Year of Establishment : 1997 Reg.NGC-35/97/NMV(16/97)M.S. 3

Rashtriya Shikshan Prasarak Mandal Beed's

Lokmanya Tilak Mahavidyalya, Wadwani

Tq. Wadwani Dist. Beed. Maharashtra, India

Affiliated to : Dr.Babasaheb Ambedkar Marathwada University, Aurangabad.

UGC Recognition Under Section : 2 (f) & 12 (B)

NAAC Accredited 'B' Grade

Principal : Dr. K.M.Pawar Cell. 9421441005

Website : www.ltmwadwani.com Office Contact No. 02443-257750 Email ID : ltm_wadwani@rediffmail.com

DEPARTMENT OF ENGLISH

❖ Programme Outcome B.A.

• After completing bachelors in Arts (B.A.) program the students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough.

• The B.A. graduates will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking.

• The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice.

❖Course Outcome

B.A.I year

Paper I & III

Paper Code OPE 1& 3

Title of the Paper: Forms of literature I

- To make the students aware of basic concepts of literature
- To make them aware of forms of literature
- To help the students to develop their taste for literature and itsjudgement
- To make the students realize creative language and art

B.A.II year

Semester IV

COMPULSORY ENGLISH COURSE

PAPER CODE : CLE3 & CLE 4

Title of the Paper: A Course in Communicative English-III

Expected Outcome : The students would emerge as god communicators

English (Optional)

PAPER CODE: OPE5 & 7

Paper No.V

Title of the Paper : Literature in English I

Expected Outcomes:

- **The students would have developed awareness about different literatures written/translated in English**

Semester IV

PAPER CODE: OPE 7

Paper No.VIi

Title of the Paper : Periods of British Literature

Expected Outcomes:

- **The students would have developed understanding of British literature to a fair extent**

B.A.III year (Optional English)

Semester V, VI

The course of B.A.III year grouped into two sections. One is subsidiary and other ismain. This subsidiary and main comprises of four papers to be studied in two semesters.

Paper No. IX and XIII

Course Code OPE-5

Twentieth Century English Literature

Semester-V

Twentieth Century Eng. Lit. Paper IX, XIII

On successful study of the course the students will able to

• Understand how the literature of modern period relates to the important trends of 20th century.

• Appreciate poems by T.S. Eliot and W.B. Yeats with new insights.

• Comment on the theme of G.B.Shaw's plays, its subject matter, characters, plot and techniques.

• Comment on the theme of John Osborne's play.

• Understand plot, setting, characters, techniques in the novels of Kingsley Amis and D.H. Lawrence.

• To explore the multiple interpretations from the prescribed texts.

Paper X and XIV

Course Code -OPE-6 :Introduction to Literary Criticism and Terms.

Semester V and Semester VI

Outcome of the Course:

Introduction to Literary Criticism and Terms

Sem. V, VI Paper (Course) X, XIV

On successful completion of the course the students will able to

- To develop critical attitude to analyse literature. To make the students competent as critics

• Identify and discuss the classical Greek critics of literature.

• Acquaint with the basic critical theories by Aristotle, Sir Philip, Sidney, William

Wordsworth and F.R. Leavis.

• Understand the text, tragedy, poetry conception of literature with critical insight.

• Learn the terms related to various genres of literature.

• Cultivate an understanding of major critical and interpretive methods.

Paper XI and XV

OPE-7 Indian Writing in English

Sem. V and VI

Outcome of the Course :Indian Writing in English Paper (Course) VI and XI

After successfully completion of the course students will be able to

• Understands the background of Indian English literature.

• Critically appreciate the themes in the poems of Nissim Ezekiel and Arun Kolatkar.

• Understands and evaluate the theme, plot, characters in the plays of Girish Karnad and Vijay Tendulkar.

• Understands the Indianness, Indian local setting, characters in the novels of Raja Rao and U.R. Anantmurti.

• Understand the Indian Social reading, issues through prescribed texts.

Paper XII and XVI

OPE-8 Project work on History of English Literature. (from Renascence Age to the Age of T.S. Eliot)

• Understand the background and development of English Literature.

• Select topic for project work.

• Understand the aspects of Research Methodology.

• Able to write a research paper.

• Understand the Trends, movements in English literature

• Face viva-voce examination related to Project Work.

IQAC Coordinator
shtriya Shikshan Prasarak Mandal Bee
kmanya Tilak Mahavidyalaya Wadw
q.Wadwani Dist. Beed,Maharashtra

R.S.P.M. Beed's

PRINCIPAL
Rashtriya Shikshan Prasarak Mandal Beed's
Lokmanya Tilak Mahavidyalaya Wadwani
Tq.Wadwani Dist. Beed,Maharashtra

राष्ट्रीय शिक्षण प्रसारक मंडल बीड़ संचलित,

लोकमान्य टिळक महाविद्यालय वड़वणी, जि. बीड़ (महाराष्ट्र)

संलग्नित, डॉ बाबासाहेब आंबेडकर मराठवाडा विश्वविद्यालय औरंगाबाद

हिन्दी विभाग (Department Of Hindi)

हिन्दी भाषा शिक्षा के परिणाम

LEARNING OUTCOMES OF HINDI

- भारतीय संस्कृति, साहित्य से छात्रों को परिचित कराना।
- हिंदी भाषा का विश्व स्तर पर प्रयोग से परिचित कराना।
- हिंदी भाषा की साहित्य विधाओं से छात्रों को अवगत कराना।
- हिंदी भाषा और तुलनात्मक साहित्य का अध्ययन करना।
- मानवीय मूल्य, सामाजिक ज्ञान, तकनीकी सामग्री से छात्रों को परिचित करना।
- अनुसंधान सुविधा प्रदान कर अहिन्दी भाषियों को वस्तुगत ज्ञान का बोध कराना।
- सृजनात्मक लेखन के लिए प्रोत्साहित करना।
- वैकल्पिक विषय चुनकर पढने का अवसर प्रदान करना।
- लेखक ,कवि, साहित्यकार के रूप में बढावा देना।
- जनसंचार के क्षेत्र की जानकारी देकर अवसर प्रदान करना।
- शिक्षा के क्षेत्र में बढावा देना।
- हिन्दी अनुवाद के क्षेत्र में अवसर प्रदान करना।
- राजभाषा सहायक के क्षेत्र में अवसर प्रदान करना।

डॉ गोविन्द पांडव
हिन्दी विभागाध्यक्ष

डॉ किशोर पवार
प्राचार्य
Principal
Lokmanya Tilak Mahavidyalaya,
Wadwani Tq.Wadwani Dist.Beed

पाठ्यक्रम परिणाम

COURSE OUTCOMES OF HINDI

हिन्दी विभाग

पाठ्यक्रम के प्रश्न पत्र	:	पाठ्यक्रम के परिणाम

- सामान्य हिंदी : सामान्य, व्यावहारिक हिंदी का परिचय होता है।
- हिंदी साहित्य का इतिहास : हिंदी साहित्य इतिहास लेखन परम्परा की जानकारी
- साहित्य हिंदी गद्य साहित्य: गद्य के विविध आयाम से समझता है।
- कथा साहित्य : कथा एवं कहानी से जीवन मूल्यों का परिचय होता है।
- लंबी कविताएं : कविता के दीर्घ स्वरूप, संवेदना, शिल्प को समझता है।
- प्रयोजनमूलक हिंदी : व्यावहारिक पक्ष की जानकारी होती है।
- प्रादेशिक भाषा साहित्य : अहिंदी भाषा क्षेत्र से अध्ययन करता है।
- मध्यकालीन काव्य : भक्तिकाल, रीतिकाल का हिंदी साहित्य परिचय।
- आदि, मध्यकालीन इतिहास : काव्य साहित्य की विशेष परंपरा को समझता है।
- साहित्य शास्त्र : भारतीय, पाश्चात्य साहित्य का परिचय।
- आधुनिक हिंदी का इतिहास : भारतेन्दु युग से इतिहास का परिचय।
- साहित्य शास्त्र : नव लेखन के लिए प्रेरित करता है।
- प्रकल्प लेखन : अनुसंधानत्मक शोध आलेख का सृजन करना।

डॉ गोविन्द पांडव
हिन्दी विभागाध्यक्ष

डॉ किशन पवार
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Department of MARATHI

MARATHI COURSE OUTCOMES AT UG :

Our collage runs UG programme Under UG we have B.A., B.Com and B.sc. आमच्या महाविद्यालयामध्ये पदवी स्तरावर मराठी विषय बीए, बी कॉम या वर्गाना शिकविले जाते त्याच बरोबर महाविद्यालयात विर्ध्यांच्या दृष्टीने आणि पुढे करीअरजच्या संधी मिळाव्यात म्हणून उपयुक्त प्रमाणपत्र कोर्स शिकविले जातात

For these classes, the learning are different As example, the course outcomes of the subject Marathi are provided here.

Second Language (Marathi) मराठी व्दितीय भाषा : B.A., B. Com., B.Sc.. F.Y.

- विध्यार्थ्यांना पायाभुत साहित्य आणि भाषीक कौष्यात्याचे ज्ञान उपलब्ध करुन देणे.
- विध्यार्थ्यांना मराठी साहित्य प्रकाराची ओळख करुण देणे, त्याच बरोबर मराठी विषयाच्या लेखकांची दर्जेदार पुस्तके उपलब्ध करुन देणे.
- विद्यार्थ्यांना निवडक लेखकांचा कवींचा परि[illegible]न देणे तथा गद्यातील अथवा कवितेतील असे सौंदर्य समजून सांगणे. आणि स्वतः विद्यार्थ्यांना क[illegible] लेखनाची सवय लावून देणे.
- विद्यार्थ्यांमध्ये मराठी साहित्याची अभिरुची निर्माण करून सृजनशीलतेला वाट तयार करून देणे.
- विद्यार्थ्यांना मराठी साहित्यातील सामाजिक सांस्कृतिक आणि जगण्याची नीतिमूल्य बहाल करून देणे.
- विद्यार्थ्यांना मराठी साहित्य निर्मितीसाठी प्रेरित करणे यासाठी भित्तीपत्रकाच्या माध्यमातून विद्यार्थ्यांच्या लेखणीला आणि प्रतिभेला प्रोत्साहित करणे.
- समाजासाठी आवश्यक असलेली संवेदनशील वैचारिकता उपलब्ध करून मनुष्यबळ निर्माण करणे.
- विद्यार्थ्यांना उपयोजित मराठी अभ्यासक्रम शिकवणे रोजगार भिमुख दृष्टिकोन निर्माण करून व्यावसायिक कौशल्य देणे पायाभूत साहित्य आणि भाषिक कौशल्याचे ज्ञान उपलब्ध करून देणे.
- मराठी साहित्यातील जुन्या नव्या कवी लेखकांच्या अप्रतिम कलाकृतीचा परिचय व्हावा म्हणून काही निवडक कथा कविता कादंबरी विद्यार्थ्यांच्या पर्यंत देणे.

Second Language (Marathi) मराठी व्दितीय भाषा. Com. SY.

- विद्यार्थ्यांना उपयोजित मराठी अभ्यासक्रम शिकवणे व्यावसायिक कौशल्य रोजगार बिमुख दृष्टिकोन निर्माण करणे.
- विद्यार्थ्यांचा भाषिक व्यावसायिक आणि व्यक्तिमत्त्वाचा विकास करून त्याला स्वच्छ ओळख करून देणे.
- विद्यार्थ्यांचे व्यावहारिक जीवन विकसित करणे दैनंदिन भाषा वापर साहित्यातील उपयोग कार्यालयीन उपायोजनेचा विचार करणे.
- भाषेतील समाज कौशल्य उच्चार सामर्थ्य लेखन कौशल्य शब्द संग्रह आणि स्वतः विद्यार्थी धीटपणानं एखाद्या विषयावर आपली विचारधारा प्रगट करून देण्याच्या साठीचे वातावरण उपलब्ध करून देणे.
- कार्यालयीन लेखन तंत्राविषयी माहिती उपलब्ध करून देणे.

Optional Marathi मराठी ऐच्छिक विषय : B.A., F.Y., S.Y., T.Y.

- विद्यार्थ्यांना मराठी भाषा व साहित्याचा सविस्तर अभ्यास शिकवणे विद्यार्थ्यांना मराठी साहित्याची इतिहासाची ओळख करून देणे.
- मराठी साहित्य निर्मितीची स्वरूप प्रक्रिया शिकवून विद्यार्थ्यांच्या मध्ये अभिरुची निर्माण करणे.
- विद्यार्थ्यांना भाषा व व्याकरणात त्यांचा सहभाग सहसंबंध वाढवून शिकवणे.
- विद्यार्थ्यांचा समीक्षात्मक दृष्टिकोन विकसित करून विद्यार्थ्यांमध्ये वाचन लेखन चिंतन कौशल्याचा विकास घडवून आणणे.
- यादवकालीन सामाजिक सांस्कृतिक धार्मिक स्थितीचा व्यक्तीचा वेध घेऊन त्यास आजच्या कालखंडातले वास्तवता लक्षात आणून देणे.
- तत्कालीन ग्रंथ निर्मिती मागील प्रेरणा आणि त्याचं स्वरूप उलगडून दाखवणे.
- मध्ययुगीन काळातील विविध संप्रदाय त्यांचे तत्त्व ांचे सामाजिक योगदान यांचा पुढील साहित्यावर पडलेला प्रभाव या सर्वांची जाणीव विद्यार्थ्यांना क .
- श्रेष्ठ व अक्षर साहित्यातील सौंदर्य स्थळे विद्यार्थ्यांना लक्षात आणून देऊन अध्यापन प्रक्रिया सुंदर बनवणे.
- मानवी जीवनातील उदात्त तत्वज्ञानाबरोबरच मानवी जीवनाचे आकलन मानवी मनाचे आकलन आणि मानवतावादाची शिकवण विद्यार्थ्यांच्या मनामध्ये रुजवून नीती मूल्यांची शिकवण देणे.
- काळाची गरज ओखून साहित्याबरोबरच प्रसार माध्यमाचा अनुवाद प्रक्रियेचा अभ्यास विद्यार्थ्यांना करून देणे.
- जागतिकीकरणाच्या खाजगीकरणाच्या उदारीकरणाच्या या कालखंडामध्ये विद्यार्थ्यांना रोजगाराच्या संधी उपलब्ध करून देणे.
- मागणी तसा पुरवठा या सिद्धांतानुसार मराठी भाषेचा साहित्याचा अभ्यास करणाऱ्या विद्यार्थ्यांच्या मध्ये साहित्याची अभिरुची वाढवण्याबरोबरच रोजगाराच्या संधी देखील उपलब्ध करून देणे
- माध्यमांतर किंवा अनुवाद या माध्यमातून वैशिष्ट्यपूर्ण व श्रेष्ठ साहित्य कलाकृती परस्परांच्या भाषेत सिद्ध करून साहित्य विषयाची गोडी निर्माण करणे.

