



Government of Maharashtra

GOVERNMENT COLLEGE OF ARTS & SCIENCE



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Kile Ark, Near Subhedari Guest House, Aurangabad (M.S)

Program Outcome

Program Specific Outcome

Course Outcome

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I. FACULTY OF LANGUAGES

1. B.A. ENGLISH PROGRAMME

● B. A. English Program Outcome

English as a subject is studied by students in following three ways:

1. As a **compulsory English** for First and second year Arts and Science undergraduate students.
2. As a **second language or additional English** for First and second year Arts and Science undergraduate students.
3. As an **Optional English** subject for B.A first and second year undergraduate students.

A. COMPULSORY ENGLISH:

● General Outcome:

- This subject is to be studied by the First and Second-year undergraduate students of Arts and Science.
- It covers every aspect of language study, i.e. prose, poetry, grammar and communicative skills.
- The prose section includes short stories, descriptive or imaginative essays on general or scientific, historical and geographical set up of India and the world.
- The poetry section studies different forms of poetic expressions like ballads, sonnets, lyrics, metrical religious excerpts and poems in free verse.
- The drama or essay section can be termed as a sort of rapid reading section. It deals with one act plays and literature written in the shortest possible ways.

● Specific Outcome:

- It improves the skills of narration.
- It helps in developing the skills of reading, writing and speaking English language.
- It helps students to properly understand the importance of teaching- learning and to gain knowledge.

- It teaches students the language through literature as well as literature through language.
- It helps in building capacity among the students to express properly.
- **Course Outcome:**
- Compulsory English subject offers vast knowledge to students that can be utilized in other spheres of life.
- The skills of writing helps students to write correctly in exams, papers of subjects other than English.
- It improves students' understanding of Science, commerce and culture and family system.
- Students learn to analyze and assess the worth of everything that they come across.
- This course makes students confident, independent and resourceful.

B. English [Additional English or second Language]:

- **General Outcome:**
- It is an additional study of English literature and language skills.
- It is for both Arts and Science students and is selected by students as per their choice.
- It includes the study of stories, one act plays, poetry or essays.
- It is to be studied by the students of first and second year U.G. students.
- It helps in the proper understanding of compulsory English texts.
- **Specific Outcome:**
- It gives the knowledge of some of the neglected branches of studies.
- It provides an opportunity to students to study various literary forms.
- It helps in soft skills useful for personality development.
- It gives the knowledge of story building and dialogue writing.
- Students learn the language skills with a new perspective.
- **Course outcome:**
- It functions as the supplementary study that develops the ability to learn and analyze simultaneously.

- It provides the knowledge of various aspects of language and literary forms.
- Students are prepared to express themselves in a proper way.
- Language composition exercises help students to act fast and acquire a lot.
- Additional English gives students additional knowledge of everything as is expected from a well-trained English learner.

C. English Literature [Optional English]:

B. A. F. Y.

D. Opt. Eng. Paper-1

- **General outcome:**
- This subject is optional and is preferred specially by those who are interested in studying English literature.
- The course consists of various branches of study like literature-Novels, Poetry, Drama and language like phonetics and linguistics and literary criticism.
- Students of first year Arts have to study two papers in each semester.
- In addition to the prescribed syllabus, it motivates students to refer to the recommended readings.
- It improves your language skills.
- **Specific Outcome:**
- It gives a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.
- It gives you an insight to look at oneself and develop one's own self.

- **Course Outcome:**

- It develops the ability to think critically, analyze life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

E. Opt. Eng. Paper-2

- **General outcome:**

- This subject is optional and is preferred specially by those who are interested in studying English literature.
- The course consists of various branches of study like literature-stories, Novels, Poetry, Drama and dialect study and linguistics and literary criticism.
- Students of first year Arts have to study two papers each.
- This paper includes the study of British Literature and literary criticism in general.
- It develops your creative and critical perception.

- **Specific Outcome:**

- It provides a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, cutting out and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.
- It gives you an awareness to look at oneself and develop one's own self.

- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in assignment work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

B.A.S.Y.

F. Opt. Eng. Paper-1

- **General outcome:**
- This subject is optional and is preferred specially by those who are interested in studying English literature.
- The course consists of various branches of study like literature-Criticism, Novels, Poetry, Drama and literary criticism.
- Students of second year Arts have to study two papers each. It prepares the students who in future can have optional English as subsidiary [02 papers] or Mains [04 papers].
- These two papers include the study of Poetry and drama Literature and literary criticism.
- In addition to this, the students have to study writers like Joyce and Synge.
- **Specific Outcome:**
- It gives a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.

- It gives you an insight to look at oneself and develop one's own self.
- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

G. Opt. Eng. Paper-2

- **General outcome:**
- This subject is optional and is preferred specially by those who are interested in studying English literature.
- The course consists of various branches of study like literature-Novels, Poetry, Drama and literary criticism.
- Students of second year Arts have to study two papers each.
- These papers include the study of British, Irish Literature and literary criticism.
- In addition to it, the students learn to read and write on their own.
- **Specific Outcome:**
- It gives a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.
- It gives you an insight to look at oneself and develop one's own self.

- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

B.A.T.Y.

H. Opt. Eng. Paper-1 : 20th century English Literature.

- **General outcome:**
- This subject is optional and is preferred specially by those who are interested in studying English literature.
- The course consists of various creations by Eliot and Shaw and literary criticism.
- The third year students can have optional English as subsidiary [02 papers] or Mains [04 papers].
- Subsidiary papers include the study of British Literature and literary criticism.
- In addition to the Subsidiary, the students of MAINS have to study subjects like Indian writing, American Writing, and Project work to be submitted once in a year.
- **Specific Outcome:**
- It gives a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.

- It gives you an insight to look at oneself and develop one's own self.
- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

I. Opt. Eng. Paper-2 : Literary Criticism

- **General outcome:**
- This subject is preferred specially by those who are interested in studying English literature.
- The course consists of various branches of study like criticism of Novels, Poetry and Drama.
- Students of the third year can have optional English as subsidiary [02 papers] or Mains [04 papers].
- Subsidiary papers include the study of British Literature and literary criticism.
- In addition to the Subsidiary, the students of MAINS have to study subjects like Indian writing, American Writing, and Project work to be submitted once in a year.
- **Specific Outcome:**
- It gives a detailed knowledge of critic and his criticism.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.

- It gives you an insight to look at oneself and develop one's own self.
- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

J. Opt.Eng.Paper-3 : Indian Writing in English

- **General outcome:**
- This subject is optional and is preferred especially over American writing by those who are interested in studying Indian English literature.
- The course consists of various branches of study like Novels, Poetry, Drama written in English by Indians and literary criticism.
- The third year students can have optional English as subsidiary [02 papers] or Mains [04 papers].
- Subsidiary papers which include the study of British Literature and literary criticism do help in understanding Indian Eng.Lit.
- In addition to the general study, the students of MAINS have to study subjects like Indian writing, American Writing, and Project work to be submitted once in a year.
- **Specific Outcome:**
- It gives a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.
- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.

- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.
- It gives you an insight to look at oneself and develop one's own self.
- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.
- This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

K. Opt.Eng.Paper-4 : Project Work.

- **General outcome:**
- This subject is compulsory for Mains students.
- The course consists of various branches of study like literature-Novels, Poetry, Drama and language like phonetics and linguistics and literary criticism.
- It is all inclusive. Students of first and second year Arts and students have to study two papers each. The third year students can have optional English as subsidiary [02 papers] or Mains [04 papers].
- Subsidiary papers include the study of British Literature and literary criticism.
- In addition to the Subsidiary, the students of MAINS have to study subjects like Indian writing, American Writing, and Project work to be submitted once in a year.
- **Specific Outcome:**
- It gives a detailed knowledge of Literature.
- It studies and develops the critical thinking of students.

- It helps in developing the habit of technical writing, editing and paraphrasing the literary contents.
- It provides an opportunity to students to study inter-continental cultural exchange and the people residing in different countries.
- It gives you an insight to look at oneself and develop one's own self.
- **Course Outcome:**
- It develops the ability to think critically, analyze the life struggles and express it in project work format.
- It gives students the chance to re-examine themselves in terms of changing definitions of life and literature.
- It makes students literature friendly. One can become a content writer, editor, teacher and columnist with the help of these subjects.
- Creative writing is one very important profession a student can opt for after studying language and literature.

This course prepares the literature students for the advanced study of psychology, anthropology and the humankind in general.

2. B.A. MARATHI PROGRAMME बी. ए. मराठी उद्दिष्ट्ये आणि उपयोगिता

● Objectives (उद्दिष्ट्ये)

- 1) मानवी मूल्यांची जाणीव विकसित करणे.
- 2) सकस साहित्याची आवड निर्माणा करणे.
- 3) सर्जनशीलतेचा विकास करणे.
- 4) जबाबदार व कर्तव्यदक्ष नागरिक घडविणे.
- 5) भाषिक कौशल्यांचा विकास करणे.
- 6) साहित्यिक अभ्यासाबद्दल टीकात्मक दृष्टिकान वाढविणे.
- 7) भाषांतर, रूपांतर, अनुवाद ही कौशल्ये विकसित करणे.
- 8) साहित्यिक संशोधक वृत्ती अंगी बाळगणे.
- 9) भाषा व साहित्याचे आकलन करून वर्गीकरण, विश्लेषण, अर्थनिर्णयन व मूल्यमापन करण्याच्या पात्रता किंबहुना क्षमता विकसित करणे.
- 10) भाषा व साहित्याच्या माध्यमातून विविध संस्कृतीचा परिचय करून देणे.
- 11) साहित्य, समाज व संस्कृती यांची जोपासना करणे.
- 12) मराठी साहित्याच्या एकंदर प्रेरणा व प्रवृत्ती यांचा अभ्यास करणे.
- 13) नभोवाणी, दूरदर्शनविषयक लेखन कौशल्य विकसित करणे.
- 14) दृक-श्राव्य रूपात कार्यक्रमाची निर्मिती कशी होते, याचा अभ्यास करणे.
- 15) भाषाविज्ञान व साहित्यशास्त्र या मूलभूत अभ्यास पत्रिकेतील विविध संकल्पनांचा अभ्यास करणे.
- 16) मराठी भाषा, संस्कृती व वाङ्मय यांचा अभ्यास करणे.
- 17) मराठी साहित्यातील कथा, कादंबरी, नाटक, काव्य, ललित निबंध, चरित्र, आत्मचरित्र, आत्मकथन या साहित्यप्रकारांचा सैद्धांतिक अभ्यास करून त्याचे स्वरूप, विकास यांचा अभ्यास करणे.
- 18) मूल्यांची जोपासना, संवर्धन करून देशासाठी सुजाण नागरिक घडविणे.
- 19) नवनिर्मितीक्षमता, सर्जनशीलता व अभिव्यक्ती क्षमता विद्यार्थ्यांमध्ये विकसित करणे.
- 20) सामाजिक बांधिलकीची जाणीव निर्माण करणे.
- 21) समाजामध्ये वावरण्याची संवेदनशीलता निर्माण करणे.

● उपयोगिता (outcome)

Po-1 साहित्य व भाषाविषयक आकलनक्षमता वाढते.

Po-2 कथा, कादंबरी, नाटक आदि विविध साहित्यप्रकार समजून घेता येतात. त्यातून वाङ्मयीन अभिरूची वाढते.

Po-3 भाषा व संस्कृती व साहित्य संस्कृती यांचा अनुबंध समजून घेता येतो.

Po-4 मातृभाषा व साहित्यातून मानवी जीवन व्यवहार समजून घेता येतो.

- Po-5 समाजामध्ये वावरण्याची संवेदनशीलता विकसित होते.
- Po-6 साहित्य व संस्कृतीविषयी ज्ञानसंग्रहण व संक्रमण प्रक्रिया गतिमान होते.
- Po-7 समाजव्यवहारात भाषेचे यथोचित आकलन व वापर करण्याची क्षमता विकसित होते.
- Po-8 साहित्य अभ्यासातून सामाजिक बांधिलकी निर्माण होते.
- Po-9 भाषेवर उत्तम प्रभूत्व मिळविले तर रोजगार मिळेल.
- Po-10 भाषा व साहित्य अभ्यासातून व्यक्तिमत्व विकास होतो.
- Po-11 युवक वयोगटातील विद्यार्थ्यांची भाषा व वाङ्मयविषयक भूमिका दृढ होते.
- Po-12 स्पर्धा परिक्षांमध्ये (MPSC) मराठी विषय अनिवार्य त्या दृष्टीने विद्यार्थ्यांना भाषा, व्याकरण, साहित्य या अभ्यासाचा फायदा होतो.
- Po-13 वृत्तपत्रे, नियतकालिके, आकाशवाणी, दूरदर्शन विविध वाहिन्या येथे बातमी, अग्रलेख, विविध सदरात लेखन करता येईल.
- Po-14 मराठी आणि एका अन्य भाषेवर प्रभूत्व मिळवले तर मालिका, चित्रपट, लघुपट, कार्टून मालिका यात भाषांतरकार म्हणून संधी मिळू शकते.
- Po-15 चित्रपट, मालिका, लघुचित्रपट क्षेत्रात पटकथा, संवाद लेखन म्हणून संधी मिळवता येईल.
- Po-16 पारंपरिक शिस्तीचे ज्ञान सैद्धांतिक व व्यावहारिक समज येईल.
- Po-17 भाषा व साहित्य अभ्यासातून टिकात्म, संशोधन दृष्टी निर्माण होईल.
- Po-18 मानवी मूल्याची जाणीव निर्माण होते.
- Po-19 जबाबदार व कर्तव्यदक्ष, सुजाण अशा नागरिक घडविण्यासाठी भाषा व साहित्यातून मदत होते.
- Po-20 भाषा व साहित्याभ्यासातून व्यवहार, विज्ञान, मानवविद्या व साहित्य याचे ज्ञान तर होतेच, याशिवाय मानवी अंतर्मनाचे विविध कंगोरे समजून घेता येतात.

1. बी.ए. / बी.एस्सी. प्रथम वर्ष सत्र -पहिले

● विषय- गद्य- पद्य व उपयोजित (Outcome)

- 1) गद्य घटकातील विविध साहित्यप्रकारांचा परिचय होतो.
- 2) पद्य घटकातील विविध साहित्यप्रकारांचा परिचय होतो.
- 3) मराठी साहित्यातील विविध साहित्यिकांचा परिचय होतो.
- 4) लेखनविषयक नियमांचा अभ्यास केल्यामुळे लेखनविषयक नियमानुसार लेखन कौशल्ये विकसित होतात.
- 5) कौटुंबिक आणि कार्यालयीन पत्रव्यवहाराचे लेखन कौशल्य विकसित होते.
- 6) विविध विरामचिन्हांचा वापर करण्याचे कौशल्य विकसित होते.
- 7) इंग्रजीतून मराठी भाषेमध्ये भाषांतराची क्षमता विकसित होते. त्यातून दुभाषक म्हणून व्यवसायाची संधी मिळते.

2. बी.ए. प्रथम वर्ष सत्र -पहिले

● **अभ्यासपत्रिका पहिली - विषय - काव्यात्मक साहित्य (Outcome)**

1. मराठी साहित्यातील सुप्रसिद्ध कविंचा जीवनपरिचय माहिती होतो.
2. केशवसुत यांच्या काव्यातून सामाजिक विचारांचा परिचय होतो.
3. बहिणाबाई चौधरी यांच्या काव्यातून सामाजिक आणि जीवनविषयक तत्त्वज्ञान आत्मसात होते.
4. नारायण सुर्वे यांच्या काव्यातून मार्क्सवादी विचारांचा परिचय होतो.
5. नामदेव ढसाळ यांच्या काव्यातून दलित समाजाच्या व्यथा, वेदना माहित होतात आणि त्यातून सामाजिक मूल्यांची जोपासणा होते.

3. बी.ए. प्रथम वर्ष सत्र -पहिले

● **अभ्यासपत्रिका तिसरी - विषय - नाट्यात्मक साहित्य उपयोगिता (Outcome)**

- CO.1 विद्यार्थ्यांना भरतमुनींच्या नाट्यशास्त्रापासूनची भारतीय समृद्ध अशी नाट्यपरंपरेचे ज्ञान होईल.
- CO.2 नाट्यात्मक साहित्याचा सैद्धांतिक भाग समजून घेतील.
- CO.3 नाट्य वाङ्मयाच्या अभ्यासाने विद्यार्थ्यांना भारतीय संस्कृतीचे यथोचित ज्ञान होईल.
- CO.4 नाट्य सादरीकरणाने विद्यार्थ्यांमध्ये आत्मविश्वास वाढेल.
- CO.5 नाट्याभिरूची विकसित झाली की विद्यार्थी जगातील प्रसिद्ध नाट्यकृतींचा शोध घेतील व त्यांमध्ये अभ्यास करतील.
- CO.6 विद्यार्थ्यांना नाट्यात्मक साहित्याच्या अभ्यासामुळे अभिनय क्षेत्रात आवड निर्माण होईल.
- CO.7 एकूणच विद्यार्थ्यांच्या व्यक्तिमत्त्व विकासात नाट्य हे महत्वाची भूमिका बजावेल.

4. बी.ए. / बी.एस्सी. द्वितीय वर्ष सत्र -पहिले

● **विषय - गद्य-पद्य व उपयोजित (Outcome)**

- 1) मराठी साहित्यातील नामवंत लेखक आणि व्यक्तींचा परिचय होतो.
- 2) अभ्यासक्रमातील विविध घटकांच्या अभ्यासातून सामाजिक, सांस्कृतिक, साहित्यिक आणि लोकशाही मूल्ये प्राप्त होतात.
- 3) शासनव्यवहारातील, कार्यालयीन आणि वैज्ञानिक परिभाषांचा अभ्यास होतो.
- 4) आकशवाणी या श्राव्य प्रसारमाध्यमांचे लेखनतंत्र अवगत होते.
- 5) पुस्तक परिचयातून समीक्षा व्यवहाराचे ज्ञान होते.
- 6) जलनियोजनातून दैनंदिन जीवनात पाण्याचे महत्व समजल्यामुळे पर्यावरणीय दृष्टीकोन निर्माण होतो.

5. बी.ए. द्वितीय वर्ष सत्र - पहिले

● **अभ्यासपत्रिका पाचवी - विषय - आधुनिक मराठी वाङ्मयाचा इतिहास उपयोगिता (Outcome)**

- CO.1 'संस्कृती' ही संकल्पना स्पष्ट होते.
- CO.2 समाजसुधारकांच्या मौलिक विचारांची माहिती होऊन समाजसेवी वृत्ती अंगी बाणली जाते.

- CO.3 वैचारिक जाणीवा प्रगल्भ होण्यास मदत होते.
CO.4 ललित साहित्यप्रकारांच्या सैद्धांतिक भागाचा परिचय होतो.
CO.5 वैचारिक साहित्य वाचनाची अभिरूची विकसित होते.

6. बी.ए. द्वितीय वर्ष सत्र - पहिले

● **अभ्यासपत्रिका सहावी- विषय- दृकश्राव्य माध्यमांसाठी लेखन – कौशल्ये उपयोगिता (Outcome)**

- CO.1 विद्यार्थ्यांचे दृकश्राव्य माध्यमांसाठीचे लेखन कौशल्य विकसित झाल्यामुळे ते या माध्यमांसाठी लेखन करतील.
CO.2 इलेक्ट्रॉनिक मिडीया, समाजप्रसार माध्यमे यासाठी लेखन करतील.
CO.3 नभोवाणी, दूरचित्रवाणी यासाठी जाहिरात तयार करतील.
CO.4 रूपक, नभोनाट्य, श्रुतिका, परिसंवाद, इत्यादी प्रकारात लेखन करण्यासाठी त्यांचे कौशल्य विकसित होतील.
CO.5 विद्यार्थ्यांने मराठी भाषेवर प्रभूत्व मिळविले तर त्याला दृकश्राव्य माध्यमासाठी लेखन करून रोजगार मिळेल.

7. बी.ए. तृतीय वर्ष सत्र - पाचवे

● **अभ्यासपत्रिका नववी- विषय- भारतीय साहित्य विचार उपयोगिता (Outcome)**

- CO.1 साहित्याचे शास्त्रोक्त स्वरूप व भारतीय परंपरा याचे ज्ञान होते.
CO.2 भारतीय साहित्य मीमांसकांनी सांगितलेली साहित्याच्या प्रयोजनाचे ज्ञान होते.
CO.3 साहित्याची निर्मिती प्रक्रिया जाणून घेण्याचे कौशल्य विकसित होते.
CO.4 रसाभ्यासातून साहित्याचा आस्वाद घेण्याची दिशा प्राप्त होते.
CO.5 साहित्य भाषा व्यवहारभाषा यांविषयी विद्यार्थ्यांना यथोचित माहिती मिळते.

8. बी.ए. तृतीय वर्ष सत्र - पाचवे

● **अभ्यासपत्रिका दहावी- विषय – भाषाविज्ञान उपयोगिता (Outcome)**

1. मानवी जीवनातील भाषेचे महत्त्व लक्षात येते.
2. भाषा आणि साहित्य व संस्कृती यांचा अनुबंध समजून घेता येतो.
3. मराठी भाषेतील विविध बोलीभाषांचा अभ्यास होतो.
4. भाषेचा शास्त्रीय अंगाने परिचय होतो.
5. भाषेचे स्वरूप आणि निर्मितीप्रक्रिया समजते.
6. प्रमाण भाषा आणि बोलीभाषा यातील फरक स्पष्ट करता येतो.

9. बी.ए. तृतीय वर्ष सत्र - पाचवे

- **अभ्यासपत्रिका अकरावी - विषय - मध्ययुगीन मराठी वाङ्मयाचा इतिहास प्रारंभ ते 1600 उपयोगिता (Outcome)**

CO.1 महानुभाव संप्रदाय वारकरी संप्रदाय, समर्थ संप्रदाय या भक्तिसंप्रदायाच्या साहित्य आणि तत्त्वज्ञानाचा परिचय होतो.

CO.2 मध्ययुगीन मराठी वाङ्मयीन चळवळींच्या प्रेरणाचे आकलन होते.

CO.3 संताचे मौल्यवान संस्कार आत्मसात करता येतात.

CO.4 संत साहित्यातून विविध जीवनमूल्यांचा परिचय होतो.

CO.5 प्रारंभ ते 1600 पर्यंतच्या साहित्यात प्रगट झालेल्या मानवी मूल्यांचे दर्शन घडते.

10. बी.ए. तृतीय वर्ष सत्र - पाचवे

- **अभ्यासपत्रिका बारावी - विषय - प्रकल्प कार्य भाग-1 उपयोगिता (Outcome)**

1. वाचन आणि लेखन कौशल्यांचा विकास होतो.

2. समीक्षणात्मक दृष्टीचा विकास होतो.

3. संशोधनात्मक दृष्टीचा विकास होतो.

4. भाषा, साहित्य या विषयाचे आकलन होते.

5. दैनंदिन जीवनातील भाषा, साहित्य, समीक्षा या क्षेत्रात प्रकल्प लेखनाचे कौशल्य प्राप्त होते.

