

Course Outcome of Economics

First Year B.A.

The syllabus of First Year B.A. was revised in the year 2016-17 with the following objectives:

- To introduce the students to elementary concepts in micro Economics.
- The Student should be able to use these concepts to understand the relevance of micro economics.
- The Student should be able to build on these concepts in the future to develop deeper understanding of the economy.

Outcomes of the course:

1. Students should understand ten principles of economics.
2. They should be in a position to understand basic concepts markets Demand, supply and factors affecting it.
3. The subject is expected to create confidence in students to understand small issues in Economy.
4. Student should understand various concepts of National Income, Budget, Keynesian theory, structure of taxation and GST.

Second Year B.A.

The main objective of the syllabus is to

- To help students to understand different micro level concepts.
- To introduce different concepts which can help the students to understand monetary and fiscal Economics

Outcomes of the course:

1. The syllabus helps students to understand Macro concepts like national income and Demonetization its impacts on Indian Economy.
2. Student should be in a position to understand the concept of IS-LM, and U.B.I
3. To understand Demand for and Supply of Money and factors determining it.
4. To understand public finance and difference between public and private finance.
5. Students should be able to understand importance of fiscal policy concepts like public expenditure, public debt, fiscal administration, budget .All these concepts help the student to understand working of Indian economy and government.



The syllabus of third Year B.A. was revised in the year 2018-19 with the following objectives:

Third Year B.A.

The syllabus of Third Year B.A. was framed with the following objectives:

- To give the students sound understanding in micro economic theory.
- Student have been taught perfect competition this course focus on three aspects, which are the study of imperfect competition, general equilibrium and welfare economics.

Outcomes of the course:

1. Students should know the structure and functions of Monopoly and oligopoly markets.
2. Students should know basis of international trade.
3. To understand difference between internal, international trade, B.O.P and B.O.I trade policy.
4. Students should be in a position to know gains of international trade.
5. Students should understand FOREX market and the role played by it in the international trade.
6. To understand role of RBI in managing exchange rate.
7. Student should know the economic causes of Environmental economics.
8. Student should know the key aspects of Indian economic development during the second half of British colonial rule.



Satish Pradhan

PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

Satish Pradhan Dnyanasadhana College, Thane.
History Department

Class: FYBA, SYBA, TYBA

This is syllabus of the undergraduate Programme (Six Semesters) in History, to be taught in Semester I to VI. The objective of framing course is to understand past as a process of evolving the culture and inculcate the rational attitude among the students. It will help to understand the contemporary issues and search a solution through the HISTORY.

Objective of teaching the course

To study the past and understand present and future

To promote and develop Historical awareness and value of rich cultural heritage of India

To study significant events in world history which shaped the course of history

To develop an ability to apply historical knowledge and skill in everyday life

To provide students with skills in historical research and analysis

Programme

Learning Outcome

FYBA Subject: History of Modern India (1857 A.D. -1947A.D.) Sem: I and II

Paper: I

Learning Outcomes:

On successful completion of this course, students will understand the history of Modern India and the struggle for independence. They will learn the contribution of social reformers and course of reform movement.



SYBA Subject: Landmark in the World History (1300 A.D.-1945 A.D.) Sem: III and IV Paper: II

Learning Outcomes:

On successful completion of this course, students will enable to comprehend the transition of Europe from medieval to modern times and its impact on the world. They will understand the most significant events and personalities of the period under study and making of modern world.

SYBA Subject: Ancient India (Earliest Time to 1000 A.D.) Sem: III and IV Paper: III

Learning Outcomes: On successful completion of this course, students will enable to acquaint the different sources of Ancient Indian History. They will understand the political- socio- economic and cultural development in the ancient period and appreciate cultural history of India.

TYBA: - Sem: V

TYBA Subject: History of the Sultanate Period (1000 A.D.- 1526A.D.) Sem: V Paper: VII

Learning Outcomes: On successful completion of this course, students will enable to acquaint the history of the Sultanate period and highlight the development of socio economic administrative and cultural trends during the period.

TYBA Subject: History of Modern India (1857 A.D.- 1964 A.D. Sem: V Paper: VIII

Learning Outcomes: On successful completion of this course, students will enable to understand study of colonial impact on India and socio economic reform in pre and post independence.

TYBA Subject: Archaeology and Historical Tourism Sem: V Paper: IX-A

Learning Outcomes: On successful completion of this course, students will understand the basis of Archaeology. It will help to understand significance of epigraphy and numismatic as the source of history and make students aware about the basis of heritage tourism.



Sattish Pradhan

PRINCIPAL

*Sattish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)*

**TYBA Subject: History of Marathas- Royal Period (1630 A.D.- 1707 A.D.)
Sem: V Paper: X**

Learning Outcomes: On successful completion of this course, students will understand the regional history of Maharashtra. It will help to understand the significance of the establishment of Swarajya under King Shivaji.

**TYBA Subject: History of Contemporary World (1945 A.D.- 2000 A.D.) Sem:
V Paper: XI**

Learning Outcomes: On successful completion of this course, students will understand the impact of cold war on world and understand the significant events after Second World War.

**TYBA Subject: Research Methodology in Social Sciences: Research Design
and Data Collection Sem: V Paper: XII-A**

Learning Outcomes: On successful completion of this course, students will understand the Research Methodology in social sciences, research design and Data collection. To introduce students to the basics of research and methods and tools of data collection.

TYBA: - Sem VI

**TYBA Subject: History of Mughal Rule (1526 A.D.- 1707A.D.) Sem: VI
Paper: XIII**

Learning Outcomes: On successful completion of this course, students will understand the Political, Socio-Economic, Administrative and cultural history during the period of study.

**TYBA Subject: History of Contemporary India (1964 A.D.-2000 A.D.) Sem:
VI Paper: XIV**

Learning Outcomes: On successful completion of this course, students will understand History of India during post independent era. It will help to understand the important events during the period and study foreign policy of India.

**TYBA Subject: Museology Archival and Library Sciences Sem: VI Paper:
XV-A**

Learning Outcomes: On successful completion of this course, students will understand the role of museum in preservation of heritage. . It will help to understand the value of Archival science and library in academic and research careers.



TYBA Subject: History of Marathas- Peshwa Period (1707 A.D.-1818 A.D.)

Sem: VI Paper: XVI

Learning Outcomes: On successful completion of this course, students will understand the expansion of Maratha powers and their contribution to the national politics of the 18th century. . It will help to understand the socio-cultural life in Maharashtra in the 18th century.

TYBA Subject: History of Asia (1945 A.D. – 2000 A.D.) Sem: VI Paper: XVII

Learning Outcomes: On successful completion of this course, students will understand the significant event in Asia which shaped world history. . It will help to understand the development of China and Japan. . It will help to understand the events in west Asia and its impact on world.

TYBA Subject: Research Techniques in History: Trends, Processing and Presentation. Sem: VI Paper: XVIII-A

Learning Outcomes: On successful completion of this course, students will understand different trends in Historical Research. . It will help to develop the methodology to collect the sources and analysis and bring awareness of importance of rational method of history writing.



Chandra

PRINCIPAL

*Satish Pradhan Dnyanadasarwati College,
Thane (Arts, Science & Commerce)*

विषय - मराठी

बी. ए. मराठी अभ्यासक्रमाची अपेक्षित फलनिष्पत्ती (Programme Outcome)

- साहित्यकलेचे एकूण सामाजिक व्यवस्थेतील अनन्यसाधारण स्थान व महत्त्व
- ललितकला व साहित्यकला यांच्यातील अनुबंध
- भाषाव्यवहार, भाषाशास्त्र, व्याकरण व्यवस्था, प्राचीन व आधुनिक मराठी साहित्य, सौंदर्यशास्त्र, समीक्षा व्यवहार, साहित्यशास्त्र, काव्यशास्त्र यांचे आकलन
- साहित्यकेंद्री अभ्यासक्रमाच्या अध्ययनातून विद्यार्थ्यांना जीवनाच्या समग्रतेचे आकलन
- साहित्याला असलेल्या आंतरविद्याशाखीय आकलनाद्वारे मूल्यात्मक दृष्टिकोनाचे संवर्धन
- जीवनमूल्ये व कलामूल्ये यांच्यातील संतुलनाचे सजग भान
- साहित्य आणि समाज यांच्या परस्पराभिमुख अन्वयातून (तात्त्विक व उपयोजित) सामाजिक बांधिलकीची रुजवण
- सक्षम व जबाबदार नागरिकत्वाची जडणघडण



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PRINCIPAL

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विषय - मराठी
अभ्यासपत्रिकांची अपेक्षित फलनिष्पत्ती
(Course Outcome)

❖ प्रथम वर्ष कला – मराठी (अनिवार्य)

१. ललित साहित्यप्रकारांचा प्राथमिक परिचय
२. उपयोजित साहित्यकृतींचे (वडीलधारी माणसं - शांता शेळके, नापास मुलांची गोष्ट - संपा. अरुण शेवते) समग्र आकलन

➤ व्यावहारिक मराठी - दैनंदिन व्यवहारात व कार्यालयीन वापरासाठी मराठी भाषिक कौशल्ये

❖ प्रथम वर्ष कला – मराठी (ऐच्छिक)

- १) नाटक – साहित्यप्रकाराचा सैद्धांतिक अभ्यास व आकलन
 - २) कावळ्यांची शाळा – विजय तेंडुलकर
 - ३) राहिले घर दूर माझे – शफाअत खान
- या नाट्यकृतींचा समग्र अभ्यास

कविता – एक साहित्यप्रकार

१. कविता - साहित्यप्रकाराचा सैद्धांतिक अभ्यास
२. विविध कवींच्या काव्यशैलींचा अभ्यास व आकलन
३. स्त्रीवादी कविता, ग्रामीण कविता, दलित कविता, आधुनिक कविता इ. काव्यजाणिवांचे आकलन

❖ द्वितीय वर्ष कला – अभ्यासपत्रिका क्र. II

विविध साहित्यप्रकारांची तात्त्विक संकल्पना व उपयोजित साहित्यकृतींचा अभ्यास :-



१. साहित्याचे प्रकाराधिष्ठित (कादंबरी व आत्मकथन) आकलन
२. कादंबरी - थॅक यू मिस्टर ग्लाड - अनिल बर्वे
३. दिवे गेलेले दिवस - रंगनाथ पठारे
४. मन मे है विश्वास - विश्वास नांगरे पाटील
५. जसं घडलं तसं - नीलम माणगावे

❖ द्वितीय वर्ष कला – अभ्यासपत्रिका क्र. III

मराठी भाषा, समाज आणि संस्कृती:-

६. भाषा व भाषाविषयक मूलभूत तात्त्विक संकल्पनांचा परिचय
७. जागतिकीकरण, भाषा विकास आणि त्यातील समाजाची व शासनाची जबाबदारी यांचे भान

आगरी बोलीचा अभ्यास:-

१. आगरी समाजाचा परिचय
२. आगरी बोलीचा परिचय
३. विविध बोलींच्या जतन आणि संवर्धनाविषयी संवेदनशीलता

❖ तृतीय वर्ष कला – अभ्यासपत्रिका क्र. IV

प्राचीन मराठी वाङ्मयाचा इतिहास:-

१. मराठी साहित्याच्या इतिहासाचा परिचय
२. संतकविता, पंडितकविता व शाहिरीकाव्य या काव्यप्रवाहांचा अभ्यास व आकलन

❖ तृतीय वर्ष कला – अभ्यासपत्रिका क्र. V

भारतीय व पाश्चात्य साहित्यशास्त्र :-

१. भारतीय व पाश्चात्य साहित्यशास्त्रात विकसित झालेला साहित्यासंबंधीचा तात्त्विक विचार



२. संस्कृत व पाश्चात्य साहित्यशास्त्रज्ञांनी साहित्यासंबंधी मांडलेल्या विविध तात्त्विक संकल्पना

❖ तृतीय वर्ष कला – अभ्यासपत्रिका क्र. VI

साहित्य व समाज :-

१. साहित्य व समाज यांच्या परस्परसंबंधाची सैद्धांतिक भूमिका व उपयोजन
२. ग्रामीण, दलित, स्त्रीवादी व महानगरी या साहित्यप्रवाहांत अनुस्यूत असलेला तत्त्वविचार व त्या अनुषंगाने साहित्यकृतींच्या अभ्यासातून वास्तव व साहित्यकृतींतर्गत वास्तव यांच्यातील व्यामिश्र संबंधांचे आकलन

❖ तृतीय वर्ष कला – अभ्यासपत्रिका क्र. VII

भाषाविज्ञान आणि मराठी व्याकरणाचा अभ्यास:-

१. भाषा व भाषाविषयक मूलभूत तात्त्विक संकल्पनांचा परिचय
२. मराठी व्याकरणाचा परिचय

❖ तृतीय वर्ष कला – अभ्यासपत्रिका क्र. VIII

आधुनिक मराठी साहित्य:-

१. आधुनिक मराठी साहित्य या संकल्पनेचा परिचय
२. भारत सासणे, अरुण साधू, इंदिरा संत, गो.पु. देशपांडे यांच्या साहित्यकृतींचा अभ्यास व आकलन.

❖ तृतीय वर्ष कला – अभ्यासपत्रिका क्र. IX

व्यवसायाभिमुख मराठी :-



१. भाषांतर, अनुवाद व रूपांतर या तात्त्विक संकल्पनांचे आकलन व भाषांतराचे उपयोजन
२. ललित साहित्यकृतींचे भाषांतर करताना येणाऱ्या अडचणींचे आकलन
३. ग्रंथपरीक्षणाचे स्वरूप, प्रकाशन व्यवहार, विविध माध्यमांसाठी मुलाखतीचे विविध प्रकार, स्वरूप इ. चे आकलन



Satish Pradhan

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FYBA Psychology paper

Objectives: -

1. To impart knowledge of the basic concepts and modern trends in Psychology
2. To foster interest in the subject of Psychology and to create a foundation for further studies in Psychology
3. To make the students aware of the applications of Psychological concepts in various fields so that they understand the relevance of Psychology in different areas of life.

Course outcome for FYBA Psychology paper

1. Familiarity with basic concepts in Psychology and modern trends of research and application in the field of psychology
2. Motivation for pursuing further studies in Psychology
3. Learning applications of Psychology



Satish Pradhan

PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

Satish Pradhana Dnyanasadhana college.

DEPT. OF SOCIOLOGY

This is revised part of the undergraduate programme (Six Semesters) in Sociology .From Semester I to Semester VI from academic year 2015-16 onwards. In the Developing curriculum it should be very purposeful to create positive improvement in the education system.

Sociology is the Social Science. (Humanities Faculty) So all the courses are devoted to Sociology. There is continuity and quality content in the Syllabus. In recent times many changes noticed in Indian society, Social Structure, Social Institutions, Social Movements, Gender Perspectives etc. So in framing the syllabus need to take care of continuity.

FYBA -- Semester I and Semester II

The Course content based on Basic concepts in Sociology and Emerging issues in Sociology.

SYBA Paper II –

Semester III - Talks about Indian Social Structure and Change, Indian Traditions.

Semester IV – Talks about concept of development and contemporary debates within the development discourse.

Paper III

Semester III – Talks about Contemporary issues and in calcite responsibilities & equality.