- प्रकल्प लेखनाच्या माध्यमातून विद्यार्थ्यांनी वाचन चिंतन मनन संशोधक दृष्टी लेखन कौशल्यासाठी लागणाऱ्या सुरजनशीलतेला दृष्टी लक्षात आणून देणे प्रकल्प लेखनाच्या माध्यमातून लेखक कवी किंवा त्यांची साहित्य कृती साहित्य प्रांतातले विविध प्रवाह तत्कालीन आणि आजच्या कालखंडातले प्रश्न आणि समृद्ध सांस्कृतिक संचितविद्यार्थ्यांना मांडता यावं त्यांनी केलेल्या संशोधनाचा समाजाला देशाला आणि विद्यापीठात महाविद्यालयात शिक्षण घेणाऱ्या विद्यार्थ्यांना या साहित्यकृतीवर संशोधन करण्याची प्रेरणा विकसित करण्यासाठी विद्यार्थी परिपूर्ण बनवणे हे ध्येय ठेवणे.

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R.S.P.M. Beed's

PRINCIPAL
Rashtriya Shikshan Prasarak Mandal Beed's
Lokmanya Tilak Mahavidyalaya Wadwani
Tq.Wadwani Dist. Beed,Maharashtra

Year of Establishment : 1997 Reg.NGC-35/97/NMV(16/97)M.S. 3

Rashtriya Shikshan Prasarak Mandal Beed's

Lokmanya Tilak Mahavidyalya, Wadwani

Tq. Wadwani Dist. Beed. Maharashtra, India

Affiliated to : Dr.Babasaheb Ambedkar Marathwada University, Aurangabad.

UGC Recognition Under Section : 2 (f) & 12 (B)

NAAC Accredited 'B' Grade

Principal : Dr. K.M.Pawar Cell. 9421441005

Website : www.ltmwadwani.com Office Contact No. 02443-257750 Email ID : ltm_wadwani@rediffmail.com

SSS

B.A in Sociology

- **To provides initial knowledge about society, social life and social interactions.**
- ***To The study prepare an individual become useful member of, society and Nations at large*.**
- **To Student will demonstrate knowledge of core sociology concepts.**
- **To Student will demonstrate knowledge of how to use theory.**
- **To conceptualize a sociological problem. Student will demonstrate the ability to communicate sociological Knowledge to others.**
- **To Student will develop an ability to use social scientific research Methods.**
- **To address sociological questions. Student will develop the knowledge, skill and attitude necessary.**
- **To be engaged member of the community.**
- **Student will possess analytical skills in areas such as policy.**
- **To Analysis, administration analysis and problem solving.**

Learning Outcomes of Sociology

Course name	Course Outcomes
B.A.I Seme-I Paper I-Introduction to Sociology (CC-1A)	. Students understood basic concept of sociology . Students understood structural perspectives, Functionalist perspectives and conflict perspectives. . Students got knowledge about solution in societies problems.
Paper II- Indian Social Institutions (CC-1B)	. Students understood social policy and action in society. .Students understood meaning of culture and socialization .Student student understood social structure social Stratification in India.
B.A.I Seme-II Paper III-Basic Concepts in Sociology (CC-1C)	.To understand the social context of emergence of Sociology .To familiarizes students with new avenues in Sociology. .To introduces basic concepts in Sociology.
Paper IV-Transformation in Social Institution (CC-2C)	. Student studied of Urban and rural sociology . Students understood social policy and action in society.
B.A.II Seme-III Paper V-Problems of rural India	.Student becomes aware of the problem of rural women's. . Student learned about education and health. . The student learned about the ruler and components of development.
Paper VI-Contemporary urban issues	. Students noticed the growing problems of civilization. .Student's realized the impact of globalization on the city.
B.A.II Seme-IV Paper VII-Population in India	. Student's introduction to population in basic concept. . Student becomes aware of the growing population and resources. . Student understands new Population policy of India.
Paper VIII-sociology of development	. Students introduced the perspectives On development. . Students noticed how human development place.

B.A.III Seme.V **Paper IX-sociological Tradition**	**.The Student understood how Sociology was evolving.** **. Thoughts of thinkers who made fundamental of sociology were noticed.**
Paper X-introduction to research Methodology	**. Students got knowledge about basic concept in research methodology.** **. Students got direction regarding research in Sociology.**
Paper XI-social problems in India	**. Notice notice how human development becomes.** **. Students understood the concept of crime.** **. Students got knowledge problems regarding replacement and rehabilitation of the people.**
B.A.III Seme.VI **Paper XIII-sociological Theories**	**. The student understood how sociology was evolving.** **. Thoughts of thinkers who made the fundamentals of sociology were noticed.**
Paper XIV-social research methods	**.Students got knowledge about basic concepts in research methodology.** **. Students got direction regarding research in Sociology**
Paper XV-social disorganization in contemporary India	**. Notice how human development becomes.** **. Students understood the concept of crime.**
B.A.III Seme.V, VI **XII XVI-project work**	**.Research attitude developed among the students.** **.Research interest in Sociology has increased among the students.** **Students completed research on various subjects of Sociology.**

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B.A. in Political Science

After completion of the programmer, the students are able-

- To provide students a fundamental education in Political Science.
- To provide and adopt curricula the prepares our graduates for Employment and further study as Political Leadership.
- To provide students with the opportunity to focus on applied and policy Issues in Political.
- To provide a well- resourced learning environment.
- To provide the students with the opportunity to pursue courses those emphasize quantitative and theoretical aspects of Political Science.
- To provide programmer that allows the students to choose a wide range of special areas in Political.
- To Study Political development and Political Knowledge Growth.

Learning Outcomes of Political Science

B.A. I,II,III Year

Sr. No.	Semester	Name of Paper	Outcomes
1.	I Semester	POL CC-1A- Principals of Political Science	• To Introduce the Basic of Political Science to the freshers
2.	I Semester	POL CC-2B - Indian Government of Politics	• To Impart Undarstanding of the functioning of the Government wihtin Constitutional framework
3.	II Semester	POL CC-1A- Principals of Political Science	• To Introduce the Basic of Political Science to the freshers
4.	II Semester	POL CC-2B – Indian Government of Politics	• To Impart Undarstanding of the functioning of the Government wihtin Constitutional framework
5.	III Semester	Paper code Pol-105- Indian Government of Politics	• To Impart Undarstanding of the functioning of the Government wihtin Constitutional framework
6.	III Semester	Paper code Pol-106- International Relation	• Students will be able to evaluate ideological Foundations of International Politics. • Students will be able to identify influencing factors on International Politics.
7.	IV Semester	Paper code Pol-107- Indian Government of Politics	• To Impart undarstanding of the functioning of the Government within Constitutional framework

8.	IV Semester	Paper code Pol-108- International Relation	• Students will be able to evaluate ideological Foundations of International Politics. • Students will be able to identify influencing factors on International Politics.
9.	V	Paper code Pol-109-	• Students will be able to evaluate state,
	Semester	Indian Political Thinkers	• political Economy and civil society for public interest.
10.	V Semester	Paper code Pol-110- Western Political Thinkers	• Ability to develop principle based thinking. • Students will be able to apply theoretical knowledge for public decision making.
11.	V Semester	Paper code Pol-111- Political Ideologies	• Ability to demonstrate substantive knowledge of • Modern Political Concept and ideologies.
12.	V Semester	Paper code Pol-112- Research Project	• Students will be able to develop various research Designs and techniques.
13.	VI Semester	Paper code Pol-113- Indian Political Thinkers	• Students will be able to evaluate state, political Economy and civil society for public interest
14.	VI Semester	Paper code Pol-114- Western Political Thinkers	• Ability to develop principle based thinking. • Students will be able to apply theoretical knowledge for public decision making.
15.	VI Semester	Paper code Pol-115- Political Ideologies	• Ability to demonstrate substantive knowledge of Modern Political Concept and ideologies.
16.	VI Semester	Paper code Pol-116- Research Project	• Students will be able to develop various research Designs and techniques.

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Department of Public administration

Programme Outcomes at UG

Bachelor Of Arts (Pass Course) Public Administration

Our college runs UG Programmes.The Public Administration program from our college is run at UG level.

- **Under Graduate programme in Public Administration Objectives:**

1. Understand Public Administration theory and concepts from multiple perspectives.

2. Acquaint with the functioning of the Indian Administration at central, state, and local levels and the responses of these system in addressing the concerns of the people.

3. Acquaint the learner with the required knowledge of Administrative science and government in action and the contemporary issues in public affairs management.

4. Acquaint with India's development experience and Channing role of Administration.

5. Develop conceptual, analytics and problem solving abilities among the learners.

6. Understand the role of Public Services in India.

Program Outcomes:

1. Demonstrate knowledge of the core mechanism of Public Administration.

2. Ability to demonstrate the core mechanism of Public Management.

3. Ability to understand and apply the decision making, leadership and other professional skill.

4. Ability to explain how different environment effect on public policy and administrative functions.

B. A. First Year

Course Code:P.A.101

Course Name: Principles and Concepts of Public Administration

Course Objectives:

1. This introductory paper is aimed to acquaint the students to understand the theoretical aspects of Public Administration.

2. To introduce the students with basic concepts and theories and principles of public administration.

3. To understand the synthesizing nature of knowledge of public administration from public perspectives.

4. Appreciate the nature, scope and changing paradigm of public administration.

5. To understand the students Public and Private Administration 6. Similarities and differences. Also understand Administrative Planning, Leadership and Decision making concepts. Course Learning

Outcomes :

1. Students will be able to understand the meaning, relevance and historical development of Public Administration.

2. Learner will be able to differentiate and relation of Public Administration with other social sciences.

3. Learner will be able to define, understand and explain the organizational theories of the Public Administration.

4. Learner will be able to leading any work, planning of work and decision making.

B.A. First Year

Course Code Pub. 102 Course

Name: Public Administration In India

Course Objectives:

1. To understand the historical evolution and socio-economic, political and global context of Indian administration.

2. To build a better understanding of the role of civil services in Indian administrative system.

3. To understand the role of constitutional authorities in Indian administration.

4. To understand the constitutional frame work, preamble, fundamental rights, directive principles of state policy, fundamental duties and union judiciary structure and jurisdiction.

Course Learning Outcomes :

1. Through this course students will understand the role of Indian administration as a main instrument of State.

2. Students will develop diverse knowledge of the of Indian constitution and functioning of government.

3. Students will also learn about the problem of corruption and role and significance of Lok Pal, Right to Information Act 2005and Citizen Charter.

4. Student will be able to implementation in life fundamental rights and fundamental duties.

B. A. Second Year

Course Code Pub. 105 and 107

Course Name: Personnel Administration and Financial AdministrationCourse Objectives:

1. To introduce students the concept of Personnel Administration, Tanning, Promotion, Recruitment, Civil Service and Retirement.

2. To understand grievances redressed mechanism in India, problems of Personnel Administration

3. and Central administrative tribunals and Maharashtra administrative tribunals.

4. To be able to comprehend the financial administration.

5. To get to know about the budgetary processes in India.

6. To acquaint the students with the nature and functioning of political system(s) and the political processes.

7. To able to understand the tax administration in India and parliamentary control over finance.

Course Learning Outcomes :

1. The students understanding concept of Personal Administration, tanning, tanning institutions of civil servants in India, promotion, recruitment methods and civil services in India.

2. The students will be able to generate an insight about the financial administration in India.

3. They will understand and also differentiate between preparation and execution of budget in India.

4. They will acquire an understanding of different types of taxes at center, state, and local level and method of taxation.

B. A. Second Year Course Code PA. 106 &108

Course Name: Panchayat Raj And Rural Development Urban Local Self Government and Urban Development

Course Objective :

1. To understand the concept of democratic decentralization.

2. To trace the evolution of local government in India.

3. To comprehend the institutional arrangements and processes of rural and urban governance.

4. To Understand the concept of rural development and programs of rural development, the agencies of rural development.

5. To understand the urban development concept, programs of urban development and role of urban local self government.

Course Learning Outcomes :

1. Learner will be able to critically appreciate the relationship of local governance and development.

2. Appreciate the rural and urban institutional arrangements for development.

3. Understand the features of 73rd and 74th constitutional amendment Act.

4. Understand District Administration concept and knowledge of the district level Administrative posts and it's authority and role in Development Administration.