11. बी.ए. / बी.एस्सी. प्रथम वर्ष सत्र - दुसरे

- **विषय - गद्य-पद्य व उपयोजित (Outcome)**

1) गद्य घटकातील विविध साहित्यप्रकारांचा परिचय होतो.

2) विविध महापुरुषांच्या विचारांचा अभ्यास होतो.

3) समाजिक, राजकीय, पर्यावरणीय, घोषवाक्यातून विविध मूल्ये रूजविण्यास मदत होते.

4) संवाद लेखनाचे कौशल्य विकसित होतात.

5) विविध कार्यकामातील अहवाल लेखनाचे कौशल्य प्राप्त होते.

6) विविध क्षेत्रातील जाहिरात लेखनाचे कौशल्ये प्राप्त होतात.

12. बी.ए. प्रथम वर्ष सत्र - दुसरे

- **अभ्यासपत्रिका तिसरी - विषय - कथात्मक साहित्य (Outcome)**

1) मराठी साहित्यातील प्रसिद्ध कथाकारांचा परिचय होतो.

2) मराठी साहित्यातील कथा या साहित्य प्रकारांचा अभ्यास होतो.

3) विविध कथांच्या माध्यमातून दलित, ग्रामीण, स्त्रीवादी जाणिवांचा अभ्यास होतो.

4) विविध कथांच्या माध्यमातून सामाजिक, सांस्कृतिक मूल्ये विकसित होतील.

5) विविध कथांच्या माध्यमातून विद्यार्थ्यांचे श्रवण, भाषण, वाचन आणि लेखन कौशल्य विकसित होते.

13. बी.ए. प्रथम वर्ष सत्र - दुसरे

● **अभ्यासपत्रिका चौथी - विषय - मुद्रित माध्यमांसाठी लेखन कौशल्य उपयोगिता**
(Outcome)

- CO.1 विद्यार्थी वृत्तपत्रामध्ये स्तंभलेखन, बातमी लेखन, अग्रलेख लिहू शकतात.
CO.2 विद्यार्थ्यांना मुलाखतीचे तंत्र अवगत होत असल्यामुळे ते मुलाखत घेऊ शकतात.
CO.3 एकूणच विद्यार्थी पत्रकारितेत करिअर करू शकतात.
CO.4 विद्यार्थी पत्रकारिता क्षेत्रात मुद्रितशोधक म्हणून काम करू शकतात.
CO.5 समीक्षेच्या अभ्यासामुळे साहित्य आणि मनोरंजन क्षेत्रात परीक्षण करण्यासाठी समीक्षादृष्टी विकसित होते.

14. बी.ए. / बी.एस्सी. द्वितीय वर्ष सत्र - दुसरे

● **विषय - गद्य-पद्य व उपयोजित (Outcome)**

- 1) विविध गद्य-पद्य घटकांच्या अभ्यासातून जीवन जगण्याची कला विकसित होते.
- 2) स्त्री पुरुष समानता, राष्ट्रीय एकात्मकता, पर्यावरण जागृती इ. गाभा घटकांचा परिचय होतो.
- 3) संगणक क्षेत्रातील संकल्पनांचा स्थूल परिचय होतो.
- 4) माहिती तंत्रज्ञानाचा दैनंदिन जीवनात वापर करता येतो.
- 5) संगणकाचा समाजावरील होणारा परिणाम अभ्यासता येतो.
- 6) इंटरनेटचे स्वरूप आणि कार्यप्रणालीचा वापर करता येतो.

15. बी.ए. द्वितीय वर्ष सत्र - दुसरे

● **अभ्यासपत्रिका सातवी - विषय - आधुनिक मराठी वाङ्मयाचा इतिहास उपयोगिता**
(Outcome)

- CO.1 भारतीय नाट्यपरंपरेचे (समृद्ध) ज्ञान होते.
CO.2 आधुनिक काव्यांच्या विशेषांची माहिती होते.
CO.3 आधुनिक चरित्र-आत्मचरित्र या साहित्यप्रकारांचा स्थूल परिचय होतो.
CO.4 इ. स. 1800 ते 1920 या काळातील एकूणच मराठी साहित्य आणि वाङ्मय चळवळीची माहिती होते.
CO.5 नाट्य, काव्य व कथनात्म साहित्यप्रकारांविषयी विद्यार्थ्यांमध्ये अभिरूची निर्माण होते.

16. बी.ए. द्वितीय वर्ष सत्र - दुसरे

● **अभ्यासपत्रिका आठवी - विषय - साहित्य प्रकारांतर आणि साहित्याचे माध्यमांतर**
उपयोगिता (Outcome)

- CO.1 माध्यमांतर ही संकल्पना विद्यार्थ्यांना ज्ञात होईल.
CO.2 कादंबरी ते चित्रपट असा हा प्रवास कसा होतो याचे ज्ञान विद्यार्थ्यांना होते. उदा. नटरंग, निशाणी, डावा अंगठा
CO.3 मुद्रित, श्राव्य, दृक्श्राव्य माध्यमांचे ज्ञान विद्यार्थ्यांना होते.

CO.4 पटकथा लेखन, संवाद लेखन, नाट्यलेखन यात अभिरूची निर्माण होऊन विद्यार्थी या क्षेत्रात करिअर करतात.

CO.5 साहित्य आणि चित्रपट नाट्य संहिता आणि नाट्यप्रयोग याचा अनुबंध समजून घेता येईल.

17. बी.ए. तृतीय वर्ष सत्र - सहावे

● **अभ्यासपत्रिका तेरावी- विषय- पाश्चात्य साहित्यविचार उपयोगिता (Outcome)**

CO.1 साहित्याचे शास्त्रोक्त स्वरूप व पाश्चात्य परंपरा समजून घेता येते.

CO.2 पाश्चात्य साहित्य मीमांसकांनी सांगितलेल्या प्रयोजनाचे ज्ञान होते.

CO.3 साहित्याची निर्मिती प्रक्रिया जाणून पाश्चात्यांच्या परिप्रेक्षांतून माहिती होईल.

CO.4 मार्क्सवादी साहित्यविचाराचा दृष्टिकोन ज्ञात होईल व तत्कालीन परिस्थितीशी त्याचा अनुबंध जोडता येईल.

18. बी.ए. तृतीय वर्ष सत्र - दुसरे

● **अभ्यासपत्रिका नववी- विषय- व्याकरण व निबंध उपयोगिता (Outcome)**

1. मराठी भाषेतील स्वरसंधी, विसर्गसंधी आणि व्यंजनसंधीबद्दल माहिती मिळते.

2. मराठी भाषेतील विविध समासांचे वर्गीकरण करता येते.

3. विविध अलंकारिक शब्दांचा वापर करता येतो.

4. वाङ्मयीन आणि वैचारिक निबंधाची तुलना करता येते.

5. दैनंदिन जीवनात लेखन करताना लेखन कौशल्याचा विकास होतो.

19. बी.ए. तृतीय वर्ष सत्र - सहावे

● **अभ्यासपत्रिका पंधरावी- विषय- मध्ययुगीन मराठी वाङ्मयाचा इतिहास 1601 ते 18180 उपयोगिता (Outcome)**

CO.1 शिवकालीन सामाजिक-सांस्कृतिक, धार्मिक परिस्थितीचे आकलन होते.

CO.2 तत्कालीन महत्वाचे ग्रंथ, ग्रंथकार व त्यांच्या ग्रंथकृतीतून आविष्कृत झालेली जीवनमूल्ये यांची माहिती विद्यार्थ्यांना मिळते.

CO.3 मध्ययुगीन कालखंडातील वाङ्मयांविषयी विद्यार्थ्यांमध्ये अभिरूची विकसित होते.

CO.4 लावणी, पोवाडा, बखर गद्य या रचनाप्रकारांच्या प्रेरणा, स्वरूप, याविषयी विद्यार्थ्यांना सैद्धांतिक व मूलभूत, वस्तूनिष्ठ माहिती मिळते.

20. बी.ए. तृतीय वर्ष सत्र - सहावे

● **अभ्यासपत्रिका सोळावी- विषय- प्रकल्प कार्य भाग-2 उपयोगिता (Outcome)**

1. वाचन आणि लेखन कौशल्यांचा विकास होतो.

2. समीक्षणात्मक दृष्टीचा विकास होतो.

3. संशोधनात्मक दृष्टीचा विकास होतो.

4. भाषा, साहित्य या विषयाचे आकलन होते.

5. दैनंदिन जीवनातील भाषा, साहित्य, समीक्षा या क्षेत्रात प्रकल्प लेखनाचे कौशल्य प्राप्त होते.

3. B.A. HINDI PROGRAMME

FACULTY OF LANGUAGES

DEPARTMENT OF HINDI

B.A.HINDI

Programme Specific Outcome:PSO

हिंदी यह विषय स्नातक स्तर पर छात्रों को पढाया जाता है।

१. द्वितीय भाषा के रूप में सामान्य हिंदी (SL) यह विषय बी.ए. और बी.एस्सी-प्रथम/द्वितीय कक्षा के लिए छात्रों को पढाया जाता है।
२. बी.ए.प्रथम/द्वितीय/तृतीय कक्षा के छात्रों को ऐच्छिक हिंदी (Optional Hindi)के रूप में पढाया जाता है।
 - हिंदी भाषा के महत्व को समझते हुए हिंदी के विभिन्न रूपों (राष्ट्रभाषा,संपर्क भाषा,संचार भाषा) से परिचित होंगे।
 - हिंदी साहित्य द्वारा छात्रों में जीवन मूल्यों के प्रति अभिरुचि निर्माण होगी।
 - साहित्य एवं समाज के अन्तरसंबंध को रुब-रु होंगे।
 - अध्ययन द्वारा साहित्य के प्रति अभिरुचि निर्माण होगी।
 - छात्र हिंदी साहित्य की विभिन्न विधाओं तथा साहित्यकारों से परिचित होंगे।
 - हिंदी साहित्य के इतिहास तथा विकास का ज्ञान प्राप्त होगा।
 - साहित्य के माध्यम से छात्रों में संवेदना का विकास होगा।
 - साहित्य एवं भाषा के अध्ययन से छात्र सृजनात्मक लेखन की ओर बढ़ेंगे।
 - व्यावसायिक दृष्टि से हिंदी के महत्व को समझेंगे।
 - वर्तमान परिप्रेक्ष्य में हिंदी के विविध प्रयोग क्षेत्रों की जानकारी प्राप्त होगी।
 - छात्र हिंदी के प्रयोजनमूलक भाषा के रूप को समझेंगे।
 - प्रयोजनमूलक हिंदी के अध्ययन द्वारा छात्रों में भाषायी कौशल्य(श्रवण,भाषण,वाचन लेखन)विकसित होंगे।
 - वैश्वीकरण के दौर में अनुवाद की जरूरत एवं अनिवार्यता से परिचित होंगे।

COURSE OUTCOME

U.G.COURSE (स्नातक कोर्स)				
B.A-I	प्रथम सत्र	ऐच्छिक हिंदी	प्रश्नपत्र.१	उपन्यास साहित्य
			प्रश्नपत्र.२	नाटक साहित्य
	द्वितीय सत्र	ऐच्छिक हिंदी	प्रश्नपत्र.३	हिंदी गद्य साहित्य
			प्रश्नपत्र.४	एकांकी साहित्य
B.A-II	तृतीय सत्र	ऐच्छिक हिंदी	प्रश्नपत्र.५	कथेत्तर गद्य साहित्य
			प्रश्नपत्र.६	प्रयोजनमूलक हिंदी
	चतुर्थ सत्र	ऐच्छिक हिंदी	प्रश्नपत्र.७	आधुनिक हिंदी कविता
			प्रश्नपत्र.८	प्रयोजनमूलक हिंदी
B.A-III	पंचम सत्र	ऐच्छिक हिंदी	प्रश्नपत्र.९	प्रादेशिक भाषा साहित्य
			प्रश्नपत्र.१०	आदि तथा मध्यकालीन हिंदी साहित्य का इतिहास
			प्रश्नपत्र.११	साहित्यशास्त्र
			प्रश्नपत्र.१२	प्रकल्प कार्य
	षष्ठ सत्र	ऐच्छिक हिंदी	प्रश्नपत्र.१३	मध्यकालीन काव्य
			प्रश्नपत्र.१४	आधुनिक हिंदी साहित्य का इतिहास
			प्रश्नपत्र.१५	साहित्यशास्त्र
			प्रश्नपत्र.१६	प्रकल्प लेखन
B.A-I/II	Sem-I/II	S.L.Hin	प्रश्नपत्र.१.२	सामान्य हिंदी
B.Sc-I/II	Sem-I/II	S.L.Hin	प्रश्नपत्र.१.२	सामान्य हिंदी

B.A/B.Sc-I	Sem-I	प्रश्नपत्र क्र.१	C O	द्वितीय भाषा (S.L) Hindi
			१	कहानी की व्याख्या देते हुए हिंदी कहानी के विकास क्रम पर प्रकाश डालिए।
			२	कहानी के तत्वों पर चर्चा कीजिए।
			३	दो बॉके कहानी का कथानक लिखिए।
			४	हिंदी भाषाके उदभव-विकास को स्पष्ट कीजिए।
			५	देवनागरी लिपि की वैज्ञानिकता पर प्रकाश डालिए।
		प्रश्नपत्र क्र.१	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) हिंदी उपन्यास साहित्य
			१	उपन्यास विधा का स्वरूप एवं परिभाषा पर चर्चा कीजिए।
			२	हिंदी उपन्यास की विकास यात्रा पर प्रकाश डालिए।
			३	आपका बंटी उपन्यास की कथावस्तु लिखिए।
			४	उपन्यासकार यशपाल का साहित्यिक योगदान स्पष्ट कीजिए।
			५	अमिता उपन्यास का कथ्य एवं शिल्प पक्ष विशद कीजिए।
		प्रश्नपत्र क्र.२	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) हिंदी नाटक साहित्य
			१	हिंदी नाटक के विकास क्रम पर प्रकाश डालिए।
			२	नाटक लेखन हेतु आवश्यक तत्वों पर चर्चा कीजिए।
			३	विजय पर्व नाटक का सार अपने शब्दों में लिखिए।
			४	साहित्य एवं समाज के अंतरसंबंध को विवेचना कीजिए।
			५	होरी का चरित्र-चित्रण स्पष्ट कीजिए।

B.A/B.Sc-I	Sem-II	प्रश्नपत्र क्र.२	C O	द्वितीय भाषा (S.L) Hindi
			१	दूज का टीका कहानी की कथावस्तु लिखिए।
			२	कहानों साहित्य में चित्रित आंचलिक जीवन को विशद कीजिए।
			३	हिंदी के प्रयोजनमूलक भाषा रूप को स्पष्ट कीजिए।
			४	हिंदी के व्यावहारिक लेखन पक्ष पर प्रकाश डालिए।
			५	कम्प्यूटर में हिंदी के बढ़ते प्रयोग तथा महत्व को समझाइए।
		प्रश्नपत्र क्र.३	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) हिंदी गद्य साहित्य
			१	कहानों को व्याख्या देते हुए हिंदी कहानों के विकास क्रम पर प्रकाश डालिए।
			२	हिंदी व्यंग्य की विकास यात्रा का परिचय दीजिए।
			३	विज्ञापन में बिकती नारी का आशय लिखिए।
			४	सपना कहानी की संवेदना स्पष्ट कीजिए।
			५	इंटरव्यू मोफतलाल का होना डिप्टी कलेक्टर रचना का उद्देश्य लिखिए।
		प्रश्नपत्र .४	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) एकांकी साहित्य
			१	हिंदी गद्य की नवीनतम विधा एकांकी की व्याख्या एवं स्वरूप पर प्रकाश डालिए।
			२	हिंदी एकांकी की विकास यात्रा पर चर्चा कीजिए।
			३	हिंदी एकांकी साहित्य में महिला रचनाकारों के योगदान की भूमिका स्पष्ट कीजिए।
			४	हिंदी एकांकीयों में चित्रित सामाजिक जीवन पर प्रकाश डालिए।
			५	एकांकी के कथ्य एवं शिल्प पक्ष की विवेचना कीजिए।

B.A/B.Sc- II	Sem-III	प्रश्नपत्र क्र.२	C O	द्वितीय भाषा (S.L) Hindi
			१	हिंदी साहित्य की विभिन्न गद्य विधाओं का परिचय दीजिए।
			२	संस्मरण से तात्पर्य स्पष्ट कीजिए।
			३	प्रयोजनमूलक हिंदी के स्वरूप को स्पष्ट करते हुए विशेषताओं पर प्रकाश डालिए।
			४	भाषा शिक्षण की प्रक्रिया पर चर्चा कीजिए।
			५	व्यावसायिक दृष्टि से हिंदी के महत्व पर प्रकाश डालिए।
	Sem-III	प्रश्नपत्र क्र.४	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) कथेत्तर गद्य साहित्य
			१	कथेत्तर गद्य की विभिन्न विधाओं पर प्रकाश डालिए।
			२	महात्मा गांधीजी रचना पर प्रकाश डालिए।
			३	जीवन का व्यवसाय रचना में अभिव्यक्त नारी विषयक दृष्टिकोण को विशद कीजिए।
			४	नदिया गहरी नाव पुरानी यात्रा वृत्तांत में चित्रित प्रवृत्तिसौन्दर्य को स्पष्ट कीजिए।
			५	रिहाई संस्मरण का भावार्थ लिखिए।
	Sem-III	प्रश्नपत्र क्र.५	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) प्रयोजनमूलक हिंदी
			१	प्रयोजनमूलक हिंदी की विशेषताओं पर प्रकाश डालिए।
			२	हिंदी भाषा के नामकरण एवं क्रमिक विकास को स्पष्ट कीजिए।
			३	हिंदी के अन्तर्राष्ट्रीय परिदृश्य पर प्रकाश डालिए।
			४	भाषा एवं लिपि के बीच के अन्तर को समझाइए।
			५	भाषा मानकीकरण की प्रक्रिया को स्पष्ट कीजिए।

B.A/B.Sc- II	Sem-IV	प्रश्नपत्र क्र.IV	C O	द्वितीय भाषा (S.L) Hindi
			१	स्त्री घर कृति में अभिव्यक्ति नारी जीवन की वास्तविकता को समझाइए।
			२	कर कमला हो गए रचना का भावार्थ स्पष्ट कीजिए।
			३	बैकिंग अनुवाद का स्वरूप स्पष्ट करते हुए उसमें आनेवाली समस्याओं पर प्रकाश डालिए।
			४	अत्याधुनिक इलेक्ट्रॉनिक माध्यमों पर चर्चा कीजिए।
			५	जनसंचार माध्यमों के विविध रूपों का परिचय कीजिए।
	Sem-III	प्रश्नपत्र क्र.VII	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) आधुनिक हिंदी कविता
			१	भाषा की रात कविता का कथ्य लिखिए।
			२	आधुनिक हिंदी साहित्य के प्रमुख कवियों पर परिचय दीजिए।
			३	बेरागी आया है गौव में चित्रित औचलिक परिवेश को समझाइए।
			४	खंडकाव्य के स्वरूप को स्पष्ट कीजिए।
			५	भूमिजा खंडकाव्य का कथानक लिखिए।
		प्रश्नपत्र क्र.VIII	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) प्रयोजनमूलक हिंदी
			१	राजभाषा और राष्ट्रभाषा के बीच के अंतर को स्पष्ट कीजिए।
			२	राजभाषा हिंदी के संवैधानिक प्रावधान को स्पष्ट कीजिए।
			३	प्रयोजनमूलक हिंदी के लेखन पक्ष पर प्रकाश डालिए।
			४	कार्यालयीन हिंदी (राजभाषा) के प्रमुख प्रकारोंकी जानकारी दीजिए।
			५	अनुवाद का स्वरूप एवं प्रक्रिया पर सविस्तर चर्चा कीजिए।

B.A-III	Sem-V	प्रश्नपत्र क्र. IX	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) प्रादेशिक भाषा साहित्य
			१	प्रादेशिक भाषा साहित्य का अभिप्राय स्पष्ट कीजिए।
			२	मराठी कहानी साहित्य का सामान्य परिचय दीजिए।
			३	मराठी दलित आत्मकथा साहित्य पर प्रकाश डालिए।
			४	पराया में चित्रित कैकाडि जाति के जीवन की वास्तविकता पर प्रकाश डालिए।।
			५	मूँगो की फलियाँ कहानी का कथानक लिखिए।
		प्रश्नपत्र क्र. X	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) आदि तथा मध्यकालीन हिंदी साहित्य का इतिहास
			१	हिंदी साहित्य इतिहास लेखन के विभिन्न स्रोतों पर प्रकाश डालिए।
			२	हिंदी साहित्य के इतिहास एवं विकास की परम्परा पर चर्चा कीजिए।
			३	आदिकालीन सामाजिक पृष्ठभूमि पर प्रकाश डालिए।
			४	भक्तिकालीन काव्यधाराओं का परिचय दीजिए।
			५	कविवर भूषण की कविताओं में अभिव्यक्ति राष्ट्रीय चेतना पर प्रकाश डालिए।
		प्रश्नपत्र क्र. XI	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) साहित्यशास्त्र
			१	साहित्य के स्वरूप एवं तत्वों पर प्रकाश डालिए।
			२	साहित्य के प्रयोजन पर चर्चा कीजिए।
			३	भारतीय काव्यशास्त्र में प्रतिपादित रस सिद्धांत के महत्व को समझाइए।
			४	भारतीय काव्यशास्त्र के साहित्य में उपादेयता को स्पष्ट कीजिए।
			५	साहित्य के हेतुओं पर प्रकाश डालिए।

B.A-III	Sem-VI	प्रश्नपत्र क्र.XII	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) मध्यकालीन काव्य
			१	भारतीय भक्ति आंदोलन की पृष्ठभूमि पर प्रकाश डालिए।
			२	भक्तिकालीन काव्य का सामान्य परिचय दीजिए।
			३	रीतिकालीन सामाजिक पृष्ठभूमि पर प्रकाश डालिए।
			४	कविता द्वारा मध्यकालीन सामाजिक,सांस्कृतिक,राजनीतिक एवं साहित्यिक पृष्ठभूमि पर प्रकाश डालिए।
			५	मध्यकालीन कवियों की महत्ता को स्पष्ट कीजिए।
		प्रश्नपत्र क्र.XIII	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) आधुनिक हिंदी साहित्य का इतिहास
			१	हिंदी का आधुनिक काव्य का विभिन्न काव्यधाराओं का परिचय दीजिए।
			२	हिंदी साहित्य के आधुनिक कवियों पर प्रकाश डालिए।
			३	हिंदी गद्य की नवीनतम विधाओं पर प्रकाश डालिए।
			४	प्रगतिवादी काव्यधारा का परिचय दीजिए।
			५	छायावादी कविता की प्रवृत्तियों को स्पष्ट कीजिए।
		प्रश्नपत्र क्र.XIV	C O	ऐच्छिक प्रश्नपत्र (Optional Paper) साहित्यशास्त्र
			१	भारतीय काव्यशास्त्र के विकास क्रम पर प्रकाश डालिए।
			२	अलंकार सिद्धान्त के स्वरूप को स्पष्ट कीजिए।
			३	छंद सिद्धान्त के स्वरूप एवं उसकी सैद्धांतिक अवधारणा का विवेचन कीजिए।
			४	आलोचना के प्रमुख भेदों पर प्रकाश डालिए।
			५	हिंदी साहित्य की प्रमुख विधाओं का सामान्य परिचय दीजिए।

4. B.A. SANSKRIT PROGRAMME

- **Objectives of Sanskrit Language:**

Sanskrit language has given a great contribution to the whole world as it is one of the oldest languages in the world and till date it holds the prominent position in the world. Sanskrit language is a main source of knowledge, tradition, culture and the history of ancient India. The oldest Vedic literature, classical dramas, poetry, the great epics like Ramayana and Mahabharata, various Puranas all these can be understood in-depth by studying Sanskrit. Even the philosophy and idealism pertaining to various periods can be understood by studying Sanskrit language. The study of Sanskrit enables one to comprehend the 'Upanishadas' and 'Bhagawadgita' which enlighten the concept of 'Aatmatattv' and 'Parmatmatattv'.

