Literary Mindscapes | Use oral and written English effectively • Appreciate literary language • Use English language in creative writing |
| 4 | M.A.I | I | I | British Literature | Able to understand the western culture and traditions Able to understand the British literary pieces. |
| | | | Π | Indian Literature in English | • At the end of the course the students will get acquainted with later phases of development of Indian English |

| | | | | Literature and familiar with Indian ethos as reflected in texts prescribed. • At post-graduation level, students will enjoy reading of a number of authors and important literary genres as practiced by select Indian English figures. •As planned while designing the syllabus of this paper, students will get acquainted with thematic plurality, genres handled and style reflected in seminal texts of poetry, fiction drama and nonfiction. |
|--|---|-----|--|---|
| | | III | Introduction to Language &Linguistics | The students will be interested in the language • Familiar with some of the mechanism and theories of linguistics |
| | | IV | Comparative Literature | The students are introduced to different literary expressions written in English language. The students understand thematic perspectives of the literatures written in different countries. The students develop sensitivity and balanced responses to the complexity of human nature as portrayed in literary works. The students develop understanding of the natures and functions of literatures in English. The students develop an awareness of the relationship between texts and their cultural contexts. |
| | Π | V | British Literature | Able to understand the western culture and traditionsAble to understand the British literary pieces. |
| | | VI | Indian Literature in English | • At the end of the course the students will get acquainted with later phases of development of Indian English Literature and familiar with |

| | | | | | Indian ethos as reflected in texts prescribed. At post-graduation level, students will enjoy reading of a number of authors and important literary genres as practiced by select Indian English figures. As planned while designing the syllabus of this paper, students will get acquainted with thematic plurality, genres handled and style reflected in seminal texts of poetry, fiction drama and nonfiction. |
|---|-------|-----|------|--|---|
| | | | VII | Introduction to Language &Linguistics | The students will be interested in the language • Familiar with some of the mechanism and theories of linguistics |
| | | | VIII | Comparative Literature | The students are introduced to different literary expressions written in English language. The students understand thematic perspectives of the literatures written in different countries. The students develop sensitivity and balanced responses to the complexity of human nature as portrayed in literary works. The students develop understanding of the natures and functions of literatures in English. The students develop an awareness of the relationship between texts and their cultural contexts. |
| 5 | M.AII | III | IX | Contemporary Critical Theories | Understand how various critical theories developed in the course of the 20th Century. Read & contextualize contemporary Theories to the best of their ability. Develop competency to mark differences and similarities in these theories and schools. Develop an ability to apply the |

| | | | | critical theories to literary texts. •Acquire ability to understand their own theoretical/critical |
|--|-----|------|-----------------------------------|---|
| | III | X | Postcolonial Literature | stance as readers. Analyze and interpret the colonial and postcolonial texts applying the postcolonial literary theory. Define the key concepts in postcolonial studies. Read, comprehend and engage with postcolonial literary criticism. Know how race, class, gender, history and identity are presented and problematized in the literary texts, Know how a literary text, explicitly or allegorically represents various aspects of colonial oppressions. |
| | III | XI | Translation Studies | Comprehend translation studies as a separate discipline of knowledge Comprehend the nature, scope and theoretical issues in translation studies Comprehend major issues and methods in literary studies |
| | III | XII | 21 st Century Skills | English is the world language. It is spoken worldwide. Students of the postgraduate level should use English in their future life. With the help of soft skills students can develop their personality in an effective way for better life. |
| | IV | XIII | Contemporary Critical Theories | Understand how various critical theories developed in the course of the 20th Century. Read & contextualize contemporary Theories to the best of their ability. Develop competency to mark differences and similarities in these theories and schools. Develop an ability to apply the critical theories to literary texts. |

| | | | | | | | •Acquire ability to understand their own theoretical/critical stance as readers. |
|------------|----------------|----------|----------|----|---------------------------------|-------------------------------|---|
| | | | XIV | | Postcolonial | Literature | Analyze and interpret the colonial and postcolonial texts applying the postcolonial literary theory. Define the key concepts in postcolonial studies. Read, comprehend and engage with postcolonial literary criticism. Know how race, class, gender, history and identity are presented and problematized in the literary texts, Know how a literary text, explicitly or allegorically represents various aspects of colonial oppressions. |
| | | | XV | | Translation Studies | | Comprehend translation studies as a separate discipline of knowledge Comprehend the nature, scope and theoretical issues in translation studies Comprehend major issues and |
| | | | XVI | | 21 st Century Skills | | ecomptenent major issues and methods in literary studies English is the world language. It is spoken worldwide. Students of the postgraduate level should use English in their future life. With the help of soft skills students can develop their personality in an effective way for better life. |
| Sr. No. | Course Name | Semester | Paper No |). | Subject | | Course outcome |
| 1 | B.Sc. I | I&II | - | | English Com. | Appreciat | d written English effectively te literary language ish language in creative writing |
| 2 | B.Sc. III | V&VI | - | | Com. • Apply En | | ish language in creative writing glish language skills in clearing e examinations |

Department Of Hindi

| Sr.N | Cours | Se | Donor | DoporNama | Course Outcomes |
|------|---------|-----|------------|------------------|---|
| | Cours | | Paper | PaperName | |
| 0 | е | me | No | प्रश्नपत्र का | (पाठ्यक्रम केपरिणाम) |
| | (कक्षा) | ste | (| नाम | |
| | | r | प्रश्नपत्र | | |
| | | | क्र | | |
| 1 | B.A | I | 1 | साहित्य रत्न | १) छात्रहिंदी के लेखक एवं कवियों से परिचित होतेहैं। |
| | | | | • | २) छात्रों में हिंदी साहित्य के प्रति अभिरुचि संवर्धितहोताहै |
| | -1 | | | | छात्रों में राष्ट्र के प्रति प्रेम एवं सामाजिक प्रतिबद्धता की भावना |
| | | | | | विकसित होती हैं |
| | | | | | ४) छात्रों लिंग, वचन की दृष्टि से वाक्य शुध्दिकरण की विधि से |
| | | | | | अवगत होतेहैं। |
| | | | | | ५) छात्रोंहिंदी भाषा के विभिन्न मुहावरों, कहावतों से परिचितहोते हैं। |
| | | | | | ६) छात्रों को देवनागरी लिपि में लिखे जानेवाले हिंदी अंको से परिचित कराना। |
| | | 11 | 11 | साहित्य रत्न | ?) छात्र हिंदी के लेखक एवं कवियों से परिचित होते हैं |
| | | | | | २) छात्रों में हिंदी साहित्य के प्रति अभिरुचि संवर्धित होता है |
| | | | | | छात्रों में राष्ट्र के प्रति प्रेम एवं सामाजिक प्रतिबद्धता की भावना |
| | | | | | विकसित होती हैं |
| | | | | | ४) छात्र साक्षात्कार प्रविधि से परिचित होते हैं। |
| | | | | | ७) छात्र विज्ञापन लेखन कौशल्या आत्मसात होता है |
| | | | | | ६) छात्र हिंदी भाषा के विभिन्न मुहावरों, कहावतों से परिचित होते हैं। |
| | B.A | 111 | 111 | आधुनिक हिंदी | 1) आधुनिक वैविध्यपूर्ण हिंदी कहानियों से छात्र अवगत होते है। |
| | | ''' | 111 | गद्य कहानी एंव | 2) आधुनिकता बोध और नए मूल्यों के प्रति छात्र अवगत होते है। |
| | -11 | | | व्यवहारिक हिंदी |) 3) कहानी कला के प्रति अभिरुची और समीक्षा छात्रा विकसित करते है। |
| | | | | | 4) |
| | | IV | | मध्ययुगीन हिंदी | सामाजिक , सांस्कृतिक पृष्ठभूमी मे कविता के अध्ययन विश्लेषण की |
| | | | | काव्य, व्याकरण | जानकारी लेते है। |
| | | | | एवं लेखन | 2) भक्तिकालीन तथा रीतीकालीन कविता के माध्यम से शृंगार रस एवं वीर |
| | | | | | रस की स्थापना का महत्त्व को अवगत करते है। |
| | | | | आधुनिक हिंदी | आधुनिक हिंदी एकांकी विधा से छात्र अवगत होते है। |
| | | | | गद्य-एकांकी | 2) एकांकी कला के प्रति अभिरुची और समीक्षा दृष्टी छात्र विकसित करते |
| | | | | एवंम | है। |
| | | | | व्ययवहारिक हिंदी | |
| | | | | आधुनिक हिंदी | हिंदी साहित्य के आधुनिक काल से छात्र परिचित होते है। |
| | | | | काव्य एवं लेखन | 2) छायाबाद तथा प्रगतिवाद के माध्यम से प्रकृति मानवीय पीडा संवेदना से |
| | | | | | छात्र अवगत होते है। |
| | B.A | V | | हिंदी विशेष | भगवानदास मोरवाल के व्यक्तित्व से परिचित होते है। |
| | | | | लेखक- | 2) प्रतिनिधि कहानियों के विषय विविधता से परिचित होते है। |
| | -111 | | | भगावनदास | |
| | | | | मोरवाल | |
| | | VI | | हिंदी विशेष | 1) भगवानदास मोरवाल के उपन्यास संसार से परिचित होते है। |
| | | | | लेखक- | 2) शंकुतला उपन्यास की विशेषताओं से परिचित होते है। |
| | | | | भगावनदास | , , , , , , , , , , , , , , , , , , , |
| | | | | मोरवाल | |
| I | 1 | 1 | 1 | | 1 |

| | | | काव्यशास्त्र | 1) | साहित्य निर्मिती प्रक्रिया से अवगत होते है। |
|------|----------|-----|---|----------|---|
| | V | | फाट्यरास्त्र | 2) | साहत्य गणनता आज्ञया से जपगत होते है। गदय तथा पदय तत्त्वोे से परिचित होते है। |
| | | | | 2) 3) | शब्दों की शक्ति से परिचित होते है। |
| | | | आलोचना | 1) | छात्र साहित्य के उपकरणों से परिचित होते है। |
| | VI | | जालायना | | |
| | | | | 2) | रसानुभूति की प्रकियों से अवगत होते हैं। |
| | | | आदिकालीन और | 3) | साहित्य के मूल्य, गुणों से परिचित होते है। |
| | V | | | 1) | हिंदी साहित्य के दार्शनिकि पूर्वपिठिका से छात्र परिचित होते है। |
| | | | मध्यकालीन हिंदी सम्पेन्स स्ट | 2) | हिंदी साहित्य की आदिकालीन और मध्यकालीन का कालजयी रचनाओं |
| | | | साहित्य का इतिहास सं. | | तथा रचनाओंसे छात्र अवगत होते है। |
| | | | शतहास स. 1050 से सं. | | |
| | | | 1900 | | |
| | | | | 1) | |
| | VI | | आधुनिक हिंदी सारीका का | 1) | आधुनिक हिंदी साहित्य की दार्शनिक पूर्वपीठिका से छात्र परिचित होते है। |
| | | | साहित्य का चरित्रम प्रान ंग | 2) | आधुनिक हिंदी साहित्य के इतिहास के कालानुरुप विभिन्न वाद एवं |
| | | | इतिहास सवंत | | विधाओं के विकास को छात्र अवगत करते है। |
| | | | 1900 से 2010 | | |
| | | | तक | 1) | |
| | V | | प्रयोजनमूलक िंफ े | 1) | प्रयोजनमूलक हिंदी के स्वरुप एवं विकास से छात्र परिचित होते है। |
| | | | हिंदी | 2) | प्रयोजनमूलक हिंदी के माध्यम से रोजगारपरक कौशल छात्र विकसित करते हैं। |
| | | | व्यवहारिक हिंदी | 1) | • |
| | VI | | व्यवहारिक हिंदा | 1) | अनुवाद का स्वरुप और महत्त्व से छात्र अवगत होते हैं। |
| | | | हिंदी भाषा | 2) | अनुवाद एवं विज्ञापन लेखन की क्षमता से छात्र विकसित होते हैं। हिंदी भाषा ए वं लिपि से उद्भव और विकास से छात्र परिचित होते है। |
| | V | | ाहदा मापा | 1) | हिंदी माना ए व लिपि से उद्भव और विकास से छोत्र परिपित होते है। मानक हिंदी वर्तनी और व्याकरण से छात्र अवगत होते है। |
| | | | भाषा विज्ञान | 2) | भाषा विज्ञान से छात्र परिचित होते है। |
| | V | | मापा विशान | 1) | माथा विज्ञान से छात्र परिपित होते है। उच्चारण की शुध्दता के प्रति छात्र जागृत होते है। |
| | | | आधुनिक हिंदी | 2) | हिंदी गद्य साहित्य से छात्र परिचित होते है। |
| M.A. | I | 1.1 | गद्य साहित्य | 1) 2) | हिंदी गद्य साहित्य की विविध विधासों का अध्ययन करत है। |
| 1 | | | गप्प साहरप | 2) | ित्व अपूर्व साहत्व का विविध विवासी का अध्यवन करता हा |
| | П | 1.1 | आधुनिक हिंदी | 1) | तात्कालीन भारतीय सामाजिक सांस्कृति परिवेश से छात्र परिचित होते है। |
| | | | गद्य साहित्य | 2) | छात्रों से हिंदी गद्य विधा के प्रति रुचि निर्माण होती है। |
| | 1 | 1.2 | भाषा विज्ञान | 1) | भाषा और भाषा विज्ञान से छात्र परिचित हौते हैं। |
| | 1. | 1.2 | | 2) | रुप विज्ञान, अर्थ विज्ञान से छात्र अवगत होते हैं। |
| | П | 1.2 | हिंदी भाषा एवं | 1) | हिंदी की ऐतिहासिक पृष्ठभूमि से छात्र परिचित होते है। |
| | | 1.2 | लिपि | 2) | देवनागरी लिपि की उत्पती एवं उसकी विशेषतासों से छात्र परिचित होते |
| | | | | | है। |
| | I | 1.3 | प्रयोजनमूलक | 1) | कामकाजी हिंदी से छात्र परिचित होते हैं। |
| | 1 | | हिंदी | 2) | राजभाषा की संविधानिक स्थिती से छात्र परिचित होते हैं। |
| | П | 1.3 | संगणकीय हिंदी | 1) | संगणक में हिंदी के अनुप्रयोग से छात्र अवगत होते हैं। |
| | | 1.0 | एंव व्यवहारिक | 2) | मुद्रित और इलेक्ट्रॉनिक माध्यम से छात्र परिचित होते हैं। |
| | | | हिंदी | | |
| | 1 | 1.4 | व्यावसायिक वर्ग- | 1) | परिकारिता के स्वरुप प्रकार और महत्त्व से छात्र परिचित होते हैं। |
| | 1 | 1.7 | पत्रकारिता | 2) | पत्रकारिता के मूल तत्त्वों से छात्र अवगत होते हैं। |
| | П | 1.4 | व्यावसायिक वर्ग- | 1) | प्रिंट पत्रकारिता और मुद्रणकला के संदर्भ जानकारी छात्र अवगत करते हैं। |
| | | ' | पत्रकारिता | 2) | अगरतीय संविधान में प्रदत्त मौलिक अधिकार सूचना और मानवाधिकार |
| | | | | Ĺ | से छात्र परिचित होते हैं। |
| | 1 | 1.2 | अनुवाद | 1) | अनुवाद की सामाजिक उपदयेयता से छात्र परिचित होते हैं। |
| | ' | 1.2 | 5 | 2) | अन्वाद सें रोजगार के क्षेत्रो छात्र अवगत होते हैं। |
| 1 | 1 | 1 | 1 | -7 | 3 |

| | | | | r | |
|------|-----|------|------------------|----|--|
| | П | 1.2 | हिंदी साहित्य | 1) | हिंदी साहित्य एवं सिनेमा से छात्र परिचित होते हैं। |
| | | | और सिनेमा | 2) | हिंदी साहित्यीक कृतियों के फिल्मांतरण की प्रक्रिया से छात्र अवगत होते |
| | | | | | الق |
| M.A. | 111 | 3.1 | हिंदी साहित्य का | 1) | छात्र हिंदी साहित्य के महत्त्व से परिचित होकर उसका विश्लेषण करते |
| | | •••• | इतिहास | | हैं। |
| | | | | 2) | छात्रों को आदिकालीन, भक्तिकालीन, रितिकालीन साहित्य की जानकारी |
| | | | | | होती हैं। |
| | IV | 4.1 | हिंदी साहित्य का | 1) | आधुनिककालीन परिवेश एवं विभिन्न दर्शनों से छात्र परिचित होते हैं। |
| | | | इतिहास | 2) | विभिन्न विमर्शो से छात्र परिचित होते हैं। |
| | Ш | 3.2 | काव्यशास्त्र एवं | 1) | काव्यशास्त्र को लेकर भारतीय चिंतन से छात्र परिचित होते हैं। |
| | | ••• | साहित्यालोचन | 2) | संस्कृत काव्यशास्त्र के विकासक्रम से छात्र परिचित हैं। |
| | IV | 4.2 | काव्यशास्त्र एंव | 1) | पाश्चात्य काव्यशास्त्र के इतिहास से छात्र परिचित होते हैं। |
| | | | साहित्यलोचन | 2) | पाश्चात्य काव्यशास्त्र के सिध्दांतो के स्वरुप अवधरणासें छात्र परिचित |
| | | | | | होते हैं। |
| | 111 | 3.3 | अनुसंधान प्रविधि | 1) | छात्र अनुसंधान प्रक्रिया और प्रविधी से परिचित हौते हैं। |
| | | | और प्रक्रिया | 2) | साहित्यिक अनुसंधान के विभिन्न क्षेत्रों से छात्र अवगत होते हैं। |
| | IV | 4.3 | अनुसंधान प्रविधि | 1) | छात्र अनुसंधान परियोजना कौशल आत्मसात करने में सक्षम होते हैं। |
| | | | और प्रक्रिया | 2) | छात्र को अनुसंधान संशोधन पध्दति और प्रविधि में रुचि निर्माण होती |
| | | | | | ۱۶ |
| | | 3.1 | प्राचीन एवं | 1) | प्राचीन काव्य परंपरा से छात्र परिचित होते हैं। |
| | | | मध्यकालीन | 2) | नाथ साहित्य और सुफि काव्य से छात्र परिचित होते हैं। |
| | | | काव्य | | |
| | IV | 4.1 | प्राचीन एवं | 1) | उत्त्र मध्यकालीन काव्य से छात्र परिचित होते हैं। |
| | | | मध्यकालीन | 2) | छात्र बिहारी और घनानंद के व्यक्तित्व एवं कृतित्त्व से परिचित होते हैं। |
| | | | काव्य | | |
| | 111 | 3.2 | फिल्म मिमांसा | 1) | हिंदी फिल्म उद्भव एवं विकास से छात्र परिचित होते हैं। |
| | | | | 2) | फिल्म निर्मिती एवं पात्रों से छात्र परिचित होते हैं। |
| | IV | 4.2 | दलित एंव | 1) | दलित साहित्य एवं अदिवासी साहित्य से छात्र परिचित होते हैं। |
| | | | आदिवासी | 2) | आधुनिक हिंदी साहित्य में प्रवाहित विचारधारा से छात्र अवगत होते हैं। |
| | | | साहित्य | | |