B. A. Third Year Course Code PA -109

Course Name :Human Resource DevelopmentCourse

Objectives :

1. To comprehend the nature, scope and significance of human resource development and human resource management.

2. To identify the objectives and need of human resource planning.

3. The course also aims to understand the role of institutions in human resource development and means of human resource development.

Course Learning Outcomes :

1. Students will be able to discuss the human resource development & human resource management.

2. Also understand the challenges of human resource planning and Problems.

3. Also, to identify the systems and processes of financial and material management.

4. Students will be able to discuss human resource planning concept, significance and process of planning.

B. A. Third Year

Cource code:P A -110

Cource Name:Educational Administration In India

Course Objective:

1. To Inform the students educational administration concept, education meaning, objectives and importance of education.

2. To Introduce the students historical background education in India and institutions of education in India.

3. Quality control institutions in higher education in India such as NAAC and AICTE to inform students.

4. To understand the students challenges before higher education in India and globalization impact on higher education.

Course Learning Outcomes :

1. Students will be able to discuss education concept, education importance in human life. Also understand educational institutions in India.

2. Globalization impact and consequences in higher education understand the students.

3. For national building and national development to make future generations efficient, proactive and characterization.

B.A . Third Year
Course Code PA-111
Course Name: Administrative ThinkersCourse

Objectives :

1. To understand the various theories of administrative thinkers with brief life sketch.

2. Make the learner to understand the administrative theories.

3. To understand the thoughts of most influential thinkers and contributors of Public Administration.

Course Learning Outcomes :

1. Students will be able to recognize the thinker's life, writings, principal contribution to the theory and critical evaluation.

2. They can identify and explain the significance of the theories in the modern context.

3. They can identify the organizational conflict and how the theories can resolve these conflicts.

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Department of History

Program me specific outcomes

At the time of graduation, the students will be to –
PSO 1: Understand the background of ancient ,medieval, and modern Indian history as well as world history.
PSO 2: Understand past and present existing social, political, religious and economic background of people.
PSO 3: Develop practical skills helpful in the study and understanding of historical models tools.
PSO 4 : Develop interests in the study of history and activities relating to history ,like reading of historical documents Maps, charts .
PSO 5 : Write articles on historical topics.

Course Outcomes
F. Y. B. A.
Semester I

Shivaji and His Times [1630 to 1707A.D.]
Upon completion of the course, the students will be able to –
CO1: Explain formation of welfare state during the Maratha rural
CO2 : Discuss industrial agricultural aspects of Chhatrapati Shivaji,regime
CO3 : Explain administrative aspect of the Swarajya.
CO 4 : Elaborate inspiration behind the establishment of Swarajya.
CO5 : Explain reasons behind Chhatrapati Shivajis early conflicts with the regional early conflicts with the regionallords and the outsiders.
CO6 :Discuss Maratha war of independence.[1689 to 1707 A.D.]
History of Modern Maharashtra [1818to 1905 A.D.]
Upon completion of the course, the students will be able to-
CO1 : Discuss history of modern Maharashtra
CO2 : Evaluate renaissance and social reform movement in Maharashtra
CO3 : Explain early political awakening of freedom struggle in Maharashtra.
CO4 : Discuss British Administration in Bombay Presidency
CO5 : Identify social institutions of 19th Century.

Semester – II

History of Marathas [1707 to 1818 A.D.]
Upon completion of the course, the students will be able to –
CO1 : Discuss Importance of the Maratha history in 18th century.
CO2 : Asses circumstances under which rise of the Peshwa took place
CO3 : Explain political scenario of the Maratha Power in the 18th century.
CO4 : Evaluate policies adopted by early Peshwa
CO5 : Explain circumstances of the Maratha Pawarat the battie of Panipat
CO6 : Explain reasons of political disintegration of the Maratha
CO7 : Discuss nature of Anglo – Maratha Relation.
CO8 : Discuss central and provincial administration of Maratha under the Pashwas.

20th Century Maharashtra[1905 - 1960 A.D.]
Upon completion of the course ,the students will be able to –
CO1 : Explain salient features of 20th the century Maharashtra
CO2 : Evaluate consolidation of British power in Maharashtra

CO3 : Analyse social ,religious consciousness in Maharashtra
CO4 : Discuss freedom struggal in Hydrebad state specially in Marathwada region
CO5 : Differentiate the Dalit movement and non Brahmin movemen

S. Y, B. A.
Semester III

History of early India [UPTO300 B.C.]
Upon completion of the course, the students will be able to –
CO1 : Discribe Prehistory and Pro history
CO2 : Classify urbanization in the Gangetic Basin
CO3 : Classification of Buddhism and Jainism
CO4 : Acquire Knowledge about Sanskrit, Pali literature
CO5 : Identify Early Indian MAPS
CO6 : Acquire knowledge of Vedic ,Jain, Buddist culture and their literature
CO7 ; Discuss ancient Republic and Mahajanpadas

British Rule in India [1707 to 1857 A.D.]
Upon complation of the course, the students will be able to –
CO1 : Explain modern Indian history
CO2 : Identify expansion of British Rule in India
CO3 : Distinguish detail account of British Raj as well as its overall impacts on the Indian Society
CO4 : Evaluate renaissance and social reform movement in India
CO5 : Explainearly resistance to British rule
CO6 : Discuss reasons behind the revolt 1857

Semester IV
B. A. T. Y.

Historigraphy
Upon conplation of the course, the students will be able to –
CO! : Write articals on historical topics, Writinge History and Techniques of historical Writing.
CO2 : Developed their ability to access critically historical analysis and agreement pest and present
CO3 : Gained an understanding of the development of the academic study of history Throug Hout the world since the leter eighteenth century
CO4 : Explain recent contemporary debates in the theory and pritices of historical writing
CO5 : Gained insight into current methodologists, theories,and concepts, currently in use within the historical discipline
CO6 : Discuss Historiographical traditions outside the west
CO7 : Identify history as scientific discipline.

History of National Movement [A.D. 1885 to 1947]
Upon completion of the course , the students will be able to-
CO1 : Explain early Political awakeningin Indian freedom struggle
CO2 :Discuss origin and development Indian national congress
CO3 : Explain various phases of the national movement.
CO4 : Identify difference between moderates, extremists and revolutionaries
CO5 : comprehend socio- religious scenario and the social reformation
CO6 : Discuss freedom movements under the mahatma Gandhi s leadership
CO7 : Explain Revolutionary movements in India
CO8 : Discuss evolutionary process of constitutional developments

Women Struggle in Modern India.
Upon completion of the course , the students will be able to –
CO1 : Discuss women contribution in Indian Freedom Struggle
CO2 : Explain actual condition of women in Colonial period

CO3 : Discuss past and present existing social,political , religious and economic condition of womwn in modern Indian
CO4 : Explain various superstitions, wrong traditions related to women in modern Indian History.

Semester VI

Fields of Historivity

Museology etc.
Upon completion of the course , the students will be able to –
CO1 : Explain advance and assist Archaeological research
CO2 : Discuss Participation in archaeology throughout society ,identifying and addressing Brrriers to inclusivity
CO3 : Explain various career opportunities in the field of Museology, and tourism
CO 4 Identify various types of career opportunities in the fild of Tourism, Archaeology Museology etc.

Landmarks in the History of Modern world
Upon completion of the course , the students will be able to -
CO 1 : Discuss rise of Modern World
CO2 : Classiffy growth of capitalism
CO 3 : Identify world maps – Oceanic Exploration, Europ in 1815 ,important stage of world War : and important centres of International trade.
CO4 : Explain rise and development of Democracy in modern world
CO5 : Discuss freedom struggle in Amrica ,French , Russia,China, India and other part of the world
CO6 : Explain new ethic of politics, philosophy, political, economical, and military trende in modern world

Glimpses of the history of Marathwada
Upon completion of the course ,the students will be able to –
CO1 : Discuss salient feature of history of Marathwada
CO2 : Analyse contribution of Marathwada in hydrabad Freedom struggale
CO3 : Discuss Marathwada Freedom struggle with Indian freedom streggle
CO4 : Explain women contribution of Marathwada in freedom struggle
CO5 : Indentify socio – religious movements in Marathwada w
CO6 : Explain work of Swami

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Department of Economies

Course Name		Course Outcomes
B.A.F.Y. (Sem.I)	P.No.1- Micro Economics	To understand the behaviour of an economic agent namely, a consumer, a producer, a factor owner and the price inflection in a market. Price formation in different markets structure and the equilibrium of a firm and industry.
	P.No.II -Indian Economy	To make the students known about the various sectors of the economy in detail. To highlight the potential of the Indian economy to study the facts and figures as out development.
B.A.F.Y. (Sem.II)	P.No.III-Price Theory	To understand the behaviour of an economic agent namely, a consumer, a producer, a factor owner and the price inflection in a market. Price formation in different markets structure and the equilibrium of a firm and industry.
	P.No.IV- Money, Banking & Public finance	To create the awareness of the student of money, Banking system. Understandings of the opportunities of banking their interaction with nest of the economy essential to realize how monitory force operates through multitude of channels. To understand the policies and operations which involve the use of tax and expenditure measures while budgetary policy. It helps to understand expenditure program, stabilization instruments, etc
B.A.S.Y. (Seme.III)	P.No.V- Macro Economics	To understand the economic analysis in terms of theoretical, empirical as well as policy making issues. The objective of the course is to familiarize the students the basis concept of macro economics and applications.
	P.No.VI-Development Economics	This paper is develops to the theories of economics development, approaches to economic development, social and institutional aspects of development. The course provides extension and application of knowledge in a current specialized field. To get exposed to a few elements of social science research.
B.A.S.Y. (Seme.IV)	P.No.VII- Public Finance	This paper would provide understanding about the significance and scoop of public finance. the main objective of this paper is to provide deals information to students about the fiscal policy ,public revenue, public debt and public expenditure.

	P.No.VIII-Statistical Methods	To understand Statistical methods is to train the students to use the techniques of statistical analysis which are commonly applied to economic problems. This paper also deals with simple tools and techniques, which will help the students in dada collection, presentation, analysis drawing inference about various statistical hypotheses.
B.A.T.Y. (Seme.V)	P.No.IX- International Economis	The Paper provided the students through understanding and deep knowledge about the basic principles that tend to govern the free flow of trade in goods and services at global level. Students will understand to the International tread, concepts, ideas and theories.
	P.No.X- Agricultural Economics.	The Paper provided the students a thorough understanding and deep knowledge about the basic principles to agriculture sector in India. In this course the students are promoted to be capable to understand Agriculture is the major sector of economy in the country.
	P.No.XI- History of Economic Thought	The paper deals basic ideas of classical, new classical and marginalism economist. The objective of this paper is to understand student the basic economic ideas of various economic thinker of the world. To understand the economic thought in terms of theoretical, empirical by various economists of global level.
	P.No.XII- Research Project Works	To understand fort Student views Research Methodology.
B.A.T.Y. (Seme.VI)	P.No.XIII-Research Methodology	To understands the Basic concepts of social science research approach development to students. To understands social research importance, research design, data collection and presentation of data to students.
	P.No.XIV-Industrial Economics	The Paper provided the students a thorough understanding and deep knowledge about the basic principles to Industrial sector in India. in the contemporary world with globalization ,privatizations and liberalization more and more attention is being given to industry. This paper intends to provide knowledge to the students on the basic issues such as concepts and organization of a firm, productivity, efficiency, capacity utilization and Industrial development in India.
	P.No.XV- Indian Economic Thinker	To understand for Student views Research Methodology.

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DEPARTMENT OF BOTANY
COURSE OUTCOME
Semester I

- **Diversity of Cryptogams I & II (P I & P IV)**
  - The courses have been designed to benefit all Botany students to study various aspects of plant science including its practical applications.
  - These students can take up teaching at different levels, research work in research institutes and or industry, doctoral work, environment impact assessment, biodiversity studies, entrepreneurship; scientific writing relevant topics have been included in the curriculum.
  - Syllabus also deals with study the understand the multi functionality of plant cells in production of fine chemicals and their wide spread industrial applications.
  - Cryptogams have an important role & function in bio prospecting.
  - Algae, Fungi along with Bryophyte & Pteridophytes have many ecological, economic & industrial applications which can be grasped by students.

- **Morphology of Angiosperms(P II)**
  - Useful in basic botany study.
  - Useful in plant classification (Taxonomy study).
  - Creates hands on agricultural field practices.
  - Benefited in plant breeding study.

- **Histology, Anatomy and Embryology (P VI)**
  - Creates knowledge regarding plant internal cell structure.
  - Benefited in plants science research.
  - Study of anatomy, embryology useful for research on various aspects of plant.

- **Practical based on course (P I , II, V AND VI)**
  - Useful in identification of plants, fruits, flowers.
  - Provides knowledge of pollination and reproduction in plants.
  - Useful for identification of different types of flowers and fruits.

B.Sc. II

- **Taxonomy of Angiosperm (P IX)**

- Making aware about plant diversity and flowering plants.
- To acquaint with world history about classification of plants.
- To create awareness regarding structural features of plants.
- To develop vision of identifying plants around the world.
- To classify plants on basis of various morphological features.