Sanskrit is a key to the hidden treasures of India like Yoga and Ayurveda, Physics and Chemistry, Astrology, Astronomy and Architecture, Medicine and Metallurgy, Mathematics, History and Geography, Music and Natyashastra, details of sixty-four Kala and many other shastras. If Sanskrit is made available to experts in these areas, they can unravel the knowledge contained in the ancient texts and also interpret such wisdom in the latest scientific discoveries.

- **Outcome of Sanskrit Language:**

- To get acquainted to the traditions, culture and history of ancient India.
- To make awareness about the importance of world famous Vedic and Classical Sanskrit literature, various shashtras and incredible philosophy which is treasure of knowledge.
- To know the stringent grammar rules.
- To enhance the vocabulary, clarity in speech and verbal fluency.
- To inspire the students for the comparative linguistic study of Indo – European languages and all Indian languages.

After completion of the course the students will be able to know / understand

B.A. Sanskrit

1. B.A.F.Y. संस्कृत सरिता

- About the general introduction of Sanskrit literature.

2. B.Sc F.Y. S.L.

- To build advanced aptitude in students for contributing to Sanskrit literature through poetry and prose etc.
- General awareness of the गद्य and पद्य literature in Sanskrit.

3. B.A.S.Y. S.L. गीर्वाणमंजरी

- Acquaint ethical and moral values.
- Fundamental elements and characteristics of

4. B.SC .S.Y. S.L.

- literary and dramaturgical criticism. An idea about the various topics connected with both the poet and poem.

5. B.A.F.Y. आर्षकाव्य Opt I

- आर्षकाव्य in the source text of subsequent literary works representing the Indian Values, social and cultural conditions.
- The silent features of Indian culture, heritage preserved in Sanskrit text.
- Accurate and efficient defense ministry in Balkand.
- Environmental awareness in Mahabharata's Anushashanparva.

6. B.A.F.Y. Opt II संस्कृत व्याकरण परंपरा

- Introduction of Sanskrit Grammar.
- About the Sanskrit grammatical traditions.
- History of the development of Sanskrit Grammar Significant Grammarians.
- General study of Paninian rules.

7. B.A.F.Y. Opt III संस्कृत नाटक- प्रतिमा

- The theme and the style of Bhasa's.
- Aesthetics of Bhasa's writing skill
- Comparison between Bharatmuni's Natyashastra and the drama writing style of Bhasa's
- A general idea of various theories and enjoyment of Rasa.

8. B.A.F.Y. Opt IV संस्कृत कथा साहित्य - हितोपदेश

- The importance of values in human life.
- Every aspect of human behavior.
- The valuable insight into politics and practical wisdom.
- The practical aspects of life like- understanding people, choosing reliable friends, coming out of difficult situations wisely.
- Living in peace while facing deceit and many problems in life.

9. B.A.S.Y. Opt V पंचमहाकाव्याचा इतिहास

- The deference between Kavya and Mahakavya.
- Valuable contribution of Kalidasa in history of Raghukul and Sanskrit prose.
- Origin and development of Mahakavya.
- Valuable contribution of Bharavi, Magha and Shriharsha in the glorious history of Sanskrit Mahakavya.
- Bharavi and his valuable work "Kiratarjuniyam".
- Magha and his valuable work "Shishupalwadham"
- Shriharsh and his valuable work. "Naishadhiyachaaritam".

10. B.A.S.Y. Opt VI रघुवंशम्

- An outstanding work of Kalidasa.
- How Kalidasa created Raghuvansham to reestablish ideals, values for the kings & people.

· Social, economical, financial and political status of the state in the Era of Ishwanku race.

11. B.A.S.Y. Opt VII शुक्रनासोपदेशः- The prose kavya.

- An awareness of the style of narratives in Sanskrit.
- To impart an indepth textual study of the Shukanasopadesha of the Kadambari.
- To familiarise with the Prose literature in Sanskrit and the artistic style of Banbhata.

12. B.A.S.Y. Opt VIII नाटक - संगीत सौभद्रम् Sanskrit Drama.

- Rich treasure of modern Sangeet(musical)
- An awareness of Dramatic Arts.
- An overview of the Rasa and Bhava concepts in Indian Dramaturgy.

13. B.A.T.Y. Sub IX – वैदिक सूक्त

- General introduction to Vedic Literature.
- The Vedic mantras which is the key to treasure of knowledge.
- The history of Vedic Literature and Vedic thoughts.
- General idea about Vedic hymns, Upanishads and Vedangas to comprehend the expansive nature of the knowledge in Vedas - to pursue the Vedic search for truth.
- The derivation of the Vedic word meanings.

14. B.A.T.Y. Sub X – नाट्यलक्षण आणि नाटक

About the world famous drama.

- To appreciate the beauty of inculcating prose in between verses
- The authoritative commentary by Bharatmuni.
- The poetic art of Kalidasa in the Abhidnyanashakuntalam.

15. B.A.T.Y. Main XI - व्याकरण

- The basic principal of the structure of the Panini Ashtadhyayi.
- Derivational process of Sanskrit compounds based on Sidhantkaumudi.
- Basic rules of Grammar - Sandhi (words putting together).

16. B.A.T.Y. Main XII Project

- How to select a research topic.
- To inculcate the research attitude among students.
- Critically analyse the chronology of Sanskrit literature.
- About the research methodology and textual criticism.
- About the traditional and scientific methods of Sanskrit research.
- Develops capacity for creative writing and literary appreciation.

17. B.A.T.Y. Sub XIII- तत्त्वज्ञान - श्रीमद्भगवद्गीता

- Shrimadbhagvadgeeta's Concepts of divine nature.
- The actual Art of living.
- The Indian Philosophy.

- Develop the capacity to manage with mental stress.
- The immortal truth of life.

18. B.A.T.Y. Sub XIV - नाटक - अभिज्ञानशाकुन्तलम्

- The actual creativity of Kalidasa and its fabulous writing style.
- An acquaintance with the drama literature in Sanskrit.
- A deep knowledge about the style of Kalidasa.
- To impart indepth textual knowledge of Abhidnyana-shakuntalam with the help of Natyashastra .
- The comparison between “Shakuntalopakhyan” and the great creation of Kalidasa’s Abhidnyana-shakuntalam.

19. B.A.T.Y. Main XV साहित्यशास्त्र

- General introduction of Alankarshatra its definition and Examples of various Alankaras.
- Familiarise the students with various schools of Alankaras.
- Critically analyse a Kavya beyond a mere enjoyment.
- Make out different aspects of the Kavya
- Poetic arts and includes concepts like Alankara, Rasa, Riti, Vakrokti, Dhvani, Aucitya etc.

5. B.A. URDU PROGRAMME

Program Outcome
Program Specific Outcome
Course Outcome

☆ بی اے/بی ایس سی اردو پروگرام کا نتیجہ:-

☆ B. A./B.Sc Urdu Program Outcome

اردو بطور مضمون طالب علم مندرجہ ذیل دو طریقوں سے پڑھتے ہیں۔

Urdu as a subject is studied by students in following two ways

(۱) پہلے اور دوسرے سال کے آرٹس کے لیے دوسری زبان یا اضافی اردو کے طور پر بی۔ اے اور سائنس انڈرگریجویٹ طلباء۔

1. As a second language or additional Urdu for First and second year Arts and Science undergraduate students.

(۲) پہلے اور دوسرے سال کے بی۔ اے آرٹس کے لیے دوسری زبان یا اختیاری اردو کے طور پر انڈرگریجویٹ کے لیے۔

3. As an Optional Urdu subject for B.A first and second year undergraduate students.

(A) اردو

عمومی نتیجہ:

☆ مضمون اس مضمون کا مطالعہ پہلے اور دوسرے سال کے انڈرگریجویٹ کے ذریعے کرنا ہے۔

☆ آرٹس اور سائنس کے طلباء۔

- ☆ یہ زبان کے مطالعہ کے ہر پہلو کا احاطہ کرتا ہے، یعنی نثر، شاعری، گرامر اور بات چیت کی مہارت۔
- ☆ نثر، نثر کے حصے میں مختصر
- کہانیاں، وضاحتی یا تخیلاتی مضامین شامل ہیں۔
- ☆ ہندوستان اور دنیا کا عمومی یا سائنسی، تاریخی اور جغرافیائی سیٹ اپ۔
- ☆ شاعری شاعری کے حصے میں شاعرانہ اظہار کی مختلف شکلوں کا مطالعہ کیا جاتا ہے جیسے غزلیں، مذہبی اقتباسات اور نظمیں
- ☆ آزاد نظم میں۔
- ☆ ڈرامہ ڈرامہ یا مضمون کے حصے کو تیزی سے پڑھنے والے حصے کے طور پر کہا جاسکتا ہے۔ یہ
- ☆ ایک ایکٹ ڈراموں اور ادب سے متعلق ہے جو مختصر سے مکمل طریقوں سے لکھے گئے ہیں۔
- ☆ مخصوص نتیجہ:
- یہ بیان کی مہارت کو بہتر بناتا ہے۔
- یہ اُردو پڑھنے، لکھنے اور بولنے کی مہارتوں کو فروغ دینے میں مدد کرتا ہے۔
- ☆ زبان :-
- یہ طالب علموں کو درس و تدریس کی اہمیت کو صحیح طریقے سے سمجھنے میں مدد کرتا ہے۔
- ☆ اور علم حاصل کرنا۔
- یہ طلباء کو ادب کے ساتھ ساتھ ادب کے ذریعے زبان سکھاتا ہے۔

☆ زبان :-

• یہ طلباء کے درمیان صحیح طریقے سے اظہار کرنے کی صلاحیت پیدا کرنے میں مدد کرتا ہے۔

☆ کورس کا نتیجہ:

• اردو مضمون طلباء کو وسیع علم فراہم کرتا ہے جو ہو سکتا ہے۔

☆ زندگی کے دوسرے شعبوں میں استعمال کیا جاتا ہے۔

• لکھنے کی مہارت طلباء کو امتحانات، پیپرز میں صحیح لکھنے میں مدد دیتی ہے۔

☆ اردو کے علاوہ دیگر مضامین :-

یہ طلباء کی سائنس، تجارت اور ثقافت کی سمجھ کو بہتر بناتا ہے۔

☆ خاندانی نظام :-

• طلباء اپنی آنے والی ہر چیز کا تجزیہ کرنا اور اس کا اندازہ لگانا سیکھتے ہیں۔

☆ اس پار :-

• یہ کورس طلباء کو پراعتماد، خودمختار اور وسائل سے بھرپور بناتا ہے۔

(B) اضافی اردو یا دوسری زبان:

☆ عمومی نتیجہ:

یہ اردو ادب اور زبان کی مہارت کا ایک اضافی مطالعہ ہے۔

یہ آئرس اور سائنس دونوں کے طالب علموں کے لیے ہے اور اس کا انتخاب طلباء اپنے مطابق کرتے ہیں۔

☆ انتخاب

شامل ہے اس میں کہانیوں کا مطالعہ، ایک ایک ڈرامے، شاعری یا مضامین شامل ہیں۔

اس کا مطالعہ پہلے اور دوسرے سال U . G کے طلباء کرنا ہے۔ طلباء

- یہ لازمی اردو نصوص کی صحیح تفہیم میں مدد کرتا ہے۔

☆ مخصوص نتیجہ:

- یہ مطالعہ کی کچھ نظر انداز شدہ شاخوں کا علم دیتا ہے۔
- یہ طلباء کو مختلف ادبی شکلوں کا مطالعہ کرنے کا موقع فراہم کرتا ہے۔
- یہ شخصیت کی نشوونما کے لیے مفید نرم مہارتوں میں مدد کرتا ہے۔
- یہ کہانی کی تعمیر اور مکالمہ لکھنے کا علم دیتا ہے۔ طلباء ایک نئے تناظر کے ساتھ زبان کی مہارتیں سیکھتے ہیں۔

☆ کورس کا نتیجہ:

- یہ ایک ضمنی مطالعہ کے طور پر کام کرتا ہے جو سیکھنے کی صلاحیت پیدا کرتا ہے۔

☆ ایک ہی وقت میں تجربہ یہ کریں:-

☆ یہ زبان اور ادبی شکلوں کے مختلف پہلوؤں کا علم فراہم کرتا ہے۔

طلباء اپنے آپ کو صحیح طریقے سے اظہار کرنے کے لیے تیار ہیں۔

- زبان کی تشکیل کی مشقیں طلباء کو تیزی سے کام کرنے اور بہت کچھ حاصل کرنے میں مدد کرتی ہیں۔
- اضافی اردو طلباء کو ہر چیز کے بارے میں اضافی معلومات فراہم کرتی ہے۔ ایک اچھی تربیت یافتہ اردو سیکھنے والے سے امید رکھتے ہیں۔

Sem-I

B.Sc/ B.A Ist Year S.L Urdu

بی۔ اے/ بی۔ ایس۔ سی سال اول سینڈھیلینگو توج اُردو

paper I

Nasar aur Tarjuma نثر اور ترجمہ

- (۱) اُردو نثر کا عمومی تعارف کروانا۔
- (۲) مختلف اصناف نثر کا مطالعہ کرنا۔
- (۳) صحیح اور اچھی اُردو بولنے، لکھنے اور سمجھنے کی صلاحیت پیدا کرنا۔

Outcome

- (۱) متن کا تجزیہ و تبصرہ کرنے کی صلاحیت پیدا کرنا۔
- (۲) طلباء اور بی اصناف سے واقف ہوتے ہیں۔
- (۳) طلباء ترجمہ نگاری کے فن سے واقف ہوتے ہیں۔

Sem-I

B.A Ist Year (Opt) Urdu

بی۔اے سال اول (پہلاؤل) اُردو

paper I

غزل اور علم بیان

Ghazal aur Ilme bayan

- (۱) طلباء میں اُردو غزل کی معنویت اور اہمیت واضح کرنا۔
- (۲) طلباء کے ذوق کی آبیاری کرتے ہوئے ان میں تخلیقی صلاحیت پیدا کرنا۔
- (۳) طلباء میں شاعری کے ذوق کی آبیاری سے ان میں علم بیان واقف کرنا۔

Outcome

- (۱) طلباء میں غزل کے ذریعے اُردو ادب میں اُنسیت پیدا کرنا۔
- (۲) جذبات و احساسات کی ترجمانی کے ذرائع سے واقف ہوتے ہیں۔
- (۳) علم بیان کو روزمرہ میں استعمال کریں۔

Sem-II

B.Sc/ B.A Ist Year S.L Urdu

بی۔اے/بی۔ایس۔سی سال اول سینڈہیلیمکو تچ اُردو

paper II

نثر اور مضمون نگاری

Nasar aur Mazmoon Nigari

(۱) اُردو نثر کا عمومی تعارف کروانا۔

(۲) مختلف اصناف نثر کا مطالعہ کرنا۔

(۳) صحیح اور اچھی اُردو بولنے، لکھنے اور سمجھنے کی صلاحیت پیدا کرنا۔

Outcome

(۱) متن کا تجزیہ و تبصرہ کرنے کی صلاحیت پیدا کرنا۔

(۲) طلباء اور بی اصناف سے واقف ہوتے ہیں۔

(۳) طلباء مضمون نگاری کے فن سے واقف ہوتے ہیں

Sem-II

B.A Ist Year (Opt) Urdu

بی۔اے سال اول (پیپر اول) اُردو

paper III

Nazam Aur Qita

نظم اور قطعہ

- ۱۔ طلباء میں نظم نگاری کی اہمیت واضح کرنا۔
- ۲۔ طلباء میں شعری اصناف کے تئیں دلچسپی پیدا کرنا۔ اور خصوصاً نظم نگاری کے موضوعات سے بحث کرنا۔
- ۳۔ طلباء میں تخلیقی صلاحیت کو پروان چڑھانا۔

Outcome

- ۱۔ طلباء میں نظم نگاری کی اہمیت واضح کرنا۔
- ۲۔ طلباء میں شعری اصناف کے تئیں دلچسپی پیدا کرنا۔ اور خصوصاً نظم نگاری کے موضوعات سے بحث کرنا۔
- ۳۔ طلباء میں تخلیقی صلاحیت کو پروان چڑھانا۔

Sem-II

B.A Ist Year (Opt) Urdu

بی۔اے سال اول (پیپر اول) اُردو

paper IV

Novel

ناول

- ۱۔ افسانوی ادب سے دلچسپی پیدا کرنا۔
- ۲۔ اردو کے مخلوط معاشرتی و ثقافتی پہلوؤں سے متعارف کروانا۔
- ۳۔ اردو ادب کی نشوونما میں داستان کی اہمیت کو واضح کرنا۔
- ۴۔ برصغیر کی تہذیبی تنوع کو سمجھنے کی صلاحیت پیدا کرنا۔ اور ذوقِ علم کی تربیت کرنا۔
- ۵۔ بحیثیتِ بیانیہ صنفِ ادب ناول کی اہمیت کو سمجھنا۔

Outcome

- ۱۔ طلباء نے داستانوی دنیا کی سیر کی۔
- ۲۔ افسانوی ادب کی دیگر اصناف اور داستان میں فرق و امتیاز کی صلاحیت پیدا ہوئی۔
- ۳۔ طلباء کے اخلاقی عناصر جیسے صبر و شکر، نیکی و بدی، کشمکش و یقین پر وان چڑھی۔

Sem-III

B.Sc/ B.A II Year S.L Urdu

بی۔اے/بی۔ایس۔سی سال دوم سینڈلیٹنگ ویج اُردو

paper III

Masnavi 'Gazal aur Ilme bayan

مثنوی، غزل اور علم بیان

- (۱) طلباء میں اُردو غزل کی معنویت اور اہمیت واضح کرنا۔
- (۲) طلباء کے ذوق کی آبیاری کرتے ہوئے ان میں تخلیقی صلاحیت پیدا کرنا۔
- (۳) طلباء میں شاعری کے ذوق کی آبیاری سے ان میں علم بیان واقف کرنا۔

Outcome

- (۱) طلباء میں غزل کے ذریعے اُردو ادب میں اُنسیت پیدا کرنا۔
- (۲) جذبات و احساسات کی ترجمانی کے ذرائع سے واقف ہوتے ہیں۔
- (۳) علم بیان کو روزمرہ میں استعمال کریں۔

Sem-III

B.A II Year (Opt) Urdu

بی۔ اے سال دوئم اُردو

paper V

marsiya aur Qaseeda

قصیدہ اور مرثیہ

- ۱۔ قصیدہ کے آغاز و ارتقاء نیز اسکے زوال کے بارے میں طلباء کو معلومات فراہم کرنا۔
- ۲۔ مرثیہ نگاری کے فن کا تاریخی پس منظر اور اسکے موضوع و مضمون کی انفرادیت کو واضح کرنا۔

Outcome

- ۱۔ قصیدہ کے آغاز و ارتقاء نیز اسکے زوال کے بارے میں طلباء کو معلومات فراہم کرنا۔
- ۲۔ مرثیہ نگاری کے فن کا تاریخی پس منظر اور اسکے موضوع و مضمون کی انفرادیت کو واضح کرنا۔

Sem-III

B.A II Year (Opt) Urdu

بی۔ اے سال دوم اُردو

paper VI

مثنوی اور رُباعی

Masnavi aur Ruba

- ۱۔ مثنوی کی خصوصیات اور اسکے موضوعات اور اسالیب کے تنوع سے متعارف کروانا۔
- ۲۔ مثنوی اور دیگر اصنافِ سخن سے فرق و امتیاز کروانا۔
- ۳۔ مثنوی نگاری کا جائزہ لینا۔

Outcome

- ۱۔ رُباعیات کا تجزیاتی و معنی مطالعہ کرنا۔
- ۲۔ نظم میں قصہ گوئی اور مکالمہ نگاری کے ہنر سے واقف ہوئے۔
- ۳۔ رُباعیات کے ذریعے طلباء میں موزوں و مناسب الفاظ کے انتخاب کی صلاحیت اُجاگر ہوئی۔

Sem-IV

B.Sc/ B.A IInd Year S.L Urdu

بی۔ اے/ بی۔ ایس۔ سی سال دوم سیکنڈ لیٹگو تاج اُردو

paper IV

نظم، مرثیہ، قصیدہ اور رباعی

Nazm'marsiya'Qaseeda aur Rubai

- ۱۔ طلباء میں شعری اصناف کے تئیں دلچسپی پیدا کرنا۔ اور خصوصاً نظم، مرثیہ، قصیدہ اور رباعی پر روشنی ڈالنا۔
- ۲۔ قصیدہ کے آغاز و ارتقاء نیز اسکے زوال کے بارے میں طلباء کو معلومات فراہم کرنا۔
- ۳۔ مرثیہ نگاری کے فن کا تاریخی پس منظر اور اسکے موضوع و مضمون کی انفرادیت کو واضح کرنا۔
- ۴۔ صنف رباعی کی تعریف اور تکنیک اور موضوعات سے بحث کرنا۔

Outcome

- ۱۔ طلباء میں شعری اصناف کے تئیں دلچسپی پیدا کرنا۔ اور خصوصاً نظم، مرثیہ، قصیدہ اور رباعی پر روشنی ڈالنا۔
- ۲۔ قصیدہ کے آغاز و ارتقاء نیز اسکے زوال کے بارے میں طلباء کو معلومات فراہم کرنا۔
- ۳۔ مرثیہ نگاری کے فن کا تاریخی پس منظر اور اسکے موضوع و مضمون کی انفرادیت کو واضح کرنا۔
- ۴۔ صنف رباعی کی تعریف اور تکنیک اور موضوعات سے بحث کرنا۔

Sem-IV

B.A II Year (Opt) Urdu

بی۔ اے سال دوئم اردو

paper VII

Afsana

افسانہ

- ۱۔ افسانوی ادب سے دلچسپی پیدا کرنا۔
- ۲۔ اردو کے مخلوط معاشرتی و ثقافتی پہلوؤں سے متعارف کروانا۔
- ۳۔ اردو ادب کی نشوونما میں افسانہ کی اہمیت کو واضح کرنا۔
- ۴۔ برصغیر کی تہذیبی تنوع کو سمجھنے کی صلاحیت پیدا کرنا۔ اور ذوقِ علم کی تربیت کرنا۔
- ۵۔ بحیثیتِ بیانیہ صنفِ ادب افسانہ کی اہمیت کو سمجھانا۔

