

Bhagwan Shikshan Prasarak Mandal's, Rashtramata Indira Gandhi Arts, Commerce &



Principal Dr. S.V. Tidke

e-mail rmigjalna@gmail.com President Dr. NarayanraoMundhe

| Sr. No. | 2.6.1: Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes | | |
|------------|---------------------------------------------------------------------------------|--|--|
| | | | |
| 1 | English | | |
| 2 | Hindi | | |
| 3 | Marathi | | |
| 4 | Urdu | | |
| 5 | Botany | | |
| 6 | Chemistry | | |
| 7 | Mathematics | | |
| 8 | Physics | | |
| 9 | Economics | | |
| 10 | Geography | | |
| 11 | Histry | | |
| 12 | Political Science | | |
| 13 | Public Admistration | | |
| 14 | Sociology | | |

Principal ta Indira Gandhi Arts, Commerce & Science College Jalna - 431203 (M.S.)



Bhagwan Shikshan Prasarak MandalGeorai Rashtramata Indira Gandhi College, Jalna

Department of English

Program outcome of English as subject:

- Students are enable to communicate in English at the places like Railway station and airports.
- 2) The student is aware of formal letter writing and can apply for the job as per requirements. And complain letters if required to the official.
- 3) The student can travel all over the world as he is equipped with the knowledge of English speaking skills
- 4) The student can communicate in English at the work places.
- 5) The student prepare his bio data or curriculum vitae as per his needs of job and further progress.
- 6) The student attainspersonality development.

Program specific outcome of English as subject:

- 1) Student enjoys English movies, serials, and Netflix movies.
- 2) To able to enjoy simple texts of English literature.
- 3) This is an age of communication and information technology, the student can use his smartphone and the laptop for gathering required information and communicating on social media.

Course Outcomes:

- reading ability the student uses the preferred text for reading appropriately understand the
 text the theme and the use of vocabulary be a particular writer reading also enhance
 knowledge of English literature as the specific and prominent writers of English literature
 are preferred in the text
- Writing skill enable the students to construct the sentences in accordance with the given text writing skill
- 3) Understanding literature: understand various themes and Plot discussed in the text
- 4) exploring English with the help of given text and understanding the language skill used in the text
- 5) The student acquires the structure and grammar of English language
- 6) The student is able to pronounce the Received Pronunciation.
- The students are introduced to the various genre of the language and literature such as Poetry, Novels, Dramaand Short stories.
- 8) To familiarize the students with literary terms, theories and criticism
- 9) To introduce the student with Indian and American literature

Faculty:

Dr. JyotiDharmadhikari Shri. VithalGadekar



B.S.P.Mandal Georai Dist Beed

Rashtramata Indira Gandhi Arts Commerces&Science College, Jaina Department of Hindi

Outcomes

| Progran Department of Hindi | nme Outcomes : B.A. Hindi |
|--------------------------------|---------------------------------------------------------------------------------------------|
| Department of Hilldi | After Successful completion of three year degree program in Hindi student should be able to |
| | PO-1छात्रोंकोहिंदीभाषाकाउदभ्वविकासतथाबोलियोंकाज्ञानप्राप्तह्अ |
| | PO-2 छात्रोंकोसाहित्यशास्त्रकाज्ञानप्राप्त् ह्आ. |
| | PO-3 छात्रोंकोहिंदीसाहित्यइतिहासकेविकासक्रम, |
| | लेखनपरंपराकाज्ञानप्राप्तह्आ. |
| | PO-4 छात्रोंकोभाषातथादेवनागरीलिपीकायथोचितज्ञानप्राप्तह्आ. |
| | PO-5 |
| | छात्रोकोगद्यऔरगदयपद्यकेविभिन्न् साहित्यकाज्ञानप्राप्तह्आ. |
| | PO-6 छात्रोंमेंगद्यतथाभाषासाहित्यकाअध्ययन, अध्यापन, |
| | आस्वादनमूल्यांकनका ज्ञानहुआ. |
| | PO-7 |
| | छात्रोंकासाहित्यकेगदयतथाकाव्यकेमाध्यमसेवैचारीकविकासह्आ. |
| | PO-8 छात्रोंकाहिंदीसाहित्यसेराजनितीक, |
| | सामाजिकतथासांस्कृतिककेप्रतिज्ञानप्राप्तहुआ. |
| | PO-9 छात्रोंकोकार्यालयोकाहिंदीभाषासे ज्ञानप्राप्तहुआ. |
| | PO-10 छात्रोंकोउपन्यासोसेपारिवारिकताकाज्ञानप्राप्तह्आ. |
| Programme Specific Outcomes | PSO-1 हिंदीभाषाकायथोचितज्ञान. |
| Outcomes | PSO-2 वैचारीककाविकास. |
| | PSO-3 पटकथा, लेखन, संवादलेखन. |
| | PSO-4 अनुदवाद, संपादक, प्रकाशक. |
| | PSO-5 राष्ट्रीयभावनाजागृतकरना, |
| | नैतिकतथासामाजिकमूल्योकाविकास. |
| | PSO-6 राष्ट्रीयएकात्मता, बंधुता, समानताकाविकास. |
| | Course Outcomes Hindi F.Y.B.A. |
| | Course Outcomes |
| हिंदीसामान्य | After Completion of these course students should be |
| | able to; |
| | CO-1. छात्रोंकोहिंदीभाषाकेउदभवऔरविकाससेपरिचयहुआ. |
| | CO-2. छात्रोंकोआस्वादनऔरअभिरुचीकापरिचयहुआ. |
| | CO-3. छात्रोंकोजीवनमूल्योंकेप्रतिआस्थानिर्माणहुई. |

| | CO-4. छात्रों उपन्यासों सेपारिवारिकतथा ऐतिहासिकताका ज्ञानप्र प्रतहुआ है |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| हिंदीसामान्यतथाहिंदीसाहित्यकाविकास | Course Outcomes S.Y.B.A CO-1. छात्रोंकोहिंदीभाषाका ज्ञानप्राप्तहुआ. CO-2. छात्रोंकोभारतीयसंस्कृतिकाहिंदीगदयऔरपदयसेज्ञानप्राप्तहुआ CO-3. छात्रोंकोहिंदीकवियोंकापरिचयहुआ. CO-4. छात्रोंकोहिंदीपदयसंवेदनाकीपरंपरासेपरिचितहुए. CO-5. छात्रोंकोभाषाकेविविधरूपोंकापरिचयहुआ. CO-6. छात्रोंकोराजभाषाहिंदीकेविभिन्न पहलुओंकापरिचयहुआ. CO-7. छात्रोंकोप्रयोजनमूलकभाषातथाअनुवादकीभूमिकाकापरिचयहुआ. CO-8. छात्रोंकोराजभाषाऔरराष्ट्रभाषाअवधारणाएंवस्वरुपकापरिचयहुआ. CO-9. छात्रोंकोराजभाषाऔरराष्ट्रभाषाअवधारणाएंवस्वरुपकापरिचयहुआ. CO-10 छात्रोंकोप्रयोजनमूलकहिंदीलेखनपक्षका ज्ञानप्राप्तहुआ. CO-11 छात्रोंकोप्रयोजनमूलकहिंदीसेव्यावसायिकव्यापारिकताका ज्ञानप्राप्तहुआ |
| | Course Outcomes T.Y.B.A |

| | stell (M.S.) |
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| हिंदीसामान्यतथाप्रादेशिकसाहित्यकाविकास | CO-1. छात्रोकोसाहित्यअस्वादनअभिरुचिका ज्ञानप्रीप्तह्आ. |
| | CO-2. छात्रोंकोजीवनमूल्योंकेप्रतिआस्थानिर्माणहुई 💿 🥬 |
| | CO-3. छात्रोंकोसाहित्यकेअध्ययनसे ज्ञानप्राप्तह्आ. |
| | CO-4. छात्रोंकोहिंदीसाहित्यइतिहासलेखनका ज्ञानप्राप्तह्आ. |
| | CO-5. छात्रोंकोहिंदीसाहित्यइतिहासकेकालविभाजनकाज्ञानप्राप्तह्आ. |
| | CO-6. छात्रोंकोआदिकालिनरचनाकारोंसेपरिचयह्आ. |
| | CO-7. छात्रोंकोभक्तीकालिनसाहित्यकाज्ञानप्राप्तह्आ. |
| | CO-8. छात्रोंकोआधुनिकयुगकीसामाजिक, |
| | राजनितिकतथासांस्कृतिकपरिस्थितीयोंकाज्ञानप्राप्तह्आ. |
| | CO-9. छात्रोंकोरितिकालीनसाहित्यकाज्ञानप्राप्तह्आ. |
| | CO-10 छात्रोंकोसाहित्यशास्त्रसेशबदशक्तीकाज्ञानप्राप्तह्आ. |
| | CO-11 छात्रोंकोभक्तीकालिनसाहित्यकाज्ञानप्राप्तह्आ |
| | CO-12 छात्रोंकोभक्तीकालिनकविताकेसंवेदनाका ज्ञानप्राप्तह्आ. |
| | CO-13 छात्रोंकोआध्निककालकेकाव्यसाहित्यकाज्ञानप्राप्तहआ. |

PRINCIPAL

Rashtramata Indira Gandhi
Arts, Commerce & Science
Gollege Jalna - 431203 (M.S.)

CO-14 छात्रोंकोआधुनिककालकेरचनाकारोंकापरिचयहुआ.



BHAGWAN SHIKSHAN PRASSARAK MANDAL'S GEORAI.

RASHTRAMATA INDIRA GANDHI, ARTS COMMERECE AND SCIENCECOLLEGE JALNA

Programme Outcomes :B.A.Marathi *मराठीविभाग*

सामान्यज्ञान

- O.C 1. भाषिकआकलनआविष्कारसमृध्दहोतआहे.
- O.C 2. विदयार्थ्यांनास्पर्धापरीक्षेचेभाषिककौशल्याचे ज्ञानप्राप्तझाले.
- O.C 3. गदय-पदयामधीलसामाजिकसांस्कृतिकमूल्याचाबोधप्राप्तझाला.
- O.C 4. वाचनसंस्कृतीवृध्दींगतहोण्यासाठीविदयार्थ्यानाग्रंथालये व ग्रंथयासंबधीची माहितीसांगणे.
- O.C 5. विदयार्थ्यांनालेखनाचे व भाषांतराचेआकलनप्राप्तझाले.
- O.C 6. पाठआणिकवितेतीलसामाजिकमूल्ये,लोकशाहीमूल्ये,औदयोगिकअनुभव, साहित्यीकमूल्ये, सांस्कृतिकमूल्येयांचेआकलनहोण्यासविदयार्थ्यांनामदतझाली.
- O.C 7. नैसर्गीकसंपत्तीचेसंरक्षणकरण्यातयावे व तंत्रज्ञानाचाव्यवहारातउपयोगकरता यावायासाठीउपयोजितमराठीयाघटकांनीमुदयांचाअभ्यासाचाउपयोगविदयार्थ्यांनाझाला.
- O.C 8. विदयार्थ्यांनामराठीराजभाषेचासामाजिकजीवनामध्येउपयोगझाला.

प्रा.डॉ. उमेशमुंढे (मराठीविभागप्रमुख)

BHAGWAN SHIKSHAN PRASSARAK MANDAL'S GEORAI.