Semester IV – Talks about relevance & varies possibilities for future studies in sociology. New vibrant fields in sociology. Depth understanding of struggle & survival in today's Competitive scenario.



Semester -I

Foundations of Sociology.

- 1) To introduce the students to the basic concepts in Sociology.
- 2) To familiarize students with the theoretical aspect of different concepts.

Semester -II –

Fundamental of Sociology:

- 1) To introduce the students to the emerging issues in sociology.
- 2) To enthuse students & to introduce them to the relevance & varied possibilities for future studies in Sociology.

-3-

DEPT. OF SOCIOLOGY

S.Y.B.A.

SEM - III

Paper II – Indian Society Structure & Change.

- 1) To introduce students to the Indian Sociology Traditions.
- 2) To familiarize students with the research traditions in India.
- 3) To familiarize students with the Emerging issues in Indian society.



SEM – IV

Paper II – Sociology of Development.

- 1) To introduce various theoretical perspectives in Indian Society that has shaped the concept of development.
- 2) To help students to gain an insight into emerging issues & contemporary debates within the development discourse.

S.Y.B.A. – Semester - III

Paper III: -- Contemporary issues in Indian society

- 1) To bring awareness & Sensitivity among the students towards Contemporary issues.
- 2) To inculcate responsibilities & equality.

Semester IV

Paper III: Emerging fields in Sociology.

- 1) To introduce students to the relevance & various possibilities for future studies in sociology.
- 2) To make students aware about the new vibrant fields in sociology.
- 3) To provide students with in depth understanding of struggle & survival in today's Competitive scenario.



Dept. of Sociology.

T.Y.B.A.

SEM-V

Paper IV – Social Theory

Objectives –

- 1) To provide the students of Sociology with the understanding of Sociological theory.
- 2) To train the students in the application of these theories to social Institution.

Paper V – Sociology of work

Objectives:--

- 1) To introduce students to the area of Industrial Sociology.
- 2) To familiarize students to the nature of Indian work & workers.
- 3) To develop Sociological understanding of the changes taking place in the area of work.

Paper VI – Sociology of Gender.

Objectives:--

- 1) To trace the Evolution of gender as a category of societal
- 2) To trace the emergence of women's movement in India.
- 3) To sensitize the students on gender issues.

Paper VII – Sociology of Human Resource Development.

Objectives:--



- 1) To familiarize the students with role & functions of human resource development at the micro & macro level.
- 2) To create an awareness of the various issues involved in the development of human resource with particular emphasis on social & cultural factors.

Paper VIII – State, civil society & social Movements.

Paper IX – Quantitative Social Research.

Objectives:--

- 1) To provide students with an orientation to quantitative Social Research.
- 2) To acquaint students with important concepts, techniques & process in quantitative research.
- 3) To guide students to work on meaningful minor research projects.



Theoretical Anthropology: Paper IV

Objectives:--

- 1) To provide the students with the understanding of theoretical anthropology.
- 2) To train students in the application of these theories to social situations.

Sociology of Informal Sector – Paper V

Objectives:--

- 1) To develop a sociological understanding of the issues related to the Informal Sector.
- 2) To introduce students to the growing Sector of informal workers in the Indian economy.

Gender & Society in India an Emerging Issues: Paper VI

Objectives:--

- 1) To understand new and emerging issues in the Indian women's Movement.
- 2) To understand newer methods of protest & resistance.

Sociology of Organization: Paper VII

Objectives:--

- 1) To Familiarize Students with dynamics of organizations & diverse strategies useful in developing human resources.
- 2) To create an understanding of human resource planning to social development & Comprehend the challenges faced by organizations in a global

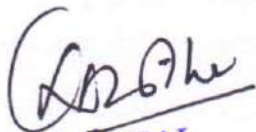
Sociology of Social Movements: Paper VIII—



Quantitative social Research: Paper IX

Objectives:--

- 1) To provide students with an orientation to qualitative social Research
- 2) To acquaint students with the important concept, techniques & process in Qualitative research.
- 3) To guide the students to work on meaningful, minor research Projects.



PRINCIPAL

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Thane (Arts, Science & Commerce)



Foundation Course Paper I & II

Foundation Course is a compulsory paper offered at the undergraduate level for all the traditional courses and self-financing courses, offered at Mumbai University. It was introduced in the year 1978 for all faculty students with the intension to inculcate value education through syllabus. It also aimed to develop personality of the students and strengthen social awareness among them. The papers are offered at F Y and SY level with the following objectives.

FY BA, B Com & B Sc

Objectives

1. Develop a basic understanding about issues related to gender disparity, caste/class discrimination, rights and duties of Indian citizens, ecology
2. Gain an overview of Indian society and understanding the Cultural pluralism of the society.
3. Appreciate the importance of developing awareness about social issues

SY BA, B Com & BSc

Objectives

4. Develop a basic understanding about issues related to Human Rights of weaker sections, ecology and science and technology.
5. Gain an overview of significant skills required to address competition in career choices.
6. Appreciate the importance of developing a scientific temper towards technology and its use in everyday life.

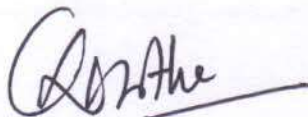


Course outcome for Foundation Course at FY and SY level is as follows:

1. Gender sensitization: Familiarity with basic concepts like Sex and Gender
2. Awareness about Gender Discriminatory practices in the family and society
3. Awareness about human rights especially for weaker sections of the society and redressal mechanism for the same
4. Environmental consciousness
5. Scientific temperament

Project work in all the four semesters help in nurturing the following skills among students.

1. Familiarity with various research initiatives
2. Learning beyond classrooms
3. Promoting self-study, discipline, reasoning ability, generalization and abstraction ability, communication skills among students.



PRINCIPAL

*Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)*



Satish Pradhan Dnyanasadhana College, Thane.

Botany Department

Class: F.Y.BSc

Preamble :

This is a revised part of the undergraduate programme (Six Semesters) in Botany, to be taught in Semester I & II from the academic year 2017-18 onwards. Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision.

Out of the two courses in each Semester, **one** course is based on Basic Botany that involves the study of Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms.

The **second** course deals with the interdisciplinary and application- oriented branches of Botany such as Cell biology, Genetics, , Physiology, Anatomy, Ecology and Economic Botany.

The 'practical' component constitutes various experiments to acquaint the students with the working and use of instruments, and excursion.



➤ **Objectives:**

The course has been designed for the students with the following objectives:

1. To familiarize students with basic concepts and principles of Botany
2. To develop their ability to appreciate the diversity of plants
3. Know the vegetative morphological and reproductive characteristics of the plant.
4. To achieve an up-to-date level of understanding of plant science and its applications in social, economic, pharmaceutical, environmental and industrial fields.

Subject: Plant Diversity (USBO101) Sem: I Paper: I

Learning Outcomes :

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

- 1) learn the significance of algae as the most primitive organisms on earth, their simplicity of structure & methods of reproduction, significance of the blue-green algae viz. Nostoc & Spirogyra as nitrogen fixers, diversity of chlorophycean algae & their economic importance
- 2) understand the life cycle study of Bryophytes like Riccia and their role as primary producers
- 3) learn the vital role of the saprophytic fungi in the ecosystem and finally the economic importance of fungi



Subject: Form and Function II (USBO102) Sem: I Paper: II

Learning Outcomes:

➤ On successful completion of this course students will be able to :

- 1) Understand the ultra-structural details of the fundamental basic unit of life i.e. Cell and will lay the foundation for the study of Cell & Molecular Biology
- 2) understand the concept of ecosystem, energy flow in the ecosystem w.r.t. the Laws of Thermodynamics and its applications.
- 3) learn the the Mendelian Genetics form the basis of plant breeding.

Subject: Botany Practical (USBOP1) Sem: I

Learning outcomes :

➤ On successful completion of this course students will be able to :

- 1) Understand the various stages in the life cycle of Thallophyta and Bryophytes.
- 2) Practice the analytical skills such as chromatography
- 3) become aware of the plant diversity
- 6) learn statistical methods and critically analyze and interpret the scientific data and experimental results



Subject: Plant Diversity (USBO201) Sem: II Paper: I

Learning Outcomes:

➤ **On successful completion of this course students will be able to :**

- 1) Understand the evolution of Pteridophytes as vascular plants from non-vascular plants and the role of the stele as conducting elements,
- 2) Understand the differences between flowering & non-flowering plants and the morphological diversities in plant Taxonomy.

Subject: Form and Function - II (USBO202) Sem: II Paper: II

Learning Outcomes :

➤ **On successful completion of this course students will be able to :**

- 1) Understand the significance of plants as the fixers of light energy and their role of producers of energy rich molecules.
- 2) understand plants as resources of phytochemical constituents useful in medicine.

Subject: Botany Practical (USBOP2) Sem: II

Learning Outcomes :

➤ **On successful completion of this course students will be able to :**

- 1) Design and execute an experiment
- 2) correlate the theoretical concepts of physiological processes with practical knowledge.
- 3) study and understand various life forms .



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Thane (Arts, Science & Commerce)

Satish Pradhan Dnyanasadhana College, Thane.
Botany Department

Class: S.Y.BSc

Preamble :

This is a revised part of the undergraduate programme (Six Semesters) in Botany, to be taught in Semester III & IV from the academic year 2017-18 onwards. Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision.

Out of the three courses in each Semester, **one** course is based on Basic Botany that involves the study of Thallophyta, Bryophyta, Gymnosperms and Angiosperms which is in continuity with the current FYBSc syllabus (Sem I and Sem II).

The **second** course deals with the interdisciplinary branches of Botany such as Cell biology, Genetics, Molecular biology, Physiology, Anatomy and Ecology.

The **third** course in each semester offers application- oriented topics. It will be offered as a **choice** to all learners across various combinations. This course specifically highlights the applications of plant science in industry and research.

The 'practical' component constitutes various analytical experiments to acquaint the students with the working and use of instruments, and excursion



➤ **Objectives:**

The course has been designed for the students with the following objectives:

1. To familiarize students with basic concepts and principles of Botany
2. To develop their ability to appreciate the diversity of plants
3. Know the vegetative morphological and reproductive characteristics of the plant.
4. To achieve an up-to-date level of understanding of plant science and its applications in social, economic, pharmaceutical, environmental and industrial fields.

Subject: Plant Diversity (USBO301) Sem: III Paper: I

Learning Outcomes :

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

- 1) learn the general characters and economic importance of algae belonging to Phaeophyta, especially the genus *Sargassum* which has food and industrial applications.
- 2) understand the life cycle study of Bryophytes, *Anthoceros* and *Funaria* which will help the student understand how these amphibian plants are significant as primary producers
- 3) understand the objectives of Plant systematics and significance of nomenclature and the various morphological characteristics used in plant identification.
- 4) understand the role of anatomical structures, pollen morphology, chemical constituents, types of embryos in plants, habitat and environmental factors in classification of plants.



5) learn the techniques of Microscopy, Chromatography and Electrophoresis which will help them in laboratory analysis and for research studies. And also learn techniques of preserving plants.

Subject: Form and Function II (USBO302) Sem: III Paper: II

Learning Outcomes:

➤ On successful completion of this course students will be able to :

- 1) Understand the structure of cell organelles like mitochondria, perroxisomes, glyoxysomes ribosomes and nucleic acids and their importance in the overall functioning of the cell.
- 2) understand how variations in chromosomes causes abnormalities and the various factors responsible for determination of sex in plants and animals. This would enable them for better plant breeding .
- 3) learn the process of DNA replication and protein synthesis at molecular level .

Subject: Current Trends in Plant Sciences- I (USBO303) Sem: III Paper: III

Learning Outcomes :

➤ On completion of this, it is expected that:

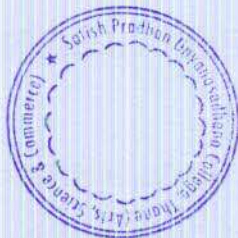
- 1) The students will understand the scope of the subject and its various applications in aromatherapy, neutraceuticals, enzyme industry and as biofuels.
- 2) The students will become aware of the Indian pharmacopoeia and monographs and the economic importance of plants to human beings.
- 3) The course will touch upon the social issues such as environment awareness and impact of forestry for saving earth.



Learning outcomes :

➤ On successful completion of this course students will be able to :

- 1) Understand the various stages in the life cycle of Thallophyta and Bryophytes.
- 2) Practice the analytical skills such as microscopy, chromatography and Electrophoresis.
- 3) Understand the working and use of analytical instruments while performing experiments.
- 4) learn the technique of plant preservation
- 5) become aware of the biodiversity
- 6) critically analyze and interpret the scientific data and experimental results



Subject: Plant Diversity (USBO401) Sem: IV Paper: I

Learning Outcomes:

➤ **On successful completion of this course students will be able to :**

- 1) Understand the morphological diversities of Fungi, Pteridophyte and Gymnosperms.
- 2) Identify the causes and symptoms of fungal diseases and the control measures for the same which will develop their interest in agriculture and crop improvement.
- 3) Understand the process of fossilization and the need of sustainable environment, thereby creating social awareness.

Subject: Form and Function - II (USBO402) Sem: IV Paper: II

Learning Outcomes :

➤ **On successful completion of this course students will be able to :**

- 1) Understand the anatomical features of plants and how these structures provide resistance to various environmental stress.
- 2) Understand the biogeochemical cycles operating in nature
- 3) Understand physiological processes of photosynthesis and respiration in higher plants and how plant productivity can be increased.



Subject: Current Trends in Plant Sciences - I (USBO403) Sem: IV

Paper: III

Learning Outcomes :

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

- 1) develop the architectural skills for planning and developing a garden.
- 2) learn the molecular techniques, plant tissue culture as well as statistical methods that can be applied in agriculture, plant breeding and other scientific fields.
- 3) Understand the concepts of Bio informatics and develop information literacy skills.

Subject: Botany Practical (USBOP4) Sem: IV

Learning Outcomes :

➤ **On successful completion of this course students will be able to :**

- 1) design and execute an experiment
- 2) Understand the principle, working and use of analytical instruments.
- 3) explore their architectural skills.



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Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

Class: T.Y.BSc

Preamble :

This is a revised part of the undergraduate programme (Six Semesters) in Botany, to be taught in Semester V & VI from the academic year 2016-17 onwards. Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision.

Out of the three courses in each Semester, **one** course is based on Basic Botany that involves the study of Thallophyta, Bryophyta, Pteridophytes Biotechnology and Microbiology which is in continuity with the current SYBSc syllabus (Sem III and Sem IV).

The **second** course deals with the interdisciplinary branches of Botany such as, Gymnosperms Angiosperms Anatomy and Biotechnology.

The **third** course in each semester comprises the study of Cell biology, Genetics, Molecular biology, Physiology and Ecology.

The **fourth** course in each semester offers application- oriented topics. It basically offers technical skills such as instrumentation, plant tissue culture, horticultural and cosmetology. It will be offered as a **choice** to all learners across various combinations. This course specifically highlights the applications of plant science in industry research and entrepreneurship .