Outcome

- ۱۔ طلباء نے افسانوی دنیا کی سیر کی۔
- ۲۔ افسانوی ادب کی دیگر اصناف اور داستان میں فرق و امتیاز کی صلاحیت پیدا ہوئی۔
- ۳۔ طلباء کے اخلاقی عناصر جیسے صبر و شکر، نیکی و ہمدلی، کشمکش و یقین پر دان چڑھی۔

Sem-IV

B.A II Year (Opt) Urdu

بی۔ اے سال دوئم اردو

paper VIII

Drama

ڈرامہ

- ۱۔ افسانوی ادب سے دلچسپی پیدا کرنا۔
- ۲۔ اردو کے مخلوط معاشرتی و ثقافتی پہلوؤں سے متعارف کروانا۔
- ۳۔ اردو ادب کی نشوونما میں ڈرامہ کی اہمیت کو واضح کرنا۔
- ۴۔ برصغیر کی تہذیبی تنوع کو سمجھنے کی صلاحیت پیدا کرنا۔ اور ذوق علم کی تربیت کرنا۔
- ۵۔ بحیثیت بیانیہ صنف ادب ڈرامہ کی اہمیت کو سمجھانا۔

Outcome

- ۱۔ طلباء نے افسانوی دنیا کی سیر کی۔
- ۲۔ افسانوی ادب کی دیگر اصناف اور داستان میں فرق و امتیاز کی صلاحیت پیدا ہوئی۔
- ۳۔ طلباء کے اخلاقی عناصر جیسے صبر و شکر، نیکی و ہمدلی، کشمکش و یقین پر وان چڑھی۔

Sem-V

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper IX

Maktoob Nigari

مکتوب نگاری

- ۱۔ طلباء میں مکتوب نگاری کے فن کو اجاگر کرنا۔
- ۲۔ طلباء میں مکتوب نگاری کا ذوق پیدا کرنا۔ اور معاشرے کی اسلوبیاتی پہلوؤں کو اجاگر کرنا۔
- ۳۔ طلباء میں ادبی معاملات و موضوعات کو بہتر انداز میں پیش کرنے کی صلاحیت بڑھانا۔
- ۴۔ طلباء کو مکتوب کے مختلف اسالیب سے واقف کرانا۔

Outcome

- ۱۔ روزمرہ زندگی میں مکتوب کی اہمیت سے واقف ہوتے ہیں۔
- ۲۔ طلباء نجی اور کاروباری مکتوب کے امتیاز سے واقف ہوتے ہیں۔
- ۳۔ غیر افسانوی ادب میں ہمد قسم کے مکتوب سے واقف ہوتے ہیں۔

Sem-V

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper X

Inshaiyya انشائیہ

- ۱۔ طلباء میں انشائیہ نگاری کی اہمیت واضح کرنا۔
- ۲۔ طلباء میں انشائیہ نگاری کا ذوق پیدا کرنا۔
- ۳۔ انشائیہ نگاروں کی زندگی کے اعلیٰ پہلوؤں کو نمایاں کرنا۔

Outcome

- ۱۔ طلباء کی تخلیقی صلاحیتوں کی نشوونما ہوگی۔
- ۲۔ زبان و بیان پر طلباء کو اعتماد حاصل ہوا۔
- ۳۔ اُردو ادب کے بہترین ادب سے متعارف ہوتے ہیں۔

Sem-V

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper XI

Adabi Tanqeed

ادبی تنقید

- ۱۔ ادبی تنقید کی اہمیت و افادیت سے واقف کروانا۔
- ۲۔ ادب کے ارتقاء میں تنقید کے کردار کو نمایاں کرنا۔
- ۳۔ طلباء میں تنقیدی صلاحیتوں کو فروغ دینا۔

Outcome

- ۱۔ طلباء میں تنقیدی صلاحیتوں کو فروغ ملی۔
- ۲۔ ادب و تنقید کے باہمی ربط و تعلق سے متعارف ہوئے۔
- ۳۔ تنقیدی صلاحیت کو عملی زندگی میں استعمال کرنے کا حوصلہ پیدا ہوا۔

Sem-V

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper XII

Mansooba Amal

منصوبہ عمل

- ۱۔ تنقیدی و تحقیقی صلاحیت کو فروغ دینا۔
- ۲۔ اردو زبان و ادب کے مختلف ادوار سے واقف کروانا۔
- ۳۔ ادبی موضوعات کو بہتر سے بہتر انداز میں پیش کرنے کی صلاحیت پیدا کرنا۔

Outcome

- ۱۔ اردو کی لسانی و ادبی اہمیت و افادیت کو محسوس کرنا اور اسے واضح کرنا۔
- ۲۔ اردو کی مختلف تحریکات و رجحانات کے مطالعہ کے ذریعے اردو ادب کے ارتقاء میں معاون سماجی و تہذیبی اجزاء سے روشناس ہوئے۔

Sem-VI

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper XIII

خاکہ اور سوانح

- ۱۔ طلباء کو اردو ادب کے تینیں بیداری پیدا کرنا اور طلباء کے ذوق سلیم کی آبیاری کرنا۔
- ۲۔ خاکہ اور سفر نامہ سے طلباء کو واقف کروانا اور انکی ادبی اہمیت واضح کرنا۔
- ۳۔ طلباء میں خاکہ تحریر کرنے کی صلاحیت پیدا کرنا۔

Outcome

- ۱۔ طلباء کے ذوق کی آبیاری ہوئی۔
- ۲۔ سوانح نگاری کے ذریعے عملی زندگی کو سمجھنے میں مدد ملی۔
- ۳۔ خاکہ نگاری کے فن سے واقف ہوئے۔

Sem-VI

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper XIV

سفرنامہ اورر پوتاٹا

- ۱۔ طلباء کو اردو ادب کے تین بیداری پیدا کرنا اور طلباء کے ذوق سلیم کی آبیاری کرنا۔
- ۲۔ سفرنامہ اورر پوتاٹا سے طلباء کو واقف کروانا اور انکی ادبی اہمیت واضح کرنا۔
- ۳۔ طلباء میں سفرنامہ اورر پوتاٹا تحریر کرنے کی صلاحیت پیدا کرنا۔
- ۴۔ مشترکہ تہذیب کی نمائندہ زبان کی حیثیت سے اردو کا تعارف۔
- ۵۔ اردو کے سیکولر مزاج سے واقف ہوئے۔

Outcome

- ۱۔ طلباء کے ذوق کی آبیاری ہوئی۔
- ۲۔ سفرنامہ اورر پوتاٹا کے فن سے واقف ہوئے۔
- ۳۔ اردو کے ذریعے طلباء کے سیکولر مزاج پر و ان چڑھی۔

Sem-VI

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper XV

ذرائع ابلاغ اور ترجمہ نگاری

- ۱- صارفیت کے دور میں جدید ذرائع ابلاغ سے واقف ہوتے ہیں۔
- ۲- جدید ذرائع ابلاغ کے توسط سے طلباء کے تجربے میں وسعت ہوگی اور اسکے ذریعے سے نئے نئے چیلنجز کو قبول مکر کرنے کے لائق بن سکیں گے۔
- ۳- جدید ذرائع ابلاغ پر مختلف زبانوں کے ساتھ ساتھ انگریزی بھی ضروری ہے۔ اسی لئے ایک زبان سے دوسری زبان میں ترجمہ کرنا۔

Outcome

- ۱- جدید دور کے جدید ذرائع ابلاغ سے طلباء واقف ہوئے۔
- ۲- جدید ذرائع ابلاغ پر مختلف زبانوں کے ساتھ ساتھ انگریزی بھی ضروری ہے۔ اسی لئے ایک زبان سے دوسری زبان میں ترجمہ کرنے کی صلاحیت پروان چڑھی۔

Sem-VI

B.A IIIrd Year Opt Urdu

بی۔ اے سال سوم اختیاری

Paper XVI

Mansooba Amal

منصوبہ عمل

- ۱۔ تنقیدی و تحقیقی صلاحیت کو فروغ دینا۔
- ۲۔ اردو زبان و ادب کے مختلف ادوار سے واقف کروانا۔
- ۳۔ ادبی موضوعات کو بہتر سے بہتر انداز میں پیش کرنے کی صلاحیت پیدا کرنا۔

Outcome

- ۱۔ اردو کی لسانی و ادبی اہمیت و افادیت کو محسوس کرنا اور اسے واضح کرنا۔
- ۲۔ اردو کی مختلف تحریکات و رجحانات کے مطالعہ کے ذریعے اردو ادب کے ارتقاء میں معاون سماجی و تہذیبی اجزاء سے روشناس ہوئے۔

Sem-I

B.A Ist Year (Opt) Urdu

بی۔اے سال اول (پیپر اول) اُردو

paper II

Dastan

داستان

- ۱۔ افسانوی ادب سے دلچسپی پیدا کرنا۔
- ۲۔ اردو کے مخلوط معاشرتی و ثقافتی پہلوؤں سے متعارف کروانا۔
- ۳۔ اردو ادب کی نشوونما میں داستان کی اہمیت کو واضح کرنا۔
- ۴۔ برصغیر کی تہذیبی تنوع کو سمجھنے کی صلاحیت پیدا کرنا۔ اور ذوق علم کی تربیت کرنا۔
- ۵۔ بحیثیت بیانیہ صنف ادب داستان کی اہمیت کو سمجھانا۔

Outcome

- ۱۔ طلباء نے داستانوی دنیا کی سیر کی۔
- ۲۔ افسانوی ادب کی دیگر اصناف اور داستان میں فرق و امتیاز کی صلاحیت پیدا ہوئی۔
- ۳۔ طلباء کے اخلاقی عناصر جیسے صبر و شکر، نیکی و ہمدلی، کشمکش و یقین پر دان چڑھی۔

II. Faculty of Social Science

6. B.A. ECONOMICS PROGRAMME

Program Outcome PO'S

After successfully completing B.A. Economics programme students will be able to-

PO 1- Use different tools for economic analysis and can apply knowledge of the Micro and Macro approach for the personal benefit and for the benefit of nation.

PO 2- To understand and study the problems of various sectors of the economy at regional, state, national and international level.

PO3- To design policies for economic development and to solve economic problems.

PO4- To understand environmental issues because of production pattern and to develop sustainable development policies for the society.

PO5- To inculcate ethical values in the business and the government sector and define responsibilities and norms in the business environment as well as policies of the government in the context of the welfare of the society.

PO 6- To apply the knowledge of economic concepts, laws and theories, for a better economic environment for the society at large.

Program Specific Outcome PSO'S

PSO: Explain the basic concepts, laws and theories related to the economic behaviour of the human being.

PSO: Inculcate the economic way of thinking.

PSO: Apply economic analysis in practice.

Course Outcome CO'S

B.A.First Year Course Micro Economics Eco-101

After successful completion of this course students will be able to-

CO1: Describe basic economic problems and look towards the economy with the microeconomic approaches.

CO2: Explain division of market from consumer and supply of the products from the producers.

CO3: Interpret concepts related to utility, demand and supply in the market.

CO4: Analyse process of production in economy, laws and variables related to the production function.

CO5: Demonstrate various forms of market and price determination concept of firm.

B.A. First year course Indian Economy Eco 102

After successfully completing this course, students will be able to:

CO1: Explain the status of the Indian economy as a developing economy in comparison with world economy.

CO2: Explain agriculture, Industry and services sector status of Indian Economy.

CO3: Explain poverty and unemployment as economic problems in the India .

CO4: Analyse various policies of Government of India

CO5: Analyse developments of secondary and tertiary sectors in the economy along with the problems and solutions.

CO6: Interpret demographic features of the Indian economy and problems.

B.A. First Year course Theory of price Eco 103

After successfully completing this course, students will be able to:

CO1: To understand cost and revenue concepts in production.

CO2: Explain cost analysis and cost curves

CO3: To understand market types and structure of the market

CO4: Analyse role of factors of production and its remuneration

CO5: To interpret distribution theory and price determination in the market

B.A. First Year Course Money and Banking in India Eco 104

After successfully completing this course, students will be able to:

CO1: Describe types of banks and its functioning.

CO2:To understand the role of commercial and cooperative banks in India

CO3: Explain functions and working of the central bank of country and Reserve Bank of India.

CO4: Explain principles of commercial banks, different types of accounts and customers of various types of these banks.

CO5:Understand the role of NBFC's and DFI's

B.A. Second Year Course Macro Economics Eco 105

After successfully completing this course, students will be able to:

CO1: To understand nature scope and subject area of Macro economics

CO2: Make a detailed enquiry into generation, calculation and measurement of national income
CO3: Describe way of money facilitates exchanges and develop market and the economy.

CO4: To understand the role of effective demand and consumption function in the economy

CO5: Analyse approaches towards value of money and price level in economy.

CO6: Interpret causes and controlling measures of cyclical fluctuations in economy

B.A. Second Year Course Development and Planning Eco 106

After successfully completing this course, students will be able to:

CO1: Explain concepts of Development and Growth of economies.

CO2: Describe characteristics of developed or developing economies.

CO3: Analyse constraints of process of development of various countries.

CO4: Analyse theories and ways of development of economies.

CO5: Explain the role of capital and investment in economic growth.

B.A. Second Year Course Public Finance Eco 107

After successfully completing this course, students will be able to:

CO1: Describe role of Government in an economy and way of maximum social advantage

CO2: To know the sources of income, types and principles of expenditure of government and general importance of public finance.

CO3: Analyse public expenditure and effects on production and distribution of resources

CO4: Analyse concepts and principles related to public revenue, taxation and its effects

CO5: Examine external and internal debts of government and ways to repay public debts.

CO6: Illustrate concepts of budgeting, zero base budgeting gender budgeting.

B. A. Second Year Course Statistical Methods Eco 108

After successfully completing this course, students will be able to:

- CO1-** Understand statistical tools for application in various fields
- CO2-** Understand economic concepts by applying statistical methods
- CO3-** To collect data, tabulation and data analysis
- CO4-** To apply statistical techniques in research analysis in various sectors
- CO5-** Analyse data and to understand economic problems

B.A. Third Year Course International Economics Eco 109

After successfully completing this course, students will be able to:

- CO1:** Understand concepts and its application in international economics
- CO2:** Evaluate theories related to international trade for profit maximization.
- CO3:** Analyse process of gains from trade and determination of terms of trade.
- CO4:** Understand the concept of balance of payments and measures to correct deficit in balance of payments.
- CO5:** Evaluate trade policy and concepts related to trade policy like quotas tariffs and exchange rates.
- CO6:** Interpret India's foreign trade, policy and its participation in international trade organisations like World Trade Organisation.

B.A. Third Year Course Agricultural Economics Eco 110

After successfully completing this course, students will be able to:

- CO1:** Describe role of agriculture in economic development.
- CO2:** Understand trends in agricultural growth.
- CO3:** Apply farm mechanization techniques in farm management.
- CO4:** Describe the role of the Government in agriculture price policy and food security.
- CO5:** Analyse effects of Globalization on Indian agriculture.

B.A. Third Year Course Mathematical Economics Eco 111(A)

After successfully completing this course, students will be able to:

CO1: Understand economic concepts and theories which use mathematical tools.

CO2: Refine verbal logic with mathematical techniques.

CO3: Formulate economic problems in multivariable mode.

CO4: Understand economic behaviour of human being with optimization.

B.A. Third Year Course Project Work Eco 112 & Eco 116

After successfully completing this course, students will be able to:

CO1: Collect , analyse data and report writing.

CO2: Apply research methodology techniques

CO3: Understand problem and analysis of issues

CO4: Study in depth regarding specific subject

B.A. Third Year Course Research Methodology Eco 113

After successfully completing this course, students will be able to:

CO1: Understand concept of research, types, objectives, process, importance and limitations of research.

CO2: Explain data collection methods and sampling techniques of research.

CO3: Apply different research designs for research purpose

CO4: Illustrate data analysis of research with various statistical methods

CO5: Apply research knowledge in management and policy making

CO6: Explain stages of report writing.

B.A. Third Year Course Foreign Trade and International Institutions Eco 114

After successfully completing this course, students will be able to:

CO1: Understand broad principles and theories of trade which governs free flow of goods and services.

CO2: Examine impact of trade policies at national and international level.

CO3: Describe international capital movements.

CO4: Know the role of International economic institutions in world trade.

CO5: Know exchange rate management and market orientation of trade.

B.A. Third Year Course Econometrics Eco 115

After successfully completing this course, students will be able to:

CO1: Explain core concepts and techniques in econometrics, with a special focus on the classical linear regression model

CO2: To apply econometric model in economic problem solving.

CO3: Apply different variables in equations.

CO4: Collect, organize and analyze economic data, and interpret results from statistical analyses.

7. B.A. HISTORY PROGRAMME

8. B.A. POLITICAL SCIENCE AND PUBLIC ADMINISTRATION PROGRAMME

9. B.A. SOCIOLOGY PROGRAMME

● PROGRAMME SPECIFIC OUTCOMES (PSO's)

After successfully completion the UG degree in Sociology students will be able to:

PSO1- Create a basic understanding of emerging sociological thoughts and perspectives to recognize our society rationally.

PSO2- Develop skills to prepare an academic research project with the help of qualitative and quantitative skills and techniques.

PSO3 Raise the sensitization to identify the contemporary social problems and arrange to measures it.

PSO-4 Take a empirical, ethical and creative approach to identify urbanization and its consequences.

PSO-5 Build up the basic theoretical understanding skill to observe any social phenomena objectively.

PSO-6 Increase quiet enough confidence to handling the computers and statistical tools in research.

PSO-7 Modification in views and approach towards social disorganization.

PSO-8 Increase the sensitization about the concept Globalization, Industrialization, Privatization and liberalization and its dimensions.

● COURSE OUTCOME (CO's)

Nos.	Class	Semester	Paper No. with Title	Course Outcome CO's Learner expected to acquire knowledge of-----
CO1	FYBA	SEM-I	Paper-I Introduction to Sociology	a) To introduce students the origin and development of sociology. b) To develop the understanding of students in sociological concepts, methods, perspectives and principles. c) To understand the uses of sociology in our life.
CO2	FYBA	SEM-I	Paper-II Individual and Society	a) To introduce students the importance of culture and socialization in individual life. b) To develop the understanding of students in social structure, social stratification and social change. c) To understand the importance's of different sections of society in our life.
CO3	FYBA	SEM-II	Paper- III Introduction to Subfields of Sociology	a) To introduce students in the area of Sociology with different dimensions. b) To familiarise students to the nature of Indian society and institutions.

				c) To develop sociological understanding of the changes in day to day life.
CO4	FYBA	SEM-II	Paper- IV Indian Social Composition	a) To introduce students the features of Indian Society. b) To familiarise students with Indian diversity population, Indian democracy and secularism. c) To develop sociological understanding through the agrarian structure of Indian society.
CO5	SYBA	SEM-III	Paper-V Problems of rural India	a) To introduce students to the basic concepts, theories, nature and dynamics of rural society in India. b) To understand the basic social problems of rural India. c)To understand newly emerging issues and concerns in the changing scenario.
CO6	SYBA	SEM-III	Paper-VI Contemporary Urban India	a) To introduce the basic concepts of urban sociology ineptly. b) To understand urban development in the neo liberal era. c).To understands newly emerging issues and concerns in the changing scenario.
C07	SYBA	SEM-IV	Paper-VII Population in India	a)To develop the skills to understand the basic concepts. b) To know the population and its consequences in different sector of society.
C08	SYBA	SEM-IV	Paper VIII Sociology of Development	a)To understand the theoretical and practical concept of development. b)To develop the skills to analyze the development among different Nations rationally.

● **BA- SOCIOLOGY- PROGRAMME OUTCOME (PO's)**

PO- 1	TYBA	SEM-V	Paper- IX- Sociological Traditions	a) To provide the students of Sociology with the understanding of Sociological theory. b) To train students in the application of these theories to social situations. c) To introduce students in the area of different theorist and their theories.
PO-2	TYBA	SEM-V	Paper- X Introduction to research Methodology	a)To provide students with an orientation to Quantitative Social Research b) To acquaint students with the important concepts, techniques and processes in quantitative research. c) To guide students to work on meaningful, minor research projects.
PO-3	TYBA	SEM-V	Paper- XI-Social Problems in India	a) To identify and analyze some emerging social problems form sociological perspective. b) To sensitize the student with contemporary social problems of our Nation. c) To discuss and try to measure the social problems.

PO-4	TYBA	SEM-VI	Paper- XIII Sociological Theories	a) To develop students sociological thinking in theoretical manner. b) To familiarize students the contribution of prominent sociologists in sociology.
PO-5	TYBA	SEM-VI	Paper- XIV Social Research Methods	a) To familiarize students to the computer application and statistics. b) To develop truthful understanding of society through techniques of sociological investigation..
PO-6	TYBA	SEM-VI	Paper XV- Social Disorganization in Contemporary India	a)To introduce student with basic concept of social disorganization in contemporary India. b) To develop the skills to understand and measure social disorganization with advance knowledge and techniques.

10. B.A. PSYCHOLOGY PROGRAMME

- **Program Outcome (PO) :**

After successfully competing BA Psychology program students will be able to

PO1:- The study of psychology focussing primarily on human resources, potentials, interpersonal relationship and also encompasses the study of social, cultural, multhiethnic, and paranormal phenomena that may effects human behaviour. So students gets more knowledge through this program.

PO2:- Students deals with diverse human behavior ranging from mild emotional and interpersonal problems to sever stress and trauma in day to day life.

PO3:- Intelligence, sensation, perception, memory, thinking, motivation, emotion etc. so on concepts learnt theoretically and also practically.

- **Program Specific Outcome (PSO) :**

After successfully competing BA Psychology program students will be able to

PSO1:- The program help the students apply knowledge of Psychology for a healthy self, family and society.

PSO2:- In this program to developed a scientific temperament for studying human behaviour

PSO3:- The program motivated students to face competition in world.

PSO4:- Students acquired Psychological testing skill and how to used various psychological test on other person through this program.

PSO5:- Every person suffering from different problem but psychology students know that how to solved problem and also counselling other person problem through studying this program.

- **Course Outcome (CO):**

BA Psychology is a three year degree program. Every year has two paper both semester and one practical. In every paper gets more knowledge of psychology and this knowledge to used daily life.

CO1:- Course Outcome: F.Y.B.A

➤ **Paper 1: General Psychology/Course code – PSY 101**

1] Identify the primary objectives (goals) of general psychology

2] Demonstrate an understanding of psychological theory regarding the relationship between physiology, cognition, and emotion

3] Describe how communication takes place between neurons

4] Explain theories of emotion and how we express and recognize emotion

➤ **Paper 2: Social Psychology/Course code – PSY 102**

1] Explain the psychological influences of culture on basic psychological processes, social and human development, social cognition, and social interaction.

2] Social psychology can enrich students understanding of self and the world around you. Through this subjects students get more knowledge about how people view others, how they behave in groups and how attitudes are formed, you can gain a greater appreciation for how social relationships influence individual functioning.

3] Demonstrate an awareness of their own and others' culture and world views

➤ **Paper 3: Basic Concept in Psychology/Course code – PSY 104**

1] To know about various basic concept such as Sensation, Perception, Motivaion, Emotion, Personality, memory, thinking process, intelligence etc. so on.