RASHTRAMATA INDIRA GANDHI, ARTS COMMERECE AND SCIENCECOLLEGE JALNA

Programme Outcomes :B.A.Marathi *मराठीविभाग*

2014 पासूनपुढे

| | 2014 पासूनपुढ |
|-------------------|-------------------------------------------------------------------|
| Department of | |
| Marathi | |
| Programme | 1.साहित्याची सामाजिक व सांस्कृतिकपार्श्वभूमीमधूनज्ञानप्राप्तहोते. |
| outcomes | 2. विचारप्रणाली व सामाजिकचळवळयांचीमाहितीसमजते. |
| | 3. साहित्याचावाङमयीनप्रेरणा-प्रवृत्तीमुळेज्ञानातभरपडते. |
| | 4. विविधप्रकारचीलेखनकौशल्येविकसितकरणे. |
| | 5. साहित्यशास्त्रामधूनआस्वादप्रक्रियाविकसीतहोते. |
| | 6. विविधवाङमयप्रकारामधूनसमाजातीलचित्रणसमजते. |
| | समीक्षाकरण्याचीदृष्टी व क्षमताविकसीतकेलीजाते. |
| Programme | 1. मराठीसाहित्यातीलविविधवाङमयप्रकाराचीमाहीतीमिळते. |
| specific outcomes | 2. विदयार्थ्यांच्यावाङमयीनअभिव्यक्तीचाविकासकरणे. |
| | 3. वाङमयप्रकारामधूनविदयार्थ्यांनाग्रामीन, दलित, साहित्यसमजते. |
| | 4. संशोधनाचीसंकल्पना व संशोधनपध्दतीचाआराखडासमजूनघेणे |
| | आवश्यकआहे. |
| | 5. दक-श्राव्यमाध्यमासाठीलेखनकौशल्यविकसीतहोते. |
| | * Course outcomes B.A.F.Y.* |
| MAR-001 | 1. भाषातीलसंवाद, उच्चार, लेखनविस्तारशब्दसंगृहाचापरिचयहोणे. |
| MAR-002 | 2. मराठीभाषेतीलजुन्यानव्याभाषेचावापर व अर्थसमजूनसांगणे. |
| MAR-101 | मराठीसाहित्यासंबधीरुचीनिर्माणहोते. |
| MAR-102 | 4. वाङमयीनअभिरुचीचाविकासहोतो. |
| MAR-103 | 5. सामाजिकसंदर्भ व सांस्कृतिकयांचाकाव्य व गद्यअशांच्या |
| MAR-104 | निमित्तानेपरिचयघडविणे. |
| | 6. व्यक्तीमत्वविकासातभोषेचेमहत्वस्पष्टहोते. |
| | 7. दैनंदिनभाषा, वापरसाहित्यातीलउपयोग व कार्यालयीनउपाय |
| | योजनाचाविचारसमजूनघेणे. |
| | * Course outcomes B.A.S.Y.* |
| Course | Outcome |
| MAR- 03 | 1. विविधप्रसारमाध्यमांचीओळखकरुनदेणे . |
| | |

| | 118 |
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| MAR- 04 | 2. साहित्यामधूनसमाजाकडेडोळसपणेपाहण्याचीक्षमताविकसीत |
| MAR - 105 | करणे. |
| MAR - 106 | 3. ग्रंथकारांचेव्यक्तीमत्व व त्यांच्यासाहित्यातीलआशय, अभिव्यक्तीचा |
| MAR - 107 | परिचयकरुनघेणे. |
| MAR - 108 | 4. कौटुंबिक, व्यावसायिकपत्रलेखनाचामजकूर व काहीमुददेलक्षातठेवणे. |
| | माध्यमलेखनातअसणारेसाहित्याचेमहत्विवशदकरणे. |
| | 6. माध्यमांसाठीविविधलेखनप्रकाराचापरिचयकरुनदेणे. |
| | 7. साहित्यकृतीचेआकलनआस्वादआणिमुल्यमापनकरण्याचीक्षमता |
| | विकसितहोते. |
| Course | * Course outcomes B.A.T.Y.* |
| | संस्कृतअभ्यासकांनीसांगितलेलीसाहित्याचीव्याख्या व स्वरुप, |
| | लक्षणेसमजूनघेणे. |
| | 2. भारतीयसाहित्याचीप्रयोजनजाणूनघेणे. |
| 17 | 3. शब्दशक्ती व प्रकारविदयार्थ्यांनीसमजूनघेणे. |
| | 4. भारतीयरसविचाराचासविस्तरमहत्वजाणूनघेणे. |
| | 5. भाषेचेमानवीजीवनातीलकार्य व महत्वजाणूनघेणे. |
| | 6. विविधभाषाभ्यासपध्दतीनेवेगळेपण व महत्वजाणूनघेणे. |
| | 7. मराठीभाषामधील -हस्व,दीर्घ्यांचाअभ्यासकरणे. |
| | 8. तात्कालीनग्रंथनिर्मितीमधीलप्रेरणा व प्रत्यक्षग्रंथ् रचनेवरील |
| 40 | परिमणामसमजूनघेणे. |
| 2 | 9. साहित्यनिर्मितीचीतत्वेजाणतो. |
| | 10.विदयार्थ्याला आपलाआवडीचेसंशोधनाचेक्षेत्रनिश्चितकरतायेते. |
| | |

प्रा.डॉ. गि-हे डी.पी. (मराठीविभाग) PRINCIPAL
Rashtramata Indira Gandhi
प्रा.डॉ. उमेशिमुटेommerce & Science
Science Jaina - 431203 (M.S.)
(मराठी विभाग प्रमूख)

Rashtramata Indira Gandhi College

Department of Urdu

Program Outcome

B.A.-Urdu

After successful completion of three years degree program in Urdu student should be able to know:

- 1. Students will gain knowledge of Urdu language.
- 2. Students will gain knowledge of poetry and prose.
- 3. Major traditions of Urdu language.
- Students will develop an ability to read text in relation to their historical and cultural contexts.
- 5. Students become more aware of themselves as Urdu literature Graduates.

Program Specific Outcome

- 1. Complete knowledge of Urdu language
- 2. Emotional and Behavioural positive change in their attitude.
- 3. B.A. Urdu graduates can pursue B.Ed. course and optional teaching career.
- 4. They can do post graduate studies in Urdu subject.
- 5. There are many other options like journalism, writing career, tourism, TV and Radio anchoring etc.
- 6. They are eligible to appear for any competitive exams for entering to the Government services.

Course Out Comes- Urdu

After completion of this course students should be able to:

| Cours | e | Outcomes |
|-----------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | F.Y.B.A. |
| S.L.A-1021 Tarjuma | Nasfaur- | Know the basics of prose. To understand special studies of prose. Know the Urdu fiction especially Urdu prose. Study the idea of translation. |
| L-1023Ghazal Bayan | aurIlm-e- | What is Ghazal. Grammar of the Ghazal. Various Ghazal poet study. Various Ghazal to study. Urdu grammar Introduction. Urdu Grammar Methods. |
| L-1024 – Dastan | | Understand the special quality of Dastaan To give an extended knowledge about Urdu fiction Dastaan Discuss the type of Dastaan. |



| A-1057- Nasr- | Study of various prose type |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| aurMazmoon | 2. Gain the knowledge of prose |
| | 3. Understand the value of Essay writing |
| 74 | 4. Importance of essay writing. |
| Z-1042- Nazm-aur-Qita | Understand the principles of Nazm |
| | Difference between Nazmaur Ghazal |
| | Study various NazmNigar |
| | 4. Able to understand the meaning of Nazm |
| | 5. Study of Qita know the importance in Urdu literature. |
| | 6. Study poet of Nazm as well as Qita. |
| Z-1043 Novel | Know the importance of Novel. |
| | 2. Role in Indian Independence. |
| _ | 3. Various types of Novel. |
| | 4. Get knowledge of the various Era. |
| | 5. Special study of Novel "Umraojaanada" |
| | p out of the office o |
| | B.A.S.Y. |
| P-1059 QasidaMarsiya | Introduction of Qasida and Marsiya |
| | 2. Importance of Qasida and Marsiya |
| | 3. Poets of Qasida and Marsiya. |
| | 4. Principles of Qasida writing. |
| | 5. Types of Marsiya |
| n n | 6. To give an extended knowledge about poetry. |
| | or to give an entended into wroage about poorly. |
| P-1060 – | Difference of Dastaan and Masnavi |
| MasnaviaurRubai | 2. To study Rubai |
| | Study learn various Masnavi |
| | Imparting knowledge of Urdu poetry. |
| | Impact on social life and culture. |
| P-1058 – Afsana | Principles of Afsana writing. |
| 52 | 2. Progress of Afsana |
| î. | 3. Difference between Novel and Afsana |
| | 4. Study different types of Afsana |
| | 5. Know the History behind Afsana |
| | 6. Cultural Values. |
| P1059 – Drama | Knowledge of stage Drama |
| | 2. Story of society of Drama depends on problems |
| | 3. To study various Drama writer |
| | 4. Understand Drama and film |
| | 5. Concept of Urdu Drama |
| | 6. It shows the Era before Independence. |
| | B.A.T.Y. |
| Z-1024 – Maktool | 1. Know the Urdu letter writing principles |
| est un une estatutation de la comma APPRINCE de MARCON MARCON DE COMMA DE C | 2. To understand the basic concept of letter writing. |
| y. | 3. Study of Ghalib and AbulKalamAzadsMaktoob. |
| | 4. Importance of Ghalibsmaktoob and |
| | MaulanaAzadsMaktoob |
| | 5 Understand the facts hidden in Urdu Maktoch |

5. Understand the facts hidden in Urdu Maktoob

| Z-1025 – Inshaiya | Knowing the Inshaiya writing Basics of Inshaiya Study various Inshaiya writers. Ability to understand the difference between Inshaiya and Maktoob. |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Z-1026 – AdabiTanqeed | Research and Criticism study Types of Criticism Study various critic writer. Study Indian and western writers Principles of criticism AdabiTanqeed in Urdu poetry. Social use of AdabiTanqeed. |
| Z-1008 KhakaAurSwaneh | Study of Khaka and Swaneh To understand difference of Khaka and Swaneh Study of Khaka and swneh writer Gain the knowledge of Urdu literature Undertand various intellectual personalities of Urdu. |
| Z-1009 – Safarnamaaur Reportage | Know the writing skills of Safarnama and Reportage Study various Safarnama and their writers. Fundamental knowledge of Reportage writing. Importance of Reportage in Urdu literature. Safarnama give an extended Knowledge about various countries and cities. |
| Z-1010 — jaded Zarai- IblaghaurTarjumaNigari | Use of Media Media and Urdu language Study Role of Urdu media Electronic Media and Urdu language (TV, Radio, Internet) Importance of Journalism. Human rights and Media discussion Translation value and properties Role of Translation in Urdu literature. |
| Project | Understand Research Create awareness and importance of Research Develop Research oriented skills Extended the knowledge. |

PRINCIPAL
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Arts, Commerce & Science
College Jalna - 431203 (M.S.)

JALMA (M.S.)

JALNIA (14.5.)

RASHTRAMATA INDIRA GANDHI, ARTS COMMERECE AND SCIENCE COLLEGE JALNA

Program outcomes, Program Specific outcomes and course Outcomes:

Department of Botany

Program outcomes B.sc Botany (On completion of this course students will be able ...) BACHELOR OF SCIENCE (B.Sc.)