Department Of Marathi

अभ्यासक्रमाची उदिष्टे :-

| अ. क्र. | वर्ग | सत्र | अभ्यासपत्रिका क्रमांक आणि नाव | अभ्यासक्रम उद्दिष्टे |
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| ę | बी. ए. भाग - १ | I & II | आवश्यक मराठी - साहित्यदर्पण | १) मराठी भाषा समर्थपणे वापरण्याची क्षमता विद्यार्थ्यांमध्ये निर्माण व्हावी २) साहित्याचे विविध प्रकारांचे व प्रवाहांचे आकलन, आस्वाद, व विश्लेषण करता यावे. ३) साहित्यात मांडलेल्या विषयाच्या अनुषंगाने जीवनातील प्रश्न समजावून देणे ४) मराठी भाषेचे वैभव दृष्टीपथात यावे, व त्यातुन सामाजिक दृष्टी विकसित होण्याची प्रेरणा मिळावी |
| | बी. ए. भाग - १ | I & II | ऐच्छिक मराठी - साहित्यरंग | १) विद्यार्थ्यांमध्ये मराठी भाषा आणि साहित्याची जाणीव समृद्ध करणे २) विद्यार्थ्यांना मराठी साहित्यातील विविध प्रकार व प्रवाहांची ओळख करून देणे. ३) विद्यार्थ्यांना कथा व कविता या साहित्यप्रकाराची संकल्पना, रुवरूप व परंपरा समजावून सांगणे. ४) विद्यार्थ्यांना भाषेचे उपयोजन शिकवताना बातमीलेखन व निबंधलेखन कौंशल्य शिकविणे |
| Ś | बी. ए. भाग - २ | ш | पेपर क्रमांक - तीन मराठी वाङ्मर्यप्रकार आणि उपयोजित मराठी | १) कादंबरी या साहित्यप्रकाराचे वेगळेपण लक्षात घेणे. २) कादंबरी निर्मितीतील लेखकाचे महत्व अधोरेखित करणे. ३) कादंबरीतील आशय व अनुभव समजावून देणे. ४) विद्यार्थ्यांचे व्यक्तीमत्व कलागुण संपन्न करणारी कौशल्ये विकसित करणे |
| | बी. ए. भाग - २ | III | पेपर क्रमांक - चार कविता आणि काव्यास्वाद :- | १) कविता या साहित्यप्रकाराची ओळख करून देणे २) मराठी कवितेची वाटचाल समजून घेणे ३) मराठी कवितेतील वित्रणाचा आढावा घेणे. ४) कवितेतील प्रतिमा, प्रतिके, व मिथकांचे महत्व समजून देणे |
| | | IV | पेपर क्रमांक – पाच आत्मकथन आणि उपयोजित मराठी | १) आत्मकथन म्हणजे काय ते समजून घेणे. २) आत्मकथनाचे साहित्यिक मूल्य तपासणे. ३) आत्मकथनाची मराठी वाटचाल समजून घेणे. ४) उपयोजित मराठीचे न्यावहारिक मूल्य समजावून देणे. |
| | | IV | पेपर क्रमांक - सहा | १) नाटक या साहित्यप्रकाराची ओळख करून देणे. |

| | | | नाटक वाङ्मय प्रकार आणि उपयोजित मराठी | २) नाटकाचे विविध घटक समजावून देणे. ३) मराठी नाटकाची वाटचाल समजावून देणे. ४) उपयोजित मराठीतील घटक समजावून देणे. |
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| 3 | बी. ए. भाग -तीन | V | पेपर क्रमांक – सात साहित्यशास्त्र | १) साहित्यलक्षणाच्या विविध सिध्दांतांचा परिचय करून देणे. २) साहित्याचे स्वरूप समजावून सांगणे. ३) साहित्याच्या विविध प्रयोजनांचा परिचय करून देणे ४) साहित्यनिर्मितीच्या कारणांची माहिती करून देणे |
| | | V | पेपर क्रमांक - आठ भाषाविज्ञान व न्याकरण | १) मानवी जीवनातील भाषेचे स्वरूप व महत्व विद्यार्थ्यांना समजावून सांगणे २) विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टीकोन विकसित करणे. ३) भाषिक संप्रेषणाचा परिचय करून घेणे. ४)भाषा परिवर्तनाचे स्वरूप स्पष्ट करणे. ५) मराठी भाषेच्या न्याकरणाचे स्वरूप समजावून सांगणे. |
| | | V | पेपर क्रमांक - नऊ मध्ययुगीन मराठी वाङ्मयाचा इतिहास (इ. स. ११०१ ते १८००) | १) मध्ययुगीन मराठी वाङ्मयाची परंपरा व इतिहास यांचा परिचय करून देणे. २) मध्ययुगीन मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. ३) मध्ययुगीन मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. ४) मध्ययुगीन मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी समजून देणे. |
| | | V | पेपर क्रमांक - दहा उपयोजित मराठी | १) विद्यार्थ्यांना पारिभाषिक शब्दांचा परिचय करून देणे. २) ई - मराठी लेखनाचे महत्व समजावून सांगणे ३) मुद्रित शोधनाचे महत्व सांगून त्याचा सराव करून घेणे ४) स्पर्धा परीक्षेतील मराठी भाषेचे महत्व लक्षात आणून देणे. |
| | | V | पेपर क्रमांक - ११ आधुनिक मराठी साहित्यातील विविध प्रवाह (ग्रामीण व दलित) | १) आधुनिक मराठी साहित्यातील प्रवाहांच्या निर्मितीची पार्श्वभूमी समजावून सांगणे. २) ग्रामीण व दलित साहित्य प्रवाहाची संकल्पना, प्रेरणा स्वरूप व वैशिष्ट्ये विशद करणे. ३) ग्रामीण व दलित साहित्यप्रवाहांचा उदगम व विकास स्पष्ट करणे. ४) ग्रामीण कवितेची आशयसूत्रे, भाषावैशिष्ट्ये विशद करणे. ५) दलित कथेचा आशय, सामाजिकता, वैचारिकता स्पष्ट करून सांगणे |
| | बी. ए. भाग -तीन | VI | पेपर क्रमांक – बारा | १) साहित्यलक्षणाच्या विविध सिध्दांतांचा परिचय करून देणे. |

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| | | | रसापचार | २) साहित्याचे स्वरूप समजावून सांगणे. |
| | | | | ३) साहित्याच्या विविध प्रयोजनांचा परिचय करून देणे |
| | | | | ४) साहित्यनिर्मितीच्या कारणांची माहिती करून देणे |
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| | | | | |
| | | VI | पेपर क्रमांक – तेरा | १) मानवी जीवनातील भाषेचे स्वरूप व महत्व विद्यार्थ्यांना |
| | | | भाषाविज्ञान व | समजावून सांगणे |
| | | | व्याकरण DSE - 8 | २) विद्यार्थ्यांमध्ये वैज्ञानिक हष्टीकोन विकसित करणे. |
| | | | | ३) भाषिक संप्रेषणाचा परिचय करून घेणे. |
| | | | | ४)भाषा परिवर्तनाचे स्वरूप स्पष्ट करणे. |
| | | | | %) मराठी भाषेच्या व्याकरणाचे स्वरूप समजावून सांगणे |
| | | | | |
| | | | <u> </u> | |
| | | VI | पेपर क्रमांक – चौंदा — | १) मध्ययुगीन मराठी वाङ्गयाची परंपरा व इतिहास यांचा परिचय |
| | | | मध्ययुगीन मराठी | करून देणे. |
| | | | वाङ्गयाचा इतिहास (इ. स. ११०१ ते | २) मध्ययुगीन मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. |
| | | | (e. el. 117 117 8600) | ३) मध्ययुगीन मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय |
| | | | | २) गण्ययुगान गलान राजि याच एवरन्य व वासन्द्य याचा यारवय करून देणे. |
| | | | | |
| | | | | ४) मध्ययुगीन मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी समजून देणे. |
| | | VI | पेपर क्रमांक - पंधरा | १) मरावी आफ्रेने विविध शेवावील महत्व व सामे रज विद्यार्थ्य म |
| | | VI | | १) मराठी भाषेचे विविध क्षेत्रातील महत्व व उपयोजन विद्यार्थ्यांना |
| | | | उपयोजित मराठी | समजावून सांगणे. |
| | | | | २) जाहिरात कलेची उपयुक्तता स्पष्ट करून सांगणे. |
| | | | | ३) विद्यार्थ्यांमध्ये निवेदन कौंशल्ये विकसित करणे. |
| | | | | ४) ग्रंथपरिक्षणाचे महत्व व स्वरूप समजावून सांगणे |
| | | | | |
| | | VI | पेपर क्रमांक – सोळा | १) आधुनिक मराठी साहित्यातील प्रवाहांच्या निर्मितीची पार्श्वभूमी |
| | | | आधुनिक मराठी | समजावून सांगणे. |
| | | | साहित्यातील विविध | २) स्त्रीवादी व मुस्लिम साहित्यप्रवाहांची संकल्पना, स्वरूप, प्रेरणा |
| | | | प्रवाह, (स्त्रीवादी, | विशद करणे. |
| | | | मुस्लिम) | ३) वरील साहित्यप्रवाहांचा उदगम व विकास स्पष्ट करणे. |
| | | | <u>ن</u> ق | ४) कादंबरीतील आशयसूत्रे, समाजचित्रण, घटनाप्रसंग, व्यक्तिरेखा |
| | | | | व भाषा विशद करणे. |
| | | | | ४) आत्मचरित्राचा आशय, जीवनसंघर्ष, सामाजिकता, वैचारिकता, |
| | | | | |
| | | | | भाषा स्पष्ट करून सांगणे |
| 8 | एम. ए. भाग - १ | I | अभ्यासपत्रिका | १) साहित्य निर्मितीप्रक्रियेची माहिती देणे. |
| | | | क्रमांक – १ | २) साहित्यकृती अभ्यासताना साहित्य विचाराचे उपयोजन करणे. |
| | | | साहित्यविचार | ३) ललित साहित्याचे मूल्यमापन करणे. |
| | | | | ४) साहित्यकृतीचे सर्वंकष समीक्षण करणे. |
| | | | | ~ |
| | | Ι | | १) भाषिक संवादाचे महत्व लक्षात आणून देणे. |

| [| | | א משקבת היה ה משוור אין |
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| | | अभ्यासपत्रिका क्रमांक – २ मराठी भाषा संवाद व उपयोजन | २) वक्तृत्व तंत्र व कौंशल्ये समजावून सांगणे. ३) वृत्तपत्रीय लेखन, बातमीलेखन, संपादकीय लेखांचे विश्लेषण करणे. ४) जाहिरात निर्मिती करता येणे. |
| | Ι | HCT - १.३ आधुनिक मराठी वाङ्मयाचा इतिहास (१८०० ते १९२०) | १) साहित्य व साहित्यिक यांचे कालखंडानुसार ज्ञान देणे २) वाङ्मय इतिहासाची परंपरा समजून घेणे. ३) साहित्यकृतीच्या प्रभावाची कारणे समजून घेणे. ४) १८०० ते १९२० या कादंबरीतील साहित्याचे मूल्यमापन करणे. |
| | Ι | पेपर क्रमांक - SCT - १.१ एका लेखकाचा अभ्यास (मध्ययुगीन संत तुकाराम) | १) मध्ययुगीन साहित्य समाज आणि संस्कृती अभ्यासणे. २) लेखक पद्धती समजून घेणे. ३) संत तुकाराम यांच्या अभंगांचा सखोल अभ्यास करणे. ४) संत तुकाराम यांच्या अभंगांचे साहित्यिक मूल्यमापन करणे. |
| | Π | अभ्यासपत्रिका क्रमांक - ६ साहित्यविचार समीक्षा | १) समीक्षेच्या प्रकारांचे ज्ञान देणे २) समीक्षा संकल्पना समजून घेणे. ३) समीक्षा पद्धतीचा वापर करणे. ४) वृत्तपत्रीय समीक्षा लिहता येणे. |
| | Ш | अभ्यासपत्रिका क्रमांक - ७ मराठी भाषा संवाद व उपयोजन | १) आकाशवाणी उद्धोषणा, बातमी देता येणे. २) दूरदर्शन बातमी, मालिकांचे विश्लेषण करता येणे. ३) समाजमाध्यमावरील संवादाचे उपयोजन करणे. ४) youtube साठी लघुपट निर्मिती करणे. |
| | Π | अभ्यासपत्रिका क्रमांक - ८ आधुनिक मराठी वाङ्मयाचा इतिहास इ. स. १९२० ते १९६० | १) साहित्य व साहित्यिक यांचे कालखंडानुसार ज्ञान देणे २) वाङ्मय इतिहासाची परंपरा समजून घेणे. ३) साहित्यकृतीच्या प्रभावाची कारणे समजून घेणे. ४) इ. स. १९२० ते १९६० या कादंबरीतील साहित्याचे मूल्यमापन करणे. |
| | II | एका लेखकाचा अभ्यास आधुनिक - महात्मा जोतीराव फुले | १) महात्मा फुले यांच्या समग्र साहित्याचा सखोल अभ्यास करणे. २) महात्मा फुले यांचे सामाजिक व शैक्षणिक कार्य समजवून घेणे. ३) महात्मा फुले यांच्या कार्यकर्तृत्वाचे वाङ्मयीन कार्यकर्तृत्वाचे वेगळेपण लक्षात घेणे. ४) महात्मा फुले यांच्या कार्याची कालसमर्पकता समजावून घेणे. |
| | | | |