2] Define personality and the contributions of Freud and neo-Freudians to personality theory

3] Explain learning and the process of classical conditioning

4] Explain operant conditioning, reinforcement, and punishment

➤ **Paper 4: Basic Concept in social psychology Course code – PSY 105**

1] Recognize aspects of social psychology, including the fundamental attribution error, biases, social roles, and social norms, in your daily life

2] Describe how attitudes can be changed through cognitive dissonance and persuasion

3] Explain how conformity, obedience, groupthink, social facilitation, social loafing, and altruism relate to group behavior

4] Explain prejudice, discrimination, and aggression

➤ **Psychology practicum's: Experiment &Tests Course code – PSY 103 and PSY 106**

1] To develop awareness of psychological practical, tools and technique.

2] To nurture skill of observation

3] How to measure human behaviour through practically.

CO2:- Course Outcome: S.Y.B.A

➤ **Paper 1 : Psychology for Adjustment/ Course code – PSY 107**

1] How to develop communication skill in individual.

2] Getting knowledge different social problem effect on human life such as marital problem, divorce and less marital adjustment etc ...

3] Getting knowledge close relationship, friendship, intimate relationship through various psychodynamic approaches.

➤ **Paper 2 : Psychological Testing/ Course code – PSY 108**

1] To know all psychological test to get informative information theoretically and practically of various tests. Which psychological tools used in different research and projects

2] Students gets knowledge about psychological tests how to measure difference between individuals of the same individual under different circumstance.

3] This paper provide standardized tests for life span development, the relative effectiveness and the influence of environment variables etc... problem investigating.

➤ **Paper 3 : Adjustment for living Course code – PSY 110**

1] Students to get knowledge about psychology and physical disease such as stress, cancer, hard disease and emotional or personality disorders.

2] How to adjust in various situational problem such as house, health, education, emotion and social etc.

3] How to manage stress in daily life. Which technique used for reduce stress? This like many more question getting right answer in this paper.

➤ **Paper 4 : Psychological Statistics/ Course code – PSY 111**

1] To train students in various psychological assessment techniques.

2] To acquaint the student and make them understand the different statistical methods with their uses and interpretations.

3. To impart skills necessary for selecting and applying different tests for different purpose such as evaluation, training, rehabilitation etc

➤ **Psychology practicum's: Experiment &Tests Course code – PSY 109 and PSY 112**

- 1] To develop awareness of psychological practical, tools and technique.
- 2] To nurture skill of observation
- 3] How to measure human behaviour through practically.

CO3:- Course Outcome: T.Y.B.A

➤ **Paper 1: Abnormal Psychology/ Course code – PSY 113**

- 1] To get information about various mental disorder, to study symptoms, causes, treatments, prevention of mental disorder such as anxiety, depression schizophrenia, paranoid, melancholia, brain disease, somatic disorder, OCD etc.....
- 2] Compare and contrast biological, psychological, family, and social views of the causes and treatment of abnormal behavior.
- 3] List and/or recognize the characteristics of specific anxiety, somatoform, mood, eating, sleep, sexual-identity, substance abuse, personality, schizophrenic and cognitive disorders.

➤ **Paper 2 : Organizational Psychology/ Course code – PSY 114**

- 1] Describe the purpose of industrial-organizational psychology and examine its application to the workforce
- 2] Explain how industrial-organizational psychologists assess leadership and organization.
- 3] How to managing technology is an important job of any management. It is an important element of any unit. Selection of technology, procurement, installation, operation and maintenance is important and no compromise should be made in procuring latest or advanced technology.

➤ **Paper 3 Introduction to Counselling/ Course code – PSY 116**

- 1] Explain the different approaches to counselling and psychotherapy postulate factors specific to each approach as the mechanisms of therapeutic change.
- 2] Students get knowledge how to use counselling technique in different behavioural disorder.
- 3] To get overall knowledge theoretically and practically for counselling.

➤ **Paper 4 : Basic concept in Research Methodology/ Course code – PSY 117**

- 1] Formulate and identify null and alternative hypotheses in research.

2] Define and give examples of independent variables, dependent variables, and scales of measurement.

3] Generate and interpret various types of graphical displays and tables from research data.

4] Differentiate between descriptive and inferential statistics

➤ **Paper 5 : Psychopathology/ Course code – PSY 119**

1] Identify the difference between organic and functional disorders.

2] To understand research methods as they are basis for our reasoning and decision making and to get knowledge of research methods helps a person test ideas on empiricism rather than faulty logic.

3] To get theoretical knowledge about counselling and to study Counselling is the application to use in various sectors such as Mental Health Centre, Clinic, School, College, Industries, Health centre, Family Court and Mental Retardation School etc. so on.

➤ **Paper 6 : Organizational Behavior/ Course code – PSY 120**

1] Student learned the systematic study and application of knowledge about how individuals and groups act within the organizations where they work.

2] To study of human behavior in organizational settings, how human behavior interacts with the organization, and the organization itself.

3] Organizational behavior theories inform real-world evaluation and management of groups of people

➤ **Paper 7 : Counselling in Action/ Course code – PSY 122**

1] Counselling outcomes are the benefits (or harms) that derive for clients (patients or mental healthcare consumers) as a result of their experiences in counselling.

2] Counselling is an effective treatment for mental health concerns.

3] The determination of therapy outcomes involves a variety of issues and considerations

➤ **Paper 8 : Fundamental of Behavioural research/ Course code – PSY 123**

1] Students identify and critically evaluate psychological research methods.

2] Students analyse empirical data.

3] Students assess the significance and importance of research reports.

4] Students communicate clearly and effectively in a written format.

➤ **Psychology practicum's/Course code – PSY 115 and PSY 118**

1] To develop awareness of psychological practical, tools and technique.

2] To nurture skill of observation

3] How to make and write research project through observing social situation.

4] Student helps overall research activity in future research work.

5] Student' s get knowledge how to make and write small research project.

➤ **Psychology practicum's and tests/Course code – PSY 121 and PSY 124**

1] Student get knowledge about various mental disorder through practical and one visited organize in mental health centre.

2] How to make case study report through during visit.

3] Students develop observation skill how recognized mental disorder on through outer behavioural symptoms.

11. B.A. MUSIC PROGRAMME

Course outcome and programme outcome B A MUSIC

PROGRAMME SPECIFIC OUTCOME

PSO-1 The student is able to give a practical demonstration of ragas for a period of at least

Half an hour.

PSO-2 He is able to demonstrate various aspects of raga and their differentiation.

PSO-3 He studies about the theoretical aspects of the prescribed ragas.

PSO-4 He understands the basic terminologies of Indian music.

PSO-5 He studies about the compositional forms and notation systems of Hindustani music

PSO-6 He learns about the notation system.

PSO-7 He learns about the history of Indian music and various types of singing forms.

PSO-8 He learns about how to perform the raga with content and how to create the various types

Of creativity in various ragas, bandishes, etc.

PSO-9 He learns about how to demonstrate the raga.

PSO-10 He learns about every aspect of music.

B A MUSIC COPO

B A I

SEMESTER I

THEORY I

CO-1 The student understands the basic terms and definitions of Indian music.

CO-2 The student learns to write the practical compositions in notation system.

CO-3 Studies about the theoretical and practical aspects.

PRACTICAL I

CO- The student is able to give practical demonstration of the prescribed ragas.

SEMESTER II

THEORY I

CO-1 The student studies about the compositions of prescribed ragas.

CO-2 The student learns about how to do Riyaz I

CO-3 He learns about writing of notation of khayal

PRACTICAL I

CO-The student is able to give practical demonstration.

B A II

SEMESTER III

THEORY I

CO-1 The student studies about the musical terms.

CO-2 He learns about the various forms of music.

CO-3 He studies about the theoretical aspects of Indian music.

PRACTICAL I

CO-The student is able to give a practical demonstration .

SEMESTER IV

THEORY I

CO-1 The student studies about the musical non musical sound

CO-2 He learns about the karnatak musics compositions.

CO-3 He learns about the history of Indian music from 1001 A.D. to 1500 A.D.

PRACTICAL I

CO- The student is able to give a practical demonstration.

B A III

SEMESTER V SUBSIDIARY

THEORY I

CO-1 Student learns about notation of different talas with different layakary.

CO-2 Student learns about shruty and swar ancient and modern .

CO-3 He learns about raagvargikaran.

PRACTICAL I

CO-The student is able to give a practical demonstration of ragas of their various aspects.

SEMESTER V MAIN

THEORY I

CO-1 Student learns about history of modern age.

CO-2 He learns about detail study of various gharanas.

CO-3 Student learns about granthas.

PRACTICAL I

CO-The student is able to give a practical demonstration in half an hour.

SEMESTER VI SUBSIDIARY

THEORY I

CO-1 Student learns about reading and writing layakaries.

CO-2 Student learns about folklore of Maharashtra.

CO-3 Student learns about biographies of musicians.

PRACTICAL I

CO- Student is able to give a practical demonstration of the prescribed ragas and also
Able to demonstrate various ragas.

12. M.A. MUSIC PROGRAMME



FACULTY OF SOCIAL SCIENCES

M.A. MUSIC PROGRAMME

COURSE OUTCOME OF M.A. MUSIC (VOCAL AND INSTRUMENTAL)

M A I

SEMESTER I

THEORY I and II

I HISTORY AND DEVELOPMENT OF INDIAN MUSIC

II SCIENCE OF MUSIC

CO-The student studies in detail the ages of Indian music .

CO- The student studies about the classification of Indian instruments.

CO- Student studies about biographies of musicians

PRACTICAL I VIVA-VOCE

CO-The student is able to give answers of various aspects of ragas.

STAGE PERFORMANCE

CO-Student is able to demonstrate of raga for period of half an hour

SEMESTER II

THEORY I and II

I HISTORY AND DEVELOPMENT OF INDIAN MUSIC

II SCIENCE OF MUSIC

CO-Students learn about the music of various states.

CO-Student learns about various gharanas.

CO- Student learns about sangeet grantha.

CO-Student learns about Indian ,western and south Indian notation system.

CO-Student learns about acoustic

CO-Student learns about asthetics.

CO-Student learns about various singing forms

PRACTICAL I VIVA VOCE

CO-The student is able to demonstrate various aspects of raga

STAGE PERFORMANCE

CO-The student is able to give a practical demonstration of raga for period of at least half an hour.

M.A. SECOND YEAR

SEMESTER III

THEORY I and II

I HISTORY AND DEVELOPMENT OF INDIAN MUSIC

II SCIENCE OF MUSIC

CO-Student learns about Indian music from 1701 A D to 1947 A D

CO-Student learns about folklore of Maharashtra.

CO-Student learns about natyasangeet

CO-Student learns about contribution of musicians

CO-Student learns about importance of electronic devices

CO-Student learns about inter-relationship of music with other performing arts.

PRACTICAL PAPER VIVA VOCE

CO- The student is able to give a practical demonstration of ragas.

STAGE PERFORMANCE

CO- Student is able to give a demonstration for a period of at least half an hour.

SEMESTER IV

THEORY I and II

I HISTORY AND DEVELOPMENT OF INDIAN MUSIC

II SCIENCE OF MUSIC

CO-1 The student studies in detail the development of music.

CO-2 The student studies of inter relationship of folk music

CO-3The student studies of new trends of music.

CO-4 Study of voice culture.

CO-5 Students studies in detail the Thata system

PRACTICAL PAPER VIVA VOCE

CO-The student is able to give a demonstration of ragas and their differentiation.

STAGE PERFORMANCE

CO-The student is able to give a demonstration of ragas for a period of at least half an hour.

13. B.A. GEOGRAPHY PROGRAMME

- **Programme Outcomes**

After successfully completing B.A. Geography Programme students will be able to:

PO1: Apply qualitative and quantitative research techniques to gather and analyses data on social, cultural, and ecological problems.

PO2: Apply clear written and oral communication skills to communicate results of research.

PO3: Demonstrate connections between everyday life at the local scale and the larger economic, social, and/or environmental forces that network them into a global community.

PO4: Evaluate cultural, social, and environmental processes with a particular focus on space and place, critical theory, practical application, analysis and/or social justice.

PO5: Think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.

PO6: Present completed researches, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

PO7: Demonstrate general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.

PO8: Demonstrate acquisition of Weather chart/map, map aerial photograph and Image reading skill.

PO9: Apply Remote sensing concepts, techniques and their application.

PO10: Develop research questions and critically analyses both qualitative and quantitative data to answer those questions using various theoretical and methodological approaches in both physical and human geographies.

PO11: Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.

- **Programme Outcomes**

PSO1: Demonstrate and understanding of principles and theories of Geography. This include Geomorphology, Economic Geography, Human Geography, and Agriculture Geography.

PSO2: Apply Statistical Techniques of Spatial Analysis.

PSO3: Demonstrate ability to apply knowledge learned in the classroom to set and perform simple laboratory experiments in geography.

- **Course Outcomes**

F. Y. B. A. Geography: Course Gg101: Elements of Physical Geography
Course Gg103: Geography of Landforms

The student who successfully completes this course can able to:

CO1: Explain principal terms, definitions, Concept and theories of geomorphology.

CO2: Discuss development of micro to mega scale landforms.

CO3: Identify different Materials of the earth crust, rock types, and types of weathering, mass movements and types of slope.

CO4: Describe importance of latitude, longitude and the reasons why different countries have different time zone and date.

CO5: Apply knowledge of basic landforms from tectonic, volcanic, fluvial and coastal environments.

CO6: Evaluate exogenous and endogenous processes in the landscape, their importance in landform development, and distinguish the mechanisms that control these processes.

CO7: Apply geomorphological knowledge and understanding in the field of watershed management, Hazard management and mitigation, Natural resource exploitation and management, Regional planning, Engineering works and construction activities, urban geomorphology and transport development and urbanization.

F. Y. B. A. Geography: -Course Gg102: Human Geography, Course
Gg104: Regional Geography of Maharashtra

After successfully completing this course, students will be able to:

CO1: Describe nature of man-environment relationship and human capability.

CO2: Explain conditions of living of human beings from primitive life to the modern era.

CO3: Explain human evolution and different races existed since the beginning of living life.

CO4: Describe different tribes and their culture in different geographical areas.

CO5: Explain causes and effect of migration of mankind.

CO6: Analyze relationship between population and available resources.

CO7: Identify and explain spatial distribution pattern of population and environment

CO8: Identify contemporary issues which the global community is facing.

S. Y. B. A. Geography:-Course Gg106: Climatology

CO1:- Introduce student with climatology, definition, significance

CO2:- I) Describe composition and structure of the atmosphere. II) Explain the distribution and factor affecting the distribution of temperature III) Explain the range of temperature.

CO3:- Describe atmospheric pressure and wind formation.

CO4:- Explain atmospheric moisture and forms of precipitation.

CO5:- Understand atmospheric pollution and global warming.

Course Gg108: Oceanography:

CO1:- Explain nature and scope of oceanography.

CO2:-Understand surface configuration of the ocean floor.

CO3:-Explain temperature of Ocean Sea and distribution of salinity of ocean water.

CO4:-Understand the circulation of Oceanic water

S. Y. B. A. Geography:- Course Gg107: Population Geography, Course Gg109: Settlement Geography

The student who successfully completes this course can able to:

CO1: Explain Evaluation of settlement and population geography globally.

CO2: Describe factors influencing growth and distribution of settlements.

CO3: Identify various patterns of settlement using topo sheet.

CO4: Evaluate effects of technology on shelter and pattern of settlement.

CO5: Analyze factors influencing the dispersion and nucleation.

CO6: Measure degree of dispersion and nearest neighbor using Topo sheet.

CO7: Apply concepts of Nodality, Centrality, Range, Threshold and Hierarchy to describe the features of settlement.

CO8: Analyse factors responsible for urbanization and influencing the distribution of settlement globally.

CO9: Apply of theories of population growth to study settlement history.

T. Y. B. A. Geography:- Course Gg111: Physical Geography of India

Course Gg114: Agricultural Geography of India.

After successfully completing this course, students will be able to:

CO1: Describe geographical location, economic position and geological structure of India in relation to World.

CO2: Explain physiographic divisions and drainage system of India.

CO3: Describe climatic regions and seasons of India using climatic data.

CO4: Describe soil types and their distribution in India by using geographical map.

CO5: Describe major forest types, crops and their distribution and production in India

CO6: Describe mineral power resources and major Industries distribution in India

CO7: Evaluate population growth and distribution in India.

CO8: Evaluate regional development in terms of infrastructure, industries and agriculture.

T. Y. B. A. Geography:- Course Gg112: Geography of Environment

Course Gg115: Geography of Natural Calamity.

After successfully completing this course, students will be able to:

CO1: Describe concepts of Disaster and its relations with Geography.

CO2: Explain terminology and concepts of Disaster Management.

CO3: Implement concepts of hazards in different areas and its Management.

CO4: Explain standard operating procedure on government for disaster management.

CO5: Describe concepts of anthropogenic disaster, its types, causes and management.

CO6: Explain important global level disasters i.e, acid rain, ozone depletion and global warming.

CO7: Demonstrate Disaster Management at local level. CO8: Suggest methods of protection from disaster and will be able to do disaster management

14. M.A. GEOGRAPHY PROGRAMME

M. A. Geography

Programme Outcomes: -

After successfully completing M.A. Geography Programme students will be able to:

PO1: Apply qualitative and quantitative research techniques to gather and analyze data on social, cultural, and ecological problems.

PO2: Apply clear written and oral communication skills to communicate the results of research.

PO3: Demonstrate connections between everyday life at the local scale and the larger economic, social, and/or environmental forces that network them into a global community.

PO4: Evaluate cultural, social, and environmental processes with a particular focus on space and place, critical theory, practical application, analysis and/or social justice

PO5: Think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.

PO6: Present completed research, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

PO7: Demonstrate general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.

PO8: Demonstrate acquisition of Weather chart/map, map aerial photograph and Image reading skill.

PO9: Apply Remote sensing concepts, techniques and their application.

PO10: Develop research questions and critically analyze both qualitative and quantitative data to answer those questions using various theoretical and methodological approaches in both physical and human geographies.

PO11: Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.

PO12: Read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective

Programme Specific Outcomes

After completing M.A. Geography course students will have

PSO1: Knowledge of geographical terms, concepts and Theories.

PSO2: Ability of explanation of correlation between geographical facts and processes.

PSO3: Development of map preparation and map reading skills.

PSO4: Understanding of Regional Geography of India.

PSO5: Ability to use geographical research methodologies and research projects.

Course Outcomes

MA Geography Part I

Course Gg: 401 Geomorphology

The student who successfully completes this course can able to:

CO1: Explain principal terms, definitions, concept and theories of Geomorphology.

CO2: Discuss how different scales of time and space affect geomorphological processes and the development of micro to mega scale landforms.

CO3: Explain different concept, theories and models for landscape evolution.

CO4: Describe the exogenous and endogenous processes in the landscape, their importance in landform development, and distinguish the mechanisms that control these processes.

CO5: Describe the different Materials of the earth crust, rock types, types of weathering, mass movements and types of slope.

CO6: Apply knowledge of basic landforms from tectonic, volcanic, fluvial, glacial, Aeolian and coastal environments.

CO7: Categorizes slope Segments in various types.

CO8: Categorizes and compares different landforms.

Course Gg: 402 Climatology

The student who successfully completes this course can able to-

CO1: Explain principal terms and concept of Climatology.

CO2: Describe composition and Structure of Earth Atmosphere

CO3: Explain electromagnetic spectrum, its effect on earth atmosphere and types of insulation.

CO4: Explain basic concepts of air temperature, air pressure and its measurement.

CO5: Explain basic concepts of wind and wind measurement.

CO6: Describe scales of Atmospheric Motion and Models of air circulation.

CO7: Explain basic concepts of hydrological cycle, condensation and evaporation.

CO8: Describe concept of Lapse Rate, Stable and unstable Atmosphere, Air Masses & Fronts.

CO9: Apply skill of weather forecasting and application in different sectors of Climatology.

Course Gg: 422 Geography of Tourism-

After successfully completing this course, students will be able to:

CO1: Explain principal terms, definitions, and methods used in surveying.

CO2: Describe different surveying instruments and field survey methods with computation and drawing.

CO3: Analyze by Collimation method Rise and fall method

CO4: Apply the knowledge of surveying in the field analyses the findings.

CO5: Apply the knowledge of surveying to survey of a selected field Such as coastal beach, river profiling, village plan map.

CO6: Write report in proper format.

DEPARTMENT OF GEOGRAPHY

Course Outcomes

MA Geography Part I

Course Gg: 403 Oceanography

After successfully completing this course, students will be able to:

CO1: Explain definition, concept and theories of Oceanography.

CO2: Describe nature, scope and development in oceanography.

CO3: Describe the origin of the ocean Basins, world oceans and their formations

CO4: Explain relief of the ocean bottom

CO5: Describe the properties and movement of sea water.

CO6: Explain sediments on the ocean floor

Course Gg: 424-Population Geography.

The student who successfully completes this course can able to:

CO1: Explain Evaluation of settlement and population geography globally.

CO2: Describe factors influencing growth and distribution of settlements.

CO3: Identify various patterns of settlement using topo sheet.

CO4: Evaluate effects of technology on shelter and pattern of settlement.

CO5: Analyze factors influencing the dispersion and nucleation.

Course Outcomes

MA Geography Part II

Course Gg: 406-Agricultural Geography.

CO1) Describe the concept and development of Agriculture.

CO2) Explain the role of agricultural determinants towards the changing cropping pattern.

CO3) Analyse and explain Green Revolution.

CO4) explain the Agricultural concepts and modern technologies used in Agriculture.

Course Gg: 408-Political Geography

1) Explain distinct dimensions of Political Geography.

2) Explain the nature of political Geography.

3) Explain the role of geographical factors in influencing the political character of countries / regions.

4) Evaluate the geo – political issues in the world with special reference to

India.

Course Gg: 425-Regional Geography of India

- 1) Explain the distinct dimensions of India.
- 2) Explain the physical setup of the country.
- 3) Explain the climate of India and mechanism of monsoon of India.
- 4) Classify soils in India.
- 5) Explain vegetation in India.
- 6) Explain the magnitude and nature of problem & Prospectus of national & state level on geographical basis.
- 7) Describe recent trends in regional study.

Course Gg: 425: Geography of Health

CO1: To study the Geographical factors affecting human health with special reference to physical, social, economic and environmental.

CO2: Explain principal terms, definitions, concept, nature, scope and recent trends in health Geography.

CO3: Discuss types of hypotheses in health geography and formation and testing of hypotheses.

CO4: Explain health, theories and models.

Course: Gg-428: Principles of Remote Sensing and GIS

After successfully completing this course, students will be able to:

CO1: Explain definition, concepts and principles, components.

CO2: Describe history of development of remote sensing and GIS in India

CO3: Describe methodologies of extracting data from remotely sensed imagery.

CO4: Explain processing and analysis of data collected from remote sensors.

CO5: Apply knowledge of remote sensing and Geographical Information System in assessment, planning and monitoring in real life application.

CO6: Apply knowledge spatial data analysis.

CO7: Integrate RS and GIS data.