After completion of B. Sc. Degree course program the students will be develop ability.

- 1) To develop necessary skills required for designing, recording and analyzing the results of experiments.
- 2) Students learn to carry out practical works, in the field and in. The Laboratory with Minimum risk. They gain introductory Experiences in Applying each skills and gain greater knowledge about plants.
- 2) To develop analytical skills to tackle real and life problems.
- 3) To apply to their knowledge in industry and self-employment.
- 4) To understand the scientific terms, concepts, facts, phenomenon and their relationships.

| Sr. No | Dept. Botany | After Successful of three year degree course in Botany a students is able to. |
|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Program outcomes | PO-1, Students learn to carry out practical works, in the field and in The Laboratory with minimum risk. They gain knowlesge about Bryophytes, Pteridophytes, & cryptogams ntroductory Experiences in Applying each skills and gain greater knowledge about plants. PO-2, Analyze cryptogams and phanerogams plants, their morphology, Anatomy, embryology, physiology, ecology and cytogenetic etc. PO-3, Plant pathology to be abele for sharing of field and lab. Data contained. PO-4, Used research based knowledge & research methods including designs experiments analyze a interpretation of data & development of Information provide valid conclusion. PO-5, Biodiversity give a knowledge to create curiosity awareness about Cultivation, conservation. PO-6, To apply their knowledge in industry and employment. PO-7, To acquire scientific knowledge and use for self as well as social. PO-8, Ecology & physiology give a knowledge about plants relation To environments and process and function of plant. |

| | | The state of the s | Will Al |
|---|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 2 | Program Specific outcome | After completion of course, the student will develop ability PSO-1, To know identify flora from their environment. PSO-2, To identify & study the use of medicinal plants. PSO-3, To study large and small aquatic plants especially microscopic organisms. PSO-4, To develop their own firm to fill to sell the different types of plants which have great demand in different colleges & Universities. PSO-5, To acquire knowledge about some plants as some plants are drought indicators, some rain indicator & some water indicator. PSO-6, To know advance technique in plant sciences like tissue culture, Phytoremediation, plant disease management, new herbal drug. PSO-7, Students acquire fundamental Botanical knowledge through theory and practical's. | 100 2 |
| | Program course | After completion of these course students should be able to | |
| 3 | Outcomes Bot- 232,Pa.II Morpholog y of Angiosper ms | CO-1, To Understand the whole morphology of flowering plants. CO-2, To equipped the students will skills related to laboratory as well as field base study. CO-3, To know modification of root, stem and leaves. CO-4, To understand inflorescence, floral & types of fruits & seeds. | |
| 4 | Pa- III, Plant histology, anatomy & embryolog | CO-1, To gain a knowledge of plant tissues and their function. CO- 2, To understand scope & importance of plant histology, anatomy & embryology. CO-3, Understand normal and anomalous secondary growth in plants. CO-4, Performe technique of anatomy. CO- 5, Understand about embryo, fertilization, endosperms, | |
| 5 | Paper- VII, L-2031 B.sc. S. Y. Taxonomy of Angiosper ms | On completion of the course, students are able to CO-1, Know about vascular plants & their phylogenetic relationships CO-2, Know systems of classification CO-3, Identify plants species & genus with key CO-4, Kow relationship of different families. | |
| 6 | Gymnosper ms & utilization of Plants. | CO-1, To gain life cycle of gymnospermic plants CO-2, To explain fossil and fossilization CO-3, To understand about geological time scale. CO-4, Gain a knowledge about various plants of economic uses, such ass understand role of plants in human welfare. CO-5, Know plantsimportance in human life. CO- 6, Know the cultivation, collection, process and importances of various herbal drugs. | |
| 7 | Paper- XV B-2021 Cell biology & molecular biology | CO-1,Gain a knowledge of cell organelles, its function. CO-2, Learn the scope and importance of Molecular Biology. CO-3, Understand biochemistry of the cell. CO- 4, Practically and theoretically know cell division and chromosomes. | |
| 8 | Paper,XIX. L -2145 Genetics | CO-1, Know the transgenic technology for the improvement of quality & quantity of plant and their product. CO-2, Understand application of Biotechnology. | |

| &Bitechnol | CO-3, understand Mendelian Law of inheritance. |
|------------|--------------------------------------------------------------------------|
| ogy | CO-4, Know about sex determination, sex linked inheritance gene, genetic |
| | diseases, cloning & genetic engineerin. |
| | Cand |

Course Outcome of Botany

Semester I – Teaching Hours per Week 3

Name of Paper _ Diversity of Microbes and cryptogams

Paper No. _ I B.Sc. F.Y.

- 1. To gain knowledge about theoretical and practical knowledge microbial diversity about, viruses, mycoplasma, Bacteria, Algae, Fungi, Lichanes.
- 2. To know, Economic importance of Bacteria, Algae and Fungal Biotechnology.
- 3. To understand plant pathogenic nature of virus and fungi.
- 4. To know life cycle patterns of lower microscopic organism.

Semester II - Diversity of Microbes and cryptogams

 To understand the general character, classification, systematic position occurrence thallus structure, external structure and internal structure, reproduction and graphic life cycle of Bryophytes and pteridiophytes.

Semester III - Teaching Hours per Week 3

Name of Paper -Plant Ecology

Paper No. X - B.Sc. S.Y.

- On completion of this course, student will be able to understand, plant and there
 environment
- To know about climatic factors light, temperature and water.
- 3. To explain edaphic factors, soil formation, soil, erosion, and soil conservation.
- 4. To understand response of the plant to water to study ecosystem and ecology.

Semester IV - Teaching Hours per Week 3

Name of Paper - Plant Physiology

Paper No. XII - B.Sc. S.Y.

- To understand physiological process and metabolism.
- 2. To explain photosynthesis with formation of primary and secondary metabolism.
- 3. To understand osmosis, diffusion.
- To study importance of chloroplast .
- 5. To know about respiration, light and dark reaction.
- 6. To clarify the process of fermentation.

Semester V - Teaching Hours per Week 3

Name of Paper -Plant Pathology

Paper No. - B.Sc. T.Y.

- Through this post the students acquire knowledge of the fundamentals of a plant pathology scope and losses.
- 2. Ability to classify plant disease on the basis of their symptoms.



To explain the casual organism on crop plants, cereals, pulses, vegetables, oil seeds and cash crops, ornamentals plants, weeds and trees.

Semester VI – Teaching Hours per Week 3

Name of Paper – Microbiology and disease management.

Paper No. XX - B.Sc. T.Y.

- 1. To explain microbial techniques, to know sterilization
- 2. To prepare and use culture media for isolation of microbes to prevent the crop plant from disease
- 3. To suggest control measure of disease to get the knowledge of fungicide, pesticide and weedicides.

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AMME

Department of Chemistry

Program specific outcomes

- 1. Use of chemistry in pharmaceutical, agriculture and chemical industry.
- 2. Importance of chemistry how to reduce environmental pollutant.
- 3. How to handle the hazardous chemical in the laboratory.
- Practical use of chemistry for analysis of various elements and samples of soil and water etc.
- Use of spectroscopic technique to detect and identify structures of various types of compounds and samples.
- 6. To increase interest of student in basic concept of chemistry for daily life use.

Course outcomes

Physical Chemistry (Paper III, IV, VIII, XIV)

- 1. Developing problem solving skills
- 2. Developing scientific knowledge
- 3. Developing instrumental working knowledge

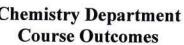
Inorganic Chemistry (Paper I, V,XIII, XXI)

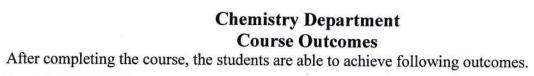
- 1. Developing ability and skill principles of chemistry.
- 2. Increase the knowledge of chemistry in nature and society.

Organic Chemistry (Paper II, IX, XVIII, XXII)

- 1. Use of various organic reactions related to biological activities.
- 2. Preparation of various compound use for pharmacy.
- 3. Use of organic chemistry in preparation of various types of important compound in chemical industries.
- 4. Use of spectroscopic techniques in structure identification.







| | | * |
|------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CO1 | Inorganic Chemistry | To learn about the periodicity of elements. To understand the of S-block elements of alkali and alkaline earth |
| | | metals. Understand the P-block elements. |
| CO2 | Organic Chemistry | Understand about eh classification and nomenclature of organic compound, fundamental of organic reaction mechanism aromaticity and stereochemistry. |
| CO3 | Lab. Course I | Learn the application of types of titration. Carry out qualitative analysis of acidic and basic radicals. |
| CO4 | Physical Chemistry | Develop the ability to use conceptual and mathematical concepts. Understand state of matter and chemical kinetics. |
| CO5 | Inorganic Chemistry | To explain the formation of various bond, geometry, hybridisation. Learn basic concept of nuclear chemistry. To learn Noble gases and volumetric analysis. |
| CO6 | Lab. Course II | Estimation of organic compound. To develop the skill of organic qualitative and quantitative analysis. |
| CO7 | Organic Chemistry | To understand preparation, chemical reactions of alcohols, phenols, aldehydes, ketones, carboxylic acids |
| CO8 | Physical Chemistry | Basic terms in thermodynamics, various types of process First laws, Enthalpy, heat capacity, Hess's law. To learn need for second law, second law, carnot's cycle, entropy, Gibb's and Helmholtz function and entropy changes. Law of mass action, Le Chatelier's principle, Clapeyron equation, Claussius equation, Reaction isotherms and isochore. |
| CO9 | Lab. Course III | To carry out gravemetric analysis To carry out complexometric titration To carryout non instrumental physical chemistry experiments. |
| CO10 | Inorganic Chemistry | To understand the general characteristics of first transition series. To understand the basic concepts of coordination compounds. To understand the basic theories of acid and bases. To understand the physical properties of non-aqueous solvents. |
| CO11 | Physical Chemistry | To study phase rule for one multi component system, Liquid Liquid mixture, Partially miscible liquids To learn conductance in metals and electrolyte solution, Kahlrausch law, Arrhenius theory of electrolyte, weak and strong electrolyte, Ostwal's law, Transport number Hittorls method and moving boundary methods and conductometric titration. To learn types of electrodes, ECE, Corrosion. |
| CO12 | Lab Course IV | To carryout quantitative analysis by conductivity bridge, Ph-meter, coulorimeter etc. Preparation of organic compounds and their physical constant. To carryout estimation of organic compound. |
| CO13 | Physical Chemistry | To understand the basic concept of spectroscopy technique. To learn De-Broglie equation, Heisenburg uncertainty principle, |



| | | Compton effect, photoelectric effect. |
|------|--------------|------------------------------------------------------------------------|
| | | To learn Bohrs theory of H-atoms, postulates of quantum mechanics, |
| | .0. | various types of operator |
| | | Understand the basic concepts of laws of photochemistry Jablonski's |
| | | diagram |
| | | To study physical properties and molecular structures of compound. |
| | | To learn synthesis and uses of nano materials. |
| CO14 | Organic | To study different types of spectroscopic technique and some |
| | Chemistry | problems based on these techniques |
| | | To understand the formation of organometallic compound and their |
| | 1.0 | chemical properties. |
| | All | To understand the process of manufacturing of detergents fats and |
| | | oils. |
| CO15 | Lab Course V | Separation and identification of binary organic compounds |
| | | Inorganic qualitative analysis |
| | | Volumetric and gravimetric analysis. |
| CO16 | Inorganic | To understand the theories of metal ligand bond |
| | Chemistry | CFT and its application, types of electronic transitions |
| | | Selection rule for d-d transition and electronic spectra of complexion |
| | 4: | to learn the classification of organometallic compound, preparation |
| | | and their chemical reactivity. |
| | | To learn about biological importance of metal ions |
| CO17 | Organic | Understand the basic concepts of polymerization. |
| | Chemistry | Understand the preparation properties and application of PE, PVC, |
| | | polystyrene. |
| | | Understand properties and preparation of drug. |
| | | To learn heterocyclic compound ex pyrrol furan thiophene pyridine |
| | | quinoline isoquinoline and indol |
| | | To learn about classification of carbohydrate and preparation |
| | | chemical properties. |
| CO18 | Lab Course | Organic estimation, organic preparation and its purity by TLC |
| | VI | quantative estimation by instruments exconductivity bridge, Ph-meter, |
| | | coulorimeter, potentiometer, abb's refractometer to carryout non |
| | | instrumental experiments. |
| | | |

Rashtramata Indira Gandhi Arts, Commerce & Science DnayneshwaleNaglena - 431203 (M.S.) Head of the Department

Conmen

Vijay Mundhe Assistant Professor

BHAGWAN SHIKSHAN PRASSARAK MANDAL'S GEORAI. RASHTRAMATA INDIRA GANDHI, ARTS COMMERECE AND SCIENCE COLLEGE JALNA.