| एम. ए. भाग - दोन | III | अभ्यासपत्रिका HCT - ३.१ आधुनिक भाषाविज्ञान | १) मानवी जीवनातील भाषेचे स्वरूप व महत्व विद्यार्थ्यांना समजावून सांगणे २) विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टीकोन विकसित करणे. ३) भाषिक संप्रेषणाचा पश्चिय करून घेणे. ४)भाषा पश्चिर्तानाचे स्वरूप स्पष्ट करणे. ९) मराठी भाषेच्या व्याकरणाचे स्वरूप समजावून सांगणे. |
|---------------------|-----|--|---|
| | III | आधुनिक मराठी वाङ्मयाचा इतिहास १९६० ते १९९० | १) मराठी वाङ्मयाची परंपरा व इतिहास यांचा परिचय करून देणे. २) मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. ३) मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. ४) मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी समजून देणे |
| | III | भाषा व साहित्य : संशोधनाचे पद्धतीशास्त्र | १) संशोधनाचे महत्व समजून घेणे. २) भाषा आणि साहित्य संशोधनाचे स्वरूप व वेगळेपण समजून घेणे. ३) भाषा व साहित्याच्या संशोधनाचे पद्धतीशास्त्र समजून घेणे. ४) भाषा व साहित्य संशोधनात्मक लेखनाचा परिचय करून घेणे. |
| | III | अभ्यासपत्रिका OET :- ३.१मराठी भाषा व स्पर्धा परीक्षा | १) भाषेचे स्वरूप विशेष समजून घेणे. २) भाषेतील स्तरभेद व बोलीचा अभ्यास करणे. ३) लोकसाहित्याचे स्वरूप विशेष समजून घेणे. ४) लोकसाहित्याचे प्रकार भेद समजून घेणे. |
| | IV | अभ्यासपत्रिका HCT ४.१ समाजभाषाविज्ञान | १) समाजभाषाविज्ञानाच्या विविध सिध्दांतांचा परिचय करून देणे. श्समाजभाषाविज्ञानाचे स्वरूप समजावून सांगणे. ३) समाजभाषाविज्ञानाच्या विविध प्रयोजनांचा परिचय करून देणे ४) समाजभाषाविज्ञानाची माहिती करून देणे |
| | IV | आधुनिक मराठी वाङ्गयाचा इतिहास १९९० ते २०१० | भराठी वाङ्मयाची परंपरा व इतिहास यांचा परिचय करून देणे. भराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी समजून देणे. |
| | IV | अभ्यासपत्रिका HCT - ४.३ शोधप्रबंध तेखन | १) भाषा व साहित्य संशोधन पद्धती समजून घेणे. २) शोधप्रबंध लेखनाचे स्वरूप लक्षात घेणे. ३) शोधप्रबंध लेखनाची शास्त्रीय माहिती देणे. ४) प्रत्यक्ष शोधप्रबंध सादर करणे. |
| | IV | पेपर क्रमांक - ४. ४ | १) लोकप्रिय साहित्याचे स्वरूप समजून घेणे. |

| | लोकप्रिय साहित्य | २) लोकप्रिय साहित्याचा उगम, व वाटचाल लक्षात घेणे. ३) लोकप्रिय साहित्याच्या भाषेचे वेगळेपण समजून घेणे. ४) लोकप्रिय साहित्य आणि वाचकांची अभिरूची यांचा सहसंबंध स्पष्ट करणे. |
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| Sr. | Year | Course | Sem. | Paper | Paper Name | Course Outcome |
|-----|------------|--------|--------|-------|---|---|
| No | | Name | | No. | • | |
| | | | Ι | I | Constitutional Government and Democracy in India | Student understands making of Indian Constitution, It's features& Philosophy It extends the consciousness of the student about the fundamental rights & duties of citizen. |
| 1. | 1. 2021-22 | B.A.I | П | П | Constitutional Government and Democracy in India | Course gives analytical perspectives about federal structure of India and actual functioning of Union- State governments. Course introduces to student nature, ideology & role of national political parties in India. |
| | | | | III | Introduction To Political Theory | Students will understand certain key aspects of conceptual analysis in political theory. Students will apply concepts to contemporary political issues |
| | | | III | IV | Modern Indian Political Thought | Students will understand to the concepts, ideas and theories that developed in India. Students will compare thinkers on similar concept |
| 2. | 2021-22 | B.A.II | B.A.II | IDS | Public Administration | Students will understand the governing philosophy into programs, policies and activities and making it a part of community living. Develop a deeper understanding of the personnel public administration. |
| | | | | V | Introduction To Political Theory | Students will understand to the concepts, ideas and theories Student explains significance of liberty, equality and justice. |
| | | | IV | VI | Modern Indian Political Thought | Students will use concepts to analyze new situations. Students will explain the nature and value of normative thinking |
| | | | | IDS | Public Administration | Students will understand the governing philosophy into programs, |

Department of Political Science

| | | | | | | policies. |
|----|---------|---------|----|------|--|--|
| | | | | | | 2) Develop a deeper understanding of |
| | | | | | | the financial administration. |
| | | | | VII | Government & Politics of Maharashtra | Students will have a summary understanding of formation of Sanyukta Maharashtra& determinants of politics of Maharashtra. Develop a deeper understanding of the structure and policy of Maharashtra Government. |
| | | | | VIII | Political Sociology | Develop a deeper understanding of the concepts in modern political theory. Students will apply certain key aspects of conceptual analysis in modern political theory. |
| | | B.A.III | V | IX | Introduction to International Politics | To understand some important theoretical approaches in international relations & a history from 1945 onwards to the present. To evaluate the foreign policy of Indian since independence and its possible future trajectory. |
| 3. | 2021-22 | D.A.III | | X | Comparative Government & Politics | Develop a deeper understanding of the structures and politics of United Kingdom, USA and Switzerland. To understand the politics in United Kingdom, USA and Switzerland government comparatively and to know the principles of good governance. |
| | | | | XI | Western Political Thought | Develop consciousness of the concepts, ideas and theories that developed in Western country. &western political tradition. To understand seminal contribution of western political Thinker to the evolution of political theorizing in western country. To understand concepts of classical political thinker. |
| | | | VI | XII | Government & Politics of | 1) Develop a deeper understanding of the structure and policy of Panchyat Raj |

| | | | | | Maharashtra | Sansthas and Local Self Government. |
|---|---------|--------|-------|-------------|--|--|
| | | | | | i vianai asini a | 2) Develop a deeper understanding of the structure and policy of Maharashtra Government, Panchyat Raj Sansthas and Local Self Government. |
| | | | | хш | Political Sociology | Develop a deeper understanding of the concepts in political theory. Students will apply certain key aspects of conceptual analysis in contemporary political theory. |
| | | | | IVX | Introduction to International Politics | To understand some important theoretical approaches in international organization & a history from 1945 onwards to the present. To evaluate the foreign policy of Indian since independence and its possible future trajectory. |
| | | | | XV | Comparative Government & Politics | Develop a deeper understanding of the structures and politics of United Kingdom, USA and Switzerland. To understand the politics in United Kingdom, USA and Switzerland government comparatively and to know the principles of good governance. |
| | | | | XVI | Western Political Thought | Students will explain their relevance of Classical Political Thoughts to contemporary times. Students will explain their relevance of Western Political Thoughts to contemporary times. |
| | | | | HCT- 1.1 | Political Theory | Student explains nature & significance of political theory. To understand modern theories of state & democracy. |
| 4 | 2021-22 | M.A. I | A.I I | HCT- 1.2 | Major Ideas in Public Administration | To understand some important theoretical approaches& views in Public Administration. To deeper understanding the bases of organization. To understand the principles of organization. |
| | | | | HCT- 1.3 | Constitution of India | Student explains understanding making of Indian Constitution, its features& |

| | | | | | | | Philosophy. |
|----|----------|---------|-----|----------------|---------------------------------------|---------------------------------------|--|
| | | | | | | 2) | Student explains understanding making |
| | | | | | | | of Indian Constitution, its features& |
| | | | | | | | Philosophy. |
| | | | | | | 1) | Student explains the concepts, ideas and |
| | | | | | | | theories that developed in Modern India. |
| | | | | | | 2) | To understand history of Indian |
| | | | | DSC- | Modern Indian | | Renaissance. |
| | | | | 1.2 | Political Thought | 3) | Students will have a summary |
| | | | | | | | understanding of New Humanism, Communism & Socialism in the view of |
| | | | | | | | Indian Thinkers. |
| | | | | | T.' ' 1 | 1) | Student explains nature & significance of |
| | | | | SCT- | Financial | | financial Administration. |
| | | | | 1.2 | Administration in | 2) | Develop a deeper understanding of the |
| | | | | | India | | personnel& financial administration. |
| | | | | HCT- | Contemporary | 1) | Student explains nature & significance of |
| | | | | 2.1 | Political Theory | | contemporary political theory. |
| | | | | | - oncour ricory | 2) | Deeper understanding of the liberalism. |
| | | | | | | 1) | Develop a deeper understanding of the |
| | | | | HCT- | Issues in Public | | Issues in Public Administration. |
| | | | 2.2 | Administration | 2) | Develop a deeper understanding of the | |
| | | | | | | Good Governance, E-Governance | |
| | | | т | HCT- 2.3 | Political Process in India | 1) | To understand theories of federalism. |
| | | | | | | 2) | Develop a deeper understanding of the various ideologies of political party. |
| | | | Π | | | 1) | To understand Electoral Politics |
| | | | | DSC- | Electoral Politics in India | 1) | under Colonial Rule. |
| | | | | 2.1 | | 2) | Develop a deeper understanding of the |
| | | | | 2.1 | | 2) | Electoral System in India since 1950 |
| | | | | | | 1) | Students will explicate analyze concepts |
| | | | | | | | & some Theories of Human Rights. |
| | | | | SCT- | Human Rights | 2) | Develop a deeper understanding of the |
| | | | | 2.1 | 0 | | Women's and Child Rights, Rights of |
| | | | | | | | Minorities and Rights of SC and ST. |
| | <u> </u> | | | | | 1) | Students will explicate analyze concepts |
| | | | | HCT- | International | | & some Theories of International |
| | | | | 3.1 | Relations | | relations. |
| | | | | 5.1 | i i i i i i i i i i i i i i i i i i i | 2) | Students will explicate analyze key |
| _ | | | | | | | concepts of International relations. |
| 5. | 2021-22 | M.A. II | III | HCT- 3.2 | Covorrant P | 1) | Maharashtra& determinants of politics of |
| | | | | | Government & Politics of | \mathbf{n} | Maharashtra. Students will analyze and critically |
| | | | | | Maharashtra | 2) | Students will analyze and critically assess the Demand for separate Vidarbha |
| | | | | | 1111111111111111 | | State |
| | | | | HCT- | Research | 1) | Students will learn research methods and |
| L | l | l | I | | resourch | -) | 2.2.30 million resource mounds and |

| | | 3.3 | Methodology | | hypothesis writing, testing. |
|--|----|------|-------------------|----|---|
| | | 5.5 | Wiethodology | 2) | Demonstrate critical thinking and writing |
| | | | | 2) | skills related to Report Writing. |
| | | | | 1) | Develop consciousness of the Classical& |
| | | DCC | Western Political | 1) | * |
| | | DSC- | | | Christian political thought. |
| | | 3.1 | Thought | 2) | Student will demonstrate understanding |
| | | | | | of secularization of political thought. |
| | | | | 1) | Students will explicate analyze concepts |
| | | SCT- | International | | & some Theories of International |
| | | 3.1 | Organizations | | organizations. |
| | | 5.1 | Organizations | 2) | Student will demonstrate understanding |
| | | | | | of Regional Organizations |
| | | | | 1) | To understand the nature, scope and |
| | | HCT- | Indian Foreign | | objective of foreign policy |
| | | 4.1 | Policy | 2) | To understand the India's Relations |
| | | | | | with South Asian Countries. |
| | | HCT- | | 1) | Student explains the composition and |
| | | | Government in | | policy making of Maharashtra |
| | | | | | Government. |
| | | 4.2 | | 2) | Student explains the composition and |
| | | | | | policy making of Panchyat Raj Sansthas |
| | | | | | and Local Self Government. |
| | | | | 1) | Students will have a stronger and more |
| | IV | UCT | | | informed perspective on Research |
| | | HCT- | Dissertation | | Methodology in Political Science. |
| | | 4.3 | | 2) | Demonstrate critical thinking and writing |
| | | | | | skills related to Report Writing. |
| | | | | 1) | To understand theories of Social |
| | | DSC- | Western Political | , | Contract. |
| | | 4.1 | Thinkers | 2) | Develop a deeper understanding of the |
| | | | | | various ideologies. |
| | | | | 1) | To understand the Foreign Policy & |
| | | SCT- | Foreign Policy & | -/ | Diplomacy. |
| | | 4.1 | Diplomacy | 2) | To understand the Process and |
| | | | | | Administration of Foreign Policy |
| | | | | | remainstration of roleign rolley |

Department of History

| Sr. No | Course Name | Sem. No. | Paper No. | Paper Name | Course Outcome |
|-----------|----------------|-------------|--------------|--|--|
| 1 | B.A.I | Ι | Ι | ChhatrapatiShiv aji and his Times | Students will be able to examine institutional basis of Maharashtra. Students will be able the real history of Chh. ShivajiMaharaj and his Times. |
| | | Π | II | ChhatrapatiShiv aji and his Times | Students will be able to examine social, economic and religious condition in Medieval Maharashtra. Students will be able to analyse civil administration, military administration and judicial system during the 1630-1707 A.D. |
| 2 | B.A.II | III | III | History of Modern Europe | Students will be able to understand the contemporary Europe in the light of its background history. Students will be able to understand the various Revolutions and basis of development of European countries. |
| | | | IV | History of Indian Freedom Movement | Students will be able to understand the major events of India's freedom struggle. Students will be able to understand rise and growth nationalism in Europe. |
| | | IV | V | History of Modern Europe | Students will be able to understand rise and growth nationalism in Europe. Students will be able to understand main forces, personalities, events and movements that has shaped the Modern Europe. |
| | | | VI | History of Indian Freedom Movement | 1.It will increase the spirit of healthy Nationalism, Democratic values and secularism among the student. 2. Students will be able to understand and assess the contribution of national leaders. |
| | IDS | III | IDS | History of Social Reforms in Maharashtra | Students will be able to examine social background of Maharashtra. Understand various social reform movements and contribution of social reformer in Maharashtra. |
| | | IV | IDS | History of Social Reforms in Maharashtra | Identify the different types of social problems in our society. It will increase the spirit of humanity, secularism, gender equality among the students. |
| 3 | B.A.II I | V | VII | Ancient India | 1.Students will be able to examine institutional basis of India.2.Identify the rules and their administration. |
| | | | VIII | Mughal India | Students will be able to examine social, economic and religious condition in Medieval period. Analyse the impact of various rule on Indian polity and society. |

| | | | IX | Expansion and | 1.Students will be able to analyse the Marathas |
|----|-------|----|-------------|-------------------------------|--|
| | | | | Downfall of the | policy of expansionism. |
| | | | | Maratha Power | 2.Understand the role played by the Marathas in |
| | | | | | the 18^{th} century polity. |
| | | | X | Modern World | 1. Students will understand the relations between |
| | | | | | the nations in the world. |
| | | | | | 2. Students will study the political, social and |
| | | | | | economic challenges in the Modern World. |
| | | | XI | Historical | 1.Students will be able to explain the what is |
| | | | | Sources, | history and importance of history. |
| | | | | Research and | 2. Students will be able to examine sources of |
| | | | | Places | history. |
| | | VI | XII | Ancient India | 1.Evaluate the legacy of Shaivism, Vaishnavism |
| | | | | | ,Buddhism and Jainism. |
| | | | | | 2. Analyze the features of Indian art and |
| | | | VIII | N 1 1 1 1 1 | architecture. |
| | | | XIII | Mughal India | 1. Students will be able to explain our heritage |
| | | | | | through culture aspects of India. |
| | | | IVX | Expansion and | 2. Assess the economy and religion of various rule. |
| | | | | Expansion and Downfall of the | 1. Students will be able to analyse the civil, military administration and judicial system during |
| | | | | Maratha Power | the Peshwa period. |
| | | | XV | Modern World | 1.Students understand the consequences of the |
| | | | 21.1 | | World War-I,II and Cold War regarding the |
| | | | | | present global crises. |
| | | | | | 2. Analyze the streamline the role of League of |
| | | | | | Nations. |
| | | | XVI | Historical | 1.Students will understand the Museum and |
| | | | | Sources, | Historical Tourism. |
| | | | | Research and | 2.Identify the different types of primary and |
| | | Ŧ | | Places | secondary sources. |
| 4. | M.A.I | Ι | HCT | Historiography | 1.Understand about the Research process in |
| | | | -1.1 | | Historical research |
| | | | | | 2.Know the relationship of history with its allied |
| | | | | | disciplines. |
| | | | LICT | A | |
| | | | HCT -1.2 | Ancient India up | 1. Student will able to gather knowledge about the |
| | | | -1.2 | to 650. | society, culture, religion and political history of ancient India. |
| | | | | | 2. The Student will able to acquire knowledge |
| | | | | | about Indus civilization and Vedic Period. |
| | | ļ | НСТ | History of | 1.Students will understand the relations between |
| | | | -1.3 | World (1900- | the nations in the world. |
| | | | | 1970) | 2.Students will study the political, social and |
| | | | | , | economic challenges in the Modern World. |
| | | | DSE- | Medieval India | 1.The political and administrative conditions |
| | | | 1.1 | (1200-1700) | during the Delhi Sultanate period. |
| | | | | | 2. The social and economic conditions prevailing |
| | | | | | during the time of Delhi Sultanate |
| | | | SCT- | History of India | 1. Identify the strategies of British for Imperial |
| | | | 1.1 | (1757-1857) | control |
| | | | | | 2. The student will become familiar with the |
| | | | | | foundation & Administration of Modern India |