- **Plant Ecology (P X)**
  - In this subject student studies Plant Interactions with nature& Other Organisms.
  - It is the study of interactions of organisms with one another as well as with their environment.
  - In plants, competition generally is indirect, through the resource, not direct, one-on-one. Plants with the same life form and growth requirements are often in competition but surviving in slightly different microenvironments.
  - In a symbiosis, two different kinds of organisms live together in an intimate and more or less permanent relationship.
  - There are many practical applications of ecology in conservation biology, wetland management, natural resource management city planning (urban ecology), community health, economics, basic and applied science
  - Ecosystems sustain life-supporting functions and produce natural capital, such as biomass production (food, fuel, fiber and medicine).
- **Gymnosperms and Utilizations of Plants resources (P XIII)**
  - Create awareness about plant resources.
  - To aware regarding non-flowering plants around the world.
  - Create awareness about economic important plants.
  - To acquaint with agricultural practices for common crops of India
- **Practical's based on (P IX and XIII)**
  - Identification of plants based on morphological characters.
  - Creates awareness regarding economic important plants and there cultivation practices.

- **Plant Physiology (P XIV)**
  - Plant physiology is the study of the structure and function of plants and other processes of plants.
  - Plant physiology is a division of biology pertaining to plant life, along with their processes and functions. Fundamental processes such as photosynthesis, respiration, plant nutrition,
  - Plant hormone functions, tropisms, nastic movements, photoperiodism, photomorphogenesis, circadian rhythms, environmental stress physiology, seed germination, dormancy and stomata function and transpiration, both parts of plant water relations, are studied by plant physiologists.
  - It is an experimental, laboratory-based field of science that requires knowledge of physics and chemistry.
  - Plant physiologists study a wide range of processes and functions that plants use to live and survive.
  - To function and survive, plants produce a wide array of chemical compounds not found in other organisms.
  - Plant physiology includes the study of biological and chemical processes of individual plant cells.

B. Sc. III

- **Cell Biology and Molecular Biology (P XVII)**
  - To acquaint with basic structure of all cells.
  - To acquaint with structures of cell organelles and their function.
  - To get detailed knowledge of cell at molecular level.
  - To aware about basic terminology of plant cell.
  - To apply information for new research in cell and molecular biology.

- **Plant Breeding and Seed technology (P XVIII B)**
  - Provides knowledge of various methods of crop improvement.
  - It provides basic knowledge of methods of hybridization in plants which are used as tool in seed companies.
  - Useful in agricultural research.

- **Genetics and Biotechnology (P XXI)**
  - To develop knowledge regarding history of Basic genetics.
  - To create awareness regarding terminology of genetics.
  - Develop the sense of research in genetic engineering.
  - Theoretical and practical awareness about genes and it functional features.
  - Creating awareness regarding genetical disorders in human and all living organisms.
- **Practical's based on (P XVII and XXI)**
  - Hands on cell division process.
  - Identification of various chromosomes.
  - Awareness regarding Mendel's experiments.
- **Economic Botany (XXII B)**
  - Useful in agricultural field.
  - Gives knowledge of importance of various crop and economic values.

- **Practical's (XXI and XXII)**
  - Hands on plant breeding experiment.
  - Useful in study of plants on economic basis.

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Department of Physics
Programme Name - B.Sc. (Physics)

Programme Outcomes

Knowledge Outcomes

After completing B.Sc. (Physics) Programme students will be able to:

1. Apply the basic principles of Physics to the events occurring around us and also in theworld.
2. Try to find out or analyze scientific reasoning for various things.

Skill Outcomes

After completing B.Sc. (Physics) Programme students will be able to:

1. Use of computers and various software and programming skills
2. apply the knowledge to develop the sustainable and eco-friendly technology for pollution free environment
3. collaborate effectively on team-oriented projects in the field of Physics
4. Communicate scientific information in a clear and concise manner both orally and inwriting or through audio video presentations

Generic outcomes

Students will

1. develop ability to work in group
2. develop capacity of critical reasoning, judgment and communication skills.
3. Develop abilities for logical thinking

Programme Specific Outcomes

PSO1: Students get acquainted with techniques which are useful in industry.

PSO2: Students get conceptual knowledge of entrepreneurships through the co-curricularactivities

PSO3: learn the organizational skills and working in group.PSO4: Students will be well versed with use of computers

Course outcomes

In each course students will learn different concepts and theories as mentioned below.

First Year 2019 (CBCS) PATTERN

Semester I Course- PHY 111- Mechanics and Properties of Matter

CO1: Application of Newton's laws of motion to solve various problems related to day todaylife.
CO2: Concepts like zero work done, conservative forces, mass energy equivalence ($E= mc^2$).
CO3: Effect of force on various types of materials is described and physical properties likeelasticity, different moduli etc. along with their relation.
CO4: Examples of surface tension in nature and its applications in our day to day life.CO5: Concept of viscosity of fluids, Bernoulli's Equation and its applications.

Course- PHY 112- Physics Principles and Applications

CO1: Students learn about an atom is made up of protons, neutrons and electron, how they arranged to make up an atom. They learn different atomic models, Atomic spectrum and types ofspectrum.
CO2: Students learn about Different forces which hold atoms together to form a molecule.
Different types of chemical and physical bonds like ionic, covalent, Van der Waal's bonds.Energy levels of rotational and vibrational diatomic molecule.
CO3: Students will identify and compare the characteristics of electromagnetic spectrumincluding speed, wavelength and frequency.
CO4: students will learn common uses and applications of electromagnetic waves.
CO5: students will learn basic principles of Laser, excitation and de-excitation process, pumping scheme, population inversion and metastable state. Characteristics, applications and different types of laser.

Semester II Course - PHY-121- Heat and Thermodynamics

CO1: To understand various thermodynamic processes like isothermal, isobaric, isochoricprocesses and laws of thermodynamics.
CO2: To understand the concept of entropy
CO3:- To understand Carnot's cycle, Heat engines and Refrigerators.
CO4:- To understand Principle of thermometry and various types of thermometers like Liquidfilled thermometers, Gas filled thermometers, Bimetallic thermometers, Platinum resistance thermometer

Course – PHY122 - Electricity and Magnetism

CO1: Students will be able to understand the concept of the electric force, electric field and electric potential for stationary charges. They are able to calculate electric potential and electricfield by using Gauss's law.
CO2: Student will understand the dielectric phenomenon and effect of electric field on dielectric.
CO3: Study the concept of magnetic field, magnetic field for steady currents using Biot-Savart'sand Ampere's Circuital laws.
CO4: Student will learn magnetic materials and its properties.

Second Year (2013 pattern)

Semester ICourse - PH 211- Mathematical Methods in Physics

CO 1: Study of de moivre's theorem includes understanding of determination of power of given complex number.
CO 2: Many times students come across the terms like divergence, curl and gradient but they don't understand their physical significance. From this course they will learn the concepts to adepth.
CO 3: Students can understand the use of the concept of partial differentiation in solving Physics situations which have more than one variable.
CO 4: Students can also understand the need of complex numbers in solving mathematical equations in different branches of Physics like Electricity and Magnetism, Fluid Dynamics and quantum mechanics.

Course--------- PH 212 (A) - Electronics

CO 1: Various network theorems which use to solve problems related to complicated circuits by converting them into simpler circuits. This has wide applications in electronic and transmission circuits.
CO 2:- Knowledge about semiconductors since it is a basic materials used in many electronic components like diode, transistors FET, UJT etc.

CO 3: Characteristics and working of operational amplifiers which are useful in various medicaland scientific investigations to amplify the signals.
CO 4:- Generation of high frequency signals using oscillator circuits and their applications inradio and TV communication
CO 5: Concepts of regulated power supply, rectifiers, filters and regulators.
CO 6: An introduction to digital electronics which is useful in digital computers. Also logic gatesand their applications.

Course-------- PH 212 (B) - Instrumentation

CO1:History and need of Instrumentation, Components of measurement system, Standards of Measurement, errors in measurement. Importance and methods of calibration. Static and dynamic characteristics of measurements.
CO2: Transduction principle, types of transducers. Use of transducers in measurement ofdisplacement, force and temperature.
CO3: Comparative study of Pressure scales, pressure units, concept of vacuum, Differentpressure measurement systems. Types and use of diaphragms and strain gauges
CO4: Need and use of signal conditioning. Detailed study of construction, working andcharacteristics of OPAMP. Circuits indicating use of OPAMP for different applications.
Study of filter circuits for use as signal conditioning component
CO5: Methods of analog display and recording. Graphical and Oscillographic recorders.

Semester II Course- PH221 - Waves, Oscillations and Sound

CO1: Learn how does a body oscillate without damping amplitude and what are the necessary conditions for it.

CO2: Learn how we can set any object in the forced oscillations that is in continuous motion

CO3: Doppler effect and its use in in day-to-day life. Using this concept students can get idea of expanding universe.

CO4: Studying sound concept we can understand why the sound of male and female are differentand the reason behind it.

Course- PH 222- Optics

CO1: Image formation related to geometrical optics, Deviation, Magnification, Concept forEquivalent lens and Cardinal Points
CO2: Different types of monochromatic and chromatic aberrations and Achromatism in lenses
CO3: Construction and working of Simple Microscope, Compound Microscope, Ramsden'sEyepiece and Huygen's Eyepiece
CO4: Interference and diffraction of light, Formation of fringes, Resolution
CO5: Concept of Polarization, Double refraction, Construction and working of Nicol Prism

Third Year (2013 pattern)

Semester ICourse - PH 331- Mathematical Methods in Physics

CO1: The three commonly used co-ordinate systems and general curvilinear co-ordinate system.CO2: Concept of relativity, length contraction, relativistic mass, time dilation and twin paradox. CO3: Various methods to solve different differential equations.
CO4: Properties of Legendre polynomials, Hermite polynomials and Bessel function. These are useful to solve the problem of linear simple harmonic oscillator in quantum mechanics.

Course - PH 332- Solid State Physics

CO: Students will able to study difference between crystalline and amorphous material, crystal structures, miller indices, interplaner distances, interatomic forces and bonds.
From this study students get to learn the basics of solid state physics.

CO2: Students will understand Bragg's diffraction, Bragg's law. X-ray diffraction and characterization techniques. With the help of this knowledge students know the principles ofstructures determination by X-ray diffraction method. This would be helpful in performing experiments in nanotechnology.

CO3: Students can understand electrical and thermal conductivity of free electron in metals,Energy levels of free electrons in one and three dimensions.
They will learn significance of Pauli's exclusion principle, Bloch theorem, Fermi energy, andHall effect and energy bands in materials.

CO4: Students can Describe and explain the behaviour of permanent magnet including induced magnetism, behaviour of paramagnetic, diamagnetic, ferromagnetic materials in terms of magnetic domain.

CO5: Students can understand superconducting materials, their properties and technological applications of superconductivity.

Course - PH 333- Classical Mechanics

CO1: Students will be able to define, present and demonstrate basic mechanical concepts andtheir applications used in daily life.

CO2: Students can understand the motion of a body, Equations of motions, trajectory of anobjects in constant field such as electrical, magnetic field.
With the help of this knowledge students can understand process involved in cathode rayOscilloscope.
CO3: With the help of this knowledge students will understand how to launch rockets and satellites. Motion of planets and satellites and dynamic molecular collisions. How the mechanicalconcepts used in sports and military.

CO4: Students will learn Lagrangian and Hamiltonian formulations. Canonical transformation, Passion's Bracket concept.
Using the technique of Lagrangian and Hamiltonian formulation students will explain motions of different bodies in simple form such as kinetic and potential energy.
CO5: Students can learn Newton's laws such as projectile motion and rocket motion. Also Kepler's laws related to motion. Scattering of particles.

CO6: Mathematical and thinking skills will develop among students by solving problems.

Course - PH 334- Atomic and Molecular Physics

CO1: There are many atomic models to explain atomic structure. But none of the model explained atomic structure fully. A new model could explain all parameters of atomic structurecalled vector atom model. Studying this model students can draw vector diagrams easily.
CO2: Students learn how to find out interaction energy from different coupling schemes.
CO3: Students scientifically understand, how the x-rays produced. Also they will understandwhat precaution should be taken during handling of x- rays.
CO4: By studying molecular spectroscopy students understand the importance rotational andvibrational energy levels.

Course - PH 335- Computational Physics

CO1: Learn the Basic Programming Concept.

CO2: Improve the logical as well as Computational ability.

CO3: Memory allocation and utilization technique learning.CO4: Applicability of computer resources in physics.
CO5: Learn Graphical technique using some Graphical Commands in C programming.

Course - PH 336 B- Elements of Material Science

CO1: By studying defects in solid, students can identify the defects existing in a given solid.

CO2: Students will learn different polymers and the importance of polymerization in makingsuperior quality polymer.

CO3: Students will understand which type of ceramic material can be used for a particularapplication.

CO4: Smart materials are newly discovered materials which are useful to human being in day-to-day life. Students will study such advanced materials.

Third Year- Semester II

Course - PH 341 - Electrodynamics

CO1: Understand the basic mathematical concepts related to electromagnetic vector fields. CO2: Understanding of basic principles and concepts of electromagnetism and magnetostatics

CO3: Learning Maxwell's equations and boundary value problems. Applications of theseequations for solving problems.

CO4: Understanding the basics of electromagnetic waves, wave equations in free space andpointing theorem.

Course - PH 342 - Quantum Mechanics

CO1: Introduction to Quantum Mechanics, Historical background, Matter Waves, Wave particle duality, Phase and Group Velocity, Heisenberg's Uncertainty Principle

CO2: Physical Interpretation of Wave function, Schrödinger's Wave Equation, Eigen Functionand Eigen values

CO3: Free Particle, One Dimensional and Three Dimensional Rigid Box, Potential Barrier

CO4: Spherically symmetric potential, Examples of Rigid Rotor and hydrogen atom

CO5: Hermition and other operators in Quantum Mechanics, Commutator brackets and conceptof parity

Course - PH 343- Thermodynamics and Statistical Physics

CO1: To study the transport phenomenon such as viscosity, thermal conductivity, diffusion.CO2: To learn about thermodynamic functions, variables and their relations.