Department of Mathematics

Programme outcomes:

After completion of B.Sc. mathematics Degree course programme the students will be develop ability:

- 1. To develop necessary skills required for designing, recording and analyzing the results of experiments.
- 2. To develop analytical skills to tackle real and life problems.
- 3. To apply to their knowledge in industry and self-employment.
- 4.To understand the scientific terms, concepts, facts, phenomenon and their relationships.

Programme Specific Outcomes:

- 1. Ability to calculate and reason to design complex and critical financial models for Bank and Insurance Companies.
- 2 . Ability to understand both concrete and abstract problems.
- 3. Ability to make critical observations.
- 4. Ability to accurately organize, analyse and interpret data.
- 5. Develop the mathematical logic which is very useful for solving mathematical reasoning problems.

Course Outcomes:

B.Sc- I (Differential Calculus, Integral Calculus, Geometry, Differential Equations)

- 1. Developing the interest towards mathematics.
- 2. Creating the relationship of mathematics with other subjects.
- 3. Developing the understanding and fluency in mathematics thorough inquiry and connecting mathematical concepts.
- 4. Developing the knowledge of applications of derivative and integration, etc.

B.Sc- II Paper V-Number Theory, Paper VI-Integral Transform, VII- Mechanism, VIII-Numerical Methods, IX-Partial differential equation, X-Mechanism

- 1. Developing several perspective so f differential equations.
- 2. Developing the knowledge of how to draw graphs, paths, walks and curvatures.

- 3. Developing the knowledge of partial differential equation.
- 4. Developing the knowledge of laplase transform, gama function, alpha function, bita function.

B.Sc. III MAT-501 - Real Analysis , 502-Abstract Algebra, 504- Ordinary differential equation, 601-Real Analysis, G02- Abstract Algebra, 604- Ordinary differential equation,

- 1. Developing the knowledge of real number of real valued functions such as sequences convergence and continuity.
- 2. Solution of system of ordinary differential equation.
- 3. Studying the properties of real numbers
- 4. Developing the knowledge of Algebra.

Department of Mathematics B.Sc.course outcomes:

| Sr. No. | Course | Expected Outcome |
|------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | After completing this course student will be able to |
| 1 | Algebra | 1. Solve various problems on properties of integers and use the basic concepts of divisibility, congruence and their applications in basic algebra. |
| 2 | Geometry | Apply factor theorem, remainder theorem to solve problems on polynomials and by using given relations between roots he will find the roots of polynomials. Solve the system of homogenous and non-homogeneous linear of m equations in n variables by using concept of rank of matrix, finding Eigen values and Eigen vectors. |
| 3 | Calculus I | 4. Solve the problems of lines in three dimension, planes, spheres, and cylinders and how geometry is related to algebra by using their algebraic equations. |
| 4 | Differential Equations | After completing the course, students will able to- 1. Identify algebraic and order properties of realnumbers 2. Identify and apply the function properties of realnumber system such as the completeness property. 3. Verify the values of limit of function at a point using the definition of a limit. 4. Students will be familiar with the techniques of integration and differentiation of function with real variables. 5. Identify and apply the intermediate value thm Mean value thm and L' Hospital' rule. 6. Identify types of differential equations and solve differential equations such as Exact, homogeneous, non-homogeneous, and linear and Bernoulli differential equations etc. |
| 5 | Calculus II | After completing the course, students will able to- 1. Students learn analysis of multivariable functions, continuity, and differentiability. |

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|----|--------------|---------------------------------------------------------------------------------------|
| | | 2. Learn the concepts of multiple integrals and their Application to area and volumes |
| 6 | Abstract | After completing this course student will be able to |
| | Algebra | 1. Use the concept of basis and dimension of vector spaces linear dependence and |
| | | linear independence, to solve problems. |
| | | 2. Use the concept of inner product spaces to find norm of vectors, distance |
| | | between vectors, and check the orthogonality of vectors, to find the orthogonal and |
| | | orthonormal basis. |
| | | 3. Apply the properties of linear transformations to linearity of transformations, |
| | | kernel and rank of linear transformations, inverse transformations to solve the |
| | | problems of matrix transformations, change of basis. |
| 7 | Integral | After completing this course student will be able to |
| / | Calculus | 1. Students develop knowledge in the limit, continuity, differentiation of vector |
| | Calculus | functions. |
| | | 2. Use the various techniques of solving Integral problems of vector valued |
| | | functions. |
| 8 | Real | After completing this course student will be able to know sequence and series of |
| 0 | 12 ANGESTON | real numbers and their convergence and divergence. |
| 0 | Analysis | After completing this course student will be able to know |
| 9 | Group | 1. Identify the various algebraic structures with their corresponding binary |
| | Theory | operations |
| | | 2. generalize the groups on the basis of their orders, elements, order of elements |
| | | and group relations |
| | | 3. Compare two groups of same orders on the basis of isomorphism Criteria. |
| | | 4. Compute the possible subgroups of given group of specific orders and will |
| | | recognize them. |
| 10 | Ordinary | On satisfying the requirements of this course, students will have the knowledge and |
| 10 | Differential | skills to: |
| | Equations | Solve linear differential equations with constant coefficients, non-homogeneous |
| | Equations | differential equations, system of first order equations, and solution of differential |
| | | equations by Power series method. |
| 11 | Number | After this course, |
| 11 | Theory | ✓ Solve various problems on properties of integers and use the basic concepts of |
| | THEOLY | divisibility and their applications in basic algebra. |
| | | ✓ Apply Euclid's algorithm and backwards substitution. |
| | | ✓ Understand the definitions of congruence's, residue classes and least residues. |
| 12 | Pool | |
| 12 | Real | On satisfying the requirements of this course, students |
| | Analysis I | will have the knowledge and skills to: |
| | | 1. solve problems on basic concepts of modulus, argument of a complex number, |
| | | deMoiver's theorem and use them to find roots of an algebraic equation. |
| | | Define continuity and differentiability for complex functions. |
| | | 3. Prove the Cauchy-Riemann equations and apply them to complex functions in |
| | | order to determine whether a given continuous function is complex differentiable. |
| | | 4. Evaluate integrals along a path directly from the definition and also via the |
| | | Fundamental Theorem of Contour Integration and Cauchy's Theorem, |
| | | 5. Compute the Taylor and Laurent expansions of simple functions, determining the |
| | | nature of the singularities and calculating residues. |
| 10 | | 6. Prove the Cauchy Residue Theorem and use it toevaluate integrals |
| 13 | Real | On satisfying the requirements of this course, students will have the knowledge and |
| | Analysis-II | skills to: Know convergenceof sequence and series of functions, Riemann |
| | | integrals, Improper integrals and its applications, |

| 14 | Ring Theory | After completing the course, students will able to- 1. Assess properties implied by the definitions of rings. 2. Use various canonical types of rings Ring. 3. Analyse and demonstrate examples of ideals and quotient rings 4 Use the concept of isomorphism and homomorphism for rings. On satisfying the requirements of this course, students will have the knowledge and |
|----|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15 | Partial Differential Equations | skills to: Form the partial differential equations and Solve the problems on Pfaffian differential equations. Solve the problems on first order and higher degree partial differential equations and its applications. |
| 16 | Geometry | After completing the course, students will able to- 1. Design, analyse and develop algorithm and method for solving geometric problems efficiently 2. Assess theoretical and practical problems that involves geometry 3. Generalize basic notions of reflection, rotation, projection with real life examples |

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HOD Of Department of Mathematics

Principalamata Indira Gandhi Arts, Commerce & Science College Jalna - 431203 (M.S.)

BHAGWAN SHIKSHAN PRASSARAK MANDAL'S GEORAI. RASHTRAMATA INDIRA GANDHI, ARTS COMMERECE AND SCIENCE COLLEGE JALNA

Department of Physics. (subject outcomes)

(M.S.)

Asst. Prof. Dr. Deshpande S.S.

| | Program Specific Outcomes. | | |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1. | Identifying and describing physical systems with the control of th | | |
| 2. | The state of the s | | |
| | theoretical or experimental in nature. | | |
| 3. | Knowledge of general physics like sound, wave, friction, forces and laws of motion and use of mathematics. | | |
| 4. | Information of electrical current, circuits, construction and their use. | | |
| 5. | Learning about concepts of nuclear physics and nuclear energies and importance of | | |
| | their use for mankind. | | |
| 6. | Knowing about the light and its importance in life, its characteristics, properties and | | |
| | use in various instruments. | | |
| | Course Outcomes | | |
| | B.Sc I Paper I | | |
| | By the end of this Course students should be able to know about. | | |
| 1. | Different types mechanics in that gravitational law Newtons law, gravitational | | |
| | potential, field, and spherical shell, solid spere. | | |
| 2. | Elasticity, moduli of Elasticity, Twisting couple, bending of Beam, Cantilever, loaded | | |
| | at free end, and effective and ineffective. | | |
| 3. | Viscosity and surface tension and its application, Bernoullis theorem, practical | | |
| | application, law of hydrostatic pressure, filter pump, poiseuilles formula, surface | | |
| | tention by Jaegers method. | | |
| 4. | Ultrasonic and acoustics, Piezo-electric effect, Magnetostriction effect, Oscillator, and | | |
| | application of ultrasonic, Acoustic, Reverberation, Sabin's law, Derivation of | | |
| | Reverberation time. | | |
| | B.Sc. I Paper II | | |
| | By the end of this Course students should be able to know about. | | |
| 1. | Thermal Conductivity, Rectilinear, flow of hit along a metal bar, Method of radial flow | | |
| | or near, comparison of conductivities of different method. | | |
| 2. | Real gas and transport phenomena, reason of modification of gas equation. Van Der | | |
| | Waals equation of state, critical constants, Constants of Var Der Waals equation, | | |
| | transfer phenomena, mean free path, viscosity, thermal conductivity | | |
| 3. | Thermodynamic, Adiabatic process, Adiabatic equation of perfect gas, Isothermal | | |
| | process, Indicator diagram, reversible and irreversible process, Thermodynamics, Heat | | |
| | engines, ccarnots ideal heat engine and cycle. | | |
| 4. | Entropy and Thermodynamic relations, change of entropy, in reversible and | | |
| | irreversible process, Maxwell's thermodynamically relations, Clausius, Clapeyron | | |
| | equation. | | |
| | B.Sc. I Paper III | | |
| * | By the end of this Course students should be able to know about | | |
| 1. | Practical, Kater's pendulum, Y by bendign of beam loaded at centre | | |
| 2. | Y by Cantilever, Maxwell's needle, M.I. by bifilar suspension, | | |
| 3. | S.T. by Jageer's methods | | |
| 4. | Coefficient of viscosity by Poisseuille's method. | | |