| | | II | HCT -2.1 | Historiography | 1.As a history student will learn about the historiographical trends, interpretation of the historical sources of India as well.2. Students will be able to explain the what is history and importance of history. |
|----|-------|-----|-------------|--------------------------------------|---|
| | | | HCT -2.2 | Ancient India up to 650. | The student will understand the changing socio- cultural scenarios of India. The student will become familiar with the foundation & Administration of ancient India |
| | | | HCT -2.3 | History of World (1900- 1970) | Students understand the consequences of the World War-I,II and Cold War regarding the present global crises. Analyze the streamline the role of League of Nations. |
| | | | DSE- 2.1 | Medieval India (1200-1700) | Student will learn and analyse about the transition from historic centuries to the early medieval. The student will become familiar with the foundation & Administration of Medieval India |
| | | | SCT- 2.1 | History of India (1757-1857) | 1.Students should be to Know about the thoughts of ancient, middle and Modern period2.It will increase the spirit of healthy Nationalism, Democratic values and secularism among the student |
| 5. | M.AII | III | HCT -3.1 | Maratha History (1600-1818) | Grasp the details about different sources and various trends in Maratha history. Students will be able to analyse the Marathas policy of expansionism |
| | | | HCT -3.2 | Modern Maharashtra (1818-1990) | Students can able to get the Knowledge of Social Movement. Understand various social reform movements and contribution of social reformer in Maharashtra. |
| | | | HCT -3.3 | Research Methodology | Understand about the Research process in Historical research. Students will be able to examine sources of history. |
| | | | DSE- 3.1 | Women in Indian History | 1.Analyse and compare the customary and legal status of women in Ancient, Medieval and colonial India2.Student will able to gather knowledge about the society, culture ,religion and political history of ancient India |
| | | | GET -3.1 | History of India (1858-1964) | 1.Identify the strategies of British for Imperial control. |

| | IV | HCT -4.1 HCT -4.2 HCT -4.3 | Maratha History (1600-1818) Modern Maharashtra (1818-1990) Dissertation | 2.Grasp the details of freedom movement under the Mahatma Gandhi's leadership. 1.Understand the role played by the Marathas in the 18th century polity. 2. Students will be able to understand and assess the contribution of national leaders 1.Understand about the Development of Modern Maharashtra. 2.Identify the reforms movements in Maharashtra. 1.Students will be able to dissertation writing skill. 2. Students will he ship to raise skill. |
|--|----|---|--|--|
| | | DSE- 4.1 SCT- 4.1 | Women in Indian History History of India (1858-1964) | 2.Students will be able to viva-vice skill. 1.The student will become familiar with the emergence and spread of Bhakti movement 2.Understand the issues in representing woman in History. 1.Understand various phases of the national movement. 2.It will increase the spirit of healthy Nationalism, Democratic values and secularism among the student. |

| Sr. No. | Course | Sem. | Paper No. | Subject | Course outcomes |
|------------|--------|------|-----------|--------------------|---|
| 1 | FYBA | Ι | I | Geomorphology | The student learns about the knowledge of Geomorphology. The student were understand geomorphological concept and process takes place on the earth surface and within the earth crust. The Student were familiar the knowledge about interior structure of the earth, formation of continent and types of rock. Student understands about endogenetic and exogenetic forces and their effect in the creation of different landforms on the surface of the earth. |
| | | II | Π | Human Geography | The students were known the importance of Human Geography. The students understood the concepts, Theory, population growth and composition, settlement and detailed knowledge of Human Geography. The students were familiar with basic development Human Geography. The students are developed as good environmental conservator |
| 2 | SYBA | III | III | Climatology-III | To make the students familiar with new terms and concept ofclimatology. To know the constituents of atmosphere and its dynamic nature To know the contribution of atmosphere in the making of earth habitable. |

Department of Geography

| | | | IV | Geography of India-IV | To synthesize students with various facts of India viz. Physiography, Climate, Soil, Vegetation and Resources To synthesize students with various facts of India viz. Agriculture, Industries, Population, Social and Regionalization of India |
|---|------|----|-----|---|--|
| | | IV | V | Economic Geography-V | To acquaint the students with economic activities i.e. Agriculture, Manufacturing, Transport, Trade and Services. To acquaint the students with economic activity models. |
| | | | VI | Environmental Geography-VI | To acquaint students with concept of environmental geography. To study the relation between human and environment. To introduce thestudents with environmental problems, programmes and policies. |
| 3 | ТҮВА | V | VII | Regional Planning and Development-VII | The students were known the importance of regional planning. The students understood the concepts of region, regionalization, regional planning & development and detailed knowledge of region. The students were familiar with indicators of measurement of development. Detail understanding of Growth Pole Model, Center |

| | | | place Theory and Growth Foci Model in Indian context. |
|----|------|--|--|
| | VIII | Urban Geography-VIII | The students were known the importance of urban settlements through urban geography. The students understood the types of urban Settlements, Site and situations. The students were familiar with an idea of relationship between human activities and urban development. |
| | IX | Population Geography-IX | • This paper would bring an understanding of population geography along with relevance of demographic data. |
| VI | X | Evaluation of Geographical Thought | Students were able to visualize the basic theme, ideas and approaches of geographic knowledge with relation to historical juncture, varying schools and era of their emergence. Detailed knowledge about the debates in the geographical studies. Understanding of recent trends in Geography. |
| | XI | Political Geography | Student will understand the history and development of political geography. Get knowledge about evaluation of state and nation. Get knowledge of Geo-political theories. Investigates problems and disputes of India with the most current research topics in political geography. |
| | XII | Social Geography | In depth understanding the problems and prospects of society in India. The students are fully aware |

| | | | I | Man Making and | about the technological, occupational and migration changes of peoples in India. Detailed knowledge about the social categories and their spatial distribution. Understanding concepts of social wellbeing, welfare and social problem in India. |
|---|-------|---|----|--|---|
| | | | | Map Making and Map Interpretation P-I | In depth understanding the map, concept of scale and projection. Detailed knowledge about the analysis of landforms and its identification. The students are deeply aware about basic information to the students about S.O.I. toposheets and I.M.D. weather reports and obtained the skills about map interpretation |
| | | | II | Advanced Tools, Techniques (Computer, Remote Sensing, GIS, GPS) & Field Work P-II | In depth understanding the importance of field work and advanced Techniques in Geography. The students are trained to implement modern tool and techniques in Geography. The students are deeply aware about the basics and trained in instrumental survey. The students are deeply familiar with computer, GIS, GPS and Remote Sensing. |
| 1 | M.A.I | Ι | Ι | Geomorphology I | To familiarize the students with certain fundamental Geomorphological concepts interior of the Earth, mountain building theories and movement of the Earth. |

| | M.A.I | I | II | Climatology I | To acquaint the student with weather phenomena, pressure belts and winds, air masses, atmospheric disturbances. |
|---|-------|----|-----|---|--|
| | M.A.I | I | III | Oceanography and Geohydrology | To know many acts of oceans such as properties of sea water, water circulation, structure of ocean basin, evolution of oceans, characteristics of marine environments. |
| | M.A.I | Ι | IV | Economic Geography | To acquaint the students with the nature and scope of Economic geography, basic economic process and economic activities. To familiarize the students with the principles of industrial location and industrial theories. To acquaint the students with the resources, transportation, connectivity and trade. |
| | M.A.I | Ι | Ι | Representation of landform and topographical map | To familiarized the students the identification of different landforms on the topographical maps. |
| | M.A.I | I | II | Study of weather maps | 1) To understand the method of collection and analysis of the climatic data and interpret the same. |
| | M.A.I | I | III | Analysis of climatic data | To understand the student with the interpretation and construction of climatic graphs and diagram. |
| | M.A.I | I | IV | Analysis of socio- economic data | To familiarize the students various techniques of analysis of socio economic data. |
| 2 | M.A.I | II | V | Geomorphology | 1) To acquaint the students |

| | | | TT | with the theories of |
|-------|----|------|---|--|
| | | | Π | evolution of continents and ocean basin. 2) To familiarize the students with the concept of erosion and applied geomorphology. |
| M.A.I | II | VI | Climatology II | To provide an understand of classification of climate and climate regions. To acquaint the students with the climate and clothing, climatic problem. |
| M.A.I | II | VII | Population geography | To understand the students with the nature, scope of population geography and sources of population data, population distribution and composition. To acquaint the students with fertility and mortality, population growth theory, population and recourses. |
| M.A.I | II | VIII | Regional geography of India | To understand the students India in terms of various regional divisions, their important characteristics. To acquaint the student with agriculture and industries in India. |
| M.A.I | II | V | Study of landforms analysis techniques | To identify the different landforms on the topographical maps. To identify the different drainage patterns and types o slopes. |
| M.A.I | II | VI | Statistical techniques in geography I | 1) To introduce some basic statistical techniques to the students to be applied to various themes in geography. |

| | M.A.I M.A.I | II | VII VIII | Statistical techniques in geography II Representation of | To introduce the relative measures and co-efficient of correlation techniques to the students to be applied to various theme in geography. To understand the |
|---|----------------|-----|-------------|---|--|
| | | | | Socio-Economic data II | students various cartographic techniques of analysis of socio-economic data |
| | M.A.I | II | IX | Geomorphology II | To acquaint the students with the theories of evolution of continents and ocean basin. To familiarize the students with the concept of erosion and applied geomorphology. |
| 3 | M.A.II | III | X | Agricultural geography | To familiarize the students with concept origin and development of agriculture: and to examine the role of agricultural determinants. The course further aims to make familiarize the students with the application of various theories, models, agricultural system and productivity. To reexamine green revolution in India, contemporary issues and agricultural problems in solapur district. |
| | M.A.II | III | XI | Settlement geography | To familiarize the students with conceptual, theoretical and empirical development in settlement studies in geography To provides an idea to the students about the national issues of settlements |
| | M.A.II | III | XII | Biography geography | To introduce the students the concept of the biography and it's interpretation To introduce the students the |

| | | | | climate ,physical environment and their interaction with the living organisms 3) To introduce the student with the living and nonliving environments and their interaction with the special reference to India 4)To make aware about conservation of biodiversity and biotic resources |
|--------|-----|------|---|--|
| M.A.II | III | XIII | Cultural geography | To understand diversity of culture in the world as well as in India To comprehend the diffusion of various ethnic traits and religions. To understand the relationship between culture and pattern of living and economic development |
| M.A.II | III | IX | Quantitative techniques in Economic geography | 1)To understand the students to the quantitative techniques in agricultural geography 2)To acquaint the students to the quantitative techniques applied in marketing geography |
| M.A.II | III | X | Introduction to computer | To understand the terms, concepts involved in computer To familiarize the student s with internet ,browser and web page |
| M.A.II | III | XI | Applications of Computer in geography | To families with geographical data and data structure To acquaint the students to the computer cartography |
| M.A.II | III | XII | Quantitative techniques in population and settlement | 1) To understand the student s to the quantitative techniques in population geography |

| | | | | geography | 2) To acquaint the student to |
|---|--------|----|------|--|--|
| | | | | | the quantitative technique applied in settlement geography |
| 4 | M.A.II | IV | XIII | Regional planning and development in India | To understand and evaluate the concept of region in geography To understand the role and relevance of region in regional planning To identify the causes of regional differences in development ,perspectives and policy imperatives To understand the problems of regional development |
| | M.A.II | IV | XIV | Development of modern geography | To introduce the students to the philosophical and methodological foundations of the subject and it's place in the world of knowledge To familiarize student with the major land marked in development of geographic thought at different periods of time. |
| | M.A.II | IV | XV | Political geography | To understand the basic concepts in political geography To enhance awareness o Multi-dimensional nature of geo-political space To make acquaint the students with nature of geographical factors influencing the geo- political situations in India and world |
| | M.A.II | IV | XVI | Geography of Tourism | Acquiring the knowledge of different tourist places in the world To understand emerging developing tourism |

| | | | | industry 3) To understand the scope and role of tourism in world as well as Indian Economy 4) To familiarize students with tourism industry 5) Encouraging the students to involve in tourism industry |
|--------|----|------|---|--|
| M.A.II | IV | XIII | Introduction to remote sensing GIS | Make students familiar with concept of Remote sensing and its use in present Geographic studies To give detailed knowledge about aerial photography Make students familiar with concept of Geographical Information System |
| M.A.II | IV | XIV | Application of Remote sensing | Make students familiar with concept of Remoter sensing and its use in present geographic studies To give detailed knowledge about aerial photography Make student familiar with concept of geographical information system |
| M.A.II | IV | XV | Research Methodology and project report | Student will explain field work, techniques of data collection and its presentation Student s will describe importance of sampling in research hand skill of report writing Students will express knowledge about format of project report |

| Sr. No | Course Name | Semester | Paper No | Paper Name | Subject Outcomes |
|-----------|----------------|----------|-------------|---|--|
| • | B.A.I | Ι | Ι | Principles of Physical Education | -To understand meaning, need and importance of physical education To understand the Growth and development. |
| | | II | II | Principles of Physical Education | -To understand the body system and play theory -To understand the aim and objectives of physical education |
| 2 | B.A.II | III | Π | History of Physical Education | -To acquire knowledge about Ancient Olympic movement -To acquire knowledge about Different Institution for training in Physical Education in India |
| | | | IV | Organization & Administration in Physical Education & Sports | To understand the meaning, importance and scope of organization, administration and sports management in physical education. To understand office Management, Record, Register & Budget. |
| | | IV | V | History of Physical Education | -To acquire knowledge about Modern Olympic movement -To acquire knowledge about Different Institution for training in Physical Education in India |
| | | | VI | Organization & Administration in Physical Education & Sports | To understand the meaning, importance and scope of organization, administration and sports management in physical education. To understand office Management, Record, Register & Budget. |
| 3 | B.A.II I | V | VII | Health Education | Health education strives to provide accurate and relevant information about various health topics. knowledge and understanding of health issues, including factors that contribute to good health and those that can lead to illness or disease. The ultimate goal of health education is to influence positive health behaviors. This might include encouraging individuals to adopt healthier eating habits, engage in regular physical activity, practice safe sex, avoid tobacco and substance use, and take preventive |

Department of Physical Education

| | | | measures to reduce the risk of various diseases. |
|----|------|---|--|
| | VIII | Rhythms and Recreation in Physical Education | -Incorporating a variety of rhythmic activities and recreational games into physical education curricula can lead to a well-rounded set of outcomes that benefit students physically, mentally, and socially |
| | IX | Applied Yoga | -The combination of physical movement, breath control, and meditation in yoga can have a calming effect on the nervous system, helping to reduce stress and anxiety. |
| | X | Anatomy Physiology and Physiology Of Exercise | -knowledge of the human body's structure and function to applications in healthcare, sports, research, and the development of medical interventions. |
| | XI | diet and Hygiene | -It seems like your question is a bit unclear. If you're asking about the outcomes of maintaining a healthy diet and good hygiene practices, a be happy to provide some information |
| VI | XII | Health Education | -Health education aims to boost individuals' confidence in their ability to make healthy choices and manage their own health. When people feel empowered to take control of their well-being, they are more likely to engage in health-promoting behaviors. Effective health education programs can lead to measurable behavioral changes. For instance, participants might start eating more fruits and vegetables, exercising regularly, or using seat belts consistently after receiving relevant education. |
| | XIII | Rhythms and Recreation in Physical Education | -Recreation helping students manage stress and anxiety. Recreation also provides an outlet for relaxation and enjoyment. |
| | XIV | Applied Yoga | -Yoga involves a range of stretching and poses that can gradually increase flexibility and range of motion in your joints and muscles. |
| | XV | Anatomy Physiology and Physiology Of Exercise | -Knowledge of exercise physiology helps in designing personalized and effective training programs that target specific fitness goals. |
| | XVI | diet and Hygiene | Both a healthy diet and good hygiene practices play crucial roles in maintaining your overall health and well-being.They are interconnected and contribute to a higher quality of life and a reduced risk of various health issues. |