The 'practical' component constitutes various analytical experiments to acquaint the students with the working and use of instruments, and excursion



➤ **Objectives:**

The course has been designed for the students with the following objectives:

1. To familiarize students with basic concepts and principles of Botany
2. To develop their ability to appreciate the diversity of plants
3. Learn the vegetative, morphological and reproductive characteristics of the plant.
4. gain knowledge about the cell and understand the biochemical nature of nucleic acids and their role in living systems.
5. Highlight scope and importance of plant pathology.
- 6) equips the students with laboratory skills and industry based studies
- 7) Develop a basic knowledge of taxonomic diversity and important families of useful plants.
- 7) To achieve an up-to-date level of understanding of plant science and its applications in social, economic, pharmaceutical, environmental and industrial fields.

Subject: Plant Diversity – I (USBO501) Sem: V Paper: I

Learning Outcomes :

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

- 1) evaluate the diversity among the algal and fungal forms with reference to their systematics, morphological structures and life cycle patterns.
- 2) learn the concept, principle and types of sterilization techniques.
- 3) understand the cultivation methods of bacteria.



4) know the prevention and control measures of fungal diseases and its effect on crop productivity.

Subject: Plant Diversity – II (USBO502) Sem: V Paper: II

Learning Outcomes:

➤ On successful completion of this course students will be able to :

- 1) Understand the the scope of Paleobotany and the various fossil genera and their evolutionary trend.
- 2) understand how the plants adapt to different habitats by showing modifications in their pattern of growth and development of secondary tissues.
- 3) develop their interest to make career in honey industry, forensic sciences, taxonomy and in medical fields.
- 4) will learn the history of systems of classification of angiospermic taxa and identify taxonomic position of plants

Subject: Form and Function III (USBO503) Sem: V Paper: III

Learning Outcomes:

➤ On successful completion of this course students will be able to :

- 1) Understand the process of protein synthesis in details.
- 2) identify and diagnose the deficiency of mineral nutrients available to the plants
- 3) develop an insight into the mineral requirements, media preparations and mineral metabolism.



- 4) learn the process of DNA replication and protein synthesis at molecular level .
- 4) acquire knowledge about the hazardous effects of different Environmental Pollutants and relative measures for their control
- 5) understand the importance of plants in bioremediation and the need for sustainable development.
- 6) present scientific hypothesis, collect data and analyze the data using appropriate statistical methods in the required formats.

Subject: Current Trends in Plant Sciences- III (USBO504) Sem: V

Paper: IV

Learning Outcomes :

➤ **On completion of this, it is expected that:**

- 1) The students will learn and practice the principle and working of instruments like colorimeter, spectrophotometer and chromatography
- 2) The students will also learn plant tissue culture and mushroom cultivation.
- 3) The students will also understand how plants and plant products are significant as food, medicine and in nutraceuticals and also the biological reasons why certain plant resources are important .



Learning outcomes :

➤ On successful completion of this course students will be able to :

- 1) Understand the various stages in the life cycle of Thallophyta and Bryophytes.
- 2) Understand the working and use of analytical instruments while performing experiments.
- 4) learn the technique of plant tissue culture and mushroom cultivation
- 5) learn and practice microbiological techniques.
- 6) understand the significance of biostatistics, critically analyze and interpret the scientific data and experimental results.



Learning Outcomes:

➤ **On successful completion of this course students will be able to :**

- 1) Understand the morphological diversities and the evolutionary trends of Bryophytes and Pteridophytes .
- 2) Understand the modern molecular techniques such as recombinant DNA technology, Southern hybridization, Polymerase chain reactions, DNA sequencing and DNA barcoding knowledge.
- 3) Apply the knowledge of basic sciences to study any plant form along with the molecular techniques.

Learning Outcomes:

➤ **On successful completion of this course students will be able to :**

- 1) Understand the morphological diversities and taxonomic position of Gnetum and Ephedra.
- 2) learn the tools used in taxonomic literature and accurately interpret the characteristics of plants and their position in taxonomy.
- 3) will know how the plants adapt to different habitats and environmental conditions by showing modifications in their morphological anatomical structures.



Subject: Form and Function - III (USBO603) Sem: VI Paper: III

Learning Outcomes :

➤ **On successful completion of this course students will be able to :**

- 1) Understand the understand the chemical nature of biomolecules and their importance in functioning of the cell. The students will gain knowledge about the nitrogen cycle operating in nature.
- 2) Understand the role of nitrogen fixing organisms, thereby reducing the use of chemical fertilizers.
- 3) develop information literacy skills and use it for molecular identification of plants and phylogenetic analyses
- 4) become an entrepreneur in cosmetology with the knowledge of herbal cosmetics,

Subject: Current Trends in Plant Sciences- III (USBO604) Sem: VI

Paper: IV

Learning Outcomes :

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

- 1) Learn the techniques of Bonsai floral arrangement and post harvest technology, with which then become entrepreneur and start their own career.
- 2) appreciate and acknowledge the economic uses of plants in modern society.



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(Arts, Science & Com...)

3) Understand the various phytogeographical regions of India, rich in diverse flora and fauna.

4) take up research in plant identification, ethnobotany and pharmacaeuticals .

Subject: Botany Practical (USBOP7 &USBOP8)

Sem: VI

Learning Outcomes :

➤ **On successful completion of this course students will be able to :**

1) design and execute an experiment

2) Understand the principle, working and use of analytical instruments.

3) explore their architectural skills.

4) learn the skills for entrepreneurship development



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OVERALL BOTANY PROGRAMME OUTCOME

The **Six- Semester based programme** has been designed in such a way that the student will not only gain theoretical knowledge but also will develop technical skills that can help them to set up their own entrepreneurship as well.

After successful completion of this course the student should know:

1. Morphological and anatomical structures observed in plants and their significance in Identification of plant diverse forms.
2. Plant preservation techniques: Wet and Dry preservation
3. Identification and classification of higher plants.
4. Physiological processes operating in plants and their role in improving crop productivity.
5. Instrumentation techniques like Chromatography, Microscopy, Electrophoresis, colorimetry and Spectrophotometry.
6. Microbiological techniques: Sterilization techniques, Preparation of nutrient media, Inoculation and Culturing of bacteria and fungi and their preservation.
7. Molecular biology : DNA barcoding and DNA sequencing techniques.
8. Plant Tissue Culture Techniques: Sterilization techniques, Preparation of nutrient media, micropropagation.
9. Post harvesting methods and Preservation of horticultural produce.
10. Plant Propagation methods, diseases (bacterial and fungal), symptoms and their control measures.
11. Apply their knowledge about plant growth regulators in improving agricultural yields.



12.They will be sensitized to the various environmental issues and will create awareness regarding environmental ethics and biodiversity conservation.

13.Biostatistical methods

14.Bioinformatics and use of ICT in biological data analysis

15. Planning and Designing a garden and indoor gardening.



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SATISH PRADHAN DNYANASADHANA COLLEGE, THANE

DEPARTMENT OF CHEMISTRY

Class: F. Y. B.Sc.

Preamble:

It is the syllabus of first two semesters of B.Sc. programme in Chemistry being revised to be implemented from the academic year 2016- 2017. Learner seeking admission for the B.Sc. programme has the background of chemistry at HSC level. This syllabus is made compatible with the HSC syllabus so that learner will find it familiar and simple. It is bridged between the syllabi of last four semesters of B.Sc. programmes and HSC.

Topics like chemical Thermodynamics, atomic structure and periodic properties are extended so that learner will be comfortable with these topics in Semester III and Semester IV. Chemical calculations and basics of organic chemistry, these topics are kept familiar for recapitulation and better understanding of the learner as these are vital as per next semester syllabus. All topics are framed such that learner will acquire all basic fundamentals of chemistry and this platform will provide him a better vision for understanding the overall chemistry at UG and PG level.



Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

- A thorough conceptual understanding of the basics of core areas of chemistry, including thermodynamics, atomic structure, periodic table and periodic properties, Fundamentals of organic reaction mechanism
- Develop a spirit of inquiry into the fundamental aspects of the various core areas of Chemistry in students.
- Practice for writing organic structures and mechanisms, shape of molecules etc.
- To make students capable of solving problems in the various units of this course
- To impart various skills of handling chemicals, reagents, apparatus, instruments, basic laboratory techniques.



Learning Outcomes

Subject: USCH101- (Paper I) - Semester I

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

- Learn about different terms in thermodynamics and heat involved in processes.
- Solve stoichiometric calculations
- Understand atomic structure in detail as well periodic properties
- Understand fundamentals of organic chemistry like nomenclature, effects and reactions types
- Basic laboratory techniques like dilutions, standardisation, purification etc.

Subject: USCH102- (Paper II) - Semester I

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

- Build on basics of chemical kinetics liquid states
- Learn about chemistry of main group elements
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Learning Outcomes

Subject: USCH201- (Paper I) - Semester II

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

- Learn about theory of gases and chemical equilibrium, laws of thermodynamics



Understand instrumentation of pH meter, colorimeter and practice qualitative analysis

Subject: USCH202- (Paper II) - Semester II

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

- Understand concepts of strength of acids, dissociation constant, buffers and molecular spectroscopy, solid crystals.
- learn structures of complexes, energy calculations, oxidation reduction chemistry
- Understand conformations of organic molecules and its relation with energy
- learn aromaticity of organic compounds



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SATISH PRADHAN DNYANASADHANA COLLEGE, THANE

DEPARTMENT OF CHEMISTRY

Class: S. Y. B.Sc.

Preamble:

In the first two semesters of the six semester graduation program of B. Sc.(Chemistry) the learner was introduced to some basic aspects in the various core branches of chemistry like Physical Chemistry, Organic chemistry and Inorganic chemistry. Concepts about the structure of atom, distribution of electrons, Thermodynamics, Formation of organic compounds and basic ideas in reactivity of molecules in general and organic compounds in particular were introduced to the learner. He was made inquisitive about why and how should atoms combine to give molecules or ions. The non-orbital approach to appreciating the shapes of polyatomic species in general and molecules in particular.

The story of chemistry is taken further in the coming two semesters of the second year of the B. Sc. (Chemistry) Program. However it is also realised that some students opting for the course on Chemistry may not continue with the subject subsequently as such the syllabus is designed to retain the interest of the serious learner of chemistry as well as be helpful to non-chemistry learners. With such students who would want to pursue other branches of science but would want to acquire a basic appreciation and experience of chemistry a separate paper (Paper-III) is designed. This paper along with the laboratory session unit that goes with it deals with the basics of chemical analysis, separating components from a given sample, basic concepts like pH, experimental techniques like Titrimetry, Gravimetry, using instruments to carry out analysis, the various techniques like chromatography, electrophoresis, Instrumentation in general is felt to be of interest to learners of various branches like physics, botany, zoology, and microbiology.



Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

- A thorough quantitative and conceptual understanding of the core areas of chemistry, including thermodynamics, chemical bonding, electrochemistry, organic reaction mechanism and its application at a level compatible with graduate programme in chemistry at peer institutions.
- To develop a spirit of inquiry into the fundamental aspects of the various core areas of Chemistry in students.
- To make students capable of solving problems in the various units of this course
- To impart various skills of handling chemicals, reagents, apparatus, instruments and the care and safety aspects involved in such handling



Learning Outcomes

Subject: USCH301- (Paper I) - Semester III

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

- Learn about different free energy functions in thermodynamics and its variations.
- Learn about conductivity, molar conductivity and its application to conductance measurement of various electrolytes.
- Understand basics of chemical bonding in various approach.
- Learn about basics of hybridisation and Molecular orbital theory.
- Understand reaction and reactivity of different organic compounds like Organomagnesium, organolithium, etc.
- Learn nomenclature, preparation and reactions of various organic compounds like alcohol, phenol, etc.

Subject: USCH302- (Paper II) - Semester III

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

- Build on basics of chemical kinetics and learn types of complex chemical reaction and theory of reaction rates.
- Learn about thermodynamics of ideal and non-ideal solutions.
- Learn about chemical reactivity, trends, synthesis of nitrogen family and boron compounds.
- Learn about Occurrence, structure and extraction of germanium and silicon compounds.
- Learn about nomenclature, preparation, reactions of different types of carbonyl compounds.



Subject: USCH303 BASICS IN ANALYTICAL CHEMISTRY- (Paper III)

- Semester III

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

- Learn role of analytical chemistry, purpose of chemical analysis.
- Learn importance and types of sampling, analysis and results of analysis.
- Learn basics and different types of titrimetry method and Gravimetric analysis.
- Learn about different instrumental methods of analysis and its application.
- Learning about different tools in analytical chemistry like colorimeter, spectrophotometer, etc.



Learning Outcomes

Subject: USCH401- (Paper I) - Semester IV

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

- Learn about various electrochemical conventions and thermodynamics of reversible cell.
- Learn about different types of phases and details about type of systems.
- Learn about occurrence, study of various properties like Magnetic properties, etc of transition metals.
- Learn basics, theories, nature of co-ordination compounds and its application.
- Understand nomenclature, preparation and reactions of carboxylic acid and its derivatives
- Understand nomenclature, preparation and reactions of sulphonic acids

Subject: USCH402- (Paper II) - Semester IV

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

- Learn about types of crystals and determine its structure by various techniques.
- Understand basics of catalysis and its effect on reactions.
- Understand basics of ions like cation and anion.
- Learn uses and environment chemistry of volatile oxides and oxo-acids.
- Learn nomenclature, preparation and reactions of nitrogen containing compounds.
- Learn classification, nomenclature, preparation and reactions of heterocyclic compounds.



• **Subject: USCH403 BASICS IN ANALYTICAL CHEMISTRY-**
(Paper III) - Semester IV

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

- Learn about various separation techniques in analytical chemistry based on different properties.
- Understand basics of solvent extraction and chromatography.
- Learn about instruments based on electrochemical properties of analytes like potentiometry, pH metry, etc.
- To learn statistical method in chemical analysis and graphical representation of data.



A handwritten signature in blue ink, appearing to read "Satish Pradhan", written over a horizontal line.

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Satish Pradhan Dnyamasadhana College,
Thane (Arts, Science & Commerce)

Class: T. Y. B.Sc.

Preamble:

This is a revised part of the undergraduate programme (six semesters) in Chemistry, to be taught in semester V and VI from the academic year 2016 – 2017 onwards. Developing curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision.

Out of five courses in each semester, four courses are devoted to core chemistry, catering to Physical, Inorganic, Organic and Analytical chemistry. These have been tailored to fit in with the existing S.Y.B.Sc. Syllabus (Semester III and Semester IV) in terms of continuity and to ensure delivery of quality content to the learner.

The science of chemistry has diversified immensely in recent times and numerous new fields in chemistry, such as spectral study of organic and inorganic compounds, medicinal chemistry, Instrumentation and qualitative as well quantitative analysis etc. have come into existence. The fundamental and the generality of many principles of Chemistry are common to all these specialised diverse fields. Most problems in applied areas have been discussed intensely in academic conferences and journals, but have not found their place in curricula or in textbooks the fifth course in each semester offers interdisciplinary application topics. It will be offered as choice to all the learners across various combinations. This course will seek to foster a spirit of multidisciplinary approach in learning. The practical component in the applied course will be seen as a combination of laboratory sessions, a visit to a industry, an assignment on a relevant topic etc.



Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

1. A thorough quantitative and conceptual understanding of the core areas of chemistry, including spectroscopic techniques, medicinal chemistry, Analytical methods, organic reaction mechanism and its synthetic applications at a level compatible with post graduate programme in chemistry at peer institutions.
2. The ability to analyse and interpret quantitative results, both in the core areas of chemistry and interdisciplinary areas.
3. The ability to use contemporary experimental apparatus and analysis tools to acquire, analyse and interpret scientific data.
4. The ability to apply the principles of chemistry to solve new and unfamiliar problems.
5. The ability to communicate scientific results effectively in presentations or posters.
6. The ability to expand the subjective knowledge* in the industrial applications.



Learning Outcomes

Subject: USCH501- Physical Chemistry (Paper I) - Semester V

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

- Understand the principles of Molecular spectroscopy and to apply them in problems.
- Understanding principle and reactions of cells in electrochemical devices and energy transformations.
- Comprehend the basic concepts of thermodynamics and its applications in determination of chemical equilibrium efficiency and separation techniques.
- Determine states of phases and their separation through extractions.
- Handling of instruments like pH meter, conductometer, colorimeter, etc.

Subject: USCH502- Inorganic Chemistry (Paper II) - Semester V

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

- Understand the bonding in complexes, their structures and stability
- Understand periodicity of inner transition elements, extraction and applications.
- Understand structures of crystalline solids
- Understand chemical behaviour and applications of elements.
- Learn synthesis of complexes

Subject: USCH503- Organic Chemistry (Paper III) - Semester V

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

- Understand reaction mechanism and its synthetic applications



- Apply stereochemical aspects to organic reactions and its effect in chemical behaviour
- Develop novel methods of organic synthesis
- Understand chemical nature of organometallic compounds and their applications
- Understand photochemical reactions and their applications in green methods
- Qualitative analysis of organic compounds by chemical tests

Subject: USCH504 - Analytical Chemistry (Paper IV) - Semester V

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

- Understand the need of sampling of the analyte
- Understand principle and working of various instruments of separation techniques
- Understand the techniques of analysis of food, cosmetics etc.
- Apply the different types of titrimetric methods for the quantitative analysis
- Understand various techniques like , optical methods, turbidimetry, polarography, flame photometry, chromatography, etc.



Learning Outcomes

Subject: USCH601- Physical Chemistry (Paper I) - Semester VI

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

- Understand the principles of theories of reaction and rate of reaction
- Understanding application of electrochemistry in renewable energy sources
- Comprehend the basic concepts of radioactivity and nuclear chemical reactions.
- Understand the basics of quantum chemistry

Subject: USCH602- Inorganic Chemistry (Paper II) - Semester VI

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

- Understand the bonding in complexes, properties like magnetic, spectral and energy calculations
- Understand reactions and preparations of organometallic complexes
- Understand chemistry in everyday life and applications of nano materials.
- Understand chemical behaviour and applications of elements.

Subject: USCH603- Organic Chemistry (Paper III) - Semester VI

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

- Understand reactivity and reactions of heterocyclic compounds
- Learn applications of different catalyst and reagents in organic reactions
- Understand chemistry of natural products
- Understand chemical nature of organometallic compounds and their applications



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- Understand spectroscopic techniques for organic compounds and interpretation of spectral data for structural elucidation.

Subject: USCH604 - Analytical Chemistry (Paper IV) - Semester VI

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

- Understand the need of sampling of the analyte
- Understand principle and working of various instruments of separation techniques
- Understand the techniques of analysis of food, cosmetics etc.
- Apply the different types of titrimetric methods for the quantitative analysis
- Understand various techniques like ion exchange method, electroanalytical methods, etc.



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PRINCIPAL

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Learning Outcomes

Subject: : PSCH 101-Physical Chemistry - Semester I

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

- Understand Maxwell equations and their applications & Details of third law of Thermodynamics.
- Understand need of quantum mechanics, fundamentals of wave equations and applications of quantum mechanics to different systems.
- Understand chemical Dynamics of reactions like polymerisation and gas phase reactions.
- Expertise in electrochemistry and understand bio-electrochemistry.

Subject: PSCH 102- Inorganic Chemistry - Semester I

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

- Expertise in hybridisation and bonding theories of chemical molecules.
- Understand symmetry properties of chemical molecules and applications of group theory.
- Understand structure of various inorganic solids and preparatory methods of nanomaterials.
- Expertise in characterisation of inorganic coordination compound.

Subject: PSCH103- Organic Chemistry - Semester I

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

- Understand thermodynamic and kinetic requirement of reaction & to determine mechanism of reaction.



Class: M.Sc. Semester I and Semester II

Preamble:

This is a revised part of the postgraduate programme (Four semesters) in Chemistry, to be taught in semester I and II from the academic year 2018 – 2019 onwards. This revision is for developing a progressive and purposeful curriculum to make learner a master in the subject.

The four courses involved in the curriculum are devoted to core chemistry, catering to Physical chemistry, Inorganic chemistry, Organic chemistry and Analytical Chemistry. These have been tailored to have a better extension with the existing T.Y.B.Sc. Syllabus in terms of continuity and to ensure delivery of quality content to the learner.

The science of chemistry has diversified immensely in recent times and numerous new fields in chemistry, such as Bioinorganic chemistry, Quantum chemistry, Solid state chemistry etc. have come into existence. The fundamental and the generality of many principles of Chemistry are common to all these specialised diverse fields. Most problems in applied areas have been discussed intensely in academic conferences and journals, but have not found their place in curricula or in textbooks the fifth course in each semester offers interdisciplinary application topics. It will be offered as choice to all the learners across various combinations. This course will seek to foster a spirit of multidisciplinary approach in learning. The practical component in the applied course will be seen as a combination of laboratory sessions, a visit to a industry, an assignment on a relevant topic etc.



The syllabus is framed to enrich the learner with overall knowledge of the subject and to make him competent with the national and international challenges of the subject.

Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

1. A thorough quantitative and conceptual understanding of the core areas of chemistry, including spectroscopic techniques, bioinorganic chemistry, quantum chemistry, organic reaction mechanism and its synthetic applications at a level compatible with many competitive examinations in chemistry at peer institutions.
2. The ability to analyse and interpret quantitative results, both in the core areas of chemistry and interdisciplinary areas.
3. The ability to be skilled in the synthesis of the particular organic compound and its separation by various methods.
4. To interpret structure of any unknown organic compound using advance spectroscopy.
5. The ability to expand the subjective knowledge in the industrial applications.
6. To develop research mind set and to get familiar to research aspects like research methodology, writing and presenting research paper and proposals.



- Expertise in types of nucleophilic substitution reactions and aromaticity of complex molecules.
- Understand stereochemistry of molecules having two or more chiral centres with types of chirality
- Expertise in oxidation and reduction reactions using different reagents.

Subject: PSCH 104 -Analytical Chemistry - Semester I

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

- Understand language and quality in analytical chemistry with safety in laboratories.
- Expertise in calculations involved in analytical chemistry.
- Understand different optical methods of analysis like UV & Visible spectroscopy, IR, etc.
- Understand different thermal methods, calorimetry and its applications.



Learning Outcomes

Subject: PSCH 201-Physical Chemistry - Semester II

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


- Understand chemical thermodynamics of real solutions and surfaces.
- Understand application of Schrödinger equation for two electron system.
- Understand kinetics of reactions catalysed by enzymes and reactions in solid state, etc.
- Understand phase equilibria of two and three component system.

Subject: PSCH 202 - Inorganic Chemistry - Semester II

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

- Understand mechanisms of various inorganic reactions of complexes and redox reactions.
- Understand organometallic chemistry of transition metals.
- Understand toxic effects of various metals on environment and its precautions
- Understand about various biological oxygen carriers and other bioinorganic reactions.




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Subject: PSCH 203- Organic Chemistry - Semester II

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

- Understand different reactions of nucleophilic intermediates and carbon nucleophiles with carbonyl groups.
- Expertise in various reactions and rearrangements with their mechanism, stereochemistry & applications
- Understand application of molecular orbital theory in organic chemistry
- Expertise in application of UV, IR, NMR & Mass spectroscopy for different functional groups and molecules.

Subject: PSCH 104- Analytical Chemistry - Semester II

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

- Understand different types of chromatography like Gas & HPLC.
- Understand application of X-ray spectroscopy, Mass spectrometry in analytical chemistry.
- Understand different surface analytical techniques like SEM, TEM, etc and atomic spectroscopy.
- Expertise in different electro-analytical methods like polarography, electrogravimetry, etc.




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Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

Class: M.Sc. Semester III and Semester IV

Preamble:

This is a revised part of the postgraduate programme (Four semesters) in Chemistry, to be taught in semester III and IV from the academic year 2018 – 2019 onwards. This revision is for developing a progressive and purposeful curriculum to make learner a master in the subject.

The four courses involved in the curriculum are devoted to core chemistry, catering to Theoretical Organic Chemistry, Synthetic Organic Chemistry, Natural products & spectroscopy and Medicinal & Bioinorganic Chemistry. These have been tailored to have a better extension with the existing T.Y.B.Sc. Syllabus in terms of continuity and to ensure delivery of quality content to the learner.

The science of chemistry has diversified immensely in recent times and numerous new fields in chemistry, such as Research Methodology, Asymmetric synthesis and electro-organic chemistry etc. have come into existence. The fundamental and the generality of many principles of Chemistry are common to all these specialised diverse fields. Most problems in applied areas have been discussed intensely in academic conferences and journals, but have not found their place in curricula or in textbooks the fifth course in each semester offers interdisciplinary application topics. It will be offered as choice to all the learners across various combinations. This course will seek to foster a spirit of multidisciplinary approach in learning. The practical component in the applied course will be seen as a combination of laboratory sessions, a visit to a industry, an assignment on a relevant topic etc.



The syllabus is framed to enrich the learner with overall knowledge of the subject and to make him competent with the national and international challenges of the subject.

Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

1. A thorough quantitative and conceptual understanding of the core areas of chemistry, including spectroscopic techniques, medicinal chemistry, designing organic synthesis, organic reaction mechanism and its synthetic applications at a level compatible with many competitive examinations in chemistry at peer institutions.
2. The ability to analyse and interpret quantitative results, both in the core areas of chemistry and interdisciplinary areas.
3. The ability to be skilled in the synthesis of the particular organic compound and its separation by various methods.
4. To interpret structure of any unknown organic compound using advance spectroscopy.
5. The ability to expand the subjective knowledge in the industrial applications.
6. To develop research mind set and to get familiar to research aspects like research methodology, writing and presenting research paper and proposals.



Learning Outcomes

Subject: USCHO301- Theoretical Organic Chemistry (Paper I) - Semester III

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

- Understand organic reaction mechanism involving intermediates, NGP and theories for bonding in organic molecules.
- Expertise in different kind of organic reactions like pericyclic reactions.
- Understanding stereochemistry of complex organic molecules and its effect.
- Understand the photochemical reactions

Subject: USCHO302- Synthetic Organic Chemistry (Paper II) - Semester III

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

- Expertise in the advanced name reactions with mechanism and their synthetic applications.
- Understand the organic synthesis involving radical mechanism.
- Learn the reactivity and reactions of enamines and Ylides of nitrogen and sulphur.
- Expertise in reactions involving different metals like mercury, tin and non metals like boron, silicon etc.

Subject: USCHO303- Natural Products and Spectroscopy (Paper III) - Semester III

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

- Understand the structure and importance of natural products like carbohydrates, Natural pigments, Insect pheromones and alkaloids.
- Understand the structure and multistep synthesis of various natural products
- Understand and become a master in advance spectroscopic techniques



Subject: USCHO304 – Medicinal, Biogenesis and green chemistry(Paper IV) -
Semester III

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

- Understand the drug discovery, design and synthesis of drugs.
- Understand the various pathways for biosynthesis of different natural products.
- Emphasise on the novel methods of organic synthesis.



Learning Outcomes

Subject: USCHO401 – Theoretical Organic Chemistry II (Paper I) - Semester IV

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

- Understand structural effects and its reactivity through mathematical aspects.
- Understand the structure and properties of biological macromolecules.
- Skilled in advance stereochemistry concepts.
- Understand the principles of asymmetric synthesis and mechanisms of these reactions.

Subject: USCHO402 – Synthetic Organic Chemistry II (Paper II) - Semester IV

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

- Understand and get master in the designing of organic synthesis
- Understand the role of transition and rare earth metals in organic synthesis.

Subject: USCHO403 – Natural products and Heterocyclic Chemistry II (Paper III) - Semester IV

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

- Understand the structure and classification of like steroids, vitamins, antibiotics, insecticides.
- Gain skill in the reactivity, properties and reactions of heterocyclic compounds.



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Subject: USCHO404 – Reserach Methodology (Paper IV) - Semester IV

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

- Understand how to collect and study literature like journals, digital material available for research.
- Undestand to use scientific methods, designs, interpretations and analysis of data recorded.
- Understanding of writing of research proposals and papers.
- Learn the safety and handlung of chemicals.



PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

Department of Commerce

F.Y.BCOM. SEM I COMMERCE I

On Successful Completion of this course, students will be able to :-

- 1) Understand the Concept of Business, steps in setting up of new Business and the impact of LPG policies of the Government. ✓
- 2) Prepare a Project Report and conducting feasibility study
- 3) Understand the components of Business Environment and its relationship with the business.
- 4) Understand Different Strategies of Restructuring and Turnaround of a business.

SEM II COMMERCE II

On Successful Completion of this course, students will be able to :-

- 1) Understanding the Concept of services marketing, service marketing mix and marketing strategies for services.
- 2) Learn Retail Business, different Retail formats, Prospects and challenges in Retailing in India.
- 3) Understand concept of modern Banking Practices.
- 4) Learn about Insurance and Liberalization of Insurance sector and FDI in banking and Insurance.
- 5) Logistics Management and Challenges before logistics.
- 6) Understand the concept of E-commerce, its significance and transformation of E-commerce in India.

S.Y.BCOM. SEM III COMMERCE COMPULSORY PAPER III

On Successful Completion of this course, students will be able to :-

- 1) Understand the concept of Management Managerial skill and competeneies.
- 2) To learn about evolution of Management thoughts in India and Moderns Management approach.
- 3) To learn about planning and decision making.
- 4) To know about organizing, Departmentation and delegation of authority.
- 5) To Understand the concept of directing leadership motivation and effective communication.
- 6) To learn control systems.

S.Y.BCOM. SEM IV

On Successful Completion of this course, students will be able to :-

- 1) Understand the concept of Production Management and Inventory control.
- 2) To know techniques of quality control, quality management tools and services quality management.
- 3) Learn about Indian financial system and constituents of the capital market, money market.



- 4) To learn investors protection measures of SEBI.
- 5) To Understand role of credit rating agency in India.
- 6) To know about recent trends in finance, mutual funds, commodity market, venture capital, derivatives etc.

S.Y.BCOM. SEM III COMMERCE OPTIONAL PAPER III

COMPANY SECRETARIAL PRACTICE

On Successful Completion of this course, students will be able to :-

- 1) Understand concept of Joint stock company and company secretary
- 2) Know the role of company secretary
- 3) Learn about company documentation, memorandum of Association and Articles of Association, Prospectus.
- 4) Understand the stages involved in formation of the company and conversion of companies.
- 5) Know about secretarial correspondence.