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| | B.Sc. I Paper IV |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | By the end of this Course students should be able to know about. |
| 1. | Geometrical optics and optical instrument, Huygens Eyepiece, Cardinal points of |
| | optical system, Ramsden's eyepiece, |
| 2. | |
| | fringes, |
| 3. | Diffraction, fraunhofer diffraction at double slit, determination of wavelength, |
| | Resolving power of optical instruments. |
| 4. | Polarization, Malus law, Huygens's theory of double refraction. Nicol prism. Fresnel's |
| | theory of optical rotation, Laurentz's half-shade polarimeter, |
| | B.Sc. I Paper V |
| | By the end of this Course students should be able to know about. |
| 1. | Vector Algebra, Cross and Dot product, vector triple product. Divergence and curl of |
| | vector, function and their physical interpretation, surface and volume integrals. Gauss's |
| | divergence and Stoke theorem. |
| 2. | Electrostatics, Coulomb's law, Gauss's law, electric potential, electric dipole |
| | Dielectrics, Gauss's law in dielectrics, Relation between D.F. and P. |
| 3. | Magneto statics, Magnetic induction, Magnetic flux, Biot-Savart law Ampere's law |
| | Moving coil ballistic Galvanometer. |
| 4. | Transient Current, Growth and decay of current L and R, Growth and Decay of charge |
| _ | in LCR circuit. |
| | B.Sc. I Paper VI |
| | By the end of this Course students should be able to know about. |
| | Practical |
| 1. | Y by Searle's Apparatus, M.I. of fly wheel |
| 2. | Thermal conductivity of bad conductor by Lee's disc method, study of CRO |
| 3 | Field along axis of circular coil, I-H curve. |
| 4. | Calibration of spectrometer, Dispersive power of prism. |
| - | B.Sc. II Paper VII |
| | By the end of this Course students should be able to know about. |
| ١. | Differentiations and ordinary differential equations, total differentiations, chain rule, |
| | ordinary differential equation, solution of first order differential equation, solution of |
| | second order differential equation, Homogeneous and inhomogeneous equation |
| 2. | Statistical basis and classical statistics, Probability and frequency, basic rule of |
| | probability theory, microstates and microstate, phase space, thermodynamic |
| | probability, Maxwell-Boltzmann energy distribution law. |
| | Quantum statics, Bose-Einstein distribution law, Planck's radiation law, Fermi Dirac distribution law Fermi level and Fermi le |
| | distribution law, Fermi level and Fermi energy, difference between classical and quantum statistics. |
| | |
| 1 | Theory of relativity, Galilean transformation equations, Michelson Morley experiment, Lorentz transformation equation, |
| | B.Sc. II Paper VIII |
| 1 | By the end of this Course students should be able to know about. |
| | Photoelectric Effect determine a/m for photoelectric Silving S |
| | Photoelectric Effect, determine e/m for photoelectrons, Richardson and Compton experiment, Retarding potential Relation between Photoelectric |
| | experiment, Retarding potential, Relation between Photoelectric current and retarding potential. Photo emissive cell photo voltaic cell photoeconduction all compton |
| | potential, Photo emissive cell, photo voltaic cell, photoconductive cell, application. X-rays, Laue's experiment Bragg's Law The Bragg's V |
| | X-rays, Laue's experiment, Bragg's Law, The Bragg's X-ray spectrometer, Power crystal method, Characteristics X-ray spectrum, |
| | Nuclear forces and models Rinding energy Nuclear State 114 |
| | Nuclear forces and models, Binding energy, Nuclear Stability, nuclear force, liquid |
| | Fellomoll |

drop model, shell model, Energy released in Fission, Chain reaction, Nuclear reactors Nuclear fusion, 4. Particle Accelerators and detectors, Linear accelerator, Cyclotron, Betatron, Ionisation chamber, G.M. counter. **B.Sc. II Paper IX** By the end of this Course students should be able to know about. 1. Practical, h by photo cell, e/m by Thomson's tube method 2. Bh and By using earth Inductor, Stefan's constant, Low resistance using potentiometer, frequency of A.C. mains using sonometer. Specific rotation by Laurent's half shade polarimeter, Cauchy's constant by spectrometer B.Sc. II Paper X By the end of this Course students should be able to know about. Practical, Thermal conductivity of rubber tube, Study of temperature dependence of total radiation To draw the histogram of theoretical Gaussian Curve, Comparison of capacities by Desauty's method. Velocity of sound using Helmholtz resonato, Surface tension by Ferguson's method, R.P. of Telescope/microscope Determination of Wavelength of light by Newtons' ring. B.Sc. II Paper XI By the end of this Course students should be able to know about. Semiconductor, Semiconductor diode, Zener Diode, Characteristics, PNP & NPN transistor, characteristics, construction and working and characteristic, FET, MOSFET. Transistor Baising and Amplifiers, Selection of operating points, Bias stability, Transistor biasing circuits, Single stage transistor amplifier Oscillators and Multivbrators, representation of transistor, Hybrid parameters or hparameter, Positive feedback, Basic principle of Oscillators, requirements feedback, RC Oscillator 4. Modulation and demodulation, amplitude, frequency, phase, modulation, advantages of modulation index. B.Sc. II Paper XII By the end of this Course students should be able to know about. Crystal Structure, Plane lattice, Unit cell, Symmetry operation, type of lattices, Miller indices, simple crystal structure. Bonding and Band theory of solids, concept of inters-atomic forces, bonding primary bonds, Kroning-Penny model, Energy versus Wave vector relationship. Thermal properties of solids, Einstein Theory of lattice heat capacity, Einstein theory of lattice capacity, Debye's model and its limitation Free electron theory of metals and transport properties, Drude-Lorentz's classical theory, Wiedemann Franz law, Fermi energy level, Hall effect, Hall coefficient, importance of Hall effect. **B.Sc. II Paper XIII** By the end of this Course students should be able to know about. 1. Practical, Energy bank gap of semiconductors using thermistor, I.V. Characteristics of solar cell. Calibration of bridge wire using Carry-Foster's bridge, Determination of absolute capacity of condenser using B.G. Full wave rectifier with, Viscosity of liquid using searle's viscometer PRITACI

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| High resistance by leakage through condenser, Viscosity of liquid by oscillating method. B.Sc. II Paper XIV By the end of this Course students should be able to know about. Practical, Transistor characteristics in CE configuration, Transistor characteristics in CB configuration. Study of CE amplifier, Hartley Oscillator using transistor Wien Bridge Oscillator using transistor/Op-Amp, Op-Amp as adder/substractor JEET characteristics, self-inductance by Owen's Bridge. B.Sc. III Paper XV By the end of this Course students should be able to know about. Classical mechanics ,mechanics of particle , mechanics of system of particle D'Alemberts principle , Lagrange's equation ,Linear harmonic Oscillator, Origin of quantum theory black body radiation, planks Quantum theory Quantum postulates, linear momentum of photon innterms of wave vector Einsteins equation , Quantum effect. Wave particle duality deBroglies hypothesis for matter wave , phase and particle velocity, group velocity Davisson-Germer Experiment ,Heisenberg uncertainty principal application, Binding energy of electron The Schrödinger Equation and its application wave function ,Time depedent Schrodinger B.Sc. III Paper XVI Electroststics knowing the knowledge of electrostatics Time varying Field knowing Maxwell equations displacement f current | | |
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| By the end of this Course students should be able to know about. Practical, Transistor characteristics in CE configuration, Transistor characteristics in CB configuration. When Bridge Oscillator using transistor/Op-Amp, Op-Amp as adder/substractor JEET characteristics, self-inductance by Owen's Bridge. B.Sc. III Paper XV By the end of this Course students should be able to know about. Classical mechanics, mechanics of particle, mechanics of system of particle D'Alemberts principle, Lagrange's equation, Linear harmonic Oscillator, Origin of quantum theory black body radiation, planks Quantum theory Quantum postulates, linear momentum of photon innterms of wave vector Einsteins equation, Quantum effect. Wave particle duality deBroglies hypothesis for matter wave, phase and particle velocity, group velocity Davisson-Germer Experiment ,Heisenberg uncertainty principal application, Binding energy of electron The Schrödinger Equation and its application wave function, Time depedent Schrodinger B.Sc. III Paper XVI Electrostics knowing the knowledge of electrostatics Time varying Field knowing Maxwell equations displacement f current Electromagnetic wave to know origin of electromagnetic waves characteristics of electromagnetic wave polarization, poynting vector, thermo. Interaction of electromagnetic wave with matter boundry condition B.Sc. III Paper XVII Experiment thermal conductivity of forbs method Experiment Rydberg constant Determination of dielectric constant of liquid/solid B.Sc. Paper XVIII Experiment Lambda by gratting, 5 Experiment Heartmanns dispersion formula Experiment Lambda by gratting, 5 Experiment Lambda by gratting, 5 Experiment Lambda by gratting, 5 Experiment Heartmanns dispersion formula Molecular spectra A.ASER B.Sc. Paper XXI Non conventional energy sources Solar photovoltaic system Introduction of optical fiber Fiber cables and fabrication B.Sc. Paper XXI | | |
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| 4. JEET characteristics, self-inductance by Owen's Bridge. B.Sc. III Paper XV By the end of this Course students should be able to know about. Classical mechanics mechanics of particle, mechanics of system of particle D'Alemberts principle, Lagrange's equation, Linear harmonic Oscillator, Origin of quantum theory black body radiation, planks Quantum theory Quantum postulates, linear momentum of photon innterms of wave vector Einsteins equation, Quantum effect. Wave particle duality deBroglies hypothesis for matter wave, phase and particle velocity, group velocity Davisson-Germer Experiment, Heisenberg uncertainty principal application, Binding energy of electron The Schrödinger Equation and its application wave function, Time depedent Schrödinger B.Sc. III Paper XVI Electroststics knowing the knowledge of electrostatics Time varying Field knowing Maxwell equations displacement f current Electromagnetic wave to know origin of electromagnetic waves characteristics of electromagnetic wave polarization, poynting vector, thermo. Interaction of electromagnetic wave with matter boundry condition B.Sc. III Paper XVII Experiment thermal conductivity of forbs method Experiment Rydberg constant Determination of dielectric constant of liquid/solid B.Sc. Paper XVIII Experiment temperature coefficient of resistance of semiconductor Experiment themerature of sodium flame Experiment Lambda by gratting, Experiment Lambda by gratting, Experiment Lambda by gratting, Experiment bridge rectifier transistor regulator power supply using zener diode B.Sc. Paper XXI The atom model Vector atom model Molecular spectra LASER B.Sc. Paper XXI Non conventional energy sources Solar photovoltaic system Introduction of optical fiber Fiber cables and fabrication B.Sc. Paper XXI | 3. | |
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| | B.Sc. Paper XXII |
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| 2 | Determination of wave length of He-Ne laser using gratting Y by Koenig method. Edgers and the State of the S |
| 3 | |
| 4 | Experiment e/m Thomson method ,surface tension by Ripple method. |

Dr. Deshpande s.s.