Course: Gg-441 Geographical study of Natural Disaster.

After successfully completing this course, students will be able to:

CO1: Explain principal terms, definitions and concept of disaster management.

CO2: Explain types of disasters.

CO3: Describe various disasters with their trend and impact.

15. B.A. HOME SCIENCE PROGRAMME

B.A. Home science

BA Home science program outcome

After completing the course student will be able to

PO 1 :Family Resource Management To understand the concept household budget and prepare budget household budget various to income group .

PO 2 :Human Development (prenatal development and early childhood) To understand prenatal development and further development growth and development for various milestone of human life cycle .

PO 3 :Textile and clothing (clothing construction) To impart skills of basic clothing construction embroidery and entrepreneurship in the filled of textile and clothing.

PO 4 :Textile and clothing(garment designing an painting) To impart knowledge and skills of design and painting , knitting wardrobe planning and selection of fabric as per situation .

PO 5 : Development (late childhood and adolescent) to understand factors of personality development and importance of discipline to be inculcated in children for their development.

PO 6 :Food and Nutrition To understand human GIT and digestion of micronutrients and meal planning for different age group depending on nutritional needs.

PO 7 :Marriage and family dynamics To understand marriage dynamics marital adjustments and lows related to women

PO 8 :Housing and interior decoration To acquire knowledge of interior decoration landscape designing for improving quality of life .

PO 9 : Fundamental of arts and design To develop skills of various art themes and use of color harmony flower arrangement in day to day life.

PO 10 :Communication process in home science To understand and improve communication skills for various extension activity in the field of home science

BA Home science program special Course (PSO)

After successfully BA Home science program students able to

PSO 1: With the knowledge of nutrition human development and basic fundamental of arts a well disciplined and well informed home care will be available in the society .

PSO 2: These will be asset for the society because they will be able to perform community building

PSO 3: Aptitude for entrepreneurship will be developed.

Course outcome (PO)

After successfully completing the course of family resource management the studies will

CO 1: Understand various resource like money time et cetera

CO 2 : They will understand the process of management factors affecting it and how to work within less time and with less fatigue

CO 3 : How to make budget and what is saving and investment .

After completing the course of food and nutrition successfully students will .

CO 1 : Understand the basic concept of food definition of balanced diet function of food .

CO 2 : Get acquaintance with nutritional significance of all food groups .

CO 3 : Definition of nutrition recommended dietary allowance and malnutrition

CO 4 : understand difference between macro and micro nutrients their basic classification and use

After successfully completing the course of human development first part parental development and early childhood development students will

CO 1 : Understand the scope of human development in broader spectrum

CO 2: Importance of parental development for healthy new generation

CO 3 : Infancy till early childhood various milestones of development in details

CO 4 : Child rearing practices their effect on behavioral problems during all these stages of family life cycles .

After completing the course of textile and clothing successfully students will

CO 1 : Be able to understand fabrics their choices

CO 2 : Get basic knowledge about basic clothing constructions

CO 3 : Develop skills in clothing construction and embroidery

CO4 : Encourage attitude towards entrepreneurship

BA II YEAR

After successfully completing the course of extension education students will be able to

CO 1 : Understand the importance and the need of addressing social issues

CO 2 : Get know about definition of extension education various methods of extension education and models is used for it

CO 3 : Understand the role of community in the social development functions of NGO universities and rural development department for community building

CO 4 : Can visualize social problems like unemployment poor health sanitation et cetera and method to address it

After completing the course of textile and textile and clothing garments designing and printing successfully students will

CO 1 : Know about various dyes used for painting printing and methods of dyeing

CO 2 : how to manage clothing various factors affecting clothing management

CO 3 : Care of household to clothing renovation of the garments storage of clothes

CO 4 : This course will make students capable of understanding clothing part of their life to improve their living .

After successfully completing the course of child development late childhood and adult sent students will be able to

CO 1 : Define late childhood and adolescence , milestones of these two important stage of life cycle

CO 2: Get understanding of parent and child relationship and its effect on personality development also role of discipline rewards and punishment in personality development

CO 3 : Learn about development task of adolescence their thoughts interest and relationship with parents see you three

CO 4 : Problem of adults in family and school and behavioral problems juvenile delinquency etc

After successfully completing the course of food and nutrition students will

CO 1 : Gain knowledge about human gastro intestinal tract and function of the same

CO 2 : Learn digestion absorption and utilization of macronutrient ,role of BMR and endocrine glands

CO 3 : Understand importance of meal planning for different age groups, breastfeeding weaning & weaning foods

CO 4 : Study methods of food preservation role of preservatives

CO 5 : Will learn about what are various food toxins , importance of food hygiene and how to prevent food adulteration

CO 6 : Various food laws and consumer laws

BA III YEAR

After successfully completing the course of marriage and family dynamics the students become aware about

CO 1 : Definition and types of marriages advantage of marriages and readiness for marriage

CO 2 : Role of family , types of family , families with problems understanding surrogacy , role of husband and wife and various stages of family life cycle

CO 3 : What are various edge adjustment to be done in family family crisis and parenthood

CO 4 : Various laws related with women and marriage like Hindu marriage act special marriage act , PCPNDT act dowry child marriage and sexual harassment acts

CO 5 : Also become aware about various methods of counselling and its output

Students have successfully complete the course of housing and interior decoration become well versed with

CO 1 : Principal of house planning interior planning floor plans vastu shastra housing loans rule of banks and LIC and other financial corporations

CO 2: Understand importance of lighting and ventilation in housing . role of lighting in the house

CO 3: Basic selection and principal of furniture arrangement with respect to every room . role furniture in housing .

CO 4 : Importance of role of rugs curtains and carpets in home furnishing and factors affecting its selections

Students who successfully complete the course of nutritional management in health and diseases become aware about

CO 1: Diet therapy role of dietician health and nutrition dimensions and definitions and understanding of dietary patterns of different regions and communities

CO 2: Concept of food habits and various factors affecting it

CO 3: Principal of diet therapy modification of normal diet in consistency , texture and nutrients

CO 4: Get basic understanding and knowledge about common ailments like diarrhea , constipation , jaundice , fever and overweight – underweight

Students who successfully complete the course of community nutrition get knowledge about

CO 1: Concepts and scope of community nutrition in public health sector . causes and symptoms of protein , energy , malnutrition ,iron deficiency anemia ,iodine deficiency and the fluorosis

CO 2: Importance of nutrition education and method of evaluation of nutrition education programs

CO 3: Various national nutritional programs like ICDS ,MDM a prophylaxis program roles of various organization like ICMR , ICAR ,NIN CFTRI . Importance of international organization like FAO, WHO, UNICEF and CARE

CO 4: Assessment of nutritional status using various methodologies like anthropometry diet, survey , clinical assessment and biochemical methods .

Students who successfully complete the course of fundamental of arts and design good knowledge about

CO 1: Design its definition elements of arts and design and principal of art

CO 2: Dimension of colour its classification and understanding of colour wheel

CO 3: What are the different types of colour schemes and their utility for every room

CO 4: Importance of flower arrangement its history, various arrangement. various types of flower arrangement and use of arts principal in flower arrangement importance of accessories for the same

CO 5: Floor decoration cultural importance of rangoli types of rangoli

CO 6: Understanding of above aspects develop good personality and overall capabilities in the girls or students who study home science course

Students who successfully complete the course of human development and old age will get knowledge about

CO 1: Stage of adulthood development task of age between 18 to 40 years. vocational adjustment achievements and changes in the interest

CO 2: Menopausal symptom achievements during the age group of 40 to 60 years. mental changes during this age

CO 3 : Changes in the motor and mental abilities during late adulthood that is geriatric changes .physical changes and adjustment to these changes

CO 4: Adjustment post retirement, agencies working for elderly. changes in their spouse relationship as well as offspring relationship

Students who complete the course of communication process in the home science will get well versed with

CO 1 : Nature scope and function of communication , principal of communication and understand the important and use of ICT in communication

CO 2: Understand the communication process models rule five an important he is communication

CO 3 : Methods of communication that is interview et cetera role play demonstration mass communication and important methods in communication in the subject in home science

CO 4: Understand the leadership its importance, characteristics and qualities of good leader

CO 5: Role of leadership in development of community

CO 6: Get knowledge about how to prepared audio visual late for effective communication.

16. M.A. HOME SCIENCE PROGRAMME

Home science MA Program outcome

After successfully completing this program with the knowledge achieved one

PO 1: Skills are developed in dress designing

PO 2: Research aptitude is developed and can plan, design & conduct research project in various areas of community science.

MA Home science Program special outcome

PSO 1: Research aptitude and vision for research in the field of community science will be among developed amongst students.

PSO 2: Take proper approach for developing additional skills in method health counselling & diet counselling.

PSO 3: Skill based entrepreneurship angle is developed to make them self sufficient

MA Home science Course outcome

Human Development

Students when successfully complete this course of human development

CO1: will get knowledge about early childhood its milestones theories and overall development of this age group of human life cycles

CO2 :Understand role of nursery school teacher parents and community their responsibilities and importance of interaction

CO3 : How to start and what are the requisites of ECCE (nursery)its administration building and functioning

CO 4: Supervise or run nurseries of their own

CO 5: five students of this program RS it for Anganwadi Centre Balewadi's which are run privately or under Department of women and child development

Research Methods and Statistics

Students have successfully complete the course research methods and statistics will

CO1: gain knowledge about research design in the area of community science

CO 2 : are able to Identify research problem formulate a problem and finally presenting the information through scientific report

CO 3: learn methods of conducting research and testing validity and reliability of the hypothesis improve their skills in research

CO 4: can conduct research systematically and independently

Communication System and Computer Applications

Students when successfully complete the course communication system and computer application

CO1 will know about communication system and learn about this technology and its utility in education

CO2 :understand basics of computer And use these things for better communication

CO3: get acquainted with mass media website et cetera so that application of PPT /graph /etc can be done in report writing

Students who successfully pass the course of textiles and clothing constructions will

CO1: will get perfection in body measurement and attain techniques of cutting drafting and stitching

CO2: can address figure irregularities call

CO3: call will gain enough knowledge in traditional textiles and embroidery

CO4 :understand fashion trends and able to utilise all skills in textiles and clothing

CO5 Develop inclination towards entrepreneurship in this sector

Human Development

Students who successfully complete the course of human development

CO1: call able to understand needs of the differently abled children

CO 2 can do child guidance And counselling

CO 3: They become sensitised person in the society towards disable children

Advance Nutrition

Students who successfully complete the course of advance nutrition will

CO 1: Understand the basics of macro nutrients and energy metabolism

CO2: Concepts of energy metabolism are cleared that helps students to decide energy content and requirement for human being

CO3: are able to prepare food preservation products like jam jelly ketchup

Mental Health and Counselling

After completing the course mental health and counselling successfully the students will be able to

CO1 :understand the concept of mental health and various policies and programmes of mental health

CO 2 :learn about counselling and various techniques of counselling also securing information from a person to be counselled

CO3: understands the importance of record-keeping in counselling and various applications of counselling

CO4 :Develop an ability to counsel the mental health patients

Students who successfully complete the course of clinical and therapeutic nutrition are

CO1: well acquainted with the functions of dieticians and doctors and their interrelationship

CO2: correlation and interaction between drugs and nutrients is well understood so that when students are addressing any health issues they are well-versed with it

CO3: importance of herbal medicines their utility is well understood and can be practised in regular daily life

CO 4: understanding of human physiology and various diseases occurring in human body their treatment and importance of various foods with specific diseases to overcome is well understood by student That will improve routine life of families in general and individual in particular so that social improvement can be achieved

Extension and Community Health Management

After successfully completing the course of extension and community health management the students will be able to

CO1: understand sustainable development and importance of peoples participation in community program

CO2: importance of micro finance and financial sustainability with special reference to self-help group

CO 3: concept of extension X education and extending the knowledge to the society and various processes of extension management

CO4: community health and disaster management makes them understand social issues and addressing the same

Women Empowerment and Communication System

Students who successfully complete the course of woman empowerment and communication system will

CO1 :Understand basic concepts of development human development index gender empowerment poverty index et cetera

CO2: after knowing basics students will get to know how to apply the knowledge about policies for women by utilising them for woman empowerment

CO3 :mass media communication can be used for women empowerment and upliftment

CO4: students can become an important part of the society to address the issues of vulnerable section of the society

Women and Welfare

Students who successfully complete the course of women and welfare will

CO1: Get basic knowledge of woman welfare schemes and child welfare schemes national international and state policies

CO2: also they get acquainted with different agencies working for the same in Maharashtra and in India

CO3: they also get sufficient knowledge about various NGOs World Bank's working for the welfare of the women and children

CO4: they Learn about all programmes related to old age homes

CO5 :Become well informed about various aspects in child and women welfare

CO6: Material base is prepared for various exams related to women and child development department .

CO7: overall a very good personality is developed because of well awareness of this important social aspect

Advanced Resource Management

.After completing the course of advanced resource management successfully students will be able to

CO1 :manage their time and energy successfully so that punctuality and energy saving is applied in their day to day living

CO2 :management of foods and clothing and simplification of the work is well understood and are capable of implementing it.

CO3 :Learning about event management make them able to perform this activity privately as an entrepreneur

III. Faculty of Science

17. B.Sc BOTANY PROGRAMME

DEPARTMENT OF BOTANY PROGRAMME: B.SC.
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<p>Statements of programme Specific Outcomes (PSOs)</p> <p>By the end of this course, the students will be able to:</p> <ol style="list-style-type: none"> 1.Understand the Classification of Plant 2.Understand the basic concepts of lower group plants 3. Identify the bacteria, viruses and plant pathogen. 4.Understand the basic concept of morphology of higher groups. 5.Understand the evolution, Classification, anatomical details of higher plants. 6. Understand the application of cytology, genetics, molecular biology in plant breeding. 7.Analyze metabolic activities and physiology of plants. 8.Understand the basic concepts of ecology. 9.Perform the procedure of laboratory technique in biochemistry, physiology and utilization of plants. 10.Able to classify, identify and describe any angiospermic plant to generic level. 11.Develop basic skills in Botany so that students can innovate using scientific methodology
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<p>Statements of course outcomes (COs)</p> <p><i>B.Sc.Course: SEM-I</i></p> <p><i>Paper -I (Diversity of Cryptogams-I)</i></p> <p>Course Outcomes: By the end of this course, the students will be able to:</p> <ol style="list-style-type: none"> 1.Understand the basic concept of virus, bacteria and mycoplasma. 2.Explain types of bacteria, viruses and their economic importance.

3. Describe Classification and general characteristic and economic importance of Algae and Fungi.
4. Analyse life cycle of Algae and Fungi
5. Differentiated between Algae and Fungi.

Statements of course outcomes (COs)

B.Sc.Course: SEM-I

Paper -II (Morphology of Angiosperm)

Course outcomes: By the end of this course, the students will be able to:

1. Explain basic body plan of flowering plant and diversity of plant forms.
2. Explain the morphology of vegetative organs and reproductive organs of angiospermic plants.
3. Compare the types of inflorescence and fruits.
4. Describe the parts of flower.
5. Describe vegetative and floral parts in scientific language.
6. Identify types of root, stem, leaves and flowers.
7. Explain types of fruit and seed dispersal

B.Sc.Course: SEM-I

Paper-III (Practical based on theory paper I&II)

Course Outcomes: By the end of this course, the students will be able to:

1. Understand principle, working and precaution of handling compound microscope.
2. Understand the basic technique in lab e.g. Slide preparation and Section cutting and Staining procedures.
3. Identify bacteria, cyanobacteria, algae and fungi.
4. Comparative study of lower and higher plants.
5. Identify various Plant specimen
6. Understand and Identify the morphological characters of plants in natural environment.
7. Identify types of roots, stem, leaves, inflorescence, flower and fruits in the field visit.
8. Describe vegetative and floral parts of angiospermic plant in scientific language.

B.Sc.Course: SEM-II
Paper-IV (Diversity of Cryptogams-II)

Course Outcomes: By the end of this course, the students will be able to:

- 1.Understand general characters of Bryophytes and Pteridophytes
- 2.Explain the classify Bryophytes and Pteridophyta.
3. Describe the economic importance of bryophytes and pteridophytes.
- 4.Discuss the alternation of generation of bryophyta and pteridophyta.
5. Identify bryophytes and pteridophytes in natural habitat to generic level.

B.Sc.Course: SEM-II
Paper -V (Histology, Anatomy and Embryology)

Course Outcomes: By the end of this course, the students will be able to:

- 1.Understand various types of permanent tissues and meristematic tissues.
- 2.Understand anatomical details of parts of Dicot and Monocot plants.
3. Explain sporogenesis in angiosperm and Pollination mechanism.
4. Understand double fertilization and its significance
- 5.Explain development of embryo, endosperm and seed.

B.Sc.Course: SEM-II
Paper-VI (Practical based on theory paper IV&V)

Course Outcomes: By the end of this course, the students will be able to:

1. Understand the basic technique in lab e.g. Slide preparation and Section cutting and staining technique of bryophyte and pteridophyte

2. Understand and identify the bryophyte and pteridophytic plant to generic level.

3. Identify the anatomy of plants material by making temporary mount.

4. Prepare temporary, stained hand sections (TS and LS) of plant specimens for light microscopic studies

5. Classify the meristematic and permanent tissue based on origin and position.

2. Compare the different types of tissue.

3. Understand primary, secondary and anatomical structure of plant parts.

4. Understand the various types of pollination mechanism.

5. Explain the types of ovules.

6. Students will understand double staining technique.

B.Sc.Course: SEM-III

Paper -VII (Taxonomy of Angiosperms)

Course Outcomes: By the end of this course, the students will be able to:

1. Acquire the basic knowledge of taxonomy.

2. Discuss the principal of botanical nomenclature.

3. Criticize the various systems of classification of angiosperms.

4. Justify the merits and demerits of systems of classification.

5. Describe general taxonomic rule of plant classification.

6. Identify and classify local flora.

7. Prepare herbarium.

8. Analyze the floral formula of monocot and dicot families.

B.Sc.Course: SEM-III

Paper -VIII(Plant Ecology)

Course Outcomes: By the end of this course, the students will be able to:

1. Understand the effect of climatic factors and Edaphic factors on vegetation.
2. Compare various adaptations in hydrophytes, xerophytes, halophytes and epiphytes.
3. Compare the various Phytogeographic regions of India.
4. Describe the types of ecosystem.
5. Understand food chain, food web and ecological pyramids.
6. **Explain Community ecology**

1.

***B.Sc.Course: SEM-III Practical
Paper- IX (Taxonomy of Angiosperms Based on Paper- VII)***

Course Outcomes: By the end of this course, the students will be able to:

1. Study locally available plants of various families of Angiosperm
2. Describe plants in botanical terminology
3. Dissect out the flower
4. Explain floral formula and floral diagram of various angiospermic plant
5. Identify and Classify various plants from angiosperm
6. Conduct field surveys to identify and collect plant specimens to appreciate the diversity of plant kingdom.
7. Submit a field report with necessary diagrams / photographs, preserved specimens (in bottles and/or herbarium) belonging to diverse groups

B.Sc.Course: SEM-III Practical

Paper- X (Plant Ecology Based on Paper –VIII)

Course Outcomes: By the end of this course, the students will be able to:

1. Describe morphological and anatomical adaptations in hydrophytes, Xerophytes, epiphytes and halophytes.
2. Compare different types of soil.
3. Measure the water holding capacity of different soil samples.
4. Perform various ecological experiments
5. Use meteorological instruments
6. Determine percent leaf area injury of different infected leaf samples

B.Sc.Course: SEM-IV

Paper – XI (Gymnosperms and Utilization of Plants)

Course Outcomes: By the end of this course, the students will be able to:

1. Understand the palaeobotany and geological time scale.
2. Identify the different type of fossils.
3. Understand the process of fossilization.
4. Understand salient features, classification and economic importance of gymnosperms.
5. Explain Domestication of plants and their centres of origin.
6. Understand various plants and their utilization.
7. Study the plants of ethnobotanical importance.

B.Sc.Course: SEM-IV

Paper -XII (Plant Physiology)

Course Outcomes: By the end of this course, the students will be able to:

1. Understand plant water relation, Mineral nutrition and **Translocation of solutes.**
2. Describe the basics of enzymes.
3. Describe the plant growth and its growth regulators.

4. Explain the various steps of respiration
5. Explain the various reaction taking place during photosynthesis.

B.Sc.Course: SEM-IV Practical

Paper -XIII (Gymnosperms and Utilization of plants Based on paper no - XI)

Course Outcomes: By the end of this course, the students will be able to:

1. Describe Morphology and anatomy and reproduction of Cycas, Pinus and Gnetum.
2. Explain Types of fossils
3. Perform Histochemical test of food storing tissue, lignin and cellulose.
4. Cultivate of Oyster (*Pleurotus*) mushroom
5. Explain sources of Timber, Gum, Medicinal plants, Cosmetics and Perfumes.
6. Understand spices and their uses.

B.Sc.Course: SEM-IV Practical

Paper- XIV (Plant Physiology Based on paper no. -XII)

Course Outcomes: By the end of this course, the students will be able to:

1. Perform Osmosis and Plasmolysis in *Tradescantia* leaves.
2. Perform experiments on enzyme activity
3. Perform experiments of effect of light, its intensity and colour on photosynthesis
4. Separate chloroplast pigments by paper chromatography
5. Isolate starch and pectin.
6. Explain Effect of IAA and Gibberellins on seed germination.

B.Sc.Course: SEM-V

Paper XV (Cell Biology & Molecular Biology)

Course Outcomes: By the end of this course, the students will be able to:

1. Differentiate between Structure of Prokaryotic cell and Eukaryotic cell
2. Describe the structure of plant cell and its organelles.
3. Analyse the morphology of chromosome organization.
4. Explain the plant cell-division and its significance.
5. Explain the structure of DNA and RNA
6. Describe Structure of Chromosome, Functions of chromosome,
7. Describe Giant chromosomes-polytene and lampbrush chromosome.
8. Explain Chromosomal aberrations

***B.Sc.Course: SEM-V
Paper XVI (A)(Diversity of Angiosperms-I)***

Course Outcomes: By the end of this course, the students will be able to:

1. Explain the concept of Biodiversity
2. Describe types of Biodiversity
3. Understand Conservation of biodiversity
4. Understand Phytotaxonomy: Classification of Angiosperms
5. Study of diversity of families with reference to the system of classification of Bentham and Hooker

***B.Sc.Course: SEM-V Practical
Paper XVII (Cell Biology & Molecular Biology)***

Course Outcomes: By the end of this course, the students will be able to:

1. Study of the cell structure from onion leaf
2. Prepare cytological fixatives and stains
3. Understand electron micrographs of Prokaryotic and Eukaryotic cell and various cell organelles
4. Prepare slides for the study of mitosis and meiosis
5. Prepare idiogram from the given micrograph of karyotype
6. Prepare wool models of mitosis, meiosis, cell structure,

Chromosome, DNA and RNA.