CO3: To acquire the skill of solving problems based of particle distribution.

CO4: To study about types of ensembles viz. Microcanonical, canonical and grand canonical.CO5: To get the knowledge about Maxwell Boltzmann statistics, Bose Einstein statistics and Fermi Dirac Statistics

Course - 344- Nuclear Physics

CO1: Studying Basic properties of nucleus, student got the idea of inner information of the nucleus.

CO2: From radioactivity chapter student knew that which radiations emit from radioactivematerial and how they are useful and harmful for the human.

CO3: From nuclear force student understood that apart from alpha, beta, gamma particle howmany other particles are inside the nucleus.

CO4: Studying molecular spectroscopy students understand the importance rotational andvibrational

energy levels.

CO5: Student learnt by using accelerators we can produce high energy particle which can beused for research purpose

CO6: Use of nuclear reactors to produce huge amount of heat energy.

Course - 345- Electronics
Students can learn the design and working of electronics used in different applications.
CO1: Special Purpose diodes like LED, photodiode, Varactor, Optocoupler

CO2: Amplifiers, Class A, Class B and Class C , Push Pull emitter follower and differentialamplifier

CO3: Junction Field Effect Transistor and MOS Field Effect Transistor, Working andapplications
CO4: Operational Amplifiers its parameters, characteristics and applicationsCO5: 555 timer, Astable, Monostable and Bistable Multivibrator
CO6: Regulated power supply using IC 723
CO7: Combinational Circuits like Adder, Subtractor and Multiplexer, Binary to Gray codeconversion
CO8: Sequential Logic Circuits, Flip- Flop, Counters and Shift Register

Course - PH 346 J- Electroacoustics and Entertainment Electronics
Students can learn physics behind architectural acoustics and variety of instruments usedin commercial sound recording and reproduction.
CO1: Human Hearing Mechanism, Human Voice production Mechanism, Theories of Hearing

CO2: Types of Microphones, Construction and working of Microphones, Sensitivity and itsdirectional Characteristics, Types of Loudspeakers, Construction and working, Loudspeakercabinets

CO3: Architectural acoustics, Reverberation time and concept of Open Window. Studio andRoom acoustics

CO4: Sound Equalizers, Compressors, Acoustic Delay, Magnetic Tape recording, CD recording,Hi-Fi systems, Studio Articulation Test

CO5: Ultrasonics and its applications
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DEPARTMENT OF CHEMISTRY

COURSE OUTCOME

B. Sc. First Year Chemistry
Semester I

Paper no. I Inorganic chemistry

- To adopt basics of atomic structure and principles related to filling of atomic orbital.
- Briefly elaborate trends in periodic properties viz. atomic and ionic radii, ionization energy, electron affinity and electro negativity with application in predicting chemical behavior.
- To study basic chemistry of elements of s and p- block.

Paper no. II Organic chemistry

- To understand basic concepts in organic chemistry- classification of reactions, reagents and mechanisms of organic reactions.
- To learn fundamental concepts from stereochemistry and its importance.
- To familiarize with chemistry of hydrocarbons and their importance
- To understand concepts of aromaticity.

Semester II

Paper no. IV Physical chemistry

- To understand basic mathematical concepts related to chemistry
- To understand kinetic theory of gases, kinetic gas equation, and gas laws.
- To study kinetics and dynamics of chemical reaction.
- To adopt concepts of Catalysis and Enzyme catalysis.
- To learn basics and classification of liquid and solid state
- To familiarize with colloidal state and their properties

Paper no. V Inorganic chemistry

- To understand chemical properties of the noble gases and chemistry of xenon
- To learn types and theories related to bonding
- To adopt basics and applications of nuclear chemistry
- To study theories of volumetric analysis and its components.

B. Sc. Second Year Chemistry
Semester III

Paper no. VII Organic chemistry

- To understand structure, reactivity, methods of preparation and chemical reactions of different types of organic compounds - alcohols, Phenols, aldehydes, ketones, amines and carboxylic acids.
- To adopt and develop skills of writing mechanism of some named reactions
- To learn uses of reagents in organic chemistry like LiAlH4, LTA, PTC.

Paper no. VIII Physical chemistry

- Able to learn basic concepts in thermodynamics.
- To understand the laws of thermodynamics
- To study Carnot cycle and its applications,
- To adopt concept of entropy, Gibbs and Helmholtz Functions, Criteria for thermodynamic equilibrium and spontaneity, their advantage over entropy change.
- Able to understand equilibrium constant, free energy and laws related to it.

Semester IV

Paper no. X Inorganic chemistry

- To gain knowledge of co-ordination compounds
- To learn basic concepts and theories of acids and bases
- To understand Chemistry of d-Block and f-Block Elements
- Able to classify solvents and learn reactions in non-aqueous solvents

Paper no. XI Physical chemistry

- Know the meaning of phase, component and degree of freedom
- Creates awareness about rate of reactions and factors influencing rate of chemical reaction.
- After completion of these courses students should be able to Know the rate constant and factors affecting rate of reactions
- Write an expression for rate constant (K) for first order, second order reaction.
- Know the terms cell constant, specific conductivity, equivalent conductivity and molar conductivity.

B. Sc. Third Year Chemistry

Semester V

Paper no. XVII Physical chemistry

- To study basic concepts of quantum mechanics
- Able to understand properties of wave functions
- To learn depth knowledge of quantum numbers and its importance
- To acquire basic features of spectroscopy
- To familiarize with thermal & photochemical processes
- To study the physical and chemical properties of nonmaterial

Paper no. XIV Organic chemistry

- Are skilled in solving combined problems of spectroscopy
- To understand concept and mechanism of organometallic compounds
- Able to analyze fats, oils and detergents

Semester VI

Paper no. XVII Organic chemistry

- Learn the mechanism of Electrophilic Substitution reaction of Heterocyclic Compounds
- Know the characteristics and Classification of Drugs and Dyes
- Explaining theories of Color and chemical constitution of Dyes
- Get basic knowledge of carbohydrates.
- Able to classify synthetic polymers.

Paper no. XVI Inorganic chemistry

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Department of Mathematics

PROGRAMME OUTCOME, PROGRAMME SPECIFIC OUTCOME,LEARNING OUTCOME AND COURSE OUTCOME

PROGRAMME OUTCOME	Formulate and develop mathematical arguments in a logical manner. Also when there is a need for information, the student will be able to identify, locate, evaluate, and effectively use that information for handling issues or solving problems at hand. Acquire good knowledge and understanding in advanced areas of mathematics and its applications.
PROGRAMME SPECIFIC OUTCOME	Will be able to apply critical thinking skills to solve problems that can be modeled mathematically, to critically interpret numerical and graphical data, to read and construct mathematical arguments and proofs, to use computer technology appropriately to solve problems and to promote understanding, to apply mathematical knowledge to a career related to mathematical sciences thus cultivating a proper attitude for higher learning in mathematics.
LEARNING OUTCOME	Students will be well equipped to critically analyze a given problem, understand and build a mathematical model to represent the problem, solve the resulting equations and interpret the resulting solution. Students are well prepared for higher studies in their chosen field.
COURSE OUTCOMES (8 Theory & Practical courses)	
Mathematics-I	* Understand the concept of rank of a matrix and its relation to solution of linear system of equations, learning the idea of Eigenvalues, Eigen vectors, and Clayey-Hamilton theorem. * Recognize the algebraic equations representing geometric objects such as line, plane, sphere, cylinder, and cone and analyze them. Learn the basic skills of successive differentiation, partial and total differentiation, calculation of Jacobeans, recognize

	homogenous functions leading to Euler's theorem. Compute integrals using Reduction formulae and Leibnitz rule.
Mathematics Practical - I	* Introduced to Free and Open Source Software (FOSS Tools) like SCILAB and MAXIMA environment to perform basicmathematical operations and functions. * Learn computations with matrices, solution of linear algebraicsystems (both manual and using SCILB) * Understands MAXIMA commands for differentiation(ordinary, partial), integration to find nthderivatives, partial derivatives, Jacobeans and reduction formulae. Implement vector forms of a line and plane.
Mathematics-II	* Comprehend the fundamental ideas of Binary operation on a set, Algebraic structures such as Group, Subgroup and their basic properties. * A solid foundation of Calculus –Learn to use Polar coordinates, tangents & normal's , pedal equations, curvature of plane curves, Asymptotes & envelopes of plane curves leadingto the skill of tracing of curves. * Develop methods of computing length of an arc, area of enclosed by a curve, surface area and volume of revolution of a curve using integration. Learn to recognize and develop skill to solve Linear, Bernoulli, Exact and non-linear differential equations. Learn to find Orthogonal trajectories of a given family of curves.
Mathematics Practical - II	* Develop skill to create simple programs in SCILAB and MXIMA to generate particular sequences, to find largest or smallest of the given numbers, to check for palindromes... * Learn to find identity, inverse of an element of a group, subgroup of a group using scilab/maxima Plot Cartesian and polar curves. * Solve first order ordinary differential equations.(both manualand using SCILB)
Mathematics-III	* Develop an understanding of Order of an element of a group, order of a group, cyclic group, cosset decomposition of a group leading to the proof of Lagrange's theorem on finite groups andit's applications. * Understand the basic ideas of convergence and divergence of sequences and series and the methods used for their tests. Basicknowledge of summation of series. Determine the continuity, differentiability of functions

	Defined on subsets of the real line. Understand the mean valuetheorems and their proofs which lead to - the L'Hospital's rule for finding limits of functions and the Taylor's theorem and itsapplications.
Mathematics Practical - III	* Develop understanding and verification of Lagrange's theorem on finite groups and calculation of cossets of a subgroup of a group using FOSS tools. * Learn the method of analyzing convergence of sequences and series, summation of series using Maxima. * Write Scilab/Maxima programs to illustrate continuity, differentiability of functions, mean value theorems, calculate limits using L'Hospital's rule.
Mathematics-IV	* Comprehend the important concepts of Normal subgroup, Quotient group, Homomorphism of groups, proof of FTH, permutation groups and the Cayley's theorem and its proof. * Learn the skill of finding the full & half range Fourier series expansion of a given function. * Develop ability to test continuity and differentiability of functions of more than one variable and to extend the Taylor's series expansion for them. Determine the maxima & minima of functions of two variables. * Learn the mathematical tool of Laplace transform and its properties to solve linear differential equations which govern L-C-R circuits. * Computational skill of finding all the solutions of second andhigher order linear differential equations with constant coefficients, linear equations with variable coefficients.
Mathematics Practical - IV	* Verify normality of a subgroup, test for homomorphism and isomorphism of groups using Maxima. Find Fourier series expansion of the given periodic functions. * Find Laplace and Inverse Laplace transforms of some standard functions using maxima and use them to solve linear differential equations. * Solve 2^{nd} order linear differential equations by finding CF and PI (maxima program) Find maxima and minima of functions of two variables.
Mathematics-V	* Gain knowledge in Ring theory-- comprehend the ideas ofsubrings, Ideals, quotient rings, Field, homomorphism, proof of FTH.

	* Understands the ideas of scalar field and vector field andcomputation of gradient, divergence, circulation and Laplacian and their geometric and physical interpretations. * Develop basic skills of Numerical Methods: finite differences, interpolation of different data structures, Numerical Integration.
Mathematics Practical - V	* Understand different types of Rings and their verificationthrough maxima programs * Learn calculation of gradient, divergence, curl, Laplacian of scalar and vector fields and their identities using maxima programs. Use scilab tool to do interpolation and numerical integration.
Mathematics-VI	* Develop an understanding and knowledge of basic ideas of 'calculus of variations' such as – functional, variational problem, Euler's equation, Geodesics, Brachistochrone problem and Isoperimetric problems. * Understand the ideas of Line and Multiple Integrals and develop skills to evaluate them and apply them to solve geometric problems of finding areas and volumes of surfaces and solids. Learn the important Integral theorems – Green's theorem, Gauss theorem, Stokes' theorem – and their proofs and some problems there on.
Mathematics Practical - VI	* Understand use of Euler's equation to solve variationl problems such as Brachistochrone problem, isoperimetric problems through hand computation and maxima programs. * Evaluate line and multiple integrals of different types using maxima commands. Verify integral theorems, evaluate given integrals through maxima programs.
Mathematics-VII	* Analyze vectors in R^n geometrically and algebraically, Recognize the concepts of the terms span, linear independence,basis, and dimension, and apply these concepts to various vector spaces and subspaces. Use matrix algebra to represent linear transformations and find rank, nullity, singularity. Learn basic concepts of 'curvilinear' coordinate systems and Their inter-relation, conversion. * Acquire skill to solve total and simultaneous differentialequations. Develop thorough understanding of the basic ideas of formation,classification and solution of 'Partial differential

	equations' of first & second order and application to one dimensional Heat and Wave equations.
Mathematics Practical - VII	* Comprehend through practical calculation(and also using maxima) the important ideas of linear algebra such as span, linear independence, basis, and dimension, matrix of linear transformations and verify rank- nullity theorem . Solve total and simultaneous differential equations. * Develop skill to solve different types of partial differentialequations . Learn solution of one dimensional wave and heat equations under Dirichlet conditions .
Mathematics-VIII	* Compute sums, products, quotients, conjugate, modulus, and argument of complex numbers. Write equation of straight line, circle in complex form • Understand the significance of differentiability of complex functions and be familiar with the Cauchy-Riemann equationsand determine whether a given function is analytic. • Define Bilinear transformation, cross ratio, fixed point, Write the bilinear transformation which maps real line to real line, unit circle to unit circle, real line to unit circle. • Find parameterizations of curves, and compute complex line integrals directly. Use Cauchy's integral theorem and formula tocompute line integrals. * Learn 'Numerical methods' of solving algebraic and transcendental equations, systems of linear algebraic equations, computing largest Eigen value of a square matrix and solution of ordinary differential equation of first by Euler, Taylor and Runge-Kutta methods.
Mathematics Practical - VIII	* Write maxima programs to verify check analyticity of complex functions, use Milne-Thomson method to construct analytic functions, check orthogonality and hormonicity of realand imaginary parts of analytic functions. * Learn the important ideas of bilinear transformations, crossratios and their preservance under bilinear transformation. * Evaluate integrals using Cauchy's Integral theorem.(usingscilab) * Solve using different numerical methods algebraic equations, system of equations. Find largest Eigen value .(using scilab) Solve ODEs using Euler's method and Runge Kutta method (using scilab)

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B.Sc. Microbiology Programme Specific Outcomes

At the time of graduation, the students will be able to-
PSO1: Understand fundamental principles involved in Microbiology
PSO2: Acquire detail knowledge of microorganisms, their types and significancePSO3: Understand metabolic and structural significance of bio-molecules
PSO4: Acquaint with concepts of Immunity, Antigen, Antibody and Immunesystem
PSO5: Understand importance and applications of various enzymes in replicationtranscription and translations
PSO6: Acquire detail knowledge of industrial production of enzymes, antibioticsand vitamins

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Course Outcomes

F.Y. B. Sc. Semester IPaper I – Fundamentals of Microbiology

At the end of the course, the students will be able to- CO1: Identify distribution of microorganism in nature
CO2: Determine evolution of microbiology and their role in various biologicalprocesses
CO3: Classify Microorganisms into different category according to taxonomicranks
CO4: Determine Biochemical properties of microorganisms.