Department of Psychology

| Sr. No | Course Name | Sem. No. | Paper No. | Paper Name | Course Outcome |
|-----------|----------------|-------------|--------------|--|--|
| 1 | B.A.I | I | Ι | Introduction to Psychology | Students can apply the psychological principles in their real life situations and to learn more effectively about life span development. Students to develop better physical, social, cognitive and personality perspectives. 3) Students opting for competitive examinations are benefited |
| | | Π | II | Fundamentals of Psychology | Students can apply the psychological principles in their real life situations and to learn more effectively about life span development. Students to develop better physical, social, cognitive and personality perspectives. 3) Students opting for competitive examinations are benefited. |
| 2 | B.A.II | III | III | Psychology of Adolescent and early Adulthood | To students able to familiarize with the basic developmental process of Adolescence to Early Adulthood. 2. Students understand with the knowledge of physical, Cognitive, Social and Personality development to the relating Adolescence and Early Adulthood stages of life |
| | | | IV | Psychology of Adjustment | Students able to understand Psychological adjustment to modern life.2) Students learn adjustment in various life situations in 21 Century |
| | | IV | V | Psychology of Middle and Late Adulthood | Student know the basic developmental process of middle and late adulthood 2) Students learn knowledge of physical, cognitive social and personality development middle and late adulthood. |
| | | | VI | Psychology of Modern Life | Students Learn Psychological applications in modern life. Student Know the Presses of Psychological interpersonal, intimate relationship with Health and work. |
| | IDS | III | IDS | Modern Logic (IDS) Propositional Logic | Students will be able to examine Propositional Logic Understand various Modern Logic & symbolic logic |
| | | IV | IDS | Modern Logic (IDS) Predicate Logic | Students will be able to examine Predicate Logic Understand various Modern Logic & symbolic logic. |
| | B.A.I | Ι | Ι | Outlines of Indian | To acceptance of self and others with tolerance and understanding. |

| | | | | philosophy | II) To inspire the student to confront the philosophical problems implicit in the experience of self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality) III) Clarity and coherence in explaining philosophical basic concepts and theories. IV) Ability to criticize assumptions and arguments. |
|--|--------|-----|-----|-------------------------------------|---|
| | | Ι | II | Outlines of Indian philosophy | To acceptance of self and others with tolerance and understanding. II) To inspire the student to confront the philosophical problems implicit in the experience of self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality) III) Clarity and coherence in explaining philosophical basic concepts and theories. IV) Ability to criticize assumptions and arguments. |
| | B.A.II | III | III | Indian Ethics | i)To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues. |
| | | III | IV | Ancient Greek philosophy | i)To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues. |
| | | IV | V | Western Ethics |)To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues |
| | | IV | VI | Modern Western philosophy | i)To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues. |

Department of Music

| Sr. No. | Course Name | Semester | Paper No. | Paper Name | Subject Outcomes |
|------------|----------------|----------|--------------|------------|--|
| 1 | B.A.I | Ι | Ι | - | 1) Introduction to the basic Principles of |
| | | | | | Music as sound, rhythm. |
| | | | | | 2) Introduction to classical ragas, taalas. |
| | | | | | 3) Introduction to the life sketch of Pt. V. N. |
| | | | | | Bhatkhande. |
| | | II | II | - | 1) Introduction to the basic Principles of |
| | | | | | Music as sound, rhythm. |
| | | | | | 2) Introduction to classical ragas, taalas. |
| | | | | | 3) Introduction to the life sketch of Pt. V. D. |
| | | | | | Paluskar. |
| 2 | B.A.II | III | III | - | 1) The three aspects of Naad. |
| | | | | | 2) Musical forms as classical and light |
| | | | | | classical. |
| | | | | | 3) Ragas and talas. |
| | | | | | 4) Introduction to the life sketch of Swami |
| | | | | | Haridas |
| | | | IV | - | 1) The three aspects of Naad. |
| | | | | | 2) Musical forms as classical and light |
| | | | | | classical. |
| | | | | | 3) Ragas and talas. |
| | | | | | 4) Introduction to the life sketch of Tansen |
| | | IV | V | - | 1) The three aspects of Naad. |
| | | | | | 2) Musical forms as classical and light |
| | | | | | classical. |
| | | | | | 3) Ragas and talas. |
| | | | | | 4) Introduction to Musical forms life sketch |
| | | | 3.73 | | of Kishori Amonkar |
| | | | VI | - | 1) The three aspects of Naad. |
| | | | | | 2) Musical forms as classical and light |
| | | | | | classical. |
| | | | | | 3) Ragas and talas.4) Introduction to the life skotch of Late |
| | | | | | 4) Introduction to the life sketch of Lata Mangeshkar |
| 3 | B.A.III | V | VII | - | 1) Development of musical abilities. |
| _ | | | | | 2) History of Indian Music |
| | | | | | 3) Ragas and talas |
| | | | VIII | - | 1) Understanding the importance of music. |
| | | | | | 2) Introduction to Smruti, Gram, Murchana |
| | | | | | etc. |
| | | | | | 3) Ragas and talas |
| | | | IX | - | 1) Loksangeet |

| | | | | 2) Ragas and talas |
|--|----|------|---|---|
| | | Х | - | 1) Life sketch of Pt. Bhimsen Joshi, Pt. Ravi |
| | | | | Shankar |
| | | XI | - | 1) Granth and its contribution to music. |
| | | | | 2) Ragas and talas |
| | VI | XII | - | 1) Karnatic music. |
| | | | | 2) Ragas and talas - practical. |
| | | XIII | - | 1) Western music. |
| | | | | 2) Ragas and talas - practical. |
| | | XIV | - | 1) Prasar Madhyame – T.V., Radio, Internet, |
| | | | | Computer etc. |
| | | | | 2) Ragas and talas - practical. |
| | | XV | - | 1) Musical gharani and its contribution. |
| | | | | 2) Ragas and talas - PPT presentation. |
| | | XVI | - | 1) History of Bhakti sangeet. |
| | | | | 2) Ragas and talas - Concert Paper. |

Department of Chemistry

| Sr. No. | Course | Semester | Paper No | Paper Name | Course Outcome |
|------------|---------|----------|-------------|-------------------------|---|
| | | Ι | Ι | Physical Chemistry | Students are expected to learn about -i)Understandingi)Understandingand significanceofratesofChemical Reactionsii)Understanding to second Law ofofThermodynamicsCarnot's cycle etc. |
| 1. | B.Sc I | | Π | Inorganic Chemistry | Students are expected to understand about- i) The atomic structure and periodic properties of elements, types of chemical bonding ii) Basic knowledge about VBT and MOT as well as key knowledge of Ionic bonding and crystal structure |
| | | П | III | Organic Chemistry | Students are expected to - i) To able to think and predict the possible mechanism of various critical organic reactions. ii) Able to imagine 3D structure of organic molecules. iii) Understand the basics of bonding and able to draw correct structure of any organic molecule and comment on its stability |
| | | 11 | IV | Analytical Chemistry | Students can - i) Understand the basic elements present in the organic compounds also able to understand the qualitative analysis methods of C, H, N, S and halogen ii) Easily understand the basic principle and classification of chromatography and also able to know paper chromatography and its applications. |
| 2. | B.Sc II | III | V | Organic Chemistry | Students can get to know about - i) various spectroscopic methods |

| | | | and knowledge about the stereochemistry ii) Various synthetic approaches for Alcohols, Phenols, Aldehydes, Ketones. |
|----|------------|---|---|
| | VI | Inorganic Chemistry | Students can get to know about - i) Knowledge of Co-ordination Chemistry, complex formation, Werner's Theory, concept of chelation etc. ii) Lewis concept of Acid and Bases, HSAB concept, Pearson's concept, study of <i>d-block</i> elements <i>etc</i> . |
| IV | VII | Physical Chemistry | Students can get to know about - i) Various Laws of thermodynamics, study of electrochemical reactions, terms involved in electrochemistry. ii) Chemistry of solid state substances, distributions Law, and related numerical problems |
| | VIII | Analytical & Industrial Inorganic Chemistry | Students can get to know about- i) Details knowledge of volumetric and gravimetric analysis, various terms involved in volumetric analysis etc. ii) Knowledge of synthesis of industrially important heavy chemicals, metallurgy meaning, steps in metallurgy <i>etc</i> . |
| | AECC | Business English | Students can get- i) Basic concept of English communication, grammatical correction in sentence construction, speaking of English, improvement in English speaking through syllabi |
| | DSE- 1A | Physical Chemistry | Students can get to know about- i) Introduction to Quantum mechanics, Gibb's phase rule, phase diagram <i>etc</i> . |

| 3. | B.ScIII | V | | | ii) Basic understanding of EMF, reduction potentials, oxidation potentials, knowledge about various electrode and photochemistry <i>etc</i> . |
|----|---------|----|------------|------------------------|---|
| | | | DSE- 2A | Inorganic Chemistry | Students can get to know about- i) Bonding in complexes, detail knowledge of CFT, MOT and their applications in complex study ii) Basic concept of Nuclear Chemistry, theory of catalysis, and details of fertilizers and their role in plant growth <i>etc</i> . |
| | | | DSE- 3A | Organic Chemistry | Students can get to know about- i) Detail study of various Name reactions, knowledge of organic synthesis. ii)Detail knowledge of various spectroscopic methods such as mass, NMR, IR etc. |
| | | | DSE- 1B | Physical Chemistry | Students can get to know about- i) Types of Solutions, various spectroscopies such as Raman also vibrational and rotation study of molecules. ii) Detail study of chemical kinetics with examples and thermodynamics etc. |
| | | VI | DSE- 2B | Inorganic Chemistry | Students can get to know about- i) Introduction and study of Ff- block elements, concept of metal and semiconductor and their applications. ii) Introduction and detail study of corrosion and passivity and also the knowledge of metal carbonyl involed structural chemistry <i>etc</i> . |
| | | | DSE- | Organic Chemistry | Students can get to know |

| | | | 3B | | about- i) Study of various Heterocyclic Compounds, carbohydrates etc ii) Introduction to Hormones and Vitamins, and also the study of various Pharmaceuticals, Agrochemicals etc. |
|---|---------|---|-------|----------------------------|---|
| 1 | M.Sc. I | Ι | DSC-1 | Physical Chemistry-I | Thorough knowledge of macroscopic as well as microscopic system. Understand the idea of wave function. Applications to conjugated systems, zero-point energy and quantum tunneling. Learn to calculate excess thermodynamic properties. |
| 2 | | | DSC-2 | Organic Chemistry- I | Understand the reactions and mechanisms with knowledge of stereochemistry. Study the stability, structure and reactions of reactive intermediate. |
| 3 | | | DSE-1 | A.Inorganic Chemistry-I | Students learn chemistry of transition element. LearnVSEPR theory and properties of semiconductors with applications. Students should know radioactive decay and techniques like GM counter, tracer technique. Aware about applications of radioisotope. |
| 4 | | | RM | Research Methodology | Student learn basic concept of referencing. Able to understand data |

| | | | interpretation. Aware about concept of plagiarism and self-plagiarism Students will understand the principle of NMR spectroscopy and analysis of spectral data. |
|--|------------|---------------|---|
| | | Practicals | |
| | DSC- 1P | Practical-I | Students learn to apply theoretical knowledge for study kinetics phenomenon, determination of radius, as well as adsorption. Students getting skill to handle instruments like Conductivity meter, Refractometer, Potentiometer and pH meter. |
| | DSC- 2P | Practical-II | Students are made aware of safety techniques and handling of chemicals. In qualitative analysis students getting skillful hand in separation and identification of two component mixture. Students learn vacuum and steam distillation technique. |
| | DSE- 1P | Practical-III | In ore and alloy analysis student getting tremendous knowledge about oxidation and reduction phenomenon. Greener approach in preparation and purification of inorganic compounds. |

| 1 | M.Sc. I | Ш | DSC-3 | Physical Chemistry-II | Students learn photochemical reaction with phenomenon like fluorescence and phosphorescence. Students learn evaluation of mean activity coefficients of ions from E.M.F. data. Study fractional and higher order kinetics. Study kinetics of polymerization and determination of molecular weight from different methods. |
|---|---------|---|-------|---|--|
| 2 | | | DSC-4 | Organic Chemistry- II | Student confronted with oxidation and reduction reactions using knowledge oxidizing and reducing agents. Learn the Electrophilic and Nucleophilic substitution reactions of aromatic compound. |
| 3 | | | DSE-2 | Inorganic Chemistry-II | Learn properties of transition and inner transition elements. Learn about extraction and applications of metals. Getting awareness about role of inorganic chemistry in biological processes at inter and intracellular level. |
| 4 | | | OJT | OJT/In-house Project/ Internship/ Apprenticeship | Students get awareness about efficiency in specific industries. Students aware about adequate knowledge about industrial processes. |

| | | | | Practicals | |
|---|--------------------------------------|---|-------------|--------------------------------------|---|
| | | | DSC- 3P | Practical IV | Understand kinetics of reaction by differential methods. Students getting skill to handle instruments like Polarimeter, Refractometer, and Potentiometer to see solute and solvent behavior in aqueous phenomenon. |
| | | | DSC- 4P | Practical V | Learn one and two stage preparations. Students are trained to different purification techniques in organic chemistry like recrystallization, distillation, steam distillation and extraction. Students learn to keep work-up procedure more eco-friendly. |
| | | | DSE- 2P | Practical VI | Students getting awareness of green chemistry and role of green chemistry in pollution reduction. Apply greener approach while ore and alloy analysis. Learn to determine purity from prepared inorganic compound. |
| | | | (Anal | M.Sc. II lytical Chmistry - III |) |
| 1 | M.Sc. II (Analytical Chmistry) | Ш | HCT- 3.1 | Advanced Separation Techniques | Students confronted with advanced chromatographic techniques. Learn dialysis and |

| | | | | filtration methods and applications. Students getting enough knowledge about solvent extraction processes and role of equilibrium for solvation. |
|---|--|-------------|--|--|
| 2 | | HCT- 3.2 | Instrumental Methods of Analysis-I | Students learn thermal techniques like TGA, DTA and DSC. Getting awareness about radio analytical techniques. Getting knowledge about titration methods like radiometric titration, High frequency titration, amperometric titration, electro gravimetric titrations. |
| 3 | | SCT- 3.1 | Applied Analytical Chemistry | Student getting awareness about analysis of agricultural feeds, soil as well as fertilizers and pesticides. Students confronted with key role of chemistry in analysis of mineral, ore and alloy as well as cosmetic product analysis |
| 4 | | OET- 3.1 | Analytical Spectroscopy | Understand various spectroscopic methods for structure determination. Explain instrumentations and methodology in spectroscopy like Raman spectroscopy, Mossbauer spectroscopy. Students confronted with electron spin resonance techniques like SEM, STM, and AFM |

| HCP- 3.1 | Seminar/ Tutorial/Industrial Visit / Field Tour Practicals Physical Analytical Chemistry | Seminaractivity increases the presentation and discussion skills in students. Helps to improve communication skill. Learn method to prepare solutions at milimolal and ppm scale Students getting skill to |
|-------------|---|---|
| | | handle instruments like spectrophotometer, colorimeter, and pH meter. |
| HCP- 3.2 | Inorganic Analytical Chemistry | Confronted with laboratory procedures like estimation of inorganic content from fertilizers and dairy products. Learn application of electrochemistry by estimating dissociation constant potentiometrically |
| SCP- 3.1 | Organic Analytical Chemistry | The course includes synthesis of some derivatives and organic compounds, which will help them while working in research laboratory in future. Analysis of drugs, chili powder, and moisture content determination from food sample |
| OEP- 3.1 | Spectral Problems | Learn to apply theoretical knowledge of spectroscopic techniques like IR, NMR,¹³C-NMR, Mass spectrometry etc. Learn to interpret data of thermogram, differential |

| | | | | | thermogram and DSC thermogram. |
|---|--------------------------------------|----|-------------|---|---|
| 1 | M.Sc. II (Analytical Chmistry) | IV | HCT- 4.1 | Advanced Analytical Techniques | Confronted with hyphenated techniques like GC-MS, LC-MS and various applications. Learn technology used in automated system and flow injection analysis. Able to solve numerical problems on chromatography. |
| 2 | | | HCT- 4.2 | Instrumental Methods of Analysis-II | Students getting thorough knowledge about X-ray methods, Nephelometry, turbidometry, flame photometry and emission spectroscopy. Learn to analyze surface characterization by spectroscopy. |
| | | | HCT- 4.3 | Biochemical and Food Analysis | Understand various terms in food analysis techniques and methods, forensicscience and drug substances. Able to solve numerical problems on analysis food and drug substances. Learn to analyze drug samples to check out for impurities and contaminants. |
| 4 | | | SCT- 4.2 | Pharmaceutical Analysis | Learn theory to estimate moisture from biological sample by using karlfischertitrator. Awareness about source of impurities in pharmaceutical materials. Learn standardization and quality control |

| | Seminar/ Tutorial/Industrial Visit / Field Tour | methods of drug to maintain standard value. understand various terms in pharmaceutical raw material and finished productanalysis Seminar activity increases the presentation and discussion skills in students. Helps to improve communication skill. |
|-----------------|---|--|
| HCP- 4.1 | Physical Analytical Chemistry | Maintain proper record of analytical data in notebook Learn method to prepare solutions at milimolal and ppm scale. |
| HCP- 4.2 | Inorganic Analytical Chemistry | To describe basic principles techniques / methods of ore analysis, alloy analysis. Determine the capacity of cation and anion exchange resin. |
| HCP- 4.3 | Organic Analytical Chemistry | Learn techniques to estimate and determinate biological component from food and beverages. Students carried out different purification techniques in organic samples like recrystallization, distillation, steam distillation and extraction. |
| SCP- 4.1/4.2 | Project Work/ In plant Training | Students getting awareness about research field. Insight in to referencing and literature review. |