S.Y.BCOM. SEM IV

On Successful Completion of this course, students will be able to :-

- 1) Understand company management, Role of Directors and Auditors.
- 2) Know about the company meeting and its elements.
- 3) Learn about company meeting.
- 4) Understand dematerialization, online trading, process of DEMAT, listing of securities.
- 5) Learn report writing and winding up of companies.

TYBCOM SEM V EXPORT MARKETING

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

1. Understand basics of Export marketing. Prospects & Challenges of export marketing is India direction of India's export trade since 2010 & composition of India's exports since 2010.
2. Study influence of trade barriers, implications of WTO Agreement, selection of foreign markets and method of entry in foreign markets, important components of logistics export marketing.
3. Study the Exim Policy 2014-2019.
4. Learn Product pricing techniques is export marketing calculation of FOB pricing.
5. Study major export pricing quotation.

TYBCOM SEM VI EXPORT MARKETING

On successful completion of this causes, student will be able to.



1. Study export marketing and promotional organization in India.
2. Learn export finance and export risk insurance, methods of international payments.
3. Learn about the role of financial institutions commercial banks, SIDBI, EXIM Bank and ECGC.
4. To study export procedure, role of customs House Agent Pre-shipment and port shipment procedure, quality control procedure customs clearance.
5. To learn about export document like commercial invoice, shipping bill mates' receipt, Bill of lading etc.
6. To know about export incentives and assistance schemes effect to Indian exports.

TYBCOM SEM V MARKETING

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

1. Understand evolution and function of marketing.
2. Understand recent trends like CRM, Digital marketing, social marketing, manager faces today.
3. Understand consumer behavior and factors affecting consumer behavior bases of segmentation and product positioning strategies.
4. Learn various elements of marketing mix like product, Price Place and Promotion.

TYBCOM SEM VI HRM

On successful Completion of this course, student will be able to.

1. Learn the concept of HRM, Strategic HRM and difference between Traditional and strategic HRM, the concept of Human Resource Information system.
2. Understand the concept of Human Resources planning to Analysis, Job Design Recruitment, Selection, Interviews and various types of employment test.
3. Know HRD practices training and development programmes performance Appraisal techniques and career planning and Development.
4. Understand the concept of Human Relations singles of Leadership theories of motivation employee morale and grievance handling procedure.
5. Understand the recent trends in HRM, EQ, SQ mentor and counselling and challenges before HR manager in changing business environment



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PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

DEPARTMENT OF ACCOUNTANCY

F.Y.B..Com. :- Accountancy & financial management

- I. Basic concept of book keeping in detail and knowledge about various topics like consignment a/c, branch a/c, fire insurance claim, stock valuation a/c, accounting for incomplete record.
- II. Accounts from different organization e.g.:- departmental a/c, branch a/c (organization having different branches)

S.Y.B.Com. . :- Accountancy & financial management

- I. Management a/c, Auditing, Introduction to company a/c, Issue of debenture, Redemption of preference shares, redemption of debentures, profit prior to incorporation, partnership a/c, retirement, death, admission of partners
- II. Partnership a/c, management a/c, ratio analysis & working capital management, capital budgeting
- III. Current ratio, liquid ratio, capital gearing ratio
- IV. Auditing:- Introduction to auditing, Audit planning, Procedure, documentation, Auditing techniques & internal audit

T.Y.B.Com.:-

- I. Closing a/c :- Cost sheet, Reconciliation, material, labour cost, stock valuation, marginal, standard cost, process, contract, cost control a/c, different types of cost techniques like marginal cost and standard cost
- II. Cost sheet which will help them to estimate selling price of product including profit.
- III. Auditing- Audit Planning, auditing techniques, vouching verification, etc.

T.Y.B.Com.:-

Paper 1 :- Sem V

- I. Amalgamation of companies, capital reduction & internal reconstruction, personal investment a/cing, final a/c of companies, introduction to IFRS

Sem VI

- II. Final a/c of co-operative housing society, profit prior of incorporation, valuation of goodwill & shares, foreign currency transaction, buy back of equity shares, different methods & actual preparation of a/cs



T.Y.B.Com.- Direct & indirect tax

Sem V-

Direct tax – the framework of income tax act 1961 including definition of important terms and formulization with different source of income including exempted income. Computing the taxable income of an individual assessee

Sem VI

Indirect tax – It includes overview of two indirect taxes namely service tax as led down under finance act 1994 & value added tax law applicable to the state of Maharashtra as per Maharashtra value added tax act 2002. In service tax law to give an overall understanding of basic terms such as service, consideration, person, etc. also understanding of declared service under negative & service under mega exception. To understand rules regarding to points of taxation & effect of change in tax. To know definition of basic claims such as business, dealers, goods, sales, sale price, etc.

1) Direct Tax

Definition of heads of income salary, house property, capital gain, income from business & profession, income from other sources, deduction, etc. To understand overall computation of taxable income & tax liability

2) Indirect Tax

Service tax & MVAT, defintory, registration of business, point of taxation, rules, calculation of service tax liability.



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Programme Outcome of Department of Business Economics

First Year Bcom

The syllabus of First Year Bcom was revised in the year 2015-16 with the following objectives:

- To make students aware of practical aspects of Economics.
- Students should be able to solve various numerical examples on different concepts which can help him/her understand business related problems.

Outcome of the programme:

1. Students should understand difference between Economics and Business Economics.
2. They should be in a position to understand basic concepts in Business Economics like Demand, supply and factors affecting it.
3. Students should be in a position to correlate theory concepts with practical concepts to solve business related problems.
4. The subject is expected to create confidence in students to understand small issues in Economy.

Second Year Bcom

The main objective of the syllabus is to

- To help students to understand different macro level concepts.
- To introduce different concepts which can help the students to understand monetary and fiscal Economics

Following is the Programme outcome:

1. The syllabus helps students to understand Macro concepts like national income and circular flow of national income.
2. Student should be in a position to understand trade cycle and its impact on economies.
3. To understand Demand for and Supply of Money and factors determining it.
4. To understand public finance and difference between public and private finance.
5. Students should be able to understand importance of fiscal policy concepts like public expenditure, public debt, fiscal administration, budget .All these concepts help the student to understand working of Indian economy and government.
6. To understand interest rate determination and theories related to it.



Third Year Bcom

The syllabus of Third Year Bcom was framed with the following objectives:

- To give the students some basic knowledge of international trade.
- To help the students to understand public finance and fiscal policy.
- To give better understanding of FOREX dealings.

Following is the programme outcome of the syllabus:

1. Students should understand Public and Private Finance and importance of it in the Indian economy.
2. Students should know basis of international trade.
3. To understand different sources of Revenue of government.
4. Students should get better picture of working of finances of government.
5. To understand difference between internal and international trade.
6. Students should be in a position to know gains of international trade.
7. Students should understand FOREX market and the role played by it in the international trade.
8. To understand role of RBI in managing exchange rate.

Rural Marketing Third Year Bcom Applied Component

Applied components are introduced at Third Year Bcom level and students generally choose two applied component subjects of their interest. The syllabus of Rural Marketing is framed with the following objective:

- As Indian economy is dominated by rural population it is essential for students to understand different aspects of marketing in rural area.
- To make students aware of different challenges of rural marketing.
- To increase knowledge of rural finance, selling strategies and information.

Following are the course outcomes:

1. Students should understand difference between Rural and urban markets.
2. Students should get better knowledge of selling strategies in rural markets.
3. Should understand different sources of rural finance
4. Students should get knowledge of FMCG sector and progress.
5. Students become aware of selling methods used in APMC market.



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BUSINESS COMMUNICATION

COURSE OUTCOME

After the successful completion of the course the learner is able to enhance his listening, speaking, reading and writing skills to meet the challenges of the world.

Every chapter of the course focuses on the specific skill development such as:

1. Learner understands the concept, modes, channels and methods of communication.
2. Perceives the understanding of the business ethics and corporate social responsibility.
3. Overcomes the various barriers to effective communication.
4. The learner cultivates good listening and effective communicative skills.
5. Develops effective writing skills such as drafting personal correspondence and business letter writing.
6. The learner grasps the various interview techniques and also learns how to prepare himself/herself for the interview.
7. The learner is also enabled in learning how to conduct meetings, organise conferences, how to work in the committees and to maintain the public relation at work place.
8. The Learner is well equipped with the drafting trade letters, notice, agenda, resolutions, reports, summarization and business proposals.

CREDITS:

3 Theory lectures per week over a semester.

1 tutorial period per week over a semester.

2 credits – 45 lectures.


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COMMUNICATION SKILLS IN ENGLISH

COURSE OUTCOME

After the successful completion of the course the learner is able to enhance his listening, speaking, reading and writing skills to meet the challenges of the world.

Every chapter of the course focuses on the specific skill development such as:

1. The learner understands grammar from basic to advance in English language.
2. Perceives the better understanding of the English Language and develops good reading ability.
3. The learner is well equipped with the drafting Letters such as: Job applications, Right to information and Statement of Purpose letters.
4. The learners is also equipped with drafting Reports, Email correspondence, creative writing, Blog writing and interpreting Technical data.
5. The learner is able to edit and summarise the passages in English.

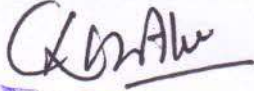
CREDITS:

3 Theory lectures per week over a semester.

1 tutorial period per week over a semester.

2 credits – 45 lectures.




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Course Outcome


Dept. of Environmental Studies

Name of the course: Environmental Studies

After successful completion of the syllabus students learn and acquire following knowledge & skills:

1. Basic understanding of concepts of Environment and ecosystems. – Classifications of ecosystems and their functioning.
2. Changes in the nature of relationship between man and environment.
3. Classification of natural resources into exhaustible and non – exhaustible and need for conversion of resources .
4. Meaning and indicators of sustainable development.
5. Overpopulation and related environmental problems.
6. Urbanization and environmental problems.
7. Classification of Waste & Problems created by solid waste.
8. Role of tourism in development of the region.
9. Significance of sustainable tourism.
10. Environmental movements, laws and their role in achieving sustainable development.
11. Application of Geographical Information system.




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F.Y.B.Com

SUBJECT: MATHEMATICAL AND STATISTICAL TECHNIQUES

OUTCOME

Students are ready to calculate number of shares , brokerage, gain when investing in shares and mutual funds.

For a manufacturing company students can calculate optimum number of units to be manufactured.

Students can do data analysis ,graphical presentation of data by studying various modules in Statistics.

Students can compare two sets of data . They can do forecasting for companies .

In a job they can do presentations with graphs & Diagrams .They can assist Higher Authorities in Decision Making Process.



A handwritten signature in blue ink, appearing to read "S. Pradhan".

PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

BUSINESS LAW – SUBJECT OUTPUT

S.Y.B.com

The subject 'Business Law' has been introduced to the students of S.Y.B.Com. to know the body of the laws, which regulate business relations and commercial activities of persons. Accordingly, following Acts are covered in the syllabus.

Business Law – 1 (Semester-3)

Module – 1 & 2- The Indian Contract Act, 1872.

This Act is the basis of all trade and commercial activities. We all enter into contracts every day. The formation of contract, rights and duties of the parties under it and the ways of discharge of contract is the scope of the Act.

Learning output:

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

- 1) Know – formation of a contract
- 2) Understand – the rights and liabilities of the parties to the contract

Module – 3 – Specific Contracts

This covers Contract of indemnity, Guarantee, Bailment and Agency. For the commerce students it is essential to know the principles and importance of these contracts in the business.

Learning output:

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

- 1) Learn – different types of specific contracts
- 2) Understand – the practical applications of these specific contracts

Module – 4 – Sale of Good Act, 1930

Due to increase in the business transaction relating to sale of goods, this Act has been separated from the Contract Act.



Learning output:

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

- 1) Learn – purchasing and selling of movable goods
- 2) Understand – the rights and duties of seller and buyer of goods

Module – 5 – Negotiable Instruments Act, 1881

It covers the transactions related to Promissory Note, Bill of Exchange and Cheque, procedure of filing the case against defaulters and punishment thereon.

Learning output:

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

- 1) Learn – monetary transactions through the instruments
- 2) Understand – the risks involved in such transactions and the precautions to be taken

Business Law -2 (Semester-4)

Module – 1 – Indian Companies Act, 2013.

It covers formation of company, types, important documents, member of company and rights and liabilities of member.

Learning output:

Module – 2 – Corporate Law

Scope of this module is management of the company, powers and position of the director and meetings in the company.

Learning output:

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

- 1) Learn – company formation necessary documentation thereof
- 2) Understand – functioning of the company



Module – 3 – Indian Partnership Act, 1932 and Limited Liability Partnership Act, 2008

This covers formation, registration and dissolution of the firm and rights and liabilities of partners.

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

- 1) Learn – registration and functions of Firm and LLP
- 2) Understand – the difference between a Firm and LLP

Module 4 – Consumer Protection Act, 1986 and Competition Act, 2002

This Act is introduced to protect the consumer from exploitation by traders and manufacturers giving him various rights.

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

Know and understand – rights of consumer and their enforcement through judiciary, need of competition in the interest of the consumer

Module – 5 – Intellectual Property Rights

The ambit of the module is to cover meaning of the intellectual property and the need and procedure to protect it.

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

- 1) Learn – types of intellectual properties
- 2) Understand – the measures to protect IPR

To understand the above laws by the students, following activities are carried out:

- 1) Legal documents such as Memorandum and Articles of Association of company, Deed of Partnership, Incorporation Certificate, Cheque and cheque bounce matters, civil suit, Vakalatnama etc. are shown to the students.
- 2) Visit are organised to get the practical knowledge of the function of courts.
- 3) Lectures of experts are organised
- 4) Students' interaction with eminent lawyers by visiting their chambers.




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Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

MASS COMMUNICATION

COURSE OUTCOME

After the successful completion of the course the learner is able to receive and analyse the various Media products critically and to develop an interest to have a career in Media industry.

Every chapter of the course focuses on various Print and Electronic Mass Media such as:

1. Learner understands the concept, modes, channels and methods of communication.
2. Comprehends the nature of Mass Communication, history, its audience, features and functions in developing country like India.
3. Overcomes the various barriers to effective communication in Mass Media.
4. Understands the various roles of Mass Mediums and their impact on Mass Communication.
5. Recognizes the importance of Mass Media in fostering National development.
6. The learner perceives the Law governing Media in India.
7. The Learner is able to analyse the relationship between the Media and the Government.

CREDITS:

4 Theory lectures per week over a semester.

1 credits – 60 lectures.



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PRINCIPAL

Faculty of Arts, Social Sciences & Commerce
Sri Lanka Open University
Tirane (Arts, Science & Commerce)

SUBJECT OUTCOME

Class : TYBCOM

Sub : Computer Systems & Applications.

On Completion of this course students will be able to understand

Sem V

1. Basic knowledge of Data Communications, Networking & Internet.
2. Database & MYSQL, Statements, simple queries, Multi-table queries , Nested queries.
3. MS – Excel : Creating, worksheets, adding information to worksheets, Multiple spreadsheets, Functions, Data Analysis.