CO5: Calculate magnification, resolving power, depth of focus, numerical apertureof Microscope

Paper II- Microbial Techniques and General Microbiology

At the end of the course, the students will be able to-
CO1: Conceptualize microorganisms and their types, importance and Practicalaspects
CO2: Distinguish between beneficial and harmful Microbes
CO3: Cultivate, observe and perform microscopic identification of bacteria, fungi and other microbes
CO4: Describe concept, methods and pattern of Sterilization and its practicalapplicability
CO5: Discuss role of Microorganisms in spreading diseases, usefulness inagriculture, environment and industrial sector

Semester II

Paper-IV Cytology and general Microbiology

At the end of the course, the students will be able to-

CO1: Describe different structural parts & its arrangement of Microbial cellsCO2: Classify bacteria on nutritional requirements

CO3: Determine Bacterial growth curve

CO4: Calculate mathematics of bacterial growth curveCO5: Describe mode of nutrient uptake by bacteria.

CO6: Describe Bacterial photosynthesis CO6: Discuss advances in Microbiology

CO7: Determine shape, size and structure of bacteria by various stainingprocedures

Paper V- Basic Biochemistry

At the end of the course, the students will be able to-

CO1: Describe structures, functions and classification of carbohydrates, proteins, amino acids, lipids, nucleic acids

CO2: Discuss metabolic and structural significance of bio-molecules

C03: Describe functional groups and biochemical interactions present in bio-molecules

C04: Explain concept of pH, buffer, titration curve and pKa value

CO5: Explain concept of enzyme, physicochemical factors contributing to enzymeactivity

CO6: Discuss nutrients uptake of microbes, anaerobic respiration andphotosynthesis

S.Y. B. Sc. Semester III

Paper VII- Environmental Microbiology

At the end of the course, the students will be able to-

CO1: Determine sources of Air, Water and Soil pollution and their effects.

CO2: Describe processes involved in purification of sewage and portable waterCO3: Determine Air sampling techniques and its effectiveness

CO4: Classify eneterobacter by various Biochemical tests: IMViC, MPN, Elevatedtemperature test

CO5: Calculate BOD, COD, Chlorine in water

CO6: Discuss relationship between soil microorganisms, Role of bio-fertilizers CO7: Describe various biogeochemical cycles

Paper VIII-Immunology

At the end of the course, the students will be able to-

CO1: Explain concept of Immunity, Antigen, Antibody, Immune system

CO2: Describe structure, Classes, biological activity and gene Organization ofantibodies and their diversity

CO3: Rationalize Expression of Ig genes, Monoclonal antibody (ChimericAntibody and Humanized Antibody) and its formation and applications

CO4: Describe Lymphocyte (T and B cell) Activation and Regulation, Effecter Mechanism, Complement System: Activation and its Regulation

CO5: Discuss Diagnostic application of immunology: Practical aspects of Antigen-Antibody Interaction: Precipitation and Agglutination

CO6: Perform Blood grouping, isolation of bacterial Antigen and Ag-Ab reactions

Semester IV

Paper XI-Applied Microbiology

At the end of the course, the students will be able to-
CO1: Describe composition of milk, associated microorganism and MilkSterilization
CO2: Discuss Food and Microorganisms, source of food contamination and foodpreservation
CO3: Describe Food born disease and Intoxication and Pathogen associated withfood poisoning
CO4: Discuss mechanism of preparation of fermented foods and probiotics with the help of microorganisms

Paper XII-Clinical Microbiology
At the end of the course, the students will be able to-
CO1: Determine mode of entry, infection, symptoms, Laboratory diagnosis and treatment for Bacterial, fungal, Protozoan infections
CO2: Describe life cycle, pathogenesis, laboratory diagnosis of HIV, Oncogenicviruses
CO3: Determine nutrients for cultivation of pathogenic bacteria
CO4: Identify epidemiology of general bacterial, fungal, protozoan infections
CO5: Identify normal micro-flora of humans CO6: Determine antibiotic resistanceby Bacteria

T.Y. B. Sc.Semester V

Paper XV-Microbial Genetics
At the end of the course, the students will be able to
CO1: Differentiate gene expression pattern between microorganisms andeukaryotes
CO2: Discuss importance and applications of different genes (structural genes,functional genes etc)
CO3: Discuss importance and applications of various enzymes in the processes viz. replication transcription and translations etc
CO4: Describe various types of RNA and their role during translation, tRNAactivations etc
CO5: Discuss mutation, its types and related effects like loss of function and gainof functions etc
CO6: Explain re-combinations- transduction, conjugation with types andtransformations etc

Paper XVI-Microbial Metabolism
At the end of the course, the students will be able to-
C01: Describe enzyme as biocatalyst, its classification and mechanism of actionCO2: Discuss metabolic role of coenzymes
CO3: Give industrial applications of free and immobilized enzyme CO4: Explain bacterial anabolic-catabolic pathways and their regulation
CO5: Discuss modes of energy yielding metabolism, microbial fermentation andits significance
C06: Determine factor affecting enzyme activity, overall enzyme kinetics viz. Km,Vmax, Kcat
C07: Prepare buffers, reagents and stock solutions.

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CO5: Discuss modes of energy yielding metabolism, microbial fermentation andits significance
C06: Determine factor affecting enzyme activity, overall enzyme kinetics viz. Km,Vmax, Kcat
C07: Prepare buffers, reagents and stock solutions.

Semester VIPaper XIX-Recombinant DNA Technology

At the end of the course, the students will be able to-
CO1: Discuss handling and applications of different DNA and RNA modifyingenzymes
CO2: Elaborate techniques used for DNA transformation in host cells
CO3: Describe design of various vectors used for plants, animals andmicroorganisms and their modification strategies
CO4: Design cloning strategies for various applications CO5: Differentiate transformed and non-transformed colonies

Paper XX-Industrial Microbiology

At the end of the course, the students will be able to-
CO1: Elaborate various aspects of industrial technology related to MicrobiologyCO2: Screen industrially important strains
CO3: State and explain principles of fermenter design and computer assistedfermentation control
C04: Discuss fermentation process and downstream processing
CO5: Formulate media, aspects of raw material used, methods of strainimprovement
CO6: Describe industrial production of enzyme, antibiotics, amino acids andvitamins
CO7: Produce, purify and estimate various products, like enzymes, ethanol, acids,and antibiotics with the help of microbes

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Department of Computer Science

Knowledge outcomes:

After completing B.Sc. Computer Science Program students will be able to:

PO1: To develop problem solving abilities using a computer.;

PO2: To prepare necessary knowledge base for research and development in ComputerScience.

Skill outcomes:

After completing B.Sc. Computer Science Program students will be able to:

PO3: To build the necessary skill set and analytical abilities for developing computerbased solutions for real life problems.

PO4: communicate scientific information in a clear and concise manner both orallyand in writing.

PO5: To train students in professional skills related to Software Industry.

Generic outcomes:

Students will

PO6: Have developed their critical reasoning, logic judgment and communicationskills.

PO7: Augment the recent developments in the field of IT and relevant fields ofResearch and Development.

PO8: Enhance the scientific temper among the students so that to develop a research culture and Implementation the policies to tackle the burning issues at global and local level.

Program Specific Outcomes

PSO1: Students get knowledge and training of technical subjects so that they will be technical professional by learning C programming,

Relational Database Management, Data Structure, Software Engineering, Graphics, Java, PHP, Networking, Theoretical Computer Science, System programming, Object Oriented Software Engineering.

PSO2: Students understand the concepts of software application and projects.

PSO3: Students understand the computer subjects with demonstration of allprogramming and theoretical concepts with the use of ICT.

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PSO4: Development of in-house applications in terms of projects

PSO5: Students will build up programming, analytical and logical thinking abilities.PS06: Aware them to publish their work in reputed journals

PS07: To make them employable according to current demand of IT Industryand responsible citizen.

Course Outcomes
F. Y. B.Sc. Computer Science-Semester I & Semester II (2019 **PATTERN)**

Computer Science Paper-I

Course CS-111: Problem Solving using Computer and 'C' Programming

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

CO1: Students will understand algorithms and flowchart for solving problems using computers.CO2: Students will understand and can choose the loops and decision-making statements to solve the problem.

C03: Student will implement different Operations on arrays and will use functions to solve thegiven problem.

CO4: To enrich the students in logic development required for programming. CO5: Tohelp the students to build carrier in various branches of software development.

Course CS-112 Database Management Systems

After successfully completing this course, students will be able to: CO1: Will understand the fundamental concepts of database.

CO2: Will understand user requirements and frame it in data model.

CO3: Will understand creations, manipulation and querying of data in databases CO4: Solve real world problems using appropriate set, function, and relational models. CO5: Design E-R Model for given requirements and convert the same into database tables. CO6:Use SQL.

Course CS103 : Practicl course on Problem Solving using Computer and'C' programming and Database Management Systems

On completion of this course, students will be able to :

CO1: Devise pseudocodes and flowchart for computational problems.CO2: Write, debug and execute simple programs in 'C'.

CO3: Create database tables in postgreSQL. CO4: Write and execute simple, nested queries.

Course CS122 : Relational Database Management Systems

On completion of the course, student will be able to–

CO1: Design E-R Model for given requirements and convert the same into databasetables. CO2: Use database techniques such as SQL & PL/SQL.

CO3: Explain transaction Management in relational database System. CO4: Use advanced database Programming concepts

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Course CS123 : Practical Course on Advanced 'C' Programming and Relational Database Management Systems

On completion of this course, students will be able to :

CO1: Write, debug and execute programs using advanced features in'C'. CO2: To use SQL & PL/SQL.

CO3: To perform advanced database operations.

Mathematics Paper 1: MTC111 Matrix theory (semester 1)

CO1: Students will get equipped with the knowledge of various properties of matrices and how matrices help in solving problems indifferent dimensions.

CO2: Students will be able to perform certain algorithms, justify whythese algorithms work, and give some estimates of the running times of these algorithms.

CO3: Students will be able to solve linear systems both by using computer and by hand using mathematical tecniques.

CO4: Students will develop their basics for the course of Linear Algebraof second semester.

CO5: Students will be able to write cohesive and comprehensivesolutions to exercises and be able to defend their arguments.

Mathematics Paper 2: MTC112 Discrete Mathematics (Semester 1)

CO1: Develop the logical thinking of students.

CO2: Improve an ability to apply mathematical foundations to design computerbased algorithms.

CO3: Improve an ability to develop algorithms.

CO4: Help to understand programming languages and software development.CO5: Help in solving a very wide variety of practical problems.

Mathematics paper 1 :MTC 121 Linear Algebra (Sememster 2)

CO1: Students will get equipped with the knowledge of various spacesand the functioning on those spaces.

CO2: Students will be able to perform operations on spaces which aredifferent from the usual spaces that they have studied till now.

CO3:Students will also learn how linear algebra helps in solving real lifeproblems using computers

CO4: Students will develop an appreciation for the literature on thesubject and be able to read and present results from the literature.

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CO5: Students will be able to write cohesive and comprehensivesolutions to exercises and be able to defend their arguments.

Mathematics paper 2: MTC 122 Graph Theory (Semester 2)

CO1: Able to work with graphs and identify certain parameters.

CO2: Develop the skill of converting mathematical problem graphically and vice-versa.

CO3: Motivates to solve real life problems.

CO4: Develop suitable techniques of analysis of problems.

CO5: Enable students to develop a positive attitude towards mathematics as aninteresting and valuable subject to study.

Electronics Paper I

ELC-111: Semiconductor Devices and Basic Electronic Systems (semester 1)After completion of this course student will be able:

CO1:To analyze performance parameters based on study of characteristics of electronic deviceslike diode, transistors , MOSFETs.

CO2:To design, analyze the Regulated Power supply using discrete components and using ICsCO3:To analyze the signal generating circuits : Oscillators and their applications.

CO4:To build and test Data converters such as Analog to Digital and Digital to analog converters.