***B.Sc.Course: SEM-V Practical
Paper XVIII (A) (Diversity of Angiosperms-I)***

Course Outcomes: By the end of this course, the students will be able to:

1. Study herbarium and analytical characters
2. Prepare of indented and bracketed keys
3. Describe various parts of flower, floral formula and floral diagram
4. Mount pollen grains (acetolysis method)
5. Submit list and photographs of wild plants from ecologically different areas

***B.Sc.Course: SEM-VI
Paper XIX (Genetics and Biotechnology)***

Course Outcomes: By the end of this course, the students will be able to:

1. Explain Mendelism
2. Explain various laws of Mendel
3. Describe Interaction of genes and can solve problems of genetics
4. Describe Chromosomal theory of sex determination
5. Understand Sex linked inheritance and Structure and function of gene
6. Concept of genetic engineering and recombinant DNA technology
7. Application of genetic engineering

***B.Sc.Course: SEM-VI
Paper XX (A)(Diversity of Angiosperms-II)***

Course Outcomes: By the end of this course, the students will be able to:

1. Understand Plant identification: keys, herbaria and botanical gardens
2. Understand Origin of angiosperms, Binomial nomenclature,
3. Understand Modern trends in taxonomy: Cytotaxonomy, chemotaxonomy, and numerical taxonomy
4. Understand Engler & Prantle, Hutchinson, Takhtajan system of classification
5. Describe plants from various families of angiosperms

***B.Sc.Course: SEM-VI Practical
Paper XXI (Genetics and Biotechnology)***

Course Outcomes: By the end of this course, the students will be able to:

1. Work out laws of inheritance by using seed mixtures
2. Solve Problems based on gene interaction
3. Solve Problems based on sex linked inheritance

***B.Sc.Course: SEM-VI Practical
Paper XXII (A) (Diversity of Angiosperms-II)***

Course Outcomes: By the end of this course, the students will be able to:

1. Describe plants from various families and write floral formula and floral diagrams
2. Mount pollen grains (acetolysis method) and measurement of pollen size.
3. Study different types of stomata and epidermal structures(Trichome)
4. Identify plants up to species by using flora
5. Submit list and photographs of wild plants from ecologically different areas



18. B.Sc MICROBIOLOGY PROGRAMME

B.SC.Microbiology

Program Outcome Course Outcome

Prgramm outcome of B.Sc Microbiology			
PO1	Microbiology is an advanced branch of biology science, students completing this course will get acquainted with advancement in various fields of biological science		
PO2	This program of B.Sc Microbiology nourish and develop students with keen knowledge of Medical science, environmental science, industrial field, agriculture science.		
PO3	This program is skill based course where student acquired practical knowledge from fundamental to advanced branches of Microbiology.		
PO4	Wide carrier opportunities are these for students; viz higher education and research, other supportive clinical courses and job opportunities in academics, research institutes and industries like food, pharma, breverage etc.		
PO5	This course also supports students to develop them as entrepreneur		
Course outcome			
Paper no	Paper name	Course outcome	
Paper I	Fundamentals of Microbiology	<ul style="list-style-type: none"> Students will get acquainted historical development in microbiology w. r t. significant role of microorganism in various field as well as development of microscope to observe the microorganisms. Students can understand the diversity and taxonomy of various microorganisms like bacteria, fungi, actinomycetes etc. 	
Paper II	Microbiological Techniques & General Microbiology	<ul style="list-style-type: none"> This course will give knowledge regarding concept of cultivation , isolation and observation using various staining techniques. The knowledge will be provided to students regarding beneficiary and harmful role of microorganism 	
Paper III	Practical	<ul style="list-style-type: none"> Students will get trained in handling basic laboratory instruments and various methods of staining to study the microorganisms 	

Paper IV	Cytology and general Microbiology	<ul style="list-style-type: none"> ● This course will provide structural organization and functional properties of bacteria.
Paper V	Basic Biochemistry	<ul style="list-style-type: none"> ● Basic biochemistry enlighten on role and structures of various important biomolecules in the cell.
Paper VI	Practical	<ul style="list-style-type: none"> ● Students will develop practical skills in various isolation techniques to isolate microorganisms from various sources
Paper VII	Environmental Microbiology	<ul style="list-style-type: none"> ● This course provide information regarding role of microorganisms in balancing ecosystem and environment and controlling pollution.
Paper VIII	Immunology	<ul style="list-style-type: none"> ● This course is branch of medical science which will inform student regarding infection/ diseases and various types of defence mechanisms to fight against disease causing pathogens
Paper IX	Practical	<ul style="list-style-type: none"> ● Students will get trained in analysis of drinking water w.r.t. its portability as well as testing the faecal contamination and waste water analysis to avoid pollution of various water reservoirs
Paper X	Practical	<ul style="list-style-type: none"> ● This course teach students to study various pathogens using differential and selective medium ● Training is provided to students in learning various serological test for diagnosis of diseases
Paper XI	Applied Microbiology	<ul style="list-style-type: none"> ● This course is applied branch which give emphasis on role of microorganisms in manufacturing of food and dairy products as well as significant role of microorganisms in spoilage of food and development of food infection and intoxication.
Paper XII	Clinical Microbiology	<ul style="list-style-type: none"> ● Clinical Microbiology will explain in depth the infection, pathogenesis, prophylaxis and treatment of various human diseases caused by bacteria and viruses
Paper XIII	Practical	<ul style="list-style-type: none"> ● Students perform the techniques to test the fertility of soil, bacteriological

		analysis of milk, food infection and food spoilage.
Paper XIV	Practical	<ul style="list-style-type: none"> ● In clinical microbiology practical students learn the techniques of isolation and identification based on biochemical and serological properties
Paper XV	Microbial Genetics	<ul style="list-style-type: none"> ● Intension of this course to teach the students the organization of genome/DNA and their functional properties, mutations and recombination
Paper XVI	Microbial Metabolism	<ul style="list-style-type: none"> ● This course will provide the knowledge the properties and role of various enzyme in catabolic and anabolic processes regarding generation and utilization of energy
Paper XVII	Practical	<ul style="list-style-type: none"> ● Student will learn the molecular biology techniques in isolation and profiling of DNA/ RNA/ Plasmids
Paper XVIII	Practical	<ul style="list-style-type: none"> ● This practical course teach the students various techniques to detect activities of various enzyme and the kinetics
Paper XIX	Recombinant DNA Technology	<ul style="list-style-type: none"> ● This course will provide information regarding in-vitro manipulation of DNA and production of various recombinant molecules by genetic engineering and their role in agriculture, human health, environment etc.
Paper XX	Industrial Microbiology	<ul style="list-style-type: none"> ● This is value added course which provide knowledge of manufacturing processes and downstream processes of industrially important bio-products viz. enzymes, antibiotic, alcohols etc.
Paper XXI	Practical	<ul style="list-style-type: none"> ● Students develop practical knowledge of various techniques of isolation, separation and detection of DNA and RNA from microbial cells.
Paper XXII	Practical	<ul style="list-style-type: none"> ● Students develop practical knowledge of various techniques of fermentation, separation and detection purification of industrially important microbial products like organic acid, antibiotic, enzymes etc.

19. B.Sc ZOOLOGY PROGRAMME

DEPARTMENT OF ZOOLOGY PROGRAMME: B.SC.

Statements of programme Specific Outcomes (PSOs)

- By the end of this course, the students will be able to:
- Understand the Classification of Animals
- Understand the basic concepts of lower group of Animals
- Identify the phyla, Class and Animal kingdom.
- Understand the basic concept of morphology of higher groups of Animals.
- Understand the evolution, Classification, anatomical details of animal
- Prepared temporary and permanent slides .
- Staining procedure.
- Understand the basic concepts of ecology.
- Perform the procedure of laboratory technique in biochemistry, and physiology of animals.
- Able to classify, identify and describe any types of animals up to species level.
- Develop basic skills in zoology students can be innovative using scientific methodology.

Statements of course outcomes (COs)

B.Sc.Course: SEM-I Paper -I (Protozoa to Annelida)

Course Outcomes: By the end of this course, the students will be able to understand:

- General characters and classification of Protozoa, Porifera, Helminthes, Annelida.
- Structure and reproduction of Paramoecium, Plasmodium, Sycon, Obelia, Ascaris, Leech

- Life cycle of Plasmodium, Obelia, Ascaris, Taenia solium.
- Parasitic Protozoans of Man- Mode of infection and its control, parasitic adaptations in helminthes.
- Trochophore larva- significance
- Canal system in sponges, corals and coral reef formation, Vermiculture and its importance

Statements of course outcomes (COs)

B.Sc.Course: SEM-I

Paper -II(Cell Biology)

Course outcomes: By the end of this course, the students will be able to understand:

- Explain structure and function of cell.
- Explain the types of cell.
- Compare the different types of prokaryotic and eukaryotic cell.
- Describe the parts of the structure of cell division.
- study of various cell organelles.
- Identify types of E.R.,Nucleus,Golgibodies,.
- Explain structure and function of DNA.
- Explain cytology of cancer,types of cancer.

B.Sc.Course SEM I

Paper III (PRACTICAL :Protozoa to annelida)

Course outcomes: By the end of this course, the students will be able to understand:

- Study of slides:protozoans,ciliates,opalinates & flagellates.
- Study of museum specimen according to phylum.
- Dissection of leech demonsration by chart.
- Preparation of temporary or permanant slides by staining procedure.

B.Sc. Course:SEM I

Paper IV (Practical based on paper II(Cell Biology)

Course outcomes: By the end of this course, the students will be able to understand:

- Student understand the cell organells.
- Nucleus,Golgibodies,Mitochondria,
- Electron microscope.
- Cell division:mitosis and meiosis.
- Microtechniques.
- Block preparation of tissue.Staining procedure.
- Study of simple microscope,compound microscope,
- Phase contrast microscope.

B.Sc.Course: SEM-II
Paper -V (Arthropoda to Echinodermata.)

Course Outcomes: By the end of this course, the students will be able to understand:

- General characters and classification up to classes: Arthropoda, Mollusca, Echinodermata, Hemichordata.
- Study the Morphology and anatomy of Cockroach , Pila, Asterias, Balanoglossus.
- Study the larval forms -crustacea, Mollusca, Echinoderms. Affinities of Balanoglossus.

B.Sc.Course: SEM-II
Paper-VI (Genetics)

Course Outcomes: By the end of this course, the students will be able to understand: Mendelian Principles& laws.

- Interaction of genes, quantitative genetics & extra nuclear genome .
- Cytoplasmic inheritance, Linkage and crossing over.
- Concepts of genes & Genetic disorders in human.
- Sex determination.
- Gene mutations & Lethal genes.
- Population genetics, Genetic counseling & Applied genetics.

B.Sc.Course: SEM-II
Paper -VII PRACTICAL(Arthropoda to Echinodermata and Protochordata.)

Course Outcomes: By the end of this course, the students will be able to:

- Identify, classify and distinguish the characters and adaptive features of animals from Urochordata , Cephalochordata, Cyclostomata , Pisces & Amphibia.
- Describe Digestive system ,Reproductive system &Brain of locally available culturable Fish.
- Explain the histology of Amphioxus and embryology of Frog from the permanent slides .
- Prepare the permanent stained slide

B.Sc.Course: SEM-II
Paper -VIII (Practical -Genetics I)

Course Outcomes: By the end of this course, the students will be able to understand:

- Culture of *Drosophila*- experimental organism in genetics
- Observation of common mutant of *drosophila*.
- Determination of human blood groups A, B, AB, and O, Rh factor.
- Minor problems based on monohybrid ratio & human blood group and its interpretation.
- Major problems based on dihybrid ratio & interaction of genes. Study of chromosomal aberration

B.Sc. Course -SEM III

Paper IX (Vertebrate Zoology)

Course Outcomes: By the end of this course, the students will be able to understand:

- Classification of animals up to the class.
- Class: Agnatha, Pisces, Amphibia, Reptilia, Aves, Mammalia.
- General characters of Cyclostomata.
- Development of Frog.
- Neoteny, parental care in amphibia.
- Calotes: external features, respiratory and blood vascular system.
- Embryology of chick.
- Migration in birds, flight adaptation in birds.
- Placentation in mammals.

B.Sc. Course -SEM III

Paper X (Genetics II)

Course Outcomes: By the end of this course, the students will be able to understand:

- Structure of DNA
- DNA model .
- Protein synthesis.
- Estimation of DNA.
- Preparation of normal Karyotype.
- Detect Barr bodies from epithelial cell.
- Genetics problem for sex linked inheritance.
- Study of mutants of man.

B.Sc. Course :SEM III

Paper XI -PRACTICAL- (Vertebrate Zoology)

Course Outcomes: By the end of this course, the students will be able to understand:

- Museum specimen according to class.
- Dissection of *Scoliodon* demonstration by charts.
- Cranial nerves of *scoliodon*.
- Dissection of rat demonstration by charts.

- Preparation of permanent slides: placoid, cycloid and ctenoid scales of fish.
- Embryological development of chick slides.

***B.Sc.Course: SEM-III Practical
Paper- XII PRACTICAL (Genetics II)***

Course Outcomes: By the end of this course, the students will be able to:

- Understand monohybrid and dihybrid ratio.
- Genetic problem of dihybrid ratio.
- Study of normal human karyotype (Normal male and female)
- Study characters and karyotypes of Syndromes.
- Study the genetic traits .

***B.Sc.Course: SEM-IV
Paper -XIII (Animal Physiology)***

Course Outcomes: By the end of this course, the students will be able to understand:

- Importance of vitamins & Enzymes-biocatalyst,
- Glands and hormones associated with digestion.
- Explain the physiology of digestion , respiration, circulation
- Blood pressure, E.C.G. & working of Heart.
- Composition of blood, respiratory pigments in mammals.
- Detect the action of salivary amylase on starch.
- Detect the presence of carbohydrates, proteins, Lipids, Vitamin A and Vitamin C in given sample.
- Prepare slide of Haemin crystal.
- Total WBC and RBC count from blood.

***B.Sc.Course: SEM-IV
Paper -XIV (Biochemistry and Endocrinology)***

Course Outcomes: By the end of this course, the students will be able to:

- Understand Different types of Enzymes.& enzyme action.
- Understand Different types of Proteins & Lipids.
- Understand Different types of carbohydrates.
- Understand metabolism of glucogeneses.
- Understand Endocrine system of vertebrates.
- Understand endocrine glands: Pituitary, adrenal, thyroid, pancreas & its functions.

B.SC .COURSE SEM -IV
Paper XV (PRACTICAL) (Animal Physiology)

Course Outcomes: By the end of this course, the students will be able to understand:

- Digestive enzymes from cockroach/Human Saliva.
- Total count of RBC /WBC from given blood sample.
- Hb% from given blood sample.
- Estimation of O₂ consumed by fish in relation to temperature by O₂ Wrinkle's method.

B.Sc.Course :SEM -IV
Paper XVI (PRACTICAL)(BIOCHEMISTRY AND ENDOCRINOLOGY

Course Outcomes: By the end of this course, the students will be able to understand:

- Study of analytical instrument principle and applications.
- pH meter, Colorimeter, Centrifuge , Electrophoresis .
- Factors affecting enzymes activity temperature and pH.
- Detection of amino acid by paper chromatography

B.Sc. Course:SEM-V
Paper-XVII- (ECOLOGY)

- Course Outcomes: By the end of this course, the students will be able to understand:
- Basic concept of ecology.
- Abiotic & Biotic factors of environment.
- Population: population growth, population regulation.
- Community: Structure of community, producer, consumer and decomposers.
- Ecosystem: components of ecosystem, dynamics of ecosystem.
- Marine ecosystem, pond ecosystem, forest & desert ecosystem.

B.Sc.Course: SEM-V
Paper- XVIII (C) - (ENTOMOLOGY-I)

Course Outcomes: By the end of this course, the students will be able to understand:

- Introduction to entomology.
- Methods of collection and preservation of insect.
- Type study of grasshopper.
- Insect –orders (general characters) Thysanura ,Collembella, Lepidoptera, Diptera ,Coeloptera ,Hymenoptera.
- House hold and Human insect pest:-
- Bed bugs, Mosquito, Rat Flea, and House fly, Cockroach, Pediculus.

- Insect Culture (gross study)
- Apiculture, Sericulture and lac culture.

***B.Sc.Course: SEM-V Practical
Paper-XVI -ECOLOGY (PRACTICAL)***

Course Outcomes: By the end of this course, the students will be able to understand:

Estimation of productivity of pond ecosystem using white and dark bottle method.

- Determine the following parameters of soil.
- pH Alkalinity , Chlorinity ,Salinity
- Analysis of DO, CO₂, Salinity, Chlorinity of water sample.
- Study of animal association ship with example (Charts) –
- Competition, mutualism, parasitism, predation and commensalisms.

***B.Sc.Course: SEM-V Practical
Paper-XX-C- ENTOMOLOGY -I-(PRACTICAL)***

Course Outcomes: By the end of this course, the students will be able to understand:

- Collection and preservation of insects
- Dissection –grasshopper-Digestive system, Nervous system, Reproductive system.
- Mounting: - Mouth parts of Grasshopper, Mosquito, Housefly, Cockroach.
- Museum study- five Human insect pest and representatives of orders: Lepidoptera, coleopteran, Odoneta, Hymenoptera, Orthoptera, with examples.
- Collection of insects .
- Preservation of insects.
- Spreading of insect on spreading board.
- Drying of insect in cabinet kept in the box.

***B.Sc.Course: SEM-VI
Paper XXI (EVOLUTION)***

Course Outcomes: By the end of this course, the students will be able to understand:

- Concept of organic evolution.
- Definition and concept
- Theories of organic evolution in brief: Preformation theory, Bear's Law, Biogenetic law, catastrophism,
- Lamarckism Darwinism & Germplasm theory.
- Origin of Life :- Definition, Abiogenesis, Biogenesis. Chemical evolution of life.

- Evidences of Organic Evolution :-
- Anatomical evidences.
- Embryological evidences.
- Basic patterns of evolution .
- Species and speciation.
- Fossils :- Definition , fossil formation . Types of fossils.

B.Sc.Course: SEM-VI

Paper XXII- C -(ENTOMOLOGY-II)

Course Outcomes: By the end of this course, the students will be able to understand:

- Introduction to entomology and pest management.
- Understand the pest
- Economical and harmful pest.
- Medicinal, veterinary and agricultural pest.
- Store grain pest.
- Bajra, jowar, wheat, maize, sugarcane, groundnut pest etc.
- How to control the agricultural pest.

B.Sc. Course :SEM VI

Paper XXIII- (EVOLUTION -Practical)

Course Outcomes: By the end of this course, the students will be able to understand:

- Embryological evidences of evolution with the help of slide.
- Adaptive modification in feet of birds.
- Mouth parts of insects.
- Homologous and Analogous organs.
- Study of natural selection using E.coli bacteria against antibiotics.
- Study of geographical era.

B.Sc.Course: SEM-VI

Paper XXIV- C (ENTOMOLOGY-II Practical)

Course Outcomes: By the end of this course, the students will be able to understand:

- How to collect the pest.
- How to identify the pest.
- Beneficial and harmful pest.
- Jowar stem borer, red cotton bug, pyrilla, white grub. These crop pests are studied to control the pest.
- Identify common stored grain pest: Rice weevil, Pulse beetle, Grain moth.
- Study of Plant protection appliances.
- Visit of agriculture field.

20. B.Sc PHYSICS PROGRAMME

Department of Physics

Program Specific Outcome (PSO)

1. To develop scientific attitude and reasoning.
2. To give the importance on development of experimental skills, calculation, measurements & precautions about the experimental method, data and results obtained.
3. To solve problems in the areas of electrodynamics, quantum mechanics, Electrodynamic, classical mechanics, statistical mechanics, mathematical physics, Electricity and magnetism, Atomic & Nuclear

Physics

4. To understand the theories of physics and its relevancy in present day Technology.

Courses:- Mechanics, Atomic molecular Physics, Classical & Quantum mechanics, Mathematical Physics, Solid state physics, Electronics, Electrostatics, Thermodynamics,

Subject	Class	Semester , Paper with title	Course outcomes
Physics			FYB Sc. Semester I
		Paper-I Mechanics, Properties of Matter and Sound	Students will gain knowledge about mechanics, gravitation, Elasticity , moduli of elasticity, Ultrasonic & acoustics'
		Paper –II Heat and Thermodynamics	Students will gain knowledge about Thermal conductivity, Real Gases and Transport Phenomena, Van der Waals equation of state, variation of mean free path with temperature and pressure, Entropy and Thermodynamic relations
		Paper-III Practical	Students will Determine of acceleration due to gravity by Katter's pendulum, will get practical value of Young's modulus by searls apparatus, by bending method. Coefficient of viscosity by poissuellis flow method.
Physics			FYBSc. Semester II
		Paper-IV Geometrical and Physical Optics	Students will get knowledge about Geometrical Optics and Optical Instruments, Cardinal points of optical system, Interference, Diffraction, Polarization.
		Paper-V Electricity and Magnetism	Students will get knowledge about Vector Algebra, physical interpretation, line, surface and volume integrals Electrostatics, Magneto statics, Transient Currents
		Paper-VI Practical	Knowledge about CRO, its calibration and uses.
			Spectrometer, angle of refraction and refractive indices for different colors.
Physics			SYBS c. Semester III

		Paper –VII Mathematical , Statistical Physics and Relativity	Students will get knowledge about Differentiation and ordinary differential equation, Statistical basis and classical statistics, Quantum statics, Theory of relativity
		Paper –VIII Modern and Nuclear Physics	Students will get knowledge about, Photoelectric Effect, X-rays- Main features of continuous X-ray spectrum, Characteristics x-ray spectrum, Nuclear forces and models Nuclear Reactors, Nuclear fusion, Source of stellar energy , Particle Accelerators and Detectors
		Paper –IX & X practical	Practically will find Velocity of sound using Helmholtz resonator, Surface tension by Ferguson’s method.R.P.of Telescope/microscope. Wavelength of light by Newton’s ring
Physics	SYB Sc. Semester IV		
		Paper –XI General Electronics	Students will get knowledge about Semiconductor, Working and Characteristics of semiconductor diode, Transistor Biasing and Amplifiers, Oscillators and Multivibrators, Modulation and demodulation
		Paper –XII Solid State Physics	Students will get knowledge about, Crystal Structure, Bonding and Band theory of solids, Thermal properties of solids, Free electron theory of metals and Transport properties
		Paper – XIII & XIV Practical	Practically Energy band gap of semiconductor, Carry-Foster’s bridge., Viscosity of any liquid by Searle’s viscometer
Physics	TYBSc. Semester V		

		Paper –XV Classical & Quantum Mechanics	Students will get knowledge about, Classical Mechanics, conservation laws , Constraints, Quantum theory its origin, Wave Particle duality, Schrodinger Equation and its applications, Quantization of energy and momentum
		Paper XVI Electrodynamics	Students will get knowledge about Electrostatics, Laplace’s equation, Uniqueness theorem, Time varying field, Origin & Characteristics of electromagnetic waves, Interaction of Electromagnetic waves with matter
		Paper XVII & XVIII practical	Practically Refractive Index of Optical fiber, focal length of convex lens by laser, absorption spectra of iodine.
		Paper XIX Atomic, Molecular Physics & Laser	Students will get knowledge about The Atom model, spectrum of the H-atom, Vector Atom Model, Quantum numbers associated with the vector atom model, Molecular spectra, LASER & its applications
		Paper XX Non-conventional energy sources and Optical fiber	Students will get knowledge about Biomass, wind energy, tidal energy/Ocean energy, Solar Photovoltaic Systems, optical fiber, Fiber cables and fabrication
		Paper XXI & XXII Practical	Wavelength of He-Ne laser by transmission grating, Youngs modulus by Koenig’s method, e/m by excel.