| | | | | M.Sc. II | |
|---|-----------------------------------|-----|-------------|---|--|
| | 1 | 1 | | (Organic Chmistry- I | |
| 1 | M.Sc. II (Organic Chmistry) | III | HCT- 3.1 | Advanced Organic Chemistry-I | Understand various methods for determining reaction mechanism. Learn various oxidizing and reducing reagents Name reactions with applications |
| 2 | | | HCT- 3.2 | Chemistry of Bio- active Heterocycles | Understand the stereochemistry, reactivity and conformational effects of six membered rings. Understand the stereochemistry, shapes of rings other than six membered rings. |
| 3 | | | SCT- 3.1 | Photochemistry and Pericyclic Reactions | Introduction to pericyclic and photochemical reactions. Understanding of how light energy influences chemical reactions. Students will aware of principles of chemical reactions including cycloadditions. |
| 4 | | | OET- 3.1 | Applied Organic Chemistry | Learn the basics of carbohydrates, its physical properties and application. Learn Concept of supramolecular chemistry Application of supramolecularcatalysis. |
| | | | | Practical | |
| | | | HCP- 3.1 | Organic Ternary mixtures | • In qualitative analysis students getting skillful hand in separation and identification of three |

| | | | | | component mixture. Understand the separation technique of ternary mixture and the analysis of separated components. Students might explore principles of extractions of ternary mixtures. |
|---|-----------------------------------|----|-------------|----------------------------------|---|
| | | | HCP- 3.2 | Organic Preparations | To provide laboratory experience to the students by performing experiments based on topics taught in theory. Knowledge to build up small scale industry for developing various products. |
| | | | SCP- 3.1 | Spectral analysis | Learn to apply theoretical knowledge of spectroscopic techniques like IR, NMR,13C-NMR, Mass spectrometry etc. Learn and become proficient in interpretation of spectral data. |
| | | | OEP- 3.1 | Column Chromatography | Students confronted with advanced column chromatographic techniques. Students will aware factors affecting on retention time and selectivity. |
| | | | OEP- 3.2 | Review Work | |
| 1 | M.Sc. II (Organic Chmistry) | IV | HCT- 4.1 | Advanced Organic Chemistry-II | • Students aware about protecting and deprotecting concept in organic synthesis. |

| | | | • |
|---|-------------|----------------------------------|--|
| 2 | HCT- 4.2 | Modern Organic Chemistry | Study asymmetric synthesis of chiral compound. Students get proficiency to tackle multicomponent reactions. Aware about applications of metal-organic framework. |
| 3 | HCT- 4.3 | Chemistry of Natural Products | Understand various extraction techniques for isolation of natural product. Learn purification of natural product and its characterization by different spectroscopic methods. |
| 4 | SCT- 4.1 | Medicinal Chemistry | Confronted with various drug used in medicinal chemistry. Students gain skills in rational drug design Getting awareness about drug interactions with biological system. |
| | | Practical | |
| | HCP- 4.1 | Organic Synthesis | Understand different name reactions using green method. Learn monitoring of reactions, purification and characterization of products. |
| | HCP- 4.2 | Organic chemistry | Student getting practical techniques to isolate constituents from natural sources. Understanding the principles behind |

| | | | choosing appropriate solvents. |
|--|-------------|--|--|
| | HCP- 4.3 | Project work/ In plant training | Students getting awareness about research field. Insight in to referencing and literature review. |
| | SCP- 408 | Pharmaceutical Formulation/ Medicinal chemistry | Confronted with various drug used in medicinal chemistry. Students gain skills in rational drug design Getting awareness about drug interactions with biological system. |
| | T4 | Seminar/ Tutorial/Industrial visit/ field Tour | Seminar activity increases the presentation and discussion skills in students. Helps to improve communication skill. |

| Sr. No. | Course | Semester | Paper No. | Paper Name | Outcome | | |
|------------|--------------|----------|--------------|--|---|----|--------------------|
| 1. | B.Sc. I | I | Ι | Introduction to Microbiology & Microbial diversity | Have developed good knowledge about the development of the discipline of microbiology & contributions made by various scientists | | |
| | | | II | Cell cytology & Microbial Techniques | Have developed good understanding about the cellular organization and techniques to observe microorganisms | | |
| | | П | III | Microbial Metabolism & cultivation | Developed good understanding of basic biomolecules like DNA, RNA, Proteins, carbohydrates etc. Have learned basic thing necessary to cultivate/grow microorganisms | | |
| | | | IV | Applied Microbiology | Got understanding of various applied branches of microbiology like Air microbiology, Water microbiology | | |
| 2 | B.Sc. II | III | V | Bacterial cytology & Physiology | Have developed good understanding of bacterial cell structure, various parts/components & their ultra- structures | | |
| | | | 111 | 111 | m | VI | Bacterial Genetics |
| | | IV | VII | Immunology & Medical Microbiology | 1.Have developed understanding of Immunity, Antigen, Antibody 2.Got good understanding of pathogen, diseases diagnostic measures/methods | | |
| | | IV | VIII | Industrial Microbiology | Acquired basic knowledge regarding different microbial processes in industries. Understood concept of fermentation | | |
| 3 | B.Sc. III | V | IX | Virology | Understood what viruses are and their structure, life cycle Gained good knowledge of various plant & animal viruses | | |
| | | v | Х | Agricultural Microbiology | 1. Have developed basic understanding of role of microorganisms in agricultural processes. | | |

Department of Microbiology

| | | | | 1 | 2. Understood various elemental |
|----|---------|----|-----------|----------------------------|--|
| | | | | | cycles and their importance |
| | | | | | 1. Developed knowledge about |
| | | | | | different hypersensitivity types & |
| | | | XI | Immunology | related diseases |
| | | | ΛΙ | minunology | |
| | | | | | 2. Understand concept of |
| | | | | | Monoclonal antibody |
| | | | | | 1. Developed knowledge of different |
| | | | VII | | types fermentations |
| | | | XII | Industrial Microbiology | 2. Aquired knowledge of various |
| | | | | | products produced from fermentation |
| | | | | | process |
| | | | | | 1. Understand genetic organization in microbes |
| | | | XIII | Microbial Genetics | 2. Able to understand three basic |
| | | | ЛШ | Whereoblar Genetics | genetic material transfer processes |
| | | | | | 3. Understood basics of |
| | | | | | Bioinformatics |
| | | | | | 1. Students understood basic |
| | | | | | concepts involved in biochemistry of |
| | | | IVX | Microbial Biochemistry | microorganisms. |
| | | | | | 2. Various pathways that are very |
| | | | | | basic in every living being. |
| | | VI | VI XIV | Clinical Microbiology | 1. Got good knowledge regarding |
| | | | | | chemotherapeutic agents, their types |
| | | | | | & mechanisms of action |
| | | | | | 2. Understood types of biomedical |
| | | | | | waste & their disposal |
| | | | | | 1. Have developed good knowledge |
| | | | | | regarding different types of |
| | | | | Environmetal Microbiology | environments and habitats |
| | | | XVI | | 2. Understand importance of |
| | | | | | BOD/COD |
| | | | | | 3. Developed practical skills to |
| | | | | | calculate BOD/COD values |
| 4. | M.Sc. I | Ι | 1 | | 1. Have developed knowledge |
| | | | | | regarding diversity of organisms & |
| | | | LICT | | need of taxonomy. |
| | | | HCT | Cytology & Taxonomy of | 2. Learned about various criterion |
| | | | 1.1 | Microorganisms | used in taxonomy |
| | | | | | 3. Aquired good knowledge of |
| | | | | | microbial classification |
| | | | | | 1. Understood basic biological |
| | | | | | chemistry of organisms |
| | | | HCT | Microbial chemistry, | 2. Learned about enzymes, their |
| | | | 1.2 | Physiology & Enzymology | structure & their role in metabolic |
| | | | | | processes. |
| | | | | 1 | 1. Understood Virus, their structure, |
| | | | HCT | Recent trends in Virology | various techniques for their detection |
| | | | 1.3 | iteeent tienes in vitology | 2. Understood recent developments |
| L | 1 | 1 | 1 | | 2. Shadistood recent developments |

| | | | | | in the field of virology |
|----|----------------|-----------------------|-------------|--|--|
| | | | SCT 1.1 | Research Methodology & Scientific writing | Aquired knowledge about research ,its planning & execution Learned basic concepts of research, types of scientific documents & how to write scientific papers |
| | | II | HCT 2.1 | Microbial Genetics | Acquired knowledge of gene, their expression and regulation Understood concept of Operon |
| | | | HCT 2.2 | Microbial Ecology & Diversity | Good understanding of microbial diversity Understood microbial interactions with ecosystem |
| | | | SCT 2.2 | Medical Microbiology | Good knowledge of normal flora of human body Understood components of Immune system |
| | | | OET 2.1 | Bioinformatics & Biostatistics | Have acquired knowledge of various databases & basic tools used in bioinformatics. Able to search literature data for their project work Understood basic concepts of statistics |
| 5. | 5. M.Sc. II | H 3 H 3 S | HCT 3.1 | Molecular Biology & Genetic Engineering | Understood biology at molecular level. Aquired knowledge of various tools used in GE Understood the process of making rDNA |
| | | | HCT 3.2 | Bioprocess Technology & Fermentation Technology | Have learned various biological processes & their manipulation for the human benefits. Understood importance of microorganisms in fermenting various products |
| | | | SCT 3.3A | Immunology & Immunotechnology | Understood Immunity, Immune system & Immune responses. Aquired various basic immunological techniques. |
| | | | OET 3.4A | Agricultural Microbiology | Developed understanding of multifarious roles of microorganisms in soil, in association with plants. |
| | | IV | HCT 4.1 | Pharmaceutical Microbiology | Aquired knowledge of antimicrobial agents, their nature & mechanism of action Acquired skills for testing pharmaceutical products for their efficiency & safety |

| HCT 4.2 | Food & Dairy Microbiology | Have developed role of microbes in making & spoilage of foods. Acquired knowledge of various processes of dairy industries & role of microbes in making dairy products |
|------------|---|---|
| HCT 4.3 | Principles of Bioinstrumentation & Techniques | Developed understanding of various techniques Understood principles of various instruments |
| SCT 4.1 | Healthcare & Diagnostic Microbiology | Have acquired good understanding of practical aspects of collection of clinical samples, their transport Good understanding of antibiotic sensitivity |

DEPARTMENT OF PHYSICS

| Sr. | COURSE | SEMISTER | PAPER | PAPER | COURSE OUTCOMES |
|-----|--------|----------|----------------|---|--|
| No. | | | NO. | NAME | |
| 1 | B.ScI | SEM-I | PAPER NO-I | MECHANICS AND PROPERTIES OF MATTER | Understanding the concept of Moment of Inertia and applying them in calculations of the moment of inertia of various systems. Understand the physics and mathematics of oscillations and to solve the equations of motion for simple harmonic and damped oscillators Understand the concepts of energy, work, power, the concepts of conservation of energy and be able to perform calculations using them. Understand the concepts of elasticity and be able to perform calculations using them. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. Understand the concepts of viscosity & fluid dynamics and its application in real life problems. Demonstrate quantitative problem solving skills in all the topics covered. |
| 2 | B.ScI | SEM-I | PAPER NO-II | OPTICS | Understand technical applications of simple optical instruments. Understand and explain the different optical method of testing and measuring of various physical parameters Understand Fermat's principle, explain about different aberrations in lenses and discuss the method to minimize them. Understand the types of eyepieces and construction and working of spectrometer and |

| | | | | | optical bench for determining various optical values. 5. Understand the phenomenon of interference of light and its formation in thin film, Newton's ring, wedge shaped film etc. due to division of amplitude. 6. Explain Schuster method, Distinguish between diffraction and interference patterns, prism and grating spectra 7.Comprehended the basic principle of laser and its parts, the construction and working of He-Ne and Ruby laser. 8. Solve problems using suitable assumptions and formulae as well as able to assess) the results. |
|---|-------|--------|-----------------|---|---|
| 3 | B.ScI | SEM-II | PAPER NO-III | HEAT AND THERMODYN AMICS | Determination of Coefficient of Viscosity, Thermal Conductivity and Diffusion. Understand Liquefaction of gases by various methods and Properties of Liquid He- II. Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process. Analyse the heat engines and calculate thermal efficiency. Analyze the refrigerators and calculate coefficient of performance. Understand property 'entropy' and derive some thermo dynamical relations using entropy concept. |
| 4 | B.ScI | SEM-II | PAPER NO-IV | ELECTRICITY , MAGNETISM AND BASIC ELECTRONIC S | Understand the concept of Varying Current and applying them in charging and discharging of capacitor and time constant. Understand the concept of AC circuits and different AC bridges. Understand the concepts Magnetostatics |

| 6 | B.ScII | SEM-III | PAPER NO-VI | ELECTRONIC S | 1. Understand the concept of transistor and various constructions like BJT include its output characteristics under CE and CB mode |
|---|--------|---------|---------------------------------|------------------------------|---|
| 5 | B.ScII | SEM-III | PAPER NO-V PAPER NO-VI | General Physics and Sound | Understand the rectifiers specially Bridge rectifier with filters also different wave shaping circuits. Understand BJT include its output characteristics under CE and CB mode with application of transistor amplifier. Understand the physics and mathematics basic concepts of vector to solve the problems. Understand the concepts of processional motions and various pendulums and its application in real life problems. Understand the concepts of elasticity and be able to perform calculations using them. Understand the concepts of surface tension and viscosity and be able to perform calculations of sound and study basic applications of sound instruments. Understand the concept of transistor and various constructions like BJT include its |
| | | | | | and applying then to determine magnetic induction and also understand Ballistic Galvanometer theory and its constants. |

| | | | | | with application of transistor amplifier. |
|---|--------|--------|-----------------|--------|--|
| | | | | | 2. Understand the concepts of oscillators and its types with applications. |
| | | | | | 3. Understand the concept of transistor and constructions like UJT include its output characteristics application of transistor amplifier. |
| | | | | | 4. Understand the physics behind in various instruments and study basic applications of instruments in daily life. |
| | | | | | 5. Understand the concept of regulator power supply and various its types. |
| | | | | | |
| | | | | | |
| | | | | | |
| 7 | B.ScII | SEM-IV | PAPER NO-VII | OPTICS | 1. Understand technical applications of simple optical instruments and behind various theoretical concepts. |
| | | | | | 2. Understand and explain the different optical phenomena of light like interference, diffraction and polarization. |
| | | | | | 3. Understand Fermat's principle, explain about different aberrations in lenses and discuss the method to minimize them. |
| | | | | | 4. Understand the phenomenon of interference of light and its formation in thin film, Newton's ring, wedge shaped film etc. due to division of amplitude. |
| | | | | | 5. Understand the theory of physics behind the fiber optics communication and its |

| | | | | | advantages. |
|----|---------|--------|------------------|---|---|
| | | | | | |
| 8 | B.ScII | SEM-IV | PAPER NO-VIII | MODERN PHYSICS | Understand the theoretical modern physics concepts and theories like theory of relativity, mass energy relations, and twin paradox Determination of matter waves by physics instruments and study the concept of De- Broglie's hypothesis Understand the laws of Compton effect with experimental verification. Analyze the various nuclear energy models with their principles. |
| 9 | B.ScIII | SEM-V | PAPER NO-IX | MATHEMATI CAL PHYSICS & STATISTICAL PHYSCIS | Determination of vector theorems and introduction to partial differential equation and orthogonal curvilinear coordinates. Understand the basic concepts in statistical physics with classically MB statics. BE and FD statics studied with quantum mechanics To apply the mathematical physics concepts for solving problems of quantum physics. |
| 10 | B.ScIII | SEM-V | PAPER NO-X | SOLID STATE PHYSICS | Understand the structure of solid in atomic level by using some instruments. Determination the various crystal structure by using XRD and study its characteristics. Understand the free electron theory and band theory of solid. Analyze the behavior of solid in external magnetic field and study types of magnetic materials. To study the application of |

| | | | | | superconductors. |
|----|---------|--------|------------------|---------------------------------|--|
| 11 | B.ScIII | SEM-V | PAPER NO-XI | CLASSICAL MECHANICS | Determination the equations of particles and systems of particles with application of Newton's laws of motions. Understand the Lagranges formulation with D' Alembert's principles and applications of Lagrange's equations with solving problems. Understand the theory of moving coordinate system and techniques of calculus variation. Understand the concept of coupled oscillations. Analyze the motion of rigid body. |
| 12 | B.ScIII | SEM-V | PAPER NO-XII | NUCLEAR PHYSICS | To study nuclear structure and properties with nuclear reactions. Understand the particles accelerator and nuclear radiation detectors. To study the nuclear energy level and theory of elementary particles. |
| 13 | B.ScIII | SEM-V | PAPER NO-XIII | SKILL ENHANCEME NT COURSE | To study of basic practices of thin film deposition. Understand the various characterizations techniques. To adopt the skill of laboratory safety and disaster management. To study the various energy resources and its impact on environments. To study the various applications of physics in medical field. |
| 14 | B.ScIII | SEM-VI | PAPER | ELECTRODY | 1.To study the electrostatics and charge |