Electronics PAPER II

ELC 112: Principles of Digital Electronics (semester 1)After completion of this course student will be able:

CO1: To solve problems based on interconversion of number systemsCO2: To reduce the expression using Boolean theorems

CO3: To reduce expressions using K maps in SOP and POS forms

CO4: To Understand the operation of all types of Logic Gates, their families etc.

CO4: To understand how to use Combinational Logic circuits using Logic Gates and using ICs.

Electronics Paper III

ELC-113: ELECTRONICS LAB IA (1.5 Credits) (semester 1)

Practicals

Learning outcomes: After completion of this course student will be able CO1: To identify different components and devices as well as their types.

CO2: To understand the use of various measuring Instruments and other devices in the laboratoryCO3: To understand basic parameters associated with each device

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CO4: To know operation of different instruments used in the laboratoryCO5: To connect circuit and do required performance analysis

CO6: To compare expected and actual results of given particular experiment.

CO7: To analyse the output of the circuits through Observation Tables and Graphicalrepresentation.

Electronics PAPER I

ELC 121: Instrumentation Systems (semester 2)

Learning outcomes: After completion of this course student will be able

CO1: To understand the Instrumentation System and role of Sensors along with their types.CO2: To understand the specifications of different sensors .

CO3: To understand the use of different Sensors and Actuators.

CO4: To realize the Smart Instrumentation system and analyze the use of Smart Sensors.CO5: To understand the use of Operational Amplifier as a Signal conditioning element.

Electronics PAPER II

ELC 122 : Basics of Computer Organisation (semester 2)

Learning outcomes: After completion of this course student will be able

CO1: To understand the working of different Sequential logic circuits

CO2: To understand working operations of different types of Flip flops as a basic building block.CCO3: To know the operations of shift registers and BinaryCounters

CO4: To understand the basic Computer System and general organization of different blocks.CO5: To understand the organization of memory in the Computer system and know differenttypes of Memories.

Electronics Paper III

ELC-123: Electronics Lab IB (semester 2)

Learning outcomes: After completion of this course student will be able

CO1: To experience activity based learning through hobby projects ,Market survey Industrialvisits.

CO2: To learn the project development process through Circuit Simulation and other tools.CO3: To learn PCB making and designing, assembling and soldering processes.

CO4: To understand the working operations of various sensors.

CO5: To know the use of Operational Amplifier and a Signal Conditioner.CO6: To understand the operation of different Sequential Circuits.

CO7: To know the functional operation of memories.

CO8: To understand the Computer Hardware System , assembling, debugging etc.

Statistics PAPER-I

CSST-111Descriptive Statistics (SEM I)

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CO1: Students will understand the concept of Statistical data. They will understand how to collectand condense data using various statistical methods and how to classify and represent that data graphically.

CO 2: Students will learn through various statistical measures such as measures of centraltendency, dispersion.

CO 3: Students will understand the concept of comprehensive introduction to descriptive statistics which are required for becoming computer professional.

CO 4: Students will able to describe the moments skewness and kurtosis.CO 5: Students will be able to understand the concept of Attributes.

Statistics PAPER-II

CSST-112 Mathematical Statistics (SEM I)

CO1: Students will understand the concept of Probability. They will understand how to determine deterministic and non-deterministic models, events, random experiment and how to calculate numerical problems using real life data.

CO 2: Students will learn conditional probability and Bayes theorem which is useful forcalculating posterior probabilities.

CO 3: Students will understand the concept random variables and types of random variables.CO 4: Students will be able to obtain the probability distributions of random variables.

CO 5: Students will understand the concept of discrete random variables and will be able to applythe standard discrete probability distributions like Binomial ,Poisson, Geometric to different real life situations

Statistics PAPER-I

CSST-121 Methods of Applied Statistics (SEM II)

CO1: Students will understand the concept of Correlation of two or more variables. CO 2: Students will understand the concept of Regression of two interrelated variables

CO 3: Students will able to Concept of Multiple Regression and Multiple & Partial Correlation.CO 4: Students will able to Solve the problems based on Multiple Regression and Multiple & Partial Correlation.

CO 5: Students will be able to understand the concept of Time Series.

Statistics:PAER-II

CSST-122 Discrete Probability distributions and Testing of hypothesis SEM –II

CO1: Students will understand the concept of Continuous random variables and will be able toapply the standard Continuous probability distributions like Exponential, Pareto, Normal to different real life situations

CO 2: Students will learn concept and Definitions Related to Testing of hypothesis.

CO 3: Students will understand the concept Parametric Tests like Large Sample Test, SmallSample Tests.

CO 4: Students will be able to obtain the random numbers and pseudo random numbers using Simulation.

CO 5: The students are expected start using some statistical software and verify their theoretical

,

knowledge about different statistical entities and computations during practical sessions using MS-Excel.

Computer Science Theory Paper I

Course CS-211: Data Structures using 'C'

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

CO1: Students will understand system related Programming such as Operating Systemfunctioning.

CO2: Students will capable to develop problem solving abilities using a computer.

CO3: To build the necessary skill set and analytical abilities for developing computer basedsolutions for real life problems.

CO4: To imbibe quality software development practices. To create awareness about processand product standards.

CO5: Students will train in professional skills related to Software Industry.

CO6: To prepare necessary knowledge which is related to operating system and base forresearch and development in Computer Science.

Computer Science Theory Paper II

Course CS-212: Relational Database Management System

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

CO1: Students will understand the concept of transaction and transaction processing.

CO2: To apply knowledge of Programming in pl/sql including stored function, cursor, trigger.CO3: Students will get to know how to apply DML/DDL commands on database.

CO4: Acquaint the knowledge of recovery management.

CO5: Understanding the concept of client – server technology.

Computer Science Paper IV

Practical Course (CS-223 and CS-224): Annual

Course CS-224:Database Practicals & Mini Project using Software Engineeringtechniques

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

CO1: Students will get to know how to apply DML/DDL commands on database.

CO2: To apply knowledge of Programming in pl/sql including stored function, cursor, trigger.CO3: Designing the normalized database.

CO4: Understanding the practical knowledge of exception handling.CO5: Gathering data requirements and functional requirements

Course Outcomes

T. Y. B.Sc. Computer Science Theory -Semester I (2013 pattern)

Course CS 331: System Programming

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

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CO1: Students will understand the design and implementation of System programs. CO2: Students will understand the role of System programs in program development.

CO3: Students will able to differentiate between System program and Application program. CO4: Students will be able to analyze the working of Simulation of simple computer SMAC0CO5: Students will understand the design structure of a simple editor, Assembler and macro

processor for hypothetical simulated computer.

CO6: Students will understand the working of linkers and loaders and other developmentutilities.

CO7: Students will understand Complexity of Operating system as software.

Course CS 332: Theoretical Computer Science

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

CO1: Design a finite automaton to recognize a given regular language.

CO2: Transform a language into regular expression or finite automaton or transition graph anddefine deterministic and nondeterministic finite automata.

CO3: Prove properties of regular languages and classify them.

CO4: Define relationship between regular languages and context-free grammars.

Prove properties of regular languages and classify them. CO5: Building a context-free grammar for pushdown automata.

CO6: Determine whether a given language is context-free language or not and

Prove properties of context-free languages.

C07: Design Turing machine and Post machine for a given language.

CO8: Students are exposed to a broad overview of the theoretical foundations ofcomputer science

Course CS 333: Computer Networks I

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

CO1: Students will get acquainted with fundamentals of Networking like PAN, LAN, MAN, WAN, topologies and Home & Business applications of Networks.

CO2: Students will clear their basic concepts about the standards, their need & types ofstandards.

CO3: Students will know the design issues for the layers, layered architecture of the NetworkModels & functions performed at each layer.

CO4: Students will come to know the role played by different addresses at different layers ofthe network models.

CO5: Students will understand very basic networking hardware like transmission media types& tools description.

CO6: Students will be able to understand the need and importance of protocols at each layerin the communicating computers.

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Course CS 334: Internet Programming I

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

CO1: Students will gain deep understanding of the use and implementation of HTML 5 andPHP language.

CO2: Students will be able to write well-structured, easily maintained, standards-compliant, responsive HTML code.

CO3: Students will get acquainted with Object Oriented Web applications.

CO4: Students will be able to create PHP programs that use various PHP library functions, files and directories manipulations.

CO5: Students will understand database connection & information retrieval from database.

CO6: Students will be able to apply a structured approach to identifying needs, interests, andfunctionality of a website.

Course CS 335: Programming in Java I

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

CO1: Students will learn about the basic concepts of Object-Oriented Programming languagelike Objects, Classes, Inheritance, Polymorphism etc.

CO2: They will implement those concepts in programming using Java language.

CO3: They will get an insight of how to handle unexpected problems and conditions inprogramming code and mechanisms of how to recover from them.

CO4: They will understand the concepts of designing Graphical User Interface and client side program execution on browser.

CO5: They will work on how to create files and transfer data to and from files through program

coded in Java.

Course CS 336: Object Oriented Software Engineering

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

CO1: To inculcate the Analytical and thinking ability.

CO2: To develop structured sets of simple user-defined classes using Object-Orientedprinciples to achieve overall programming goals.

CO3: To understanding the significance of Object Orientation Technique in Softwareengineering.

CO4: To employ formal methods to produce effective software designs as solutions to specifictasks.

CO5: To locate, read and summarize relevant literature, from both traditional and electronicmedia, to extend understanding of the topic.

CO6: To understand the components of Unified Modeling Language (UML) by learning the allSymbolic notation.

CO7: To understand techniques and diagrams related to structural modeling as well asbehavioral modeling.

CO8: To develop error identification and testing strategies for code development by understanding

techniques of Object-Oriented analysis, object-oriented design and objectoriented testing.

T. Y. B.Sc. Computer Science Practical -Semester I & II

Course CS 347: Lab Course I: System Programming & Operating System

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

CO1: Design and implement System programs with minimal features to understand theircomplexity.

CO2: Design and implement simulations of operating system level procedures.

Course CS 348: Lab Course II: Programming in Java

After successfully completing this course, students will be able to:CO1: Implement core Java programs to solve simple problems.

CO2: Implement Client and Server end Java programs.

Course CS 349: Lab Course III: Programming in PHP & Project After successfully completing this course, students will be able to:CO1: Implement Simple PHP programs to solve simple problems

CO2: Study basics of Networking concepts & develop a project java.

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DEPARTMENT OF ZOOLOGYCOURSE OUTCOMES

First YearSemester

Paper I : Protozoa to Annelida	
CO1	Identify animals by observation
CO2	Describe unique characters of Protozoa, Porifera, Coelenterate, Helminthes and Annelids
CO3	Explain life functions of Protozoa, Porifera, Coelenterate, Helminthes and Annelids
CO4	Describe ecological role of phylum Protozoa, Porifera, Coelenterate, Helminthes and Annelida
CO5	Identify diversity from Protozoa, Porifera, Coelenterate, Helminthes and Annelids

Paper II: Cell Biology	
CO1	Describe in detail the structure of cell
CO2	Describe function and the composition of the plasma membrane
CO3	Explain principles of the cell theory
CO4	Differentiate between prokaryotes and eukaryotes
CO5	Understand importance of the nucleus and its components

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Semester II

Paper IV: Arthropoda to Echinodermata and Hemichordata	
CO1	Identify animals by observation
CO2	Describe unique characters of Arthropods, Mollusks, Echinoderms & Hemichordates
CO3	Explain life functions of Arthropods, Mollusks, Echinoderms and Hemichordates
CO4	Explain ecological role of phylum from Arthropoda to Hemichordata

Paper V: Genetics I	
CO1	Describe chemical basis of heredity
CO2	Explain role of genetics in evolution
CO3	Evaluate conclusions that are based on genetic data
CO4	Find the results of genetic experimentation in animals

II YearSemester III

Paper VII: Vertebrate Zoology	
CO1	Describe unique characters of urochordates, cephalochordates and fishes
CO2	Recognize life functions of urochordates to fishes
CO3	Explain ecological role of different groups of chordates
CO4	Explain the diversity of chordates and describe unique characters of amphibians, r reptiles, aves and mammals
CO5	Describe life functions of amphibians, reptiles, Aves and Mmammals

B.Sc

Paper VIII: Genetics II	
CO1	Explain in detail gene expression and its behavior in transformation
CO2	Describe the role of genetics in evolution
CO3	Evaluate conclusions that are based on genetic data in population genetics
CO4	Describe genetic diseases and disorders
CO5	Explain the techniques that are used in genetic engineering

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SEMESTER IV

Paper XI: Animal Physiology	
CO1	Describe in detail the physiology at cellular and system levels
CO2	Explain the role of different bio-molecules
CO3	Explain how mammalian body get nutrition from different bio-molecules
CO4	Describe the functions of different systems
CO5	Describe the physiology of respiratory, renal, endocrine and reproductivesystems to define normal and abnormal functions

Paper XII: Biochemistry and Endocrinology	
CO1	Describe in detail the metabolism of carbohydrates, proteins, fats
CO2	Explain the fundamental biochemical principles
CO3	Describe basic laboratory techniques in biochemistry
CO4	Describe the structure and function of endocrine glands
CO5	Explain the role of hormones

Sc III YearSemester V

Paper XV: Ecology	
CO1	Describe abiotic and biotic factors that affect, the distribution, dispersal, andbehavior of organisms
CO2	Identify factors that affect biological diversity and the functioning ofecological systems
CO3	Use an ecological vocabulary in arguments and explanations of ecologicalphenomena
CO4	Apply concepts and theories from biology to ecological examples
CO5	Analyze and interpret ecological information, research and data

Paper XVI (D): Parasitic protozoa & Helminthes I	
CO1	Study of life cycles of Protozoan parasitic disease, its control, treatment andprophylaxis
CO2	Explain the methods used for diagnosis and treatment of Helminth diseases.
CO3	Distinguish the methods used for protection of parasitic infectious diseases.