Sem VI

1. Basic knowledge of E Commerce.
2. MS – Excel Functions, Data Analysis, Graphics representation of Data.
3. Visual Basic, Introduction, Decision & Condition, Subprocedures & Subfunctions.




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M.Com. Business Management Course Outcomes

M.com part I

- I. Strategic management :
 - (1) To understand business strategy formulation implementation evaluation of business and global strategies.
 - (2) To develop learning and analytical skill of the learner to enable them to solve the cases and provide strategic solutions.
 - (3) To acquaint learners with recent trends in business and corporate world.
- II. Cost and Management Accounting:
 - (1) To enable the learners to understand various concepts of cost accounting.
 - (2) To provide information about cost accounting as a tool of managerial decisions
 - (3) To develop various skills among the students related with budget and budgetary control and opening costing.
- III. Business ethics:
 - (1) To enable the learners to understand concepts of ethics and various approaches to ethics.
 - (2) To make learner understand Indian ethical practices and corporate governance.
 - (3) To acquaint learners with the areas of corporate social responsibility and its policies.
- IV. Economics for Business decisions:
- V. Corporate finance:
 - (1) To understand the learners the scope and objectives of financial management.
 - (2) To acquaint the students the time value of money.
 - (3) To develop skills among the learners of financial analysis and management ratio analysis and financial decisions.
- VI. Research methodology:
 - (1) To make learner understand concept of research types of research.
 - (2) To enhance skill among students of training hypothesis, collection of data and testing of hypothesis and preparing research report.
 - (3) To acquaint students with technique of sampling and research design of applications of research.
- VII. E-commerce:-
 - (1) To make understand the learners the concept of e-commerce.
 - (2) To acquaint the students with e-commerce practices and challenges.
 - (3) To provide information about online shopping, payment options, various models of e-commerce.
- VIII. Micro economics concepts:-



Applications

M.com part II

2) HR Managements :

- i) To make understand the concept of HRM, HRD, Recruitment, training and development.
- ii) To enhance the skills of students about different techniques of performance appraised.
- iii) To acquaint students with work life balance, and strategic HRM.

3) Advertising:

- i) To make understand the learners the concept of media , types of media and benefits of applications.
- ii) To enhance the skill of writing copy of advertising.
- iii) To provide information about the regulatory authority related to it.

4) Travel and Tourism:

- i) To make understand the learner about the concept travel and tourism management.
- ii) To develop skills of tourism marketing.
- iii) To provide information about tourism marketing practices and tourism development.

5) Retail management:

- i) To make understand the learners the concept of retail management, challenges in it.
- ii) To develop the skills among learners about retail strategies, customer strategies.
- iii) To provide information about retail location, merchandising and use of technology in retail management.

6) Supply chain management:

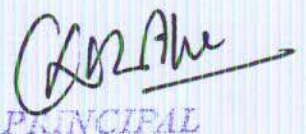
- i) To make understand the learners the concept and importance of supply chain management
- ii) To enable students to acquaint with logistics management, transportation and warehousing
- iii) To provide information about design of SCM, logistics and use of internet.



M.com part II Accountancy group.

1. Advance Financial Accounting:
 - i) To make understand to learners the concept of currency conversion as per accounting standard – II it covers the concept of foreign branches.
 - ii) To develop the skill among the learners about final account of banking companies, provisioning of non performing assets, form and requirement of final accounts.
 - iii) To provide information to learners about accounting and statutory requirements of co-op. societies and insurance companies.
2. Advanced cost Accounting:
 - i) To make learner understand the concept of process costing, activity based costing system, responsibility accounting.
 - ii) To develop the skills among the learners about the strategic cost management, techniques of transfer pricing, target costing, inflation accounting.
 - iii) To provide information about responsibility accounting managerial reporting and controllable cost approach.
3. Direct tax:
 - i) To make learners understand the concept of direct taxes.
 - ii) To develop the skill among the learners relating to computation of total income.
 - iii) To provide the learners information about provisions of income tax act.
4. Indirect Tax (GST) goods and service tax:
 - i) To make learners understand the concept of goods and service tax.
 - ii) To develop the skills among the learners relating to computation to tax liability under GST.
 - iii) To provide the learners information about application of GST to various commodity and services.
5. Corporate Financial Accounting:
 - i) To make learners understand the concept of corporate financial accounting.
 - ii) To develop the skills among the learners relating to valuation of business for Amalgamation and merges and consolidated financial statement.
 - iii) To provide the learners information about international financial reporting standards and IND-AS.
6. Financial Management:
 - i) To make learners understand the concept of financial management, working capital, financial planning.
 - ii) To develop the skills among the learners investment decisions, working capital management financial planning.
 - iii) To provide information to learner on financial policy and corporate strategy.




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Bachelor of Mass Media Course Outcome

F.Y.B.M.M. – Semester – I

Completion of the course, students of F.Y.B.M.M. should have acquired the following knowledge and skills:

- 1] **Effective Communication Skills-I:** – Functional and operational use of language in media. Enhance students with structural and analytical reading, writing and thinking skills.
- 2] **Fundamentals of Mass Communication:** – Introduction to the history, evolution and the development of Mass Communication with special reference to India. Understand the development of Mass Communication models and concept of New Media and Media Convergence and its implications.
- 3] **Introduction to Computers** – Equip with a general understanding of computer basics, To train them to use this understanding to supplement their presentation skills. To equip the student with basic knowledge of use of technology in Media Industry.
- 4] **Introduction to Economics** – Introduction to the basic concepts of Micro & Macro Economics coupled with basic understanding of the Indian economy and economic issues relevant to India.
- 5] **Introduction to Sociology** – To acquaint with the basic foundations of Sociology and to establish the relationship between Sociology and Mass Media. Highlight the need and relevance of Sociology in Mass Media.
- 6] **History** – To acquaint with the basics of history of India, world across and media industry.



F.Y.B.M.M. – Semester – II

Completion of the course, students of F.Y.B.M.M. should have acquired the following knowledge and skills:

- 1] **Effective Communication Skills-II** – To advance the communication and translation skills acquired in the first semester
- 2] **Introduction to Media Psychology** – To impart knowledge of the basic concepts and modern trends in psychology. To provide an interdisciplinary study of concepts in the field of media, communication and psychology.
- 3] **Political Concepts and Indian Political System** – To acquaint with fundamental political concepts essential for understanding political systems and theories. To orient the students to the Indian Constitution and the functioning of the Indian political system. To provide the students with a strong base in the 'Indian Political System' and to expose them to its dynamics and complexities and to establish a link between Politics and Media
- 4] **Principles of Management** – To acquaint with contribution of management management experts to management theories. Dynamics of management, decision making team work building.
- 5] **Principles of Marketing** – To acquaint with concept of new product development, understanding Indian marketing environment, integrated marketing communication, market research.
- 6] **Introduction to Literature** – To give exposure to media students to various forms of Literature . To make them understand how literature reflects contemporary period and to identify relation between Literature and Media



S.Y.B.M.M. – Semester – III

Completion of the course, students of S.Y.B.M.M. should have acquired the following knowledge and skills:

- 1] **Media Studies** – To impart knowledge of media studies in contemporary times, media and globalisation, challenges of new media.
- 2] **Introduction to Advance Computers** – To equip with understanding of industry knowledge required to make a career in the field of print and Advertising, Digital Marketing, Television media, Film etc. To train them with the software knowledge required in the above mentioned Industries.
- 3] **Understanding Cinema** – This paper aims to sensitize the students towards cinema as a medium of mass communication and help them to become critical viewers of movie today.
- 4] **Cultural Studies** – To create awareness of cultural theories and its relevance in media
- 5] **Introduction to Creative Writing** – To encourage students to read stories, poems, plays. To develop further and build upon the writing and analytical skills acquired in Semesters I & II. To acquaint with basic concepts in literary writing and to prepare students to write for media.
- 6] **Introduction to Public Relations** – To prepare for effective & ethical public communication on behalf of organizations. To help students acquire basic skills in the practical aspects of Media Relations & Crisis Management. To equip students with basic skills to write & develop Press Release & other PR communication and to design a PR campaign.



1] **Mass Media Research** – To introduce to debates in Research approaches and equip them with tools to carry on research. To understand the scope and techniques of media research, their utility and limitations.

2] **Introduction to Journalism** – To help media to acquaint themselves with an influential medium of journalism which holds the key to opinion formation & create awareness.

3] **Print, Production and Photography** – To help understand the principles and practice of photography. To enable students to enjoy photography as an art.

4] **Organizational Behaviour** – To impart knowledge of the basic concepts and facets of organizational behaviour. To highlight the role of psychological factors & process at work and to foster management skills among students.

5] **Television and Radio** – To acquaint with the working of two powerful media ie radio and television. The content is useful for both advertising and journalism students in order to further their careers in their respective fields.

6] **Advertising** – To introduce to the basic steps in advertising. To help students understand the creations of an ad campaign and the structure of an Ad Agency



T.Y.B.M.M. – Semester – V – [Advertising]

Completion of the course, students of T.Y.B.M.M. should have acquired the following knowledge and skills:

- 1] **Media Planning & Buying** – To develop knowledge of various characteristics of media. To understand procedures, requirements, and techniques of media planning and buying. To learn the various media mix and its implementation and budget allocation for a Media plan.
- 2] **Brand Building** – To study the brand concepts and brand building process and its importance to consumers and advertisers.
- 3] **Advertising in Contemporary Society** - To understand the environment in Contemporary Society, liberalisation and its impact on the economy
- 4] **Consumer Behaviour** – To understand role of marketing in influencing consumer behaviour. To analyse the role of marketer & the consumer in advertising. To sensitize the students to the changing trends in consumer behaviour.
- 5] **Copywriting** – To familiarize with basic concepts in copywriting. Writing effective copies for print, electronic and digital media.
- 6] **Ad Design** – To make understand the process of planning & production of advertisement. To highlight the importance of visual communication. To provide practical training in the field of advertising



T.Y.B.M.M. – Semester – V – [Journalism]

1] Editing – As an important segment of newspaper production, editing is a vital function. The syllabus lays stress on language skill improvement . It aims at orienting students to gain more practical knowledge in the print media scenario. The syllabus encompasses the current trends of digital media as well as writing for e editions of papers. The syllabus tackles editing from various beats points of view. Editing of editorials, columns, etc is included to acquaint the students about responsible journalism.

2] Reporting – To enable to become Reporters, which is supposed to be a prerequisite while entering into the field of Journalism. To make them understand basic ethos of the news and news-gathering.

3] Features and Opinion – Understanding the differences between reporting and feature writing. Understanding the other types of soft stories. Learning the skills for writing features/ opinion/soft stories and of interviewing

4] Journalism and Public Opinion – To assess the importance of the media vis a vis the public. To project a fair idea of the role of the media in creating and influencing Public Opinion. To analyze the impact of the media an public opinion on socio political issues

5] Indian Regional Journalism – Study of the history and role of Indian press other than in English. Understand the contribution and role of certain publications and stalwarts. Study of the regional press and television of today

6] Newspaper and Magazine Making – To study the design, elements of the newspaper and magazine. To study space distribution. To get exposure to design software such as Quark Express and the process of planning and production of newspaper and magazine



T.Y.B.M.M. – Semester – VI – [Journalism]

- 1] **Press Laws and Ethics** – To Study and understand various laws relating to press and journalism.
- 2] **Broadcast Journalism** – Learning to write in broadcasting style conforming to ethical and practical principles.
- 3] **Business and Magazine Journalism** – To understand the tools of business journalism and an overview of the economy. To study the magazine sector and its specialization
- 4] **Issues in Global Media** – Study the role of media in the 21st Century and the challenges facing traditional media Familiarize students about regional versus global media. Highlight social media's relevance in information dissemination
- 5] **News Media Management** – To make students aware about the responsibilities, structure and functioning of responsibilities of an organization. Students will be able to analyze individual media businesses and understand the Economic drivers of the media economy
- 6] **Contemporary Issues** – To understand and analyze some of the present day environmental, political, economic and social concerns and issues. To highlight the importance of human rights and its implementation in India.
- 7] **Digital Media** – Understand digital marketing platform. Understand the key goals and stages of digital campaigns. Understand the of use key digital marketing tools and learn to develop digital marketing plans

T.Y.B.M.M. – Semester – VI – [Advertising]

Completion of the course, students of F.Y.B.M.M. should have acquired the following knowledge and skills:

- 1] **Financial Management For Marketing and Advertising** – To provide a brief over view of the basic concepts, goals functions and types of finance available for new and existing business and marketing units. To enable the understanding of the need for financial planning through Budgets and their benefits.



2] Principles and Practice of Direct Marketing – To understand the relevance of directing in the field of advertising industry

3] Agency Management – To acquaint with concepts, techniques for developing an effective advertising campaign. To familiarize students with the different aspects of running an ad agency. To inculcate competencies to undertake professional work in the field of advertising.

4] Advertising and Marketing Research – To understand research methodologies – Qualitative vs Quantitative. To discuss the foundations of Research and audience analysis that is imperative to successful advertising.

5] Legal Environment and Advertising Ethics – To acquaint to the Legal Environment in contemporary India highlighting the relevance of the same with reference to Advertising media.

6] Contemporary Issues – To understand and analyze some of the present day environmental, political, economic and social concerns and issues. To highlight the importance of human rights and its implementation in India.

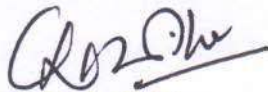
7] Digital Media – Understand digital marketing platform. Understand the key goals and stages of digital campaigns. Understand the use of key digital marketing tools and learn to develop digital marketing plans



Program Outcome of BMM

BMM is diversified program providing ample opportunities to the students to enhance career opportunities in Public Relations, Script Writing, Reporting, Editing, Photography, Event Management, Digital Media, Animation, Visual Effects, Film Making, Advertising, Media Planning, Media Research and Development, News Broadcasting, Program Coordinator, Anchoring, Background Voice Artist, Radio Jockeys, Copywriting, Ad Designing, Web Designing and much more.

Students can get opening in various media industries and other corporate sectors as well. Most significant is that, students can start their own businesses. Looking into the wide range of course contents, BMM provides much scope for starting innovative business avenues.



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Satish Pradhan Dnyanasadhana College, Thane.

Computer Science Department

FYBSc Computer Science:

Preamble:

This is a revised part of the undergraduate program (Six Semesters) in computer science, to be taught in Semester I & Semester II from the academic year 2016-17 onwards. Information and Communication Technology (ICT) has today become integral part of all industry domains as well as fields of academics and research. The industry requirements and technologies have been steadily and rapidly advancing. Organizations are increasingly opting for open source systems. The students too these days are thinking beyond career in the industry and aiming for research opportunities.

The B.Sc. Computer Science course structure therefore needed a fresh outlook and complete overhaul. A real genuine attempt has been made while designing the new syllabus for this 3- year graduate course. Not only does it prepare the students for a career in Software industry, it also motivates them towards further studies and research opportunities.