| | | | NO-XIV | NAMICS | particle dynamics. |
|----|---------|--------|------------------|---|---|
| | | | | | 2. To study time varying fields with its applications as self inductance and mutual inductance. 3. To study the Maxwell's Equations with its physical significance. 4. To study the electromagnetic waves with reflection and refraction. |
| 15 | B.ScIII | SEM-VI | PAPER NO-XV | MATERIAL SCINECE | To study various material and their properties. To study different material likes polymer, ceramics and composite materials with their composition and applications. To study the introduction of nano-science and nonmaterial's |
| 16 | B.ScIII | SEM-VI | PAPER NO-XVI | ATOMIC PHYSICS, MOLECULAR PHYSICS AND QUANTUM MECHANICS | To study the atomic spectra with alkali metals. Understand the selection rules and intensity rules. To study the anomalous Zeeman effect, paschen Back effect, stark effect with solving their problems. To study the characteristics properties of Raman lines and classical theory of Raman effect. Understand the physical significance of ψ and application of Schrödinger's equations and operators. |
| 17 | B.ScIII | SEM-VI | PAPER NO-XVII | ELECTRONIC S | 1. To study block diagram of op-amp its characteristics and applications |
| | | | | | 2. To study functional block diagram of |

| | | | | | IC555 and its | s applications. |
|---|-------|-------|---------|-----------------------|-------------------------------|--|
| | | | | | SCR, Diac, T applications. | he various electronic devices like Traic and display devices and its of JFET MOSFET devices |
| 1 | M.ScI | SEM-I | HCT 1.1 | MATHEM PHYSICS | ATICAL | Understanding the concept of complex variable and presentation. Understand the analytical functions of complex variables with Cauchy's Integral Theorem. Understand the concepts of operator and matrix analysis. Understand the concepts of ordinary differential equations. Understand Fourier series, Integral transforms and Laplace transform with box and exponential functions. |
| | | | HCT 1.2 | 2 SOLID ST PHYSICS | ATE | Understand the structure of solid in atomic level by using some instruments. Determination the various crystal structure by using XRD and study its characteristics. Understand the free electron theory and band theory of solid. Analyze the behavior of solid in external magnetic field and study types of magnetic materials. To study the application of |

| | | | superconductors. |
|--|---------|--|--|
| | HCT 1.3 | 3 ANALOG AND DIGITAL ELECTRONICS | 1. Understand the concept of transistor and various constructions like BJT include its output characteristics under CE and CB mode with application of transistor amplifier. |
| | | | 2. Understand the concepts of oscillators and its types with applications. |
| | | | 3. Understand the concept of transistor and constructions like UJT include its output characteristics application of transistor amplifier. |
| | | | 4. Understand the physics behind in various instruments and study basic applications of instruments in daily life. |
| | | | 5. Understand the concept of regulator power supply and various its types. |
| | SCT 1.1 | CLASSICAL MECHANICS | Determination the equations of particles and systems of particles with application of Newton's laws of motions. Understand the Lagrange's |
| | | | formulation with D' Alembert's principles and applications of Lagrange's equations with solving problems. |
| | | | 3. Understand the theory of moving coordinate system and techniques of calculus variation. |

| | | | | | 4. Understand the concept of coupled oscillations.5. Analyze the motion of rigid body |
|----|-------|--------|---------|----------------------|---|
| 2. | M.ScI | SEM-II | HCT 2.1 | QUANTUM MECHANICS | 1. Understand the physics and mathematics basic concepts of vector to solve the problems. |
| | | | | | 2. Understand the concepts of processional motions and various pendulums and its application in real life problems. |
| | | | | | 3. Understand the concepts of elasticity and be able to perform calculations using them. |
| | | | | | 4. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. |
| | | | | | 5. Understand the physics behind in sound and study basic applications of sound instruments. |
| | | | НСТ 2.2 | ELECTRODYNAMI CS | 1. To study the electrostatics and charge particle dynamics. |
| | | | | | 2. To study time varying fields with its applications as self inductance and mutual inductance. |
| | | | | | 3. To study the Maxwell's Equations with its physical significance. |
| | | | | | 4. To study the electromagnetic waves with reflection and refraction. |

| | | | SCT 2.1 | STATISTICAL PHYSICS | Understand the basic concepts in statistical physics with classically MB statics. To study BE and FD statistics studied with quantum mechanics. To apply the mathematical physics concepts for solving problems of quantum physics. |
|----|--------|---------|---------|--------------------------------|---|
| | | | OET 2.1 | FUNDAMENTALS OF ELECTRONICS | To study block diagram of op-amp its characteristics and applications To study functional block diagram of IC555 and its applications. To study the various electronic devices like SCR, Diac, Traic and display devices and its applications. To review of JFET MOSFET devices. To study applications of active and passive devices. |
| 3. | M.ScII | SEM-III | HCT 3.1 | SEMICONDUCTOR PHYSICS | To study the energy bands and charge carrier in semiconductor with Fermi level, electron and holes concentration at equilibrium. To study role of carriers in semiconductor with direct and indirect recombination of electrons and holes with understand Haynes-Shockley experiment. To understand dynamics of |

| | | | | | charge carriers and lattice, and semiconductor interfaces.4. To understand semiconductor crystal growth process. |
|----|---------|--------|---------|------------------------------------|---|
| | | | HCT 3.2 | ATOMIC AND MOLECULAR PHYSICS | To study the atomic spectra with alkali metals. Understand the selection rules and intensity rules. To study the anomalous Zeeman effect, Paschen Back effect, stark effect with solving their problems. To study the characteristics properties of Raman lines and classical theory of Raman effect. Understand the physical significance of ψ and application of Schrödinger's equations and operators. |
| | | | SCT 3.1 | FUNCTIONAL NANOMATERIALS | To understand semiconductor quantum dots, nanotubes and nanowires. To understand polymer nanocomposite, nanofibers and metal oxide frameworks. |
| | | | OET 3.1 | ENERGY HARVESTING DEVICES | 1. To study solar cell, fuel cell and piezoelectrics. |
| 4. | M.Sc II | SEM-IV | HCT 4.1 | SEMICONDUCTOR DEVICES | To study MIS structures and MOS FETS with its applications. To study power devices GTO, MOS, SCR, DIACs, |

| | | | TRIACs, SUS, IGBT. |
|--|---------|--|--|
| | | | 3. To study coupled and transferred electron, applications of opto electronics and advanced solid state devices. |
| | HCT 4.2 | NUCLEAR AND PARTICLE PHYSICS | 1. To study nuclear structure and properties with nuclear reactions. |
| | | | 2. Understand the particles accelerator and nuclear radiation detectors. |
| | | | 3. To study the nuclear energy level and theory of elementary particles. |
| | | | 4. To study various nuclear models and nuclear reactions. |
| | | | 5. To study particle physics and cosmic rays. |
| | SCT 4.1 | MATERIALS CHARACTERIZATI ON TECHNIQUES | 1. To study microscopic techniques I & II with different instruments. |
| | | | 2. Understand the construction and working of optical, scanning and electron microscopy |
| | | | 3. Understand the construction and working of transmission electron, scanning tunneling and Atomic force microscopy |
| | | | 4. To study the x-ray photoelectron spectroscopy, Auger electron spectroscopy, Resonance spectroscopy. |

| | SCT 4.2 | PHYSICS OF | . To study the background of |
|--|---------|---------------|--|
| | | NANOMATERIALS | nano-science and |
| | | | nanotechnology. |
| | | | 2. Understand the band structure and density of states at nanoscale. |
| | | | 3. Understand the various properties of nanomaterials. |
| | | | 4. To study growth techniques and characterization tools of nanomaterials. |

Department of Botany

| Sr.No. | Course | Semester | Paper | Paper Name | Course Outcome |
|--------|---------|----------|-------|---------------|---|
| | | | No. | | |
| 1. | B.Sc. I | Ι | Ι | Microbiology | 1) Understand the types and diversity |
| | | | | & Phycology | in bacteria, viruses and mycoplasma2) Understand the diversity among |
| | | | | | Algae. |
| | | | | | 3) Know the systematic, morphology |
| | | | | | and structure, of Algae. |
| | | | | | 4) Understand the useful, harmful activities and industrial applications of |
| | | | | | Algae |
| | | | II | Fungi | 1) Understand General characteristics, |
| | | | | U U | Thallus organization, Cell wall |
| | | | | &Archegoniate | composition Nutrition classification |
| | | | | | 2) Understand General characteristics, |
| | | | | | Occurrence, Thallus organization, Life |
| | | | | | cycle of fungi |
| | | | | | 3) Understand types and economic |
| | | | | | importance of Lichen |
| | | | | | 4) Understand types of Micorrhiza and |
| | | | | | its applications |
| | | | | | 5) Understand applied aspects of fungi with respect to biotechnology, |
| | | | | | industry |
| | | | | | 6)To understand unique characteristic |
| | | | | | features of archaegoniate. |
| | | | | | 7) Understand the morphological |
| | | | | | diversity, classification and economic |
| | | | | | importance of Bryophytes. |
| | | | | | 8)Understand the morphological |
| | | | | | diversity, classification and economic |
| | | | | | importance of Pteridophytes. |
| | | | | | 9) Understand the morphological diversity, classification and economic |
| | | | | | importance of Gymnosperm. |
| | | II | III | Plant Ecology | 1) Understand different climatic and |
| | | | | 85 | edaphic factors |
| | | | | | 2) Understand form, Structure |
| | | | | | classification and characteristics of |
| | | | | | community. |
| | | | | | 3) Understand concept, components, |
| | | | | | pyramids, food chain, energy flow and |
| | | | | | biogeochemical cycles in Ecosystem |
| | | | | | 4) Understand process and types of succession |
| | | | | | 5) Understand adaptations in |
| | | | | | community |
| | | | | | 6) Understand types and control |
| | | | | | measures of various pollution. |

| | | | IV | Taxonomy of | 1) Understand about importance of |
|----|----------|-----|------|---------------|---|
| | | | 1, | | taxonomy. |
| | | | | Angiosperms | 2) With respect to recent knowledge |
| | | | | | students should know about some |
| | | | | | angiospermic families and |
| | | | | | taxonomy. |
| | | | | | 3) Understand different methods of |
| | | | | | classification and rules of |
| | | | | | nomenclature. |
| | | | | | 4) Understand technique and botanical |
| | | | | | gardens in India. |
| 2. | B.Sc. II | III | V | Plant Anatomy | 1) Understand the scope & importance |
| | | | | | of Anatomy. |
| | | | | | 2) Know various tissue systems. |
| | | | | | 3) Understand the normal and |
| | | | | | anomalous secondary growth in plants |
| | | | | | and their causes. |
| | | | 3.71 | DI (| 4) Perform the techniques in anatomy. |
| | | | VI | Plant | 1) Understand the concept of ATP |
| | | | | Metabolism | synthesis 2) To know about Carbon oxidation |
| | | | | | with different pathways |
| | | | | | 3) Understand the properties of |
| | | | | | Monosaccharides, Oligosaccharides |
| | | | | | and Polysaccharides. |
| | | | | | 4) They will learn about the |
| | | | | | Significance of Carbohydrates. |
| | | | | | 5) Understand the Properties of |
| | | | | | saturated fatty acids, and |
| | | | | | unsaturated fatty acids. |
| | | | | | 6) Understand lipid metabolism in |
| | | | | | plants. |
| | | | | | 7) Understand the Beta Oxidation, |
| | | | | | Gluconeogenesis and its role in |
| | | | | | mobilization of fatty acids during |
| | | | | | germination. |
| | | | | | 8) They will learn about the |
| | | | | DI | Significance of lipids. |
| | | IV | VII | Plant | 1) Know about Photosynthesis and |
| | | | | Physiology | Nitrogen metabolism and its |
| | | | | | importance.2) To understand the plants and plant |
| | | | | | cells in relation to water. |
| | | | | | 3) To understand mineral nutrients |
| | | | | | and its role. |
| | | | | | 4) Learn about the movement of sap |
| | | | | | and absorption of water in the plant. |
| | | | VIII | Embryology of | 1) To know reproductive development |
| | | | | | in angiospermic plants. |
| | | | | Angiosperms | 2) To understand anther and pollen |
| | | | | | biology. |
| | | | | | 3) To understand ovule |
| | 1 | 1 | l | | -/ |

| | | | | | 4) To know the process of pollination |
|----------|-----------|---|-----|----------------|---|
| | | | | | and fertilization in the angiosperm. |
| | | | | | 5) To understand embryo and |
| | | | | | endosperm. |
| 3. | B.Sc. III | V | IX | Plant | 1) Understand principles of general |
| | | | | Systematics | conomy and they can use no |
| | | | | bystematics | menclature rules plants. |
| | | | | | 2) Understand historical development |
| | | | | | of taxonomy. |
| | | | | | 3) Explain concept of species. |
| | | | | | 4) Order sub and super categories of |
| | | | | | species according to |
| | | | | | Linnaeus hierarchy. |
| | | | | | 5) Discuss the importance of |
| | | | | | nomenclature rules in botany. |
| | | | Х | Genetics | 1) To understand basic concept of |
| | | | | | Genetics. |
| | | | | | 2) To know variation in Mendelian |
| | | | | | and Post Mendelian Genetics |
| | | | | | 3) To understand sex determination |
| | | | | | and sex linkage |
| | | | | | 4) To know the concept of population genetics |
| | | | | | 5) Understand Extra-chromosomal |
| | | | | | inheritance |
| | | | | | 6) To know the structural and |
| | | | | | numerical changes in the |
| | | | | | chromosome. |
| | | | | | 7) To know types of mutation, |
| | | | | | molecular basis and mutagens. |
| | | | XI | Molecular | 1) Learn the scope and importance of |
| | | | | Biology | molecular biology. |
| | | | | | 2) Understand the biochemical nature |
| | | | | | of nucleic acids, their role in living systems, experimental evidences to |
| | | | | | prove DNA as a genetic material. |
| | | | | | 3) Understand the process of synthesis |
| | | | | | of proteins. |
| | | | XII | Plant Breeding | 1) Understand the science of plant |
| | | | | _ | breeding. |
| | | | | | 2) To introduce the student with |
| | | | | | branch of plant breeding for the |
| | | | | | survival of human being from |
| | | | | | starvation. |
| | | | | | 3) To study the techniques of |
| | | | | | production of new superior crop verities. |
| | | | | | 4) Understand the modern strategies |
| | | | | | applied in Genetics and Plant |
| | | | | | Breeding to sequence and analyze |
| | | | | | genomes |
| <u> </u> | l | | l | L | Denomes |

| | | | | 5) Get the detail knowledge about modern strategies applied in Plant Breeding for crop improvement i.e. Mass selection, Pure line Selection and Clonal selection. 6) Know about exploitation of Heterosis, hybrid and variety development and their release through artificial hybridization. 7) Understand the role plants in human welfare. 8) Gain knowledge about various plants of economic use. 9) Know importance of plants & plant products. |
|--|----|-------|---------------|--|
| | VI | XIII | Plant | 1) Understand the scope and |
| | | | Pathology | importance of Plant Pathology.2) Know the prevention and control measures of plant diseases and its effect on economy of crops. |
| | | XIV | Plant | 1) Understand the fundamentals of |
| | | 231 7 | Biotechnology | Recombinant DNA Technology.Know about the Genetic |
| | | | | Engineering. 3) Understand the principle and basic protocols for Plant Tissue Culture. 4) To understand applications of biotechnology in relation to the crop improvement. |
| | | XV | Cell Biology | Understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles. Students will understand how these cellular components are used to generate and utilize energy in cells. |
| | | XVI | Biostatistics | To know the basic concepts of Biostatistics To understand collection of primary and secondary data To understand calculation of mean, mode median and variations To know probability To know statistical inference with respect to 't' test and chi square test |

| Sr. No. | Course | Sem | Paper No. | Paper Name | Course Outcome |
|------------|---------|-----|--------------|---|--|
| 1 | M.Sc. I | I | HCT 1.1 | Biology and diversity of fungi, bacteria, viruses and lichens | Understand General characteristics, Occurrence, Thallus organization, Life cycle of fungi Understand types and economic importance of Lichen Know the prevention and control measures of plant diseases and its effect on economy of crops. Understand the types and diversity in bacteria, viruses and fungi |
| | | | HCT 1.2 | Biology and diversity of Algae, bryophytes and pteridophytes | Understand the diversity among Algae. Know the systematic, morphology and structure, of Algae. Understand the useful, harmful activities and industrial applications of Algae. Understand the morphological diversity, classification and economic importance of Bryophytes and pteridophytes. |
| | | | HCT 1.3 | Plant Ecology | Understand different climatic and edaphic factors Understand form, Structure classification and characteristics of community. Understand concept, components, pyramids, food chain, energy flow and biogeochemical cycles in Ecosystem Understand process and types of succession |
| | | | SCT 1.1 | Taxonomy of angiosperms | With respect to recent knowledge students should know about some angiospermic families and taxonomy. To know reproductive development in angiospermic plants. To understand anther and pollen biology. To understand ovule |
| | | II | HCT 2.1 | Biology and diversity of gymnosperms and paleobotany | 1) Understand the morphological diversity, classification and economic importance of Gymnosperm. |