Rashtramata Indira Gandhi Arts, Commerce & Science College Jalna - 431203 (M.S.)



Programme Specific Outcomes of Economics.

- 1) Understand basic concept of Economics.
- 2) The ability to analyse economic behaviour in real life.
- 3) In prove economic way of thinking.
- 4) Understand economic world, how will all thinks are happening.
- 5) Understand how consumer acts in real life and try to maximize utility and how to minimize expenditure pattern.
- 6) Understand how production activities are taken place, how producer maximize profit and minimise cost and how revenue maximize.
- 7) Developing the skill of data collection and use of sampling techniques and mathematical tools in research.
- 8) Get the ability of forecasting in economy as well as in real life.

Rashtramata Indira Gandhi Arts, Commerce & Science College Jalna - 431203 (M.S.)

301.MA (M.S.)

Department of Economics

Course outcomes: B.A. Economics.



B.A.F.Y.

SEMESTER-I

Eco-101: Micro Economics (Compulsory)

On completion of the course, students are able to understand:

- 1) Scope, Importance and limitations of micro economics, the theory of consumer behaviour, analysis of consumption function and equilibrium of consumer.
- 2) The law of demand and supply (Linear and Non-linear demand function)
- 3) Different kinds of market equilibrium.
- 4) The concepts of new welfare economics.

Eco-102: Indian Economy (Compulsory)

On completion of the course, students are able to understand.

- Characteristic of Indian economy less developed economy, Natural resources.
- 2) Human development Index (HDI) concept and meaning Indicators, importance.
- 3) Concept of poverty, measurement of poverty, causes and removal of poverty.
- 4) Types of unemployment.

SEMESTER-II

Eco-103:- Price theory (Compulsory)

Units incorporated in this paper would enable the students to know about:

- 1) The theory of production: i) Analysis of production function, ii) Equilibrium of a producer.
- 2) Cost and Revenues of production.
- 3) Price determination of factors. (rent, wages, interest, profit)

 Different form of markets: perfect competition, monopolistic competition, oligopoly and Duopoly.



Eco-104:- Money Banking and Finance (Compulsory)

Units incorporated in this paper would enable the students to know about :

- Meaning, definition of bank (Types of Bank)
- New concepts in Banking Core Banking A.T.M. credit card Internet Banking
- Reserve Bank of India Method of Credit Control
- 4. Market- Money Market, Capital Market, Stock Market

B.A.S.Y.

SEMESTER-III

Eco-105:- Macro Economics (Compulsory)

This paper is designed to make student aware of the basic theoretical underlying of macroeconomics:

- 1) The basic concept and theories of macroeconomics.
- National Income: I) circular flow of National Income; ii) Difficulties in measuring National Income.
- 3) Classical and Keynesian theories of output and employment.
- 4) Consumption and Investment fiction.
- 5) Understanding the concepts of i) Inflation ii) Deflation.

Eco-106:- Development of Economics (Compulsory)

This paper is designed to make student aware of the basic concept of Public Finance.

- Understand meaning, Nature, scope of Public Finance importance of public finance.
- 2) Understand public revenue- sources of public revenue understand
- 3) Concepts of Taxation- Direct Tax and Indirect Tax

- 4) Understand concept of Public expenditure.
- 5) Understand concept of budget and balanced, surplus.



SEMESTER-IV

Eco-108: Statistical Methods. (Compulsory)

This paper is to understanding economic concepts with the help of statistical methods and understand how to collect the data.

- It helps the students in data collection, tabulation and graphical presentation of statistical data.
- 2. To know the importance, difference of mean, median and mode.
- To understand the use of dispersion-mean deviation and standard deviation, and learn how to calculate simple correlation-Karl Persons's method.
- To learn about the different types of index numbers. Its various methods such as price index-Laspeyre, Pesche and Fishers method.

B.A. III T.Y.

Semester V

Eco-109: International Economics (Compulsory)

Once go through this paper the students are able to understand various expect of international trade.

- 1. Theories of absolute advantage, comparative advantage and opportunity cost-Heckscher-Ohlin theory of trade.
- 2. Knowing gain from international trade, trade is an engine of economic growth.
- Discussing the various types of tariffs and quotas.
- 4. Understand the different concept and components of balance of payments.



Once go through this paper the students are able to understand varies aspect of Agricultural Economics

- Understand Development of Agriculture Role and Importance of Agriculture in Economics Development Agriculture resources in Indiacropping patterns.
- 2. Understand Technology in Agriculture- Traditional Technologies, Hybrid Seeds, Fertilizers Dry Land farming, and green revolution.
- 3. Understand Agriculture Price policy, price instability, objectives of agriculture price policy.
- 4. Understand an overview of agricultural development under employment and unemployment in the rare Economy, Globalization of Indian economy and its effects on Indian agriculture.

Eco-111: History of economic Thought (Optional)

The main object of this paper is to understand the basic economic idea of various economic thinkers of the world.

- 1. Acquaintance with the economic thought of early period, classical period : Adam Smith, David Ricardo, R Malthus, Karls Marx, J.B. Say.
- Marginalists: Marshall as a great synthesizer, role of time in price determination, economic methods, ideas on consumers surplus, elasticities, prime and supplementary cost, representative firm, external and internal economics, quasi rent, organization as factor of production, nature of profit.
- 3. Keynesian Ideas: The aggregate economy, liquidity preference theory and liquidity trap, marginal efficiency of capital and investment, role of fiscal policy, deficit spending and public works, multiplier principle.

OR

Eco-111 (A): Mathematical Economics (Optional)

The aim of this paper is to equip students to understand the economic concepts and theories with the help of mathematical tools and techniques to understand consumer behaviour.

 Mathematical tools: Elementary ideas of different calculus matric, Cramer's rule. Maxima and minima in a single variable, distance between two points, straight line equations.

2. Consumers Theory: Utility function – Total utility and marginal utility, budget line, constrained optimization, consumer's equilibrium, Elasticity of Demand.

3. Understand the concept of Cost and revenue function, relationship between total, average and marginal cost and revenue with the help of mathematical tools and through the numerical examples.

4. Understand the different types of market structure such as perfect competition, monopoly, price discrimination, market equilibrium, Demand and supply function with the use of curves and numerical examples.

Eco-112: Project Work

Semester- VI

Eco-113: Research Methodology (Compulsory)

This paper is to provide information about social science research to the students at economics.

- 1. Understand the basic framework of research process.
- 2. Knowing various research designs and techniques.
- 3. Knowing the various type of data collection.
- 4. Aware of different type of graphical presentation

Eco-114: Industrial Economies (Compulsory)

This paper intends to provide knowledge to students on the basic economic factors in the country.

- Understand Need, importance and role of Industries in economic and social development, Industry and agriculture sector linkages.
- 2. Understand the sector of public, private, joint and co-operative.

- Understand the location of Industries- Theories of Location, diversification, integration and merger of Industries units.
- Understand structure of large scale industries in India sugar, cotton, Iron, steel, cottage and agro processing

Eco-115 (c): Economy of Maharashtra (Optional)

The main object of this paper to understand the problems related to agriculture, industries, co-operative sector and etc.

- Understand the features of economy of Maharashtra structure and size population nature and causes of unemployment and poverty in Maharashtra and ______
- Understand the problems of agriculture in Maharashtra productivity of agriculture- causes of low productivity land reforms, irrigation in Maharashtra.
- Understand the co-operative movement in Maharashtra progress of co-operative movement, co-operative societies marketing, cooperative processing units, evaluation of co-operative movement in Maharashtra.
- 4. Understand Infrastructure and industrial development in Maharashtra –Need for Infrastructure development, Rail Transport, Road Transport, Water Transport, Structure of Industries in Maharashtra - ______ in the industrial development Recent Industrial policy.

Rashtramata Indira Gandhi Arts, Commerce & Science College Jalna - 431203 (M.S.)

Department of Geography Program Specific Outcome Geography

On completion of the B.A. Geography student are able to

- 1. Serve as Geography
- Work as a teacher in college, school and high school.
- 3. Serve as conservator in forest, soil, Agricultural department.
- 4. Work in disaster and water resource management.
- 5. Serve in forest department as forest conservator.
- 6. Serve in cartographer in map making division of Government.
- 7. Work in NGO's
- 8. Can prepare for competitive exam.

Course Outcome of Geography

Gography-07-Climatology and Ceanography

S.Y.B.A.

- 1. Understand the importance of atmosphere.
- 2. Understand insolation and temperature and heat balance.
- 3. Understand atmosphere pressure and wind.
- 4. Role of climate in human life.

Gography-110

- 1. Understand Introduction of Oceanography
- Understand properties of ocean water
- Knowledge about salinity and temperature of ocean water
- 4. Study about inarine deposit and Corel reefs.

B.A.T.Y.

Geography-112 - Geography of Environment.

- Understand definition, Nature and scope
- 2. Understand Ecology, Biotic or Nonphysical organism, population and biotech community.
- 3. Study about ecosystem, Ecological pyramid.
- 4. Knowledge about ecosystem, Global warming, forestation.

Geography-115 – Geography of Nature calamity.

- Understanding Natove & scope
- Study about earthquake, volcano.
- Understand drought and floods and biological hazards.
- 4. Understand global warming, green effect, ozone, deflation, pollution.

Geography-118 Practical main Geography

Practical in surveying.

- Understand introduction of instrumental survey.
- Study about field survey using plas table





4. Understand the measurement of heights by using Abriey level.

Geography-119 Project work (main practical)

- 1. Student selected the project must be related to the geographical tomc.
- 2. Study of disaster like earthquake, draught, floods.
- 3. Understand agricultural land use crop diversification.
- 4. Issues about urban planning and land management.
- 5. Study transportation system and local development, accessibility and flow chart.

Department of Geography Semester- V, VI Course Outcomes Geography B.A.T.Y. Geography practical Paper-XVII (Sub)

- 1. To understand and calculate average percentage by mean, median, mode
- 2. To Understand deviation between two figure by mean, quartile, standard deviation
- 3. Understand correlation
- 4. Understand regration, equation by least square method.
- 5. Participate on Geographical tours and skill developed by writing tour report.

B.A. II Paper-V Elements of Physical Geography

Semester I

- Understand basic information about physical geography and understand of branches of Geography
- 2. Understand interior of earth and origin of the earth by rerios theories.
- 3. Understand volcano and earth quack and movement.
- 4. Understand of types and classification of Rocks and origin of rocks.

Paper-III Geography of Landforms paper

- 1. Understand landforms and types of landforms.
- 2. Understand weathering, types and classification of weathering.
- 3. To know Geomatric agents and processes of Erosion, transportation and Dirsion
- Understand Geomorphology and uses and forms produced by Glacier, Settlements and Geomorphology.

Semester-III

Paper-Popn Geography

- 1. Understand introduction and definition of Pop'n Geography
- 2. Understand to factors affection on population growth.
- 3. Classification and pop'n composition
- 4. Understand to Pop'n migration and factors affecting on migration, types of migration.