21. B.Sc COMPUTER SCIENCE PROGRAMME

22. B.Sc MATHEMATICS PROGRAMME

Department Of Mathematics B. Sc Mathematics

Program Outcome (PO)

After successfully completing B.Sc. Mathematics Programme students will be able to:

PO1: Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.

PO2: A student should get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning.

PO3: Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.

PO4: Introduction to various courses like group theory, ring theory, field theory, metric spaces, number theory.

PO5: Enhancing students' overall development and to equip them with mathematical modeling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.

PO6: Ability to pursue advanced studies and research in pure and applied mathematical science.

Programme Specific Outcome (PSO)

PSO1: Think in a critical manner.

PSO2: Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.

PSO3: Formulate and develop mathematical arguments in a logical manner.

PSO4: Acquire good knowledge and understanding in advanced areas of mathematics and statistics, chosen by the student from the given courses.

PSO5: Understand, formulate and use quantitative models arising in social science, Business and other contexts.

Course Outcome (CO) - F. Y. B.Sc.

Course Title: - 101 - Differential Calculus

Upon Completion of this course the students will be able to:

CO1: Assimilate the notions of function, limit and continuity of real numbers.

CO2: Understand the notion of derivative and calculate the derivative of hyperbolic and inverse hyperbolic functions.

CO3: Assimilate the notions successive differentiation and its applications.

CO4: Understand the consequences of various mean value theorems for differentiable functions.

CO5: Learn Partial differential equations for homogeneous functions, total differentials, composite and implicit functions.

Course Title: - 102 - Differential Equations

Upon Completion of this course the students will be able to:

CO1: Understand the ordinary differential equations.

CO2: Describe various techniques of getting exact solutions of first order differential equations and linear differential equations with constant coefficients as well as variable coefficients.

CO3: Understand how to find Complementary function and Particular Integral.

CO4: Grasp the concept of partial differential equation and learn some method of finding general solution of it.

Course Title: - 201 - Integral Calculus

Upon Completion of this course the students will be able to:

CO1: Assimilate the notions of integration by means of reduction formulae, repeated/non-repeated linear factors, quadratic factors, trigonometric functions.

CO2: Learn definite integral as a limit of a sum.

CO3: Understand application of integration for area of bounded region.

CO4: : Grasp the concept of length of curves and arcs.

Course Title: - 202 - Geometry

Upon Completion of this course the students will be able to:

CO1: Grasp the concept of system of plane and learn first degree equation in three dimensions.

CO2: Learn equations of right line, line through two points, shortest distance between tow lines.

CO3: Grasp the information about sphere for given four points. Plane section of sphere and equation of tangent plane.

CO4: Discuss the equation of right circular cone, cylinder, central conicoids, intersection of line and a central conicoids.

Course Outcome (CO) - S. Y. B. Sc.

Course Title: - 301 - Number Theory

Upon Completion of this course the students will be able to:

CO1: Learn about some important results in the theory of numbers including the prime number theorem, Division Algorithm, GCD, Euclidean Algorithm, and Diophantine Equation.

CO2 Describe features of Prime numbers and their distributions, Theory of congruences.

CO3: Learn about number theoretic functions, modular arithmetic and their applications.

CO4: Discuss the theories of Fermat's, Little, Chinese remainder, Wilson's and their consequences.

Course Title: - 302 - Integral Transforms

Upon Completion of this course the students will be able to:

CO1: Have understanding regarding different kind of integral transforms.

CO2: Have deep understanding of Laplace Transformation and its real life application.

CO3: Solve initial value problem and boundary value problem using Laplace Transform.

CO4: Understand Fourier transform and its properties and will be able to solve the examples based on it.

CO5: Derive Fourier series representation of Periodic functions.

Course Title: - 303 - Mechanics - I

Upon Completion of this course the students will be able to:

CO1: Understand magnitude, direction of resultant of forces.

CO2: Learn triangle law of forces and Lamie's theorem to find angle between equilibrium of forces.

CO3: Understand vector moments of forces and couple.

CO4: Learn centroid of weighted points and center of gravity of some uniform bodies.

Course Title: - 401 - Numerical Methods

Upon Completion of this course the students will be able to:

CO1: Obtain numerical solutions of algebraic and transcendental equations.

CO2: Find numerical solutions of system of linear equations and check the accuracy of the solutions.

CO3: Learn about various interpolating and extrapolating methods.

CO4: Assimilate the curve fitting and approximations.

CO5: Solution of differential equations by using numerical methods.

CO6: Apply various numerical methods to solve system of linear equations by using.

Course Title: - 402 - Partial Differential Equations

Upon Completion of this course the students will be able to:

CO1: Study formation of linear and non-linear partial differential equations by eliminating arbitrary constants and functions.

CO2: Assimilate Lagrange's partial differential equation and its applications.

CO3: Understand solution of non-linear partial differential equation using special types, Charpit's Method and Jacobi's Method.

CO4: Learn to solve homogeneous and non-homogeneous partial differential equation, Monge's Method and Method of transformations(Canonical forms).

Course Title: - 403 - Mechanics - II

Upon Completion of this course the students will be able to:

CO1: Understand velocity, and acceleration components in the form of tangential, radial and normal components.

CO2: Learn kinetics of particle using Newton's law of motion.

CO3: Assimilate rectilinear motion, motion of projectile, motion of moving body under gravity.

CO4: Learn areal velocity in central body, differential equation of central orbit, pedal equation of any curve.

Course Outcome (CO) - T. Y. B. Sc.

Course Title: - 501 - Analysis-I

Upon Completion of this course the students will be able to:

CO1: Assimilate many properties of the real line \mathbb{R} and learn to define sequence in terms of functions from \mathbb{R} to a subset of \mathbb{R} .

CO2: Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence.

CO3: Apply the ratio, root and alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.

CO4: Understand how to calculate Jacobian of function of functions, Jacobian of implicit variable, necessary and sufficient condition for Jacobian to vanish.

Course Title: - 502 - Abstract Algebra - I

Upon Completion of this course the students will be able to:

CO1: Understand the concept of set relation, equivalence relation by applying different examples to the definition.

CO2: Learn binary operation on the given set gives a group structure by applying the axioms.

CO3: Understand group and ring and their properties.

CO4: Applying the properties of group, subgroup, Normal subgroup, cyclic group, ring, and ideals to prove Theorems.

Course Title: - 503 - Mathematical Statistics - I

Upon Completion of this course the students will be able to:

CO1: Learn frequency distribution, central tendency, mean, mode, median for discrete and continuous data, arithmetic mean, geometric mean and harmonic mean.

CO2: Understand how to calculate measures of dispersion, range, quartile deviation, mean deviation, standard deviation. Learn skewness and Kurtosis.

CO3: Learn theory of probability, mathematical probability, axiomatic approach to probability.

CO4: Assimilate the random variables, distribution function probability mass fraction, probability density fraction

Course Title: - 601 - Analysis-II

Upon Completion of this course the students will be able to:

CO1: Learn limit of function, sequence in metric space, continuous and uniform continuous function on metric space. Identify the continuity of a function defined on metric spaces.

CO2: Assimilate several standard concepts of metric spaces and their properties like openness, closeness, completeness, Bolzano-Weierstrass property, compactness, and connectedness.

CO3: Learn some of the properties of Riemann integrable functions, and the applications of the fundamental theorems of integration.

CO4: Application of Fourier series and its applications in Physics and Electronics.

Course Title: - 602 - Abstract Algebra - II

Upon Completion of this course the students will be able to:

CO1: Understand basic concepts of systems of linear equations, matrix calculus, vectors, and basic vector operations linear independent.

CO2: Recognize and use basic properties of vector spaces and subspaces.

CO3: Determine a basis and the dimension of a finite-dimensional space, linear independent.

CO4: Learn the rank-nullity theorem and its applications.

CO5: Describe features of the concepts of dual spaces and inner product space

CO6: Assimilate the concepts of Module and apply to prove theorem of modules.

Course Title: - 603 - Mathematical Statistics - II

Upon Completion of this course the students will be able to:

CO1: Learn about Mathematical expectation, theory of expectation and covariance.

CO2: Understand Binomial distribution, Poisson distribution, MG-function, Geometric distribution, Lack of memory.

CO3: Learn Uniform distribution, Normal distribution, MGF of normal distribution, Gamma distribution, Exponential distribution.

CO3: Learn Correlation and Regression.

23.B.Sc CHEMISTRY AND POLYMER CHEMISTRY PROGRAMME*Program Specific Outcome (PSO)*

<p>➤ Chemistry is the fundamental study of the structures, properties and reactions of all matter in existence throughout the universe and underpins the central sciences of Biology and Physics.</p>
<p>➤ This program could provide well trained professionals for the plastics and allied industries to meet the well trained manpower requirements</p>
<p>➤ a knowledge and skills base to enable proceeding to graduate employment or to further studies in chemistry or multi-disciplinary areas involving chemistry.</p>
<p>➤ the ability to apply standard methodology to the solution of problems in chemistry</p>
<p>➤ Study of structure, properties, reaction and application of chemical systems.</p>
<p>➤ Study of safety precaution use in chemical laboratories.</p>
<p>➤ Select and apply current techniques, skills, and tools necessary in the chemical laboratory.</p>
<p>➤ Study of basics of Physical chemistry, Inorganic chemistry, Organic chemistry and Analytical chemistry.</p>
<p>➤ Physical chemistry measures the interaction of matter and energy.</p>
<p>➤ Inorganic chemistry studies materials such as metals and their salts</p>
<p>➤ Organic chemistry involves the study of compounds containing primarily carbon</p>
<p>➤ Analytical chemistry involves qualitative and quantitative observations and spectroscopy</p>

COURSES: Physical, Inorganic, Organic, Analytical, Polymer Chemistry

Subject	Class	Semester, Paper with Title	Course Outcomes
Chemistry	F.Y.B.Sc	Semester-I	Learner expected to acquire knowledge of –
		Paper-I: Inorganic Chemistry	Students will acquire the knowledge of Atomic Structure, Periodic Properties and study in detail S-Block and P-block Elements
		Paper-II: Organic Chemistry	Students will acquire the knowledge of Structure and Bonding, Mechanism of Organic Reactions, Stereochemistry of Organic Compounds, Alkanes, Alkenes Arenes and Aromaticity. Alkyl and Aryl halides
		Paper-III Lab Course-I	Students will develop practical skills in Volumetric Analysis. Inorganic Qualitative Analysis .Viscometer Staganometer and Chemical Kinetics
		Semester-II	
		Paper-IV: Physical Chemistry	Students will learn some basic Mathematical Concepts required for the course. They will also study the different states of matter and the rate of reaction.
		Paper-V Inorganic Chemistry	Students will acquire the knowledge of Chemistry of noble gases, Chemical Bonding, Nuclear Chemistry and volumetric Analysis:

		Paper–VI Lab Course-II	Students will get trained in Organic Qualitative Analysis and Organic Estimation
	S.Y.B.Sc	Semester–III	
		Paper–VII: Organic Chemistry	<p>1. Various functional groups containing O and N heteroatoms.</p> <p>2 Specific and relative Physical-Chemical properties of compounds containing these functional group</p> <p>3. Various methods of preparation (one step, multistep processes) and reactions including Peculiar name reactions of these compounds.</p>
		Paper–VIII: Physical Chemistry	<ol style="list-style-type: none"> 1. Basic terminology in thermodynamics. 2. Physical significance of some fundamental and derived quantities in thermodynamics. 3. Types of functions, Laws and their derivations 4. Concepts of thermodynamic and chemical equilibrium
		Paper–IX: Laboratory Course–III	<ol style="list-style-type: none"> 1. Verification of thermodynamic concepts like critical solution temperature, heat of solution, heat of neutralization etc. 2. Precise handling of scientific equipment like stalagmeter and viscometer

			3. Technique of Gravimetric estimations and complexometric titrations and its applications.
		Semester–IV	
		Paper–X: Inorganic Chemistry	<ol style="list-style-type: none"> 1. Trends in atomic properties in transition and inner transition series elements with rationalizations and exceptions. 2. Nomenclature of Coordination compounds 3. Chemistry of Lanthanides and Actinides 4. Concepts of Acid and Bases in aqueous and non-aqueous solvents.
		Paper–XI: Physical Chemistry	<ol style="list-style-type: none"> 1. Concept of binary mixture, homogeneous, non-homogeneous mixtures, phase diagram concept, Ideal and non-ideal solutions and related Laws. 2. Numericals for conceptual clarity 3. Azeotropic mixtures 4. Basic terminology and Laws in electrochemistry. 5. Types of cells and their applications. 6. Types of electrodes and concept of redox reaction
		Paper–XII: Laboratory Course–IV	<ol style="list-style-type: none"> 1. Quantitative analysis using Instrumental methods for monitoring Acid-Base reactions, pH, pKa, pKb parameters like conductometer, polarimeter etc

			<p>2. Verification of various Laws, principals forming the base for various analytical methods.</p> <p>3. Preparation and Purification of derivatives (Organic compounds)</p> <p>4. Various organic estimations techniques like hydrolysis, reduction etc.</p>
	T.Y.B.Sc	Semester-V	
		Paper-XIII: Physical Chemistry	<p>This course will explain the students Classical mechanics and Quantum mechanics, Rotational spectroscopy, Photochemistry</p> <p>.Physical properties and molecular structure and Nanomaterials</p>
		Paper-XIV: Physical Chemistry	<p>Students will acquire the knowledge of Spectroscopy</p> <p>NMR, $^1\text{H-NMR}$, PMR</p> <p>Organometallic compounds. Organic synthesis via enolates. Fats, oils and detergents</p>
		Paper-XV Laboratory Course-V	<p>Students will develop the practical skills in Separation and identification of compounds. Inorganic qualitative analysis, volumetric estimation and</p> <p>.Separation of binary mixture solution and gravimetric estimation</p>
		Semester-VI	
		Paper-XVI: Inorganic Chemistry	<p>Students will get the information about Metal ligand bonding in transition metal complexes, Crystal field theory, Electronic spectra of transition metal complexes</p> <p>.Organometallic compounds</p>

			.Bioinorganic chemistry and Chromatography
		Paper–XVIII: Laboratory Course–VI	Students will get trained in Organic estimations its purity by TLC
		Laboratory Course–VI	Students will perform the experiments on different instruments such as Conductometry,Potentiometry,Colo rimetry,refractometry They will also perform the Non instrumental experiments in which the students will Determine interfacial tension,standard free energy and equilibrium and the Effect of addition of an electrolyte
Polymer Chemistry	F.Y.B.Sc	Semester–I	
		Paper–I: Basic concepts of polymer chemistry	1.Students will know about the historical development of the polymers and its significant role in our day to day life. Students will understand the methods for determining the molecular weight of the polymers and the polymerisation reactions
		Paper–II: Natural polymers	Students will get knowledge about .Carbohydrates.Proteins Natural rubbers and Basic raw materials
		Semester–II	
		Paper–IV	This course will teach the.Mechanism of condensation polymerisation Mechanism of free

		Mechanism and techniques of polymerisation	radical polymerisation and Mechanism of ionic polymerisation
		Paper–V Basic properties of polymers	This course will teach the Analytical properties, Polymer reactions and Polymer degradation
		Paper–III Laboratory Course–I Polymer Chemistry	Students will develop the practical skills in finding out .Saponification value Acid value of polymer Hydroxyl value. Iodine value and Percentage purity of phenol.
		Paper–VI Laboratory Course–II	Students will develop the practical skills in Determining the molecular weight of polymers by viscometer, end group analysis . 2. Determination of viscosity by ford cup B4 method. They will study the oxidative degradation of polyvinyl alcohol. Preparation of poly vinyl alcohol, cellulose acetate and casting of film. This course will also teach Survey of polymer production through industrial visit a report
	S.Y.B.Sc	Semester–III	
		Paper–VII: Physico chemical Aspects of polymer – I	<ol style="list-style-type: none"> 1. Analogy of thermodynamics of polymer dissolution and low molecular weight compound dissolution. 2. Factors affecting polymer dissolution

			<p>3. Principal and applications of experimental methods for polymer purifications.</p> <p>4. Morphology and Crystallinity of polymers and factors affecting them.</p>
		Paper–VIII: Chemistry of polymer material – I	Students will get knowledge about Polyamides, Polyvinyl Chloride.Poly Urethanes and Polycarbonates
		Paper–IX: Laboratory Course–III	Students will acquire the practical skills in. Fractional distillation. Preparation of Polyester resin by solution condensation method. Preparation of Aminoplasts, Nylon6, 6 Or Nylon6 and Identification of engineering plastic. Identification of cellulose polymer. Analysis of plasticizers and fillers.
		Semester–IV	
		Paper–X Physico chemical Aspects of polymer – II	Students will get knowledge about Kinetics of polymerization,.Compounding ingredients Transitions in polymers:
		Paper–XI Chemistry of polymer material – II	Students will get knowledge.Poly Methacrylate .Bisphenol A epoxide Polyethylene Terephthalate and Synthetic polymer:
		Paper–XII: Laboratory Course–IV	This lab course will develop the students skill in .Preparation of polyvinyl alcohol , cellulose acetate and casting of film.

			Preparation of starch adhesive by using different hardness and its study.
	T.Y.B.Sc	Semester-V	
		Paper-XIII Structure and properties of polymer I	Students will get knowledge. about Adhesives Inorganic polymers and Spectroscopic studies of polymers
		Paper-XIV: Advance polymer Chemistry I	This course will explain the .Methods,properties and application of Styrene,polyacetal and fluoropolymers. It will also give the knowledge about Coordination polymers and.Co polymerisation
		Paper-XV Laboratory Course-V	Practical skills will be developed in students for Determination of molecular weight by viscometry,end group analysis, fractional precipitation. Preparation of laminates,molding powder. Evaluation of polymer by standard test method.
		Semester-VI	
		Paper-XVI: Structure and properties of polymer II	This course will explain the .Rheology and mechanical properties 2.Plastic processing technique 3.Polymer properties and testing 4.Fibre technology

		Paper–XVII: Advance polymer Chemistry II	Students will get knowledge about.Elastomers Polymer composites and Polymer industries and environment.
		Paper–XVIII: Laboratory Course–VI	Practical skills will be developed in students for Preparation of PS,PVC and PMMA by bulk,suspension and solution polymerisation.. Determination of iodine value,hydroxyl value, total temporary,permanent hardness of water, COD value in waste water, polymer modification

24. B.Sc STATISTICS PROGRAMME

Programme Outcomes (PO)

After successfully completing B.sc statistics programme students will be able to:

PO1: Enabling students to develop a positive attitude towards statistics as an interesting and valuable subject of study.

PO2: A student should get a relational understanding of statistics concepts and concerned structures.

PO3: Ability to analyse concept problem and define the computing requirements, which may be appropriate to its solution.

PO4: Introduction to various courses like regression analysis
R-Programing, vital statistics.

PO5: Enhancing students' overall development and to equip them with statistics modelling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.

PO6: Ability to pursue advanced studies and research in pure and applied mathematical science.

Programme Specific Outcomes (PSO)

PSO1: Think in a critical manner.

PSO2: Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.

PSO3: Formulate and develop mathematical arguments in a logical manner.

PSO4: Acquire good knowledge and understanding in advanced areas of statistics, chosen by the student from the given courses.

PSO5: Understand, formulate and use models arising in other subject.

Course Outcomes (CO) of B.Sc.-I

Course Title: 101 Descriptive statistics-I and 103 Descriptive statistics-II

(Theory + Practical)

Upon completion of this course the students will be able to:

CO1: Understand the concepts of statistical population and attributes.

CO2: write the tubular and graphical representation of databased on variable.

CO3: Measures of Central tendency, dispersion, skewness and kurtosis.

CO4: Assimilate the concept of principal of least squares for curve fitting and regression lines.

Course Title: 102 Probability Theory and 104 Probability Distribution

(Theory + Practical)

Upon completion of this course the students will be able to.

CO1: Grasp the concept of probability.

CO2: Understand the relation between different kinds of probability.

CO3: Assimilate the difference kind of probability.

CO4: Grasp the concept of Bayes Theorem.

CO5: Probability distribution functions are quite important and widely used in actuarial science.

Course Outcomes (CO) of B.Sc.-II

Course Title: 201 Statistical Methods-I and 205 Statistical Methods-II

(Theory + Practical)

Upon completion of this course the students will be able to:

CO1: Acquainting the various statistical method.

CO2: Understand the difference measurement scales, quality and quantitative data.

CO3: Assimilate the difference kind of data.

CO4: Acquire the knowledge of correlation regression.

Course Title: 202 Sampling Techniques

(Theory + Practical)

Upon completion of the course the student will be able to:

CO1: Acquire the basic knowledge of complete enumeration and sample, sampling frame, sampling distribution.

CO2: Understand the concept of statistical sampling.

CO3:An idea of conducting the sample survey and selecting appropriate sampling technique.

CO4: Understand the basic term used in design of experiment.

CO5:Use appropriate experimental design to analyse the experimental data.

CO6: Apply the various test in suitable way.

Course Title: 206 Applied Statistics

(Theory + Practical)

Uponof this course the student will be able to:

CO1:Understand income distribution and their fitting in real life situation.

CO2:Commonly used measure of demography.

CO3:Assimilate various data collection method enable them to have a better insight in policy making.

CO4:Realize construction and implication of life table.

CO5: Use the vital statistics concept in real life.

CO6: Applied real data implementation of various demographic concepts as outlined above through practical assignment.

Course Outcomes (CO) of B.Sc.-III

Course Title: 501 Operations Research

(Theory + Practical)

After upon completion of this course the student will be able to:

CO1: Understand the use of operation research in real life.

CO2: Solving linear programming problem.

CO3: Discuss on national planning and budgeting.

CO4: Use of operations research concept in industrial establishment and private sector units.

CO5:Grasp the concept of simplex method, branch method.

Course Title: 502 Statistical Inference

(Theory + Practical)

Upon completion of this course the student will be able to:

CO1: Drawing conclusion about the whole population on the basis of sample.

CO2: Deducing properties of an underlying probability distribution by analysis of data.

CO3: Learn various concept in statistical inference.

CO4: Draw the conclusion on the basis of sample from population.

CO5: Solve the numerical problem regarding subject.

CO6: Testing hypothesis and deriving estimate.

Course Title: 601 R-programming

(Theory + Practical)

Upon completion of this course the student will be able to:

CO1: Assimilate various basic concept related to computer architecture.

CO2: Learn machine language, assemble language and high level language.

CO3: Assimilate notions of R-programming.

CO4: Learn ideas on operating system.

Course Title: 602 Design of Experiment

(Theory + Practical)

Upon completion of this course the student will be able to:

CO1: Improve their statistical knowledge.

CO2: learn the various concept of statistics.

CO3: Solve the problem on RBD, CRD.

CO4: Introduce planning valid for new project.