In the first year i.e. for semester I & II, basic foundation of important skills required for software development is laid. The syllabus proposes to have four core subjects of Computer science and two core courses of Mathematics-Statistics. All core subjects are proposed to have theory as well as practical tracks. While the Computer Science courses will form fundamental skills for solving computational problems, the Mathematics & Statistics course will inculcate research-oriented acumen. The syllabus design for further semesters encompasses more advanced and specialized courses of Computer Science. We sincerely believe that any student taking this course will get very strong foundation and exposure to basics, advanced and emerging trends of the subject. The practical component in the course will be seen as a combination of laboratory sessions, a visit to a IT workstation, mini project, an assignment on a relevant topic etc.

• Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

- 1) Fundamental skills for solving computational problems, the Mathematics & Statistics course will inculcate research-oriented acumen.
- 2) The ability to analyze and interpret quantitative results, both in the core areas of computer science and interdisciplinary areas.
- 3) Student will get very strong foundation and exposure to basics, advanced and emerging trends of the subject.



F.Y.B.Sc. Computer Science 2016-2017

Semester I

Course: Computer Organization and Design (USCS101)

Course Outcomes:

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

1. To learn about how computer systems work and underlying principles
2. To understand the basics of digital electronics needed for computers
3. To understand the basics of instruction set architecture for reduced and complex instruction sets
4. To understand the basics of processor structure and operation
5. To understand how data is transferred between the processor and I/O devices

Course: Programming with Python- I(USCS102)

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

Course outcomes :

1. Students should be able to understand the concepts of programming before actually starting to write programs.
2. Students should be able to develop logic for Problem Solving.
3. Students should be made familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
4. Students should be able to apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)

Course: Free and Open-source Software(USCS103)

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

Course Outcome:

1. Upon completion of this course, students should have a good working knowledge of Open Source ecosystem, its use, impact and importance.
2. This course shall help student to learn Open Source methodologies, case studies with real life examples.

Course: Database System(USCS104)

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

Course Outcomes



1. Students should be able to evaluate business information problem and find the requirements of a problem in terms of data.
2. Students should be able to design the database schema with the use of appropriate data types for storage of data in database.
3. Students should be able to create, manipulate, query and back up the databases

Course: Discrete Mathematics(USCS105)

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

Course Outcomes:

1. To provide overview of theory of discrete objects, starting with relations and partially ordered sets.
2. Study about recurrence relations, generating function and operations on them.
3. Give an understanding of graphs and trees, which are widely used in software.
4. Provide basic knowledge about models of automata theory and the corresponding formal languages.

Course: Descriptive Statistics and Introduction to Probability(USCS106)

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

Course Outcomes:

1. Enable learners to know descriptive statistical concepts
2. Enable study of probability concept required for Computer learners

Course: Soft Skills Development(USCS107)

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

Course Outcomes:

1. To know about various aspects of soft skills and learn ways to develop personality
2. Understand the importance and type of communication in personal and professional environment.
3. To provide insight into much needed technical and non-technical qualities in career planning.
4. Learn about Leadership, team building, decision making and stress management.

Semester II

Course: Programming with C(USCS201)

Course Outcomes:



1. Students should be able to evaluate business information problem and find the requirements of a problem in terms of data.
2. Students should be able to design the database schema with the use of appropriate data types for storage of data in database.
3. Students should be able to create, manipulate, query and back up the databases

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2. Understand the importance and type of communication in personal and professional environment.
3. To provide insight into much needed technical and non-technical qualities in career planning.
4. Learn about Leadership, team building, decision making and stress management.

Semester II

Course: Programming with C(USCS201)

Course Outcomes:



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

1. Students should be able to write, compile and debug programs in C language.
2. Students should be able to use different data types in a computer program.
3. Students should be able to design programs involving decision structures, loops and functions.
4. Students should be able to explain the difference between call by value and call by reference
5. Students should be able to understand the dynamics of memory by the use of pointers.
6. Students should be able to use different data structures and create/update basic data files.

Course: Programming with Python – II(USCS202)

Course Outcomes:

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

1. Students should be able to understand how to read/write to files using python.
2. Students should be able to catch their own errors that happen during execution of programs.
3. Students should get an introduction to the concept of pattern matching.
4. Students should be made familiar with the concepts of GUI controls and designing GUI applications.
5. Students should be able to connect to the database to move the data to/from the application.
6. Students should know how to connect to computers, read from URL and send email.

Course: Linux(USCS203)

Course Outcomes:

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

1. Upon completion of this course, students should have a good working knowledge of Linux, from both a graphical and command line perspective, allowing them to easily use any Linux distribution.
2. This course shall help student to learn advanced subjects in computer science practically.
3. Student shall be able to progress as a Developer or Linux System Administrator using the acquired skill set.

Course: Data Structure(USCS204)

Course Outcomes:

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

1. Learn about Data structures, its types and significance in computing
2. Explore about Abstract Data types and its implementation
3. Ability to program various applications using different data structure in Python



Course: Calculus(USCS205)

Course Outcomes:

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

1. Understanding of Mathematical concepts like limit, continuity, derivative, integration of functions.
2. Ability to appreciate real world applications which uses these concepts.
3. Skill to formulate a problem through Mathematical modeling and simulation.

Course: Statistical Methods and Testing of Hypothesis(USCS206)

Course Outcomes:

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

1. Enable learners to know descriptive statistical concepts
2. Enable study of probability concept required for Computer learners

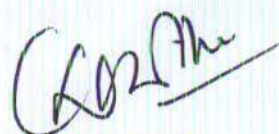
Course: Green Technologies(USCS207)

Course Outcomes:

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

1. Learn about green IT can be achieved in and by hardware, software, network communication and data center operations.
2. Understand the strategies, frameworks, processes and management of green IT




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Satish Pradhan Dnyanasadhana College, Thane.

Computer Science Department

SYBSc Computer Science:

Preamble:

This is a revised part of the undergraduate program (Six Semesters) in computer science, to be taught in Semester III & Semester IV from the academic year 2017-18 onwards. The revised and restructured curriculum for the Three-year integrated course is systematically designed considering the current industry needs in terms of skills sets demanded under new technological environment. It also endeavors to align the program structure and course curriculum with student aspirations and corporate expectations. The proposed curriculum is more contextual, industry affable and suitable to cater the needs of society and nation in present day context.

Second year of this course is about studying core computer science subjects. Theory of Computation course provides understanding of grammar, syntax and other elements of modern language designs. It also covers developing capabilities to design formulations of computing models and its applications in diverse areas. The course in Operating System satisfies the need of understanding the structure and functioning of system. Programming holds key indispensable position in any curriculum of Computer Science. It is essential for the learners to know how to use object-oriented paradigms. There is also one dedicated course Android Developer Fundamentals as a skill enhancement catering to modern day needs of Mobile platforms and applications. The syllabus has Database Systems courses in previous semesters. The course in Database Management Systems is its continuation in third semester. The course has objectives to develop understanding of concepts and techniques for data management along with covers concepts of database at advance level.

The course of Combinatorics and Graph Theory in third semester and the course of Linear Algebra in fourth semester take the previous courses in Mathematics. Graph theory is rapidly moving into the mainstream mainly because of its applications in diverse fields which include can further open new opportunities in the areas of genomics, communications networks and coding theory, algorithms and computations and operations research. Introducing one of the upcoming concepts Physical Computing and IoT programming will definitely open future area as Embedded Engineer, involvement in IoT projects, Robotics and many more.

• **Objectives:**

Completion of the course, students should have acquired the following knowledge and skills:

- 1) Android Developer Fundamentals as a skill enhancement catering to modern day needs of Mobile platforms and applications.
- 2) Physical Computing and IoT programming will definitely open future area as Embedded Engineer, involvement in IoT projects, Robotics and many more
- 3) Student will get very strong foundation and exposure to basics, advanced and emerging trends of the subject.



S.Y.B.Sc. Computer Science 2017-2018

Semester - III

Course: Theory of Computation (USCS301)

Course Outcomes:

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

1. Understand Grammar and Languages
2. Learn about Automata theory and its application in Language Design
3. Learn about Turing Machines and Pushdown Automata
4. Understand Linear Bound Automata and its applications

Course: Core Java (USCS302)

Course Outcomes:

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

1. Object oriented programming concepts using Java.
2. Knowledge of input, its processing and getting suitable output.
3. Understand, design, implement and evaluate classes and applets.
4. Knowledge and implementation of AWT package.

Course: Operating System (USCS303)

Course Outcomes:

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

1. To provide a understanding of operating system, its structures and functioning
2. Develop and master understanding of algorithms used by operating systems for various purposes.

Course: Database Management Systems (USCS304)

Course Outcomes:

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

1. Master concepts of stored procedure and triggers and its use.
2. Learn about using PL/SQL for data management
3. Understand concepts and implementations of transaction management and crash recovery

Course: Combinatorics and Graph Theory (USCS305)



Course Outcomes:

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

1. Appreciate beauty of combinatorics and how combinatorial problems naturally arise in many settings.
2. Understand the combinatorial features in real world situations and Computer Science applications.
3. Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems

Course: Physical Computing and IoT Programming (USCS306)

Course Outcomes:

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

1. Enable learners to understand System on Chip Architectures.
2. Introduction and preparing Raspberry Pi with hardware and installation.
3. Learn physical interfaces and electronics of Raspberry Pi and program them using practical's
4. Learn how to make consumer grade IoT safe and secure with proper use of protocols.

Course: Web Programming (USCS307)

Course Outcomes:

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

1. To design valid, well-formed, scalable, and meaningful pages using emerging technologies.
2. Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites
3. To develop and implement client-side and server-side scripting language programs.
4. To develop and implement Database Driven Websites.
5. Design and apply XML to create a markup language for data and document centric applications.

Semester - IV

Course: Fundamentals of Algorithms (USCS401)

Course Outcomes:

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



1. Understand the concepts of algorithms for designing good program
2. Implement algorithms using Python

Course: Advanced Java (USCS402)

Course Outcomes:

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

1. Understand the concepts related to Java Technology
2. Explore and understand use of Java Server Programming

Course: Computer Networks (USCS403)

Course Outcomes:

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

1. Learner will be able to understand the concepts of networking, which are important for them to be known as a 'networking professionals.'
2. Useful to proceed with industrial requirements and International vendor certifications.

Course: Software Engineering (USCS404)

Course Outcomes:

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

1. Graduates can effectively apply software engineering practice over the entire system lifecycle. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.
2. learners can apply basic software quality assurance practices to ensure that software designs, development, and maintenance meet or exceed applicable standards.
3. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.

Course: Linear Algebra using Python (USCS405)

Course Outcomes:

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

1. Appreciate the relevance of linear algebra in the field of computer science.



2. Understand the concepts through program implementation
3. Instill a computational thinking while learning linear algebra.

Course : .Net Technologies (USCS406)

Course Outcomes:

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

1. Understand the .NET framework
2. Develop a proficiency in the C# programming language
3. Proficiently develop ASP.NET web applications using C#
4. Use ADO.NET for data persistence in a web application

Course: Android Developer Fundamentals (USCS406)

Course Outcomes:

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

1. Understand the requirements of Mobile programming environment.
2. Learn about basic methods, tools and techniques for developing Apps
3. Explore and practice App development on Android Platform
4. Develop working prototypes of working systems for various uses in daily lives.



PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)

TYBSc Computer Science:

Preamble:

This is a revised part of the undergraduate program (Six Semesters) in computer science, to be taught in Semester III & Semester IV from the academic year 2018-19 onwards. The proposed curriculum contains two semesters, each Semester contains two Electives: Elective-I and II. Every Elective contains three papers based on specific areas of Computer Science. It also includes one Skill Enhancement paper per semester, helps the student to evaluate his/her computer science domain specific skills and also to meet industry expectations.

This revised curriculum has not only taken the specific areas of computer science into consideration but will also give the opportunity to the student to prove his/her ability in the subject practically through the Project Implementation. In Semester V and Semester VI student has to undertake a Project. It can boost his/her confidence and also can encourage the student to perform innovations in the subject as the choice of the Project topic is kept open covering most of the areas of Computer Science subject as per the students' interest and the subject they have learned during the Course.

Proposed Curriculum contains challenging and varied subjects aligned with the current trend with the introduction of Machine Intelligence specific subject such as Artificial Intelligence, Information Retrieval. Data Management related subjects such as Cloud Computing and Data Science. Image processing topics such as Game Programming, Digital Image Processing. Introduction of physical world through Architecting of IoT and Wireless Sensor Networks and Mobile Communication. Security domain is also evolved by the introduction of Ethical Hacking, Cyber Forensic and Information and Network Security. To get the hands on experience Linux Server Administration and Web Services topics are included.

• **Objectives:**

Completion of the course, students should have acquired the following knowledge and skills:

1. Demonstrate the ability to troubleshoot challenging technical problems typically encountered when operating and administering Linux systems.
2. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.
3. Understand various protocols for network security to protect against the threats in a network.
4. To understand the design principles and application of SOAP and REST based web services (JAX-WS and JAX-RS). To understand WCF service. To design secure web services and QoS of Web Services

Course: Linux Server Administration(USCS502)



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

Course Outcomes:

1. Learner will be able to develop Linux based systems and maintain.
2. Learner will be able to install appropriate service on Linux server as per requirement.
3. Learner will have proficiency in Linux server administration

Course: Software Engineering and Testing(USCS503)

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

Course Outcomes:

1. Graduates can effectively apply software engineering practice over the entire system lifecycle. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.
2. learners can apply basic software quality assurance practices to ensure that software designs, development, and maintenance meet or exceed applicable standards.
3. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.

Course: Information and Network Security(USCS504)

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

Course Outcomes:

1. Use the basic concepts of secure communication via insecure networks to design secure architectures;
2. Describe and justify relevant alternatives and decision recommendations
3. Implement security management in networks.
4. Provide security assessment of networks

Course: Web Services(USCS506)

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

Course Outcomes:

1. Emphasis on SOAP based web services and associated standards such as WSDL.
2. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services



Course: Game Programming (USCS507)

Course Outcomes:

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

1. Learner should study Graphics and gaming concepts with present working style of developers where everything remains on internet and they need to review it, understand it, be a part of community and learn.
2. Learner should get the understanding computer Graphics programming using Directx or Opengl. Along with the VR and AR they should also aware of GPU, newer technologies and programming using most important API for windows

Semester IV:

Course: Wireless Sensor Networks and Mobile Communication

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

Course Outcomes:

1. After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks.
2. Also implement and evaluate new ideas for solving wireless sensor network design issues.

Course: Cloud Computing

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

Course Outcomes:

1. After successfully completion of this course, learner should be able to articulate the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing using open source technology.
2. Learner should be able to identify the architecture and infrastructure of cloud computing, including SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc.
3. They should explain the core issues of cloud computing such as security, privacy, and interoperability.

Course: Information Retrieval



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

Course Outcomes:

1. After completion of this course, learner should get an understanding of the field of information retrieval and its relationship to search engines.
2. It will give the learner an understanding to apply information retrieval models.

Course: Data Science

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

Course Outcomes:

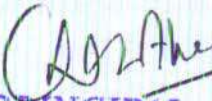
1. After completion of this course, the students should be able to understand & comprehend the problem; and should be able to define suitable statistical method to be adopted

Course: Ethical Hacking

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

Course Outcomes:

1. Learner will know to identify security vulnerabilities and weaknesses in the target applications.
2. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.