Semester-IV

Paper-IV-Settlement Geography

- 1. Understand to introduction of settlement Geography.
- 2. Understand site and structure of settlement Geography.
- 3. Understand silent features of Human settlement.

Department of Geography Course Outcomes Geography Geography-113- Industrial Geography of Maharashtra.

On completion of the course, student are able to:

- Understand study about the industry in Maharashtra that is study in nature, scope and recent development and localization of industries.
- 2. To study the distribution of India and spatial pattern in Maharashtra.
- 3. To study of industrial belt of Maharashtra and impact of economic development of Maharashtra.
- 4. To study the impact on urban fringer and changing industrial policy in Maharashtra and effect of globalization.

Geography-109- Practical Geography

- Understand introduction of instrument earth size, area, and great circle and plane spherical latitude, longitude direction and design the distance map.
- 2. Draw the man projection classification and necessity of map projection.
- Study the construction of the properties of projection and special study of cylindrical projection, equal area conical projection, zenithal polar, geometric projection, zenithal equal projection.

Geography-112-

- To study of cartography Nature scope and definition and important of cartography.
- Understand type of cartographic techniques by the data using climography, Hythergraphy, stardigram under the difference method using.
- The statistical data and using the following graph that is the line and Bar graph divided rectangle divide ciercal, dot map, ISO pleath, proportional cercal and choropleth map

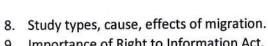
Rashtramata Indira Gandhi College, Jalna

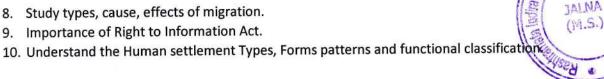
Department of Geography

Semester-II, B.A. I Geography-101 - Human Geography

- Understand the relationship of man and environment.
- 2. Study of human evolution and races of man kinds.
- 3. Understand the concept of Determinism, posibilism and stop and Go determinism.
- 4. Understand the modes of life of Bhill, Jonnd, Nagar, Fskime, Bushmen, Masai, Gonds, Gujars and Tribes in India.
- 5. Understand the history of population
- 6. Importance of Right to Information Act.
- 7. Get knowledge of population theories.







Geography-105 - Semester-II B.A.-I

Regional Geography of Maharashtra

- 1. Study the location, size and shape, relief and physical division of Maharashtra
- 2. Understand climate balance.
- 3. Understand the types of soil and winds.
- 4. Understand cropping pattern and major crops.
- Understand Geographical condition production distribution.
- 6. Study the cotton and textile Industries, sugar industries.
- 7. Understand Transpiration Road and Railway transport in Maharashtra.
- 8. Understand the influence of physical Economic and Technological factors in agriculture patterns in Maharashtra.
- Students understand the statically crop combination method.

Paper V - Practical Geography

- Understand Nature and scope of cartography.
- 2. Understand the topographical maps, its introduction, types' index, grid reference and interpretation of satellite images.
- 3. Use data representation by various techniques of maps and diagrams.
- 4. To study and understand the drainage basin analysis and prepare the slope map, dissection index map, relative relief map, absolute relief map.
- 5. To understand and prepare the slope profile and their types and drawing the black diagram.
- 6. To study and understand the weather instruments, Thermometer, simple minimum and maximum dry and wet bulb, Rainguage, wind vane, cap anemometer, Hygrometer.

Paper XI - Geography-111-Physical Geography of India

Semester-V-Subsidiary, B.A.-III

- 1. Study the India in the context of south east and south Asia.
- Study about types of land diversities.
- 3. Study of Drainage systems of India.
- 4. Understand the regional and seasonal variations of climate the Monsoons.
- Study of soil types of India.
- 6. Understand the importance of Atmosphere.
- 7. Explain soil types of Indian their distribution.
- 8. Study about monsoons
- 9. Knowledge about effect of climate.
- Understand physical landscape of India.

Paper XV - Geography-115-Agricultural Geography of India

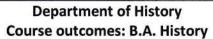
Semester-VI,B.A.-III

On completion of the course, student are able to:

- 1. Understand about the introduction to agriculture nature, scope, significance and Development of agriculture geography, study approaches applied in agriculture.
- 2. Understand the influence of physical economic and technological factors on agriculture patterns.
- 3. To understand the agricultural system its meaning and concept, whittersey's classification of agricultural system, types of agricultural study, the types of agricultural in respect of area silent features and their problems.
- Understand study about the agricultural geography, its nature, scope and different study methods.
- 5. Understand the agricultural regionalization and modes in agricultural geography and their classification of agricultural models and some theories.
- 6. Understand definition and characteristics of aid and semi aid regions and study about drought and famines, role of irrigation and dry farming.

PRINCIPAL Rashtramata Indira Gandhi

Arts, Commerce & Science College Jalna - 431203 (M.S.)



- 1. On completion of the B.A. with history special, students will gate get benefit for
- 2. Prepare for various types of competitive examinations

Paper-I

CO (1093) -Chh.Shivaji and His Times (AD 1630-1818)

- 1. Understand the Inspiration behind the establishment of Swarajya.
- 2. Student got knowledge about Explain the reasons behind chatrapati Shivaji early conflicts with the regional lords and outsiders.
- Know about the administrative need and the importance of grand coronation of Chatrapati Shivaji
- 4. Understand the formation of welfare state during the Maratha rule
- 5. Know the reasons of political disintegration of the Marathas
- 6. Explain the circumstance of the Maratha power offer the battle of panipat.

Paper II Co-(1393) - Hinstory of Modern Maharashtra (AD 1818-1905)

- 1. Administration Land Revenue system
- 2. Early phase of British Rule Social condition.
- 3. Reformers Mahatma Phule education work
- 4. Modern Maharashtra History is useful to students for MPSC examination.

B.A. SY.

Paper V (1099) - History of Early India (up to 300)

- 1. Understand the glory of Indian History in the age of Harappan Civilization, Town planning.
- 2. Comprehend the history of Vedic period.
- 3. Understand the philosophy of Jainism and Buddism.

Paper VI (Code 1100) - History of Delhi Saltant

- 1. Understand early difficulties of sultans in India
- 2. Understand the administrative setup of sultan from central to local level.
- 3. Know the system of trade and commerce during the period of sultan.
- 4. To give information to student regarding sultans carpeting and architecture.

5.

OR

Paper VI (1100) - Brithish Rule in India (AD s1775-1857)

- 1. Identify the Importance and the legacy of freedom movement.
- Distinguish the detail account of Brithish Raj as well as its overall impact on the Indian society.
- 3. Evaluate the renaissance and social reform movement in India.

VII (1280)- History of India (AD 300-650)

- Know about the Mauryan Empire.
- 2. Comprehend about the Gupta period.
- 3. Understand the History of satvahans vakatak.
- 4. Arts and Architecture.

VIII (1281) - History of Mugal India (AD 1526-1707)

- 1. Understand the political situation of India on the eve of Babars Invasion.
- 2. Understand the emergence and consolidation of shershah.
- 3. Understand the administrative set up of Mughals
- 4. Comprehend the basic features on Mansabdari and change in it during 17th century.



- 5. Know the system of trade and commerce during the period fo Mughals
- 6. Grasp the some aspects of fiscals and monetary system of Mughals.

B.A. T.Y.

Paper IX (1097) - Historiography

- Hystoriography: Understand the basic themes, concepts, chronology and the scope of Indian History.
- 2. History and other branches of knowledge.
- 3. Modern thinkers of History.
- 4. Indian History writing- subaltern, Markxist, Nationalist.
- 5. Use and abuse of history
- 6. History research method

Paper X-(1098)-History of Indian National Movement (AD-1885-1947)

- 1. Understand early political awakening in Indian freedom struggle.
- 2. Identity the social institutions of late nineteenth century.
- 3. The difference between moderates, extremists and revolutionaries.
- 4. Grasp the details of freedom movements under the Mahatma Gandhi's leadership
- 5. Understand the evolutionary processes of constitutional developments.

Paper XI (1206) - Women's struggle in Modern India

- 1. Status of women during British rule in India.
- 2. Status of women in post Independent India.
- 3. Woman's Social struggle: Tarabai Shinde, Pandita Ramabai, D.K. Karve, Mahatma Phule, Dr. B.R. Ambedkar.
- 4. Women's and Law: Consent bill, sharada Act, Patel bill.

Paper XIII (1278) - Fields of History.

- 1. Career for the students having History as a main subject.
 - Anthropologist
 - Archivist
 - Archaeologist
 - Museum Technician
 - Conservationist
 - Tourism

Paper XIV (1279) - Landmarks in the History of modern world

- Learn about the causes and aftermaths of the French revolution
- Describe how feudalism came to end in Europe.
- Describe the historical process with leads to rise of nationalism in Europe.

Paper XV (1387- Glimpses of the History of Marathawada.

- Political history of Marathwada a brief survey.
- 2. Religious movements : Brahminism, Buddhism, Jainism, Mahaubhav, Veershiva, Varkari movement , Sufism.
- 3. Hyderabad freedom struggle.

Paper XII & XVI - Project Work

1. Students out encourage the research and development among the students.

Palve R.S.

Faculty

Dr. Mundhe S. G. C. Head of Bereita Indira Gandhi Arts, Commerce & Science College Jaina - 431203 (M.S.)

Department of Political Science



Program specific outcomes B.A. political science.

On completion of the B.A. political science students are able to:

- 1. Serve as a politician
- 2. To admit M.A. Political Science, LLB, M.S.W.
- 3. Work as a teacher in college, school and High school.
- 4. Serve as foreign department.
- 5. Preparing competitive exams

B.A. I

Paper P.J. III

A) Basic concept of Political Science

- 1. Students can understand different concept of Political Science.
- 2. Students can understand democracy
- 3. Students can understand Justice
- 4. Students can understand Equality
- 5. Students can understand Liberty.

Paper II, IV -

B) Government and politics of Maharasthra

- 1. Students can understand Historical Background of Maharashtra
- 2. Students can understand political party in Maharashtra
- 3. Students can understand Government of Maharashtra
- 4. Students can understand different movements of Maharashtra
- 5. Students enable to understand so political factors of Maharashtra
- 6. Understand Punchayat Raj in Maharashtra

B.A. II

Paper -V, VII - Government and Politics

- 1. Students enable to understand philosophy of Indian constitution.
- Students enable to evaluate the evolution functioning and consequences of political party India
- 3. Students enable to know silent features in making of Indian constitution
- 4. Students understand fundamental Right, duties and directive principles of state politics.
- 5. Students understand the Indian National Movement.



- 1. Students enable to understand evolution scope of International Relation
- 2. Students enable to discuss the main international relations theories.
- 3. Students enable to know Indian foreign policy
- 4. Students enable to know Indian Relation with super powers.
- Students enable to analyse importance of international relation in process of nation progress.

B.A. III

Paper IX & XIII- Indian Political Thinkers

- Students enable to learn Lokmany Tilak chatusutri program.
- 2. Students can know Babasaheb Ambedkar Jati sangharsha.
- 3. Students know Mahatma Gandhi's idea of truth, Non-violence and satyagrah.
- 4. Students understand Pandit Nehru's idea of internationalism
- 5. Students understand Gokhales view of socialism

Paper X & XIV – Western Political Thinkers

- Students understand concept of Justice, freedom, equality, citizenship in the word of Mechqavelli, Hobes, Lock and Rouseem
- 2. Explain the different versions of state of nature and political thought.
- 3. Students can explain Kari Marxs, worldview, critique of democracy capitalism etc.
- 4. Explain John Stuart Mills theory on utilitarianism
- 5. Explain theories of origin of state.