Semester VI

Paper XIX: Evolution	
CO1	Describe evolutionary history of man

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CO2	Describe origin of species on earth
CO3	Have an enhanced knowledge and appreciation of evolutionary biology andbehavior
CO4	Perform, analyze and report on experiments and observations in whole-organism biology
CO5	Gain information regarding animal classification and systematic, animal structure and function relationships, evolution between and within major animal groups, human evolution and animal reproduction and development

Paper XX (D): Parasitic Protozoa & Helminthes II	
CO1	Study of life cycles of Helminthes parasitic disease, its control, treatment and prophylaxis
CO2	Explain the methods used for diagnosis and treatment of Helminth diseases.
CO3	Distinguish the methods used for protection of parasitic infectious diseases.

Programme Specific Outcomes of B.Sc.

- Students get the answers of the most complex questions of life, like the formation ofearth, life on earth, first life form on the earth
- Atmosphere on the earth at present and in the past when earth was formed
- They are aware of the Evolution of all the animals and mainly Human
- They learn the evolution of Human being from single bacteria and the middle stages
- All extinct animals like Mammoth, Dinosaurs, fishes, invertebrates are studied indetails
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Year of Establishment : 1997 Reg.NGC-35/97/NMV(16/97)M.S.3
Rashtriya Shikshan Prasarak Mandal Beed's
Lokmanya Tilak Mahavidyalya, Wadwani
Tq. Wadwani Dist. Beed. Maharashtra, India
Affiliated to : Dr.Babasaheb Ambedkar Marathwada University, Aurangabad.
UGC Recognition Under Section : 2 (f) & 12 (B)
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B. Com. - Programme Outcomes -

Programme Outcomes after the completion of Course:

1. The Commerce graduates would be able to acquire the fundamental knowledge of business and commercial activities.

2. The programme enables the graduates to appear exams such as Banking, CA, CS, ICWA etc.

3. The programme helps the students to acquire the knowledge of accountancy, management principles, insurance transactions, business economics and financial management.

4. The students also obtain knowledge in the field of management accounting, corporate accounting, statistical and mathematical techniques and knowledge related to corporate law and business laws.

5. The students can have various opportunities in business, banking and industry.

- **Programme Specific Outcomes – (Subject)- COMMERCE**

- After completing this specific programme–(B.COM)

1. B.com Programme improved students by Providing complete knowledgeabout Commerce
2. B.com programme Improved students in Business Activities.
3. B.com programme improved students in Decision making techniques forBusiness .
4. B.com programme makes students to learn laws, Acts and principles ofBusiness.
5. B.com programme enabled the students to do financial activities of Business.

- After completing this specific programme –Commerce

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1. B.com Programme improved students by providing complete knowledgeabout Commerce.
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5. B.com programme enabled the students to do financial activities of Business.

Course Outcomes – (Subject – COMMERCE)

Under Graduate (Course Outcomes)
B.Com: First Year

Semester – I (Paper-wise)

1. Name of the Paper – I: Fundamentals Of Financial Accounting

a. Students- learnt to record Business Transaction.

b. Learnt to maintain & present the financial data to the users

c. Learnt to prepare financial statements

2. Name of the Paper – II: Business Statistics

a. Students- Acquired Fundamental knowledge of statistics

b. Learnt to use statistics techniques & tools to analyse data.

c. Learnt to make business decisions by using statistical tools & methods

3. Name of the Paper – III: Business Economics

a. Students- Acquired information about Economics principles andtheories.

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b. Learnt to implement these Economics principles & theories inbusiness.
c. Acquired knowledge about Business Economics For Taking Businessdecisions.

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4. Name of the Paper – IV: Fundamentals Of Business Communication

a. Students- Improved communication skills.

b. Learnt how to speak, write, read and communicate with others.

c. Learnt how to attend interview and to develop personality.

5. Name of the Paper – V: Fundamentals Of Salesmanship

a. Students- Gathered Knowledge of selling products to the consumers.

b. Learnt Theories of selling, personal selling and salesmanship for saleof products.
c. Learnt consumer behavior while purchasing products

Semester – II (Paper-wise)

6. Name of the Paper – I: Financial Accounting

a. Students- Acquired knowledge of accounting for special Businesstransactions..
b. Learnt to analyze the financial data and communicate to end users.

c. Learnt to use accounting principles & rules in business to get results..

7. Name of the Paper – II: Business Statistics And Mathematics

a. Students- Learnt to solve the problems in Business by Statistical &Mathematical Methods.
b. Learnt statistics & Mathematics together to take Decisions forBusiness.
c. Learnt Financial statements analysis Tools like Ratios, Proportions,Probability, Etc

8. Name of the Paper – III: Business Economics-II

a. Students- Improved Knowledge in Determining prices of a products inMarkets.
b. Studied market structures & price determinations in Markets.

c. Studied about factors of productions & cost concepts to earn profit inBusiness.
9. Name of the Paper – IV: Modern Business Communication- II

a. Students- Improved Communication skils to compete in careerdevelopment.

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b. Developed speaking and writing skills for Business .

c. Improved personality development foe employment & career options..

10. Name of the Paper – V: Advertising

a. Students- Aware of Adverting the products in markets..

b. Learnt modern techniques of advertising to promote products.

c. Learnt Advertising media, Budget and Agencies to sale product andearn profit for Business.

B.Com: Second Year

Semester – III (Paper-wise)

1. Name of the Paper – I: Corporate Accounting

a. The subject used to understand the provisions of companies Act 1956.

b. It benefitted students to move into advance areas like CA, CS, ICWA.

c. It provided knowledge of Buyback, forfeitures of shares.

2. Name of the Paper – II: Cost Accounting

a. Students -learnt to select appropriate costing techniques and methods.

b. Learnt to take proper decision for cost control & reduction

c. Learnt how to determine cost and selling price of a product, job,batch, etc.

3. Name of the Paper – III: Principles Of Business Management

a. Students- Acquired knowledge about Business management &managerial functions.

b. Learnt way of implementing planning process in Organization

c. Learnt about directing, leading, staffing and communicating withemployees.

4. Name of the Paper – IV: Mercantile Law

a. The subject gave complete knowledge about Acts & Laws useful forsmooth business activities.

b. Students- Learnt Contract Act, Sale of Goods Act, Negotiableinstrument Act, Companies Act, Etc

c. The subject provided thorough knowledge to students in legal asceptsof Business.

5. Name of the Paper – V: Fundamentals Of Income Tax

a. The subject provided knowledge to students in Income Taxcalculation as per Income Tax Act.

,

b. Students learnt different sources of incomes like salary income, houseproperty income, Profession and business income, income from othersources and capital gains.

c. It is useful for students in both academic and in practical life.

6. Name of the paper (SEC – I)- E- Commerce-I

a. It enables the students to evaluate the information on the needs ofbusiness entity to adhere the E-commerce

b. Students learnt technologies and tools in commerce

c. It has posed the New issues in development of business informationsystem.

Semester – IV (Paper-wise)

7. Name of the Paper – I: Advance Corporate Accounting

a. Students- Learnt Accounting of different organization & entities .

b. The subject used to understand the provisions of companies Act 1956.

c. It benefitted students to move into advance areas like CA, CS, ICWA.

d. It provided knowledge of Buyback, forfeitures of shares, Etc.

8. Name of the Paper – II: Advance Cost Accounting

a. Students –learnt Methods of Costing like Process costing, BatchCosting, contract costing, etc.

b. Learnt to select appropriate costing techniques and methods.

c. Learnt to take proper decision for cost control & reduction

d. Learnt how to determine cost and selling price of a product, job,batch, etc.

9. Name of the Paper – III: Business Management

a. Students learnt Management theories to be implemented in Business.

b. Students- Acquired knowledge about Business management &managerial functions.

c. Learnt way of implementing planning process in Organization

d. Learnt about directing, leading, staffing and communicating withemployees.

10. Name of the Paper – IV: Corporate Law

a. Students – learnt companies Act 2013/1956 for formation, registration, incorporation,

commencement of business.

b. The subject gave complete knowledge about Acts & Laws useful forsmooth business activities.
c. Students- Learnt Contract Act, Sale of Goods Act, Negotiableinstrument Act, Companies Act, Etc
d. The subject provided thorough knowledge to students in legal asceptsof Business.

11. Name of the Paper – V: Income Tax Law And Practice

a. Students- learnt provisions in Income Tax for filling returns, Taxliability calculation, etc.

b. The subject provided knowledge to students in Income Taxcalculation as per Income Tax Act.
c. Students learnt different sources of incomes like salary income, houseproperty income, Profession and business income, income from othersources and capital gains.
d. It is useful for students in both academic and in practical life.

12. Name of the Paper SEC – II: E-Commerce-II

a. Students- learnt Implementation of E commerce in Business for speedand accurate business activities in business.
b. It enables the students to evaluate the information on the needs ofbusiness entity to adhere the E-commerce
c. Students learnt technologies and tools in commerce

d. It has posed the new issues in development of business informationsystem.

B.Com: Third Year

Semester – V (Paper-wise)

1. Name of the Paper – I: Advance Accounting- I

a. Students- Learnt Accounting process in advance level.

b. Learnt to do accounting for hotel, farm, Non-profit organizations andothers entities.
c. Learnt to communicate accounting information to end users likeemployees, share holders, etc.

Name of the Paper – II: Management Accounting- I

d. Students- learnt to do analysis of accounts for taking decision

e. Learnt how management will take decision based on past data andfinancial statements.
f. Subject provided complete knowledge about Budget, marginal cost,Break even analysis, etc.

2. Name of the Paper – III: Auditing-I

a. Students- Acquired knowledge of Audit of business statements.

b. Learnt the Audit procedures, planning, programme, etc to expressopinion on statements.

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c. Learnt about companies auditor, appointment, remuneration, rotation,rights and duties, etc.
d. Learnt errors and frauds while preparing financial statements

3. Name of the Paper – IV: Human resource Management-I

a. Students – learnt about Man power management in organization..

b. Learnt recruitment, selection, Induction, Job analysis, evaluation,Incentives, etc.
c. Learnt about trade unions, International organizations for labour andwelfare.
d. Learnt importance of man power and how to handle the humanresource properly.
4. Name of the Paper – V: Marketing Management -I

a. Students – Acquired knowledge about marketing .

b. Learnt to develop New Product for consumers.

c. Learnt Product positioning, pricing, development, sales promotion,Branding, packing, etc.
d. The subject gave complete information about Marketing fromproduction to distubution of product to consumer.
5. Name of the Paper – VI: Training and Project Work.

a. Students- Learnt how to do Research activity .

b. Learnt to gather and use methods of data collection for research.

c. Learnt to analyze, and interpret ate data collected.

d. Finally learnt to give suggestion and conclusion on research.

6. Name of the Paper – VI: Indian Economy-I

a. Students- Learnt recent updates about Indian economy.

b. Learnt about population, literacy, sex ratio, Census 2011.

c. Acquired complete information about our Growth and development ofthe Country.
7. Name of the paper (SEC – III)- Accounting and Tally

a. Students- learnt accounting process through computer.

b. Learnt software for accounting Tally ERP 9

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c. Learnt how to create company, vouchers, ledgers and accounts inTally.

Semester – VI (Paper-wise)

8. Name of the Paper – I: Advance Accounting- II:

a. Students- Learnt Accounting process in advance level.

b. Learnt to do accounting for hotel, farm, Non-profit organizations and others entities.

c. Learnt to communicate accounting information to end users likeemployees, share holders, etc.

9. Name of the Paper – II: Management Accounting-II:

a. Students- learnt to do analysis of accounts for taking decision

b. Learnt how management will take decision based on past data andfinancial statements.

c. Subject provided complete knowledge about Budget, marginal cost,Break even analysis, etc.

10. Name of the Paper – III: Auditing-II:

a. Students- Acquired knowledge of Audit of business statements.

b. Learnt the Audit procedures, planning, programme, etc to expressopinion on statements.

c. Learnt about companies auditor, appointment, remuneration, rotation,rights and duties, etc.

d. Learnt errors and frauds while preparing financial statements12.Name of the Paper – IV: Human Resource Management –II:

a. Students – learnt about Man power management in organization..

b. Learnt recruitment, selection, Induction, Job analysis, evaluation,Incentives, etc.

c. Learnt about trade unions, International organizations for labour andwelfare.

d. Learnt importance of man power and how to handle the humanresource properly.

13. Name of the Paper – V: Marketing Management-II:

a. Students – Acquired knowledge about marketing .

b. Learnt to develop New Product for consumers.

c. Learnt Product positioning, pricing, development, sales promotion,Branding, packing, etc.

d. The subject gave complete information about Marketing fromproduction to distubution of product to consumer.

14. Name of the Paper – V: Training And Project Work:

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a. Students- Learnt how to do Research activity .

b. Learnt to gather and use methods of data collection for research.

c. Learnt to analyze, and interpret ate data collected.

d. Finally learnt to give suggestion and conclusion on research.

15. Name of the Paper – V: Indian Economy-II:

a. Students- Learnt recent updates about Indian economy.

b. Learnt about population, literacy, sex ratio, Census 2011.

c. .Acquired complete information about our Growth and development ofthe Country.

16. Name of the Paper SEC – IV: Accounting And Auditing Practices:

a. Students- learnt accounting process through computer.

b. Learnt How auditing will be done practically in firms by Auditors.

c. Learnt how Examine companies, vouchers, ledgers, accounts andfinancial statements.

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