PRINCIPAL

Satish Pradhan Dnyanasadhana College,
Thane (Arts, Science & Commerce)



Information Technology Department

FYBSc Information Technology:

Preamble:

This is a revised part of the undergraduate program (Six Semesters) in Information Technology, to be taught in Semester I & Semester II from the academic year 2016-17 onwards. The revised and restructured curriculum for the Three-year integrated course is systematically designed considering the current industry needs in terms of skills sets demanded under new technological environment. It also endeavors to align the program structure and course curriculum with student aspirations and corporate expectations. The proposed curriculum is more contextual, industry affable and suitable to cater the needs of society and nation in present day context. To help learners develop their soft skills and develop their personality together with their technical skills. Developing professional, social and academic skills to harness hidden strengths, capabilities and knowledge equip them to excel in real work environment and corporate life. Understand various issues in personal and profession communication and learn to overcome them. To provide insight into emerging technologies to design and develop state of - the art web applications using client-side scripting, server-side scripting, and database connectivity.

The B.Sc. Information Technology program was is with an aim to make the students employable and impart industry-oriented training.

Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

1. To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems.
2. To apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programs.
3. To provide insight into emerging technologies to design and develop state of - the art web applications using client-side scripting, server-side scripting, and database connectivity.
4. To provide a sound understanding of Computer operating system, its structures, functioning and algorithms.
5. To adhere to the highest standards of ethics, including relevant industry and organizational codes of conduct.
6. To communicate effectively with a range of audiences both technical and non-technical.
7. To develop an aptitude to engage in continuing professional development. The new syllabus is aimed to achieve the objectives.

F.Y.B.Sc. IT 2016-2017

SEMESTER I



Course: Imperative Programming (USIT101)

Course Outcomes:

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

1. Students should be able to write, compile and debug programs in C language.
2. Students should be able to use different data types in a computer program.
3. Students should be able to design programs involving decision structures, loops and functions.
4. Students should be able to explain the difference between call by value and call by reference
5. Students should be able to understand the dynamics of memory by the use of pointers.

Course: Digital Electronics(USIT102)

Course Outcomes:

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

1. To understanding of the fundamental concepts and techniques used in digital electronics.
2. To understand and examine the structure of various number systems and its application in digital design.
3. The ability to understand, analyze and design various combinational and sequential circuits.
4. Ability to identify basic requirements for a design application and propose a cost effective solution.
5. The ability to identify and prevent various hazards and timing problems in a digital design.
6. To develop skill to build, and troubleshoot digital circuits.

Course: Operating Systems (USIT103)

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

Course Outcomes:

1. To provide understanding of operating system, its structures and functioning
2. Develop and master understanding of algorithms used by operating systems for various purposes.

Course: Discrete Mathematics (USIT104)

Course Outcomes:

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



1. Understand the notion of mathematical thinking, mathematical proofs, and algorithmic thinking, and be able to apply them in problem solving.
2. Understand the basics of discrete probability and number theory, and be able to apply the methods from these subjects in problem solving.
3. Be able to use effectively algebraic techniques to analyze basic discrete structures and algorithms.
4. Understand asymptotic notation, its significance, and be able to use it to analyze asymptotic performance for some basic algorithmic examples.
5. Understand some basic properties of graphs and related discrete structures, and be able to relate these to practical examples.

Course: Communication Skills (USIT105)

Course Outcomes:

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

1. To know about various aspects of soft skills and learn ways to develop personality
2. Understand the importance and type of communication in personal and professional environment.
3. To provide insight into much needed technical and non-technical qualities in career planning.
4. Learn about Leadership, team building, decision making and stress management

Semester II

Course: Object oriented Programming (USIT201)

Course Outcomes:

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

1. Explain the principles of the object oriented programming paradigm specifically including abstraction, encapsulation, inheritance and polymorphism
2. Use an object oriented programming language, and associated class libraries, to develop object oriented programs
3. Design, develop, test, and debug programs using object oriented principles in conjunction with an integrated development environment
4. Construct appropriate diagrams and textual descriptions to communicate the static structure and dynamic behavior of an object oriented solution
5. Describe and explain the factors that contribute to a good object oriented solution, reflecting on your own experiences and drawing upon accepted good practices.



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Course: Microprocessor Architecture (USIT202)

Course Outcomes:

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

1. Write programs to run on 8086 microprocessor based systems.
2. Design system using memory chips and peripheral chips for 16 bit 8086 microprocessor.
3. Understand and devise techniques for faster execution of instructions, improve speed of operations and enhance performance of microprocessors.
4. Distinguish between RISC and CISC processors.
5. Understand multi core processor and its advantages

Course: Web Programming (USIT203)

Course Outcomes:

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

1. To design valid, well-formed, scalable, and meaningful pages using emerging technologies.
2. Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites
3. To develop and implement client-side and server-side scripting language programs.
4. To develop and implement Database Driven Websites.
5. Design and apply XML to create a markup language for data and document centric applications.

Course: Numerical and Statistical Methods (USIT204)

Course Outcomes:

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

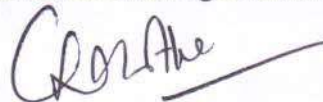
1. Enable learners to know descriptive statistical concepts
2. Enable study of probability concept required for Computer learners

Course: Green Computing (USIT205)

Course Outcomes:

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

1. Learn about green IT can be achieved in and by hardware, software, network communication and data center operations.
2. Understand the strategies, frameworks, processes and management of green IT



PRINCIPAL

Satish Pradhan Dnyanasadhana College,
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Information Technology Department

SYBSc Information Technology:

Preamble:

This is a revised part of the undergraduate program (Six Semesters) in Information Technology, to be taught in Semester III & Semester IV from the academic year 2016-17 onwards. The revised and restructured curriculum for the Three-year integrated course is systematically designed considering the current industry needs in terms of skills sets demanded under new technological environment. It also endeavors to align the program structure and course curriculum with student aspirations and corporate expectations. The proposed curriculum is more contextual, industry affable and suitable to cater the needs of society and nation in present day context.

The B.Sc. Information Technology program was is with an aim to make the students employable and impart industry-oriented training. Manage IT projects using written and oral communication skills in collaborative environments by Participating on teams that address solutions for IT management challenges. Identify and discuss professional, individual, organizational, societal, and regulatory implications of Information systems and technology. The B.Sc. Information Technology program was is with an aim to make the students employable and impart industry-oriented training. To explore and understand the concepts of Data Structures and its significance in programming. Provide and holistic approach to design, use and implement abstract data types. Understand the commonly used data structures and various forms of its implementation for different applications using C++.

Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

1. To think analytically, creatively and critically in developing robust, extensible and highly maintainable technological solutions to simple and complex problems.
2. To apply their knowledge and skills to be employed and excel in IT professional careers and/or to continue their education in IT and/or related post graduate programs.
3. To be capable of managing complex IT projects with consideration of the human, financial and environmental factors.
4. The primary objective of this course is to learn the basic principles of 2-dimensional and 3-dimensional computer graphics, different graphics shapes and the animation.
5. to teach the learner how to use Object Oriented paradigm to develop code and understand the concepts of Core Java and to cover-up with the pre-requisites of Core java.
6. To communicate effectively with a range of audiences both technical and non-technical.
7. To develop an aptitude to engage in continuing professional development. The new syllabus is aimed to achieve the objectives.



SEMESTER -III

Course: Python Programming(USIT301)

Course outcomes:

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

1. Students should be able to understand the concepts of programming before actually starting to write programs.
2. Students should be able to develop logic for Problem Solving.
3. Students should be made familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
4. Students should be able to apply the problem solving skills using syntactically simple language i.e. Python (version: 3.X or higher)

Course: Data Structures(USIT302)

Course Outcomes:

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

1. Learn about Data structures, its types and significance in computing
2. Explore about Abstract Data types and its implementation
3. Ability to program various applications using different data structure in C++.

Course: Computer Networks (USIT303)

Course Outcomes:

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

1. Learner will be able to understand the concepts of networking, which are important for them to be known as a 'networking professionals'.
2. Useful to proceed with industrial requirements and International vendor certifications.

Course: Database Management Systems(USIT304)

Course Outcomes:

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

1. Students should be able to evaluate business information problem and find the requirements of a problem in terms of data.
2. Students should be able to design the database schema with the use of appropriate data types for storage of data in database.



3. Students should be able to create, manipulate, query and back up the databases

Course: Applied Mathematics(USIT305)

Course Outcomes:

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

1. Apply mathematical concepts and principles to perform computations
2. Apply mathematics to solve problems
3. Create, use and analyze graphical representations of mathematical relationships
4. Communicate mathematical knowledge and understanding
5. Apply technology tools to solve problems
6. Perform abstract mathematical reasoning

Course: Core Java(USIT401)

Course Outcomes:

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

1. Object oriented programming concepts using Java.
2. Knowledge of input, its processing and getting suitable output.
3. Understand, design, implement and evaluate classes and applets.
4. Knowledge and implementation of AWT package.

Course: Introduction to Embedded Systems(USIT402)

Course Outcomes:

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

1. Understand what is a microcontroller, microcomputer, embedded system.
2. Understand different components of a micro-controller and their interactions.
3. Become familiar with programming environment used to develop embedded systems
4. Understand key concepts of embedded systems like IO, timers, interrupts, interaction with peripheral devices
5. Learn debugging techniques for an embedded system

Course: Computer Oriented Statistical Techniques(USIT403)

Course Outcomes:



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

1. To learn fundamentals and concepts of statistical and optimization methods, in particular, with reference to frequency distribution and measures of central tendency, measures of dispersion, skewness and kurtosis,
2. To solve problems on theory of probability, linear programming problems, transportation, assignment and game problems.
3. To learn important theorems, different formulae and practical applications of these statistical and optimization methods in the field of Computer Sciences and Applications.

Course: Software Engineering(USIT404)

Course Outcomes:

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

1. Graduates can effectively apply software engineering practice over the entire system lifecycle. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.
2. learners can apply basic software quality assurance practices to ensure that software designs, development, and maintenance meet or exceed applicable standards.
3. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.

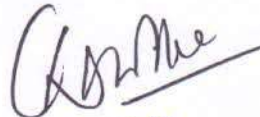
Course: Computer Graphics and Animation (USIT405)

Course Outcomes:

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

1. Students have a basic understanding of the core concepts of computer graphics
2. Know and be able to select among models for lighting/shading: Color, ambient light; distant and light with sources; Phong reflection model; and shading (flat, smooth, Gourand, Phong).
3. Students learn the steps to create animation.




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TYBSc Information Technology:

Preamble:

This is a revised part of the undergraduate program (Six Semesters) in Information Technology, to be taught in Semester V & Semester VI from the academic year 2016-17 onwards. The revised and restructured curriculum for the Three-year integrated course is systematically designed considering the current industry needs in terms of skills sets demanded under new technological environment. It also endeavors to align the program structure and course curriculum with student aspirations and corporate expectations. The proposed curriculum is more contextual, industry affable and suitable to cater the needs of society and nation in present day context.

The B.Sc. Information Technology program was is with an aim to make the students employable and impart industry-oriented training. Manage IT projects using written and oral communication skills in collaborative environments by Participating on teams that address solutions for IT management challenges. Identify and discuss professional, individual, organizational, societal, and regulatory implications of Information systems and technology. The B.Sc. Information Technology program was is with an aim to make the students employable and impart industry-oriented training. To explore and understand the concepts of advance web Programming and its significance in programming. Provide and holistic approach to design, use and implement abstract data types. Understand the commonly used IoT and various forms of its implementation for different applications using IoT.

• Objectives:

Completion of the course, students should have acquired the following knowledge and skills:

1. Demonstrate the ability to troubleshoot challenging technical problems typically encountered when operating and administering Linux systems.
2. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.
3. Understand various protocols for network security to protect against the threats in a network.
4. To understand the design principles and application of SOAP and REST based web services (JAX-WS and JAX-RS). To understand WCF service. To design secure web services and QoS of Web Services.

SEMESTER V

Course: Software Project Management

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

Course Outcomes:



1. After completion of this course, the students should be able to understand & comprehend the project; and should be able to define suitable statistical method to be adopted.

Course: Advanced Web Programming

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

Course Outcomes:

1. Emphasis on SOAP based web services and associated standards such as WSDL.
2. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services

Course: Linux System Administration

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

Course Outcomes:

1. Learner will be able to develop Linux based systems and maintain.
2. Learner will be able to install appropriate service on Linux server as per requirement.
3. Learner will have proficiency in Linux server administration

Course: Enterprise Java

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

Course Outcomes:

1. Learner will be able to develop Linux based systems and maintain.
2. Learner will be able to install appropriate service on Linux server as per requirement.
3. Learner will have proficiency in Linux server administration

Course: Project Dissertation

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

Course Outcomes:

1. Considerably more in-depth knowledge of the major subject/field of study, including deeper insight into current research and development work.
2. Deeper knowledge of methods in the major subject/field of study.
3. The capability to use a holistic view to critically, independently and creatively identify, formulate and deal with complex issues.

Semester VI:

Course: Software Quality Assurance



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

Course Outcomes:

1. Graduates can effectively apply software engineering practice over the entire system lifecycle. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.
2. learners can apply basic software quality assurance practices to ensure that software designs, development, and maintenance meet or exceed applicable standards.
3. This includes requirements engineering, analysis, prototyping, design, implementation, testing, maintenance activities and management of risks involved in software and embedded systems.

Course: Security in Computing

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

Course Outcomes:

1. Use the basic concepts of secure communication via insecure networks to design secure architectures;
2. Describe and justify relevant alternatives and decision recommendations
3. Implement security management in networks.
4. Provide security assessment of networks

Course: Business Intelligence

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

Course Outcomes:

1. Students will be able to design data warehouses and implement business intelligence systems.

Course: Principles of Geographic Information Systems

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

Outcomes:

1. Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective.
2. Students will understand through lectures but also local, regional, and/or international travel the interconnection between people and places and have a general comprehension of how variations in culture and personal experiences may affect our perception and management of places and regions.

Course: Cyber Laws

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



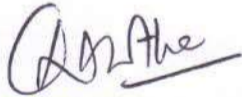
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Course Outcomes:

1. Students identify and analyze statutory, regulatory, constitutional, and organizational laws that affect the information technology professional.
2. Students locate and apply case law and common law to current legal dilemmas in the technology field.
3. Students apply diverse viewpoints to ethical dilemmas in the information technology field and recommend appropriate actions.



PRINCIPAL

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FYBAF

Preamble :

This is a revised part of the undergraduate programme (Six Semesters) in B.Com (Accounting and Finance), to be taught in Semester I & II from the academic year 2017-18 onwards. Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision. The subjects of Accounting and Finance are more of practical oriented and cover area of: Financial Accounting, Taxation, Cost Accounting, Financial Management and Auditing.

Completion of the course, students should have acquired the following knowledge and skills:

SEM 1

1. **Financial accounting 1** – subject aims at understanding the knowledge of basic accounting standards, inventory valuation, hire purchase and departmental accounts.
2. **Cost accounting 1** – the subject aims at understanding the concept of cost and costing, importance of materials, labour and overheads in the process.
3. **Introduction to financial management 1** – the subject aims in gaining the knowledge of understanding of profit and value maximization sources of finance, EBIT-