Paper XI & V - Political Ideologies.

- 1. Students enable to understand the nature with scope of political Ideology.
- 2. Students enable to understand socialism
- 3. Student enable to understand fascism
- 4. Student enable to understand Anarchism
- 5. Students enable to understand Marxism
- 6. Students enable to understand capitalism

Political Science

Programme outcome: B.A. Political

After completion of B.A. (Political Science) students should be able to

- Students enable to develop academic proficiency in the subfield or Indian Government and politics, comparative government, International relation, public administration etc.
- 2. Students enable to presenting research in political science.
- 3. Students enable to analyse political and policy problems and formulate policy options.
- Students enable to discuss the major theories and concepts of political science and subfields and also deliver thoughtful and well-articulated presentations of research findings.





Selection (22.19) ANALL (22.19) ANALL (22.19) ANALL (22.19) ANALL (22.19)

B.A. Public Administration

Program specific outcomes

- 1. Knowledge about Indian administrative system of the nation.
- 2. Study of national and state, Local self Government
- 3. Study from Competitive examination point of view.
- Understanding the Government mechanism, its functions, duties and composition, responsibilities.
- 5. Creating appropriate and efficient administrative quality.
- 6. Getting knowledge of Administrative law.
- 7. Getting knowledge of constitution of India.

B.A. I Semester I

Paper I- Principals and concepts of public administration..

- 1. PUBADD meaning, Nature and scope importance.
- 2. Organization- meaning, basic, forms line of staff agency, chief executive.
- 3. Principles of organization.
- 4. Concepts of Public Administration planning, leadership, supervision, communication, public relation.

Paper II- Public Administration in India

- 1. Evolution of Indian Administration
- 2. Constitutional Frame work preamble, Fundamental Rights, Duties, Directive principles.

Paper III- Union Government- President, Prime Minister, Council - Power & Function

Paper IV- Union Legislature:

- 1. Loksabha-Rajyasabha:
- 2. Composition of Function

Paper V- Union Judiciary:

- Supreme Court
- 2. Judicial Activism
- 3. Attorney General of India

Paper VI- Statutory and Non statutory bodies.

- 1. UPSC
- 2. Election Commission
- 3. SC, ST, Commission
- 4. Human Right Commission
- 5. Development Council

Paper VII- Act 2005

RII 2005

Semester II

Paper III - Maharashtra Administration

I - Maharashtra State Formation, Salient Features

II - State Executive

Government, Chief Minister, Council of Minister

Chief Secretary, State Secretariat, Directorate

III State Legislature

- 1. Legislative assembly, council composition, power function.
- 2. Public Account of Estimate committee.

IV State Judiciary

- 1. High court
- 2. JanhitYachika
- 3. District & Session Court

V- Constitutional & Statutory bodies.

- MPSC
- 2. Maharashtra Election commission
- 3. Finance Commission
- 4. LokAyukta
- 5. VaidhanikVikas Mandal

Paper IV - District Administration

- Evolution meaning, importance of DA
- II- District Collector Power, Function, Role
- III- Law and order- meaning, principles and machinery
- IV- Key post in district administration
 - 1. SDO
 - 2. Tahsildar
 - 3. Talathi
 - 4. Police Patil
 - 5. Information a publicity officer
- V- District Police Administration
 - 1. Importance, power, function, role
 - CID
 - L.CB

Semester III

Paper-V- Personal Administration

I- Meaning Function



- II- 1. All India Services states role & function
 - 2. Central & state services Nature & function
- III- Training-meaning & Importance
 - 1. Academy of administration (mussories)
 - 2. Saradar Vallabhbhai Patel Nchmal Police academy (Hyderabad)
 - 3. YASHADA-Pune
 - 4. Maharashtra Police Training Academy (Nasik)
 - 5. Promotion, meaning & principles.
- IV- Grievance Redressal Mechanisms in India
 - 1. Central Vigilance commission
 - Lokpal
- V- Problems of personal administration, morale, discipline, corruption, Neutrality.
- VI- Administrative Tribunals
 - 1. CAT
 - 2. MAT
- VII- Retirement
 Meaning & Benefits

Paper-VI - Panchayat Raj & Rural Development

- I- Evolution of Panchayat Raj in India.
- II- Panchayati Raj system in Maharashtra.
- III- Rural Development-concept a programs.
- IV- Ministry of state Rural Development.
- V- Rural Development agencies.
- VI- Financial Resources.

Semester IV

Paper- VII- Financial Administration

- I- Meaning a importance
- II- Competition and function
- III- Budget
- IV- Accounts and Audit
- V- Parliamentary Central
- VI- New Economic Policy

Paper VIII - Urban Local Self Government and Urban Development

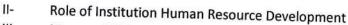
- I- Urbanization- meaning, causes and consequences
- II- Urban Local self-Government in Maharashtra
- III- Ministry of Urban Development
- IV- Urban Development Agencies
- V- Problems of Urbanization
- VI- Major Urban Development Programs

Semester V

Paper IX – Human Resource Development

I- Human Resource Development.





III- Means of HRD

IV- Human Resource Management

V- Human Resource Planning

Paper X – Education Administration in India

I- Education- Meaning, Subject, Importance

II- Historical Back ground of Education

III- Instruction in Higher Education

IV- Quality control Institution in Higher Education

V- Challenges before Higher Education

VI- Globalization and Higher education

Paper XI - Administrative Thinker,

- F.W. Taylor
- 2. Max Weber
- 3. Henry Fayal
- 4. Mary Parker Follet
- 5. Elton Mayo
- 6. Herbert Simon
- 7. F.W. Riggs

Semester VI

Paper XIII- Public Policy and Development

- 1. Public Policy- Meaning, Objectives, Types of Process
- 2. Public Policy Formulation.
- 3. Public Policy Implementation
- 4. Public Policies in India
- 5. Development meaning and concepts
- 6. Challenges before Development

Paper XIV - Health Administration in India

- 1. Indian Health Care system
- 2. Health and family welfare ministry
- 3. National Rural Health Mission
- 4. Determinants of health
- 5. Challenges before Indian Health care system

Paper XV-Recent Trends in Public Administration and important laws

- 1. Recent Trends in Public Administration
- 2. Important Law

Paper-XII & XVI - Project Work

JALAVA (M.S.)

PRINCIPAL
Rashtramata Indira Gandhi
Arts, Commerce & Science
College Jalna - 431203 (M.S.)

Rashtramata Indira Gandhi Arts Commerce and Science College Jalna

Department of Sociology

Specific Outcomes

- · Studying the general principles and pillars of social life
- Studying the pattern of human and social behaviour and their effects on individual and society
- The study and analysis of parts of social construction is a detailed study.
- · Laying the foundations of an ideal society
- Diagnosis and treatment of the various social problems experienced by society and the development or various plans to address them.
- Knowledge of the laws of social transformation, which are aimed at studying the bases and rules that society must follow to make a qualitative leap in the case of society.
- Student will demonstrate familiarity with the sociological imagination
- · Student will understand sociological theory.
- Student will develop and apply a comparative perspective to explain the diversity of human societies.

Course Outcomes B.A.F.Y.- Semester I PO 01 - Introduction to Sociology Paper No.I

- Students will demonstrate knowledge of core sociological concepts
- Students will demonstrate the ability to communicate sociological knowledge to others.
- Student will develop the knowledge skills, and attitude necessary to be engaged members of the community.
- Students will develop an ability to use social scientific research methods to address sociological questions.

B.A.F.Y.- Semester I PO 02 – Individual and Society Paper No.II

- Understand culture, socialization, social stratification and social change.
- Help to understand different sections of society and institutions and other structural elements.

B.A.F.Y.- Semester II PO 03 - Introduction to Subfields of Sociology Paper No. III

• Student of sociology must have the knowledge of those branches to understand the scope of sociology and its wideness.

• This will also help to carry interest in the sociology as general its subfields particulars.

B.A.F.Y.- Semester II

PO 04 – India Social Composition Paper No. IV

- Student know the basic segments of India social structure.
- Student understand rural and agrarian structure.

B.A.S.Y.- Semester III PO 05 – Problems of Rural India Paper No. V

- Understand the nature and social structure of rural India.
- Student aware about the changing scenario of Rural India and the contemporary problems of rural development.

B.A.S.Y.- Semester III PO 06 – Contemporary Urban Issues Paper No. VI

- Awareness to contemporary urban issues in India
- · Introduction to major social problems and challenges of urban society.

B.A.S.Y.- Semester IV PO 07 – Population in India Paper No. VII

- Student will demonstrate knowledge of demographical concept.
- Helps to students understand causes and consequences of population change.
- Help to understand the dynamics of population

B.A.S.Y.- Semester IV PO 08 – Development of Sociology Paper No. VIII

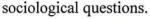
- Student understand concept of gender and development, social audit, sustainable development.
- Introduction too many development issues in India.

B.A.T.Y.- Semester V PO 09 – Sociological Traditions Paper No. IX

- Student understand of historical, socio economic and intellectual forces of the rise of sociological theories.
- Understand emergence of sociological thought and to know about pioneer sociologist state theories with their contributions to sociology.

B.A.T.Y.- Semester V PO 10 – Introduction to Research Methodology Paper No. X

- Imparting basic Research skills
- Acquaintance with different types of research and issues in research
- Students will develop an ability to use social scientific research methods to address



Helps to students to understand primary technique and the use of social research

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B.A.T.Y.- Semester V PO 11 – Social Problems in Contemporary India Paper No. XI

- To identify and analyse some of emerging social problems from sociological perspective
- To sensitize the student about social problems of contemporary India and discuss the measures on it.

Or

Urban Sociology Paper No. XI

- Understanding profile of urban community
- Introduction to the basic concept of urban society and urban development.

B.A.T.Y.- Semester VI PO 12 – Sociological Theories Paper No. XIII

• Understand the basic theoretical approach and development their sociological thinking while knowing theoretical contribution sociologist of their time.

B.A.T.Y.- Semester VI PO 13 – Social Research Method Paper No. XIV

- Students will develop an ability to use social scientific research methods to address sociological questions.
- Helps to students to understand primary technique and the use of social research
- Knowledge of how to use the computer and the internet in social research.

B.A.T.Y.- Semester VI PO 14 – Social Disorganization in Contemporary India Paper No. XV

- To make aware the students regarding the social disorganization in Indian society.
- Helps to understand the problem of social disorganization
- To make aware the student regarding Terrorism and Naxalism.
- To understand student regarding the regional unbalance special reference to Marthwada and Vidharbh.

PO 15 – B.A.T.Y. Semester V & VI Project writingPaper XII & XVI

We are teaching to prepare the various types of project to students.



Rashtramata Indira Gandhi Arts Commerce and Science College Jalna

Specific Outcomes

Studying the general principles and pillars of social life

 Studying the pattern of human and social behaviour and their effects on individual and society

The study and analysis of parts of social construction is a detailed study.

· Laying the foundations of an ideal society

 Diagnosis and treatment of the various social problems experienced by society and the development or various plans to address them.

 Knowledge of the laws of social transformation, which are aimed at studying the bases and rules that society must follow to make a qualitative leap in the case of society.

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