| | | | | | 2) To get information about the types of plant that lived during different time period. |
|---|----------|-----|---------|-------------------------------------|--|
| | | | HCT 2.2 | Tools and techniques in botany | Analyze data using appropriate statistical methods. Create, select, and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations. To know probability To know statistical inference with respect to 't' test and chi square test |
| | | | HCT 2.3 | Cell and molecular biology | Learn the scope and importance of molecular biology. Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material. Understand the process of synthesis of proteins. Understand the Biochemical nature of cell. |
| | | | OET 2.1 | Advances in plant pathology | Understand the scope and importance of Plant Pathology. Know the prevention and control measures of plant diseases and its effect on economy of crops. |
| 2 | M.Sc. II | III | HCT 3.1 | Plant embryology and Palynology | To understand anther and pollen biology. To understand ovule To know the process of pollination and fertilization in the angiosperm. To understand embryo and endosperm. |
| | | | HCT 3.2 | Cytogenetic and crop improvement | To understand basic concept of Genetics. To know variation in Mendelian and Post Mendelian Genetics To understand sex determination and sex linkage To know the concept of population genetics |

| | | | | 5) Understand Extra-chromosomal inheritance 6) To know the structural and numerical changes in the chromosome. 7) To know types of mutation, molecular basis and mutagens. |
|--|----|---------|---|---|
| | | SCT 3.2 | Angiosperm Systematics | Understand the interrelation between plants and their evolutionary descent. To reconstruct development of plant life. To arrange the taxa into logical hierarchy that permits easy and simple recognition in the basis of similarity. |
| | | OET 3.2 | Herbal and drug technology | Understand raw material as a source of herbal drugs from cultivation to herbal drug product To know the WHO and ICH guidelines for evaluation of herbal drugs. To know the herbal cosmetics, natural sweeteners, nutraceuticals. |
| | IV | HCT 4.1 | Phytogeography and conservation biology | To explain the ranges of plants in terms of their origin, dispersal and evolution. To know about branch of biogeography that is concerned with the geographic distribution of plant species and their influence on earth surface To protect species, their habitat and ecosystems from excessive rates of extension and the erosion of biotic interactions. |
| | | HCT 4.2 | Plant tissue culture, green house technology and hydroponics. | Understand the principle and basic protocols for Plant Tissue Culture. To understand applications of biotechnology in relation to the crop improvement. To study the hydroponic system to deliver an optimized nutrient solutions to plant root. |
| | | SCT 4.2 | Modern trends in angiosperm taxonomy | 1) To provide the knowledge of taxonomy is possible with the principles of various disciplines like cytology, genetics, anatomy, physiology, geographical |

| | | | distribution, embryology numerical taxonomy. 2) To improve present day knowledge of phylogeny of plants. 3) To develop taxonomic characters this may improve existing system of plant classification. |
|--|---------|-------------------|--|
| | OET 4.2 | Industrial botany | It helps in the area of economic productivity because it I involved in the study of plants and ideal growing techniques It contribute significantly to anthropology, biology, conservation, botany and other fields of science Commercial exploitation of plants by peoples. |

Department Geography Zoology

| Sr. No. | Course Name | Semest er | Paper No | Paper Name | Subject Outcomes |
|------------|----------------|--------------|-------------|--|---|
| 1 | B. Sc. I | I | I | Animal Diversity I | - Zoology has tremendous job potential. a) The successful students will be able to establish research |
| | | II | II | Animal Diversity II | organizations with the help of agriculture, environment protection and also their own industry for transgenic |
| | | | III | Comparativ e Anatomy of vertebrates | animals, clinical pathology, genetic counseling, human karyotyping etc. b) Scientific Research Organizations. c) Universities in India & aboard. |
| | | | VI | Developme ntal Biology of vertebrates | |
| 2 | B.Sc.II | III | V | Cell Biology | Zoology has tremendous job potential. The successful students will be able to establish research organizations |
| | | | VI | Demograph ic Studies | with the help of agriculture, environment protection and also their own industry for transgenic animals, clinical |
| | | IV | VII | Principles of Ecology | pathology, genetic counseling, human karyotyping etc. Scientific Research Organizations. Universities in India |
| | | | VIII | Fundament als of Biochemist ry | & aboard. |
| 3 | B.Sc.III | V | IX | DSE-1A- Molecular Biology | - Develop an understanding of concepts, mechanisms and evolutionary significance and relevance of molecular biology in the current scenario. Get well versed in recombinant DNA technology which holds application in biomedical• & genomic science, agriculture, environment management, etc. Therefore, a fundamental understanding of Molecular Biology will help in career building in all these fields. Apply their knowledge in problem solving and future course of their career development in• higher education and research. Get new avenues of joining research in related areas such as therapeutic strategies or related• opportunities in industry. |
| | | | X | DSE- 2 A - Principles of Genetics | After successfully completing this course, the students will be able to: Understand how DNA encodes genetic information and the function of mRNA and• tRNA Apply the principles of Mendelian inheritance.• Understand the cause and effect of alterations in chromosome number and structure.• Relate the conventional and molecular methods for gene |

| [] | 1 | 1 | 1 | 1 |
|----|----|------|---|--|
| | | XI | DSE- 3A- Endocrinol ogy | manipulation in other• biological systems. Discuss and analyse the epigenetic modifications and imprinting and its role in diseases.• Get new avenues of joining research in related areas such as genetic engineering of• cells, cloning, genetic disorders, human fertility programme, genotoxicity, etc Understand neurohormones and neurosecretions. Learn about hypothalamo and hypapophysial axis.• Understand about different endocrine glands and their disorders.• Understand the mechanism of hormone action. |
| | VI | XII | DSE 4 A- Wildlife Conservati on & Manageme nt | Students will understand the factors affecting the need to find sustainable practices Students will understand the general principles of ecology as how they related to terrestrial• and/or aquatic plant and animal conservation and management. Students will be able to identify species, characteristics, habitat requirements and life cycles of• birds, fish and/or wildlife species. Students will be able to evaluate current events and public information related to wildlife• conservation and management as being scientifically-based or opinion |
| | | XIII | DSE- 1B- Animal Physiology : Life Sustaining Systems | After successfully completing this course, the students will be able to: Understand the physiology at cellular and system levels.• Understand the mechanism and regulation of breathing, oxygen consumption and determination• of respiratory quotient. Understand the process of digestion and excretion.• Understand the renal physiology• Understand the process in haematology• Learn the determination of hemoglobin content, blood groups and blood pressure.• Understand the process of Physiology of Heart |
| | | XIV | DSE- 2B - Evolutionar y Biology | Understand the historical development of systematics past to the present. Understand the similarities and differences of different types of data. Understand the uses and limitations of phylogenetic trees. Appreciate the complexities and difficulties of various species concepts. Gain a basic grasp on the rules and philosophy of nomenclature |
| | | XV | Animal Behaviour and Chronobiol ogy | - Understand the. Biological Clocks and its importance Understand how Biological Rhythm influence animal behavior• Understand Social and Sexual Behaviour of animals• Understand Behaviour Patterns of animals |

| practices.• Students can incorporate social information about poultry and dairy |
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Department Of Mathematics

| Sr. No | Course | Semes ter | Paper No | Paper Name | Course Outcome |
|-----------|--------------|--------------|-------------|----------------------------|---|
| 1 | B.Sc- I | Ι | Ι | ALGEBRA | Understanding the applications of matrices Understanding how they can calculate |
| | | | II | CALCULUS | roots of a complex numbers. Calculate the limit and examine the continuity of a function at point. Explain the properties of three- dimensional shapes. |
| | | II | III | GEOMETRY | Learn how to change points and equations in Cartesians to Polar. Understand the Geometry of plane and spheres. |
| | | | IV | DIFFERENTIA L EQUATIONS | Learn various methods of solving first order and firstdegree differential equations occurring in Physics, Chemistry and Engineering Sciences. Understand the genesis of ordinary differential equation |
| 2 | B.Sc- II | III | V | Differential Calculus | Find maximum and minimum value Jacobian of n order and find curvature of any given curve as well as find tangents and normals of any given curve. |
| | | | VI | Laplace Transform | Define Laplace transform inverse Laplace transform and applications |
| | | IV | VII | Differential Equations | To solve differential Equation of first order and of degree higher than the first, linear equation of the second order, homogeneous linear equation |
| | | | VIII | Abstract algebra-I | Apply the theory of groups to number systems, define group and its properties,homomorphism and isomorphism |
| 3 | B.Sc- III | V | IX | Algebra – II | Understand the theory of rings and fields as well as linear algebra |
| | | | X | Complex Analysis | Define Analytic Function, Complex Differentiation, Cauchy-Rieman equation. Complex Integration, Line Integration, Cauchy Integral Formula, Power Series, Laurent Series. |
| | | | XI | Real Analysis | To understand completeness of set of real number, absolute value of real number. |

| 1 | | | |
|----|------|---|---|
| | | | Define series of real number, Cauchy |
| | | | root test, D'Alembert's test, Ratio test |
| | | | for convergence of series. |
| | XII | Partial | : Learn to Partial Differential |
| | | Differential | Equation, Formation of Partial |
| | | Equations | Differential Equation, types of partial |
| | | (Elective - A) | differential Equation. |
| | | | Lagrange's Method, Charpit's |
| | | | Method. |
| VI | XIII | Metric Spaces | Define metric spaces |
| | | - | completeness, compactness and open, |
| | | | closed sets |
| | XIV | Numerical | Define operators, finite difference, |
| | | Analysis | Gauss Interpolation Formula, |
| | | - | Newton's Interpolation |
| | | | Formula(Center, forward, backward) |
| | | | Numerical differentiation and |
| | | | integration, Maxima and minima of |
| | | | tabulated function, Difference |
| | | | equation. |
| | XV | Graph Theory | Able to define the basic concepts of |
| | | 1 2 | - |
| | | | graph |
| | XVI | Integral | Acquire the knowledge of double |
| | | Calculus | |
| | | (Elective - A) | improper integral |
| | XIV | Numerical Analysis Graph Theory Integral Calculus | completeness, compactness and open, closed sets Define operators, finite difference, Gauss Interpolation Formula, Newton's Interpolation Formula(Center, forward, backward) Numerical differentiation and integration, Maxima and minima of tabulated function, Difference equation. Able to define the basic concepts of graphs, directed graphs, and weighted graph Acquire the knowledge of double integral beta, gamma function and |

Department of Electronics

| SR. NO | COURSE | SEMISTER | PAPER NO. | PAPER NAME | COURSE OUTCOME |
|-----------|----------|----------|----------------------|--|--|
| 1 | B.Sc.I | I | I II | Basic Circuit Theory and Network Analysis Digital Fundamentals | Students will get basic understanding of the subject. To encourage students to develop approach towards upcoming |
| | | 11 | V | Semiconductor Devices Digital Electronics | electronic technologies. Students will get hands-on on various circuits and instruments. To equip students with adequate fundamental concepts and knowledge base. |
| 2 | B.Sc.II | 111 | V VI | Electronic Circuits Pulse and Switching Circuits | To equip student with necessary fundamental concepts and knowledge base. To develop specific practical skills. |
| | | IV | VII | Operational Amplifier and Applications Digital Techniques and Microprocessor | To encourage student to develop skills for accepting challenges of upcoming technological advancements. To prepare students for demonstrating the acquired knowledge. |
| 3 | B.Sc.III | v | IX X XI XII | Linear Integrated Circuits and Applications Fundamentals of Microcontroller Sensors and Transducers Electronics Communication | To impart training on circuit design, analysis, building and testing. To design the syllabus with specific focus on key Learning Areas. To encourage student to develop skills for accepting challenges of upcoming technological advancements. To expose the students to on-lineshooter certificate courses such as MOOC / SWAYAM/ NPTEL, etc. |

| | VI | XIII XIV XV XVI | •Power Electronics •Embedded System Design •Electronics Instrumentation •Modern Communication Systems | To impart training on circuit design, analysis, building and testing. To inculcate awareness among the student to perform the project so find us trial standards, which could also, ensures the interdisciplinary approach. To provide the knowledge of design and implementation of instrumentation of significant preciseness. To expose the students to the industrial environment a on job training and internship may be provided |
|--|----|--------------------------|---|---|
|--|----|--------------------------|---|---|

Department of Economics

| Sr. No. | Course Name | Semes ter | Paper No | Paper Name | Subject Outcomes |
|------------|----------------|--------------|-------------|-----------------------------------|---|
| 1 | B.A.I | Ι | Ι | Indian Economy | -To understand meaning, need and importance of Indian economy To understand the Growth and development. |
| | | II | II | Indian Economy | -To understand the unemployment -To understand the aim and objectives of economy |
| 2 | B.A.II | III | III | Money and Banking | -To acquire knowledge about money -To acquire knowledge about banking system. |
| | | | IV | Demographic Studies | To understand the meaning, importance and scope of demographic studies.To understand the census. |
| | | IV | V | Public finance | -To acquire knowledge about public finance.-To acquire knowledge about fiscal policy. |
| | | | VI | Demographic Studies | -To understand the meaning, importance and scope of demographic studies. |
| 3 | B.A. III | V | VII | Micro Economics | - to understand the concept of land labour price monopoly etc. |
| | | | VIII | Macro Economics | -to know about the macro level issues in the country. |
| | | | IX | History of Economic Thought | -To understand the knowledge of economic thoughts of western economists. |
| | | | Х | Development Economics | -knowledge of the development concepts. |
| | | | XI | Agricultural Economics | To understand Indian agriculture. |
| | | VI | XII | Micro Economics | -to understand the different price, market concepts. |
| | | | XIII | Macro Economics | -to know about the trade cycles, monetary policies.etc. |
| | | | XIV | History of Economic Thought | -to know about Indian economist thoughts on the economics. |
| | | | XV | Development Economics | -Knowledge of hdi,hpi,gem etc. |
| | | | XVI | Agricultural Economics | -to understand the problems and solutions on agricultural crises. |

| 1 | M.A .I | I& II | Ι | Micro economic analysis | -To understand meaning, need and importance of land labor, monopoly, market theories etc. |
|---|-----------|-------------|------|---|--|
| | | | II | Economics of growth and development | -To understand the unemployment -To understand the aim and objectives of economy |
| | | | III | Economics of Environment | -To acquire knowledge about money -To acquire knowledge about banking system. |
| | | | IV | Industrial Economics | -To understand the meaning, importance and scope of demographic studies. -To understand the census. |
| | | | V | Financial institutes and markets | To acquire knowledge about public finance.To acquire knowledge about fiscal policy. |
| 2 | MA. II | III & IV | VI | Macro Economic analysis | - to understand the concept of money,inflationunemployment,trade cycles etc. |
| | | | VII | Public Economics | -to know about the macro level issues in the country of income, expenditure, taxes. budget etc. |
| | | | VIII | Research methodology | -To understand the knowledge of research methods data collection, report writing etc. |
| | | | IX | Adgricultural development of india | -knowledge of the development concepts of agriculture in india. |
| | | | Х | International trade and finance | To understand the concepts of trade, trade theories,trademou's.etc. |

| Department | of Sanski | rit |
|------------|-----------|-----|
|------------|-----------|-----|

| Sr | Course | Sem | Paper | Paper Name | Course Outcomes |
|----|--------|--------|-------|-----------------------------------|--|
| No | | | | | |
| 1 | BAI | I & II | I | SanskritVihar | Introduce importance of Aayurveda Tointroduce ModernstyleofSanskrit To Increase morality in students |
| 2 | BAI | I & II | Com | Sanskritmayukh | To introduce Upanishad philosophy Modern Sanskrit they can learn different types of literature Student will aware for goodhealth |
| 3 | BAII | | | Prachin Bhartiya Jalshastra | To introduce scientific knowledge In Sanskrit The paper introduces a branch of science Student canknow the technique Of find underground water |
| 4 | BAII | III | IV | Karakprakaran | Student can achieve knowledge About vibhakti Student can make sentence Useful for speaking Sanskrit |
| 5 | BAII | IV | V | Bhagvadgeeta | Student can achieve valuable Knowledge of Indianphilosophy They can learnt the technique of Mental ,physical and spiritual peace Through yogshastra |
| 6 | BAII | IV | VI | Kavyashastra | To introduce the poetics in Sanskrit Language Introduction of Alankaras Which is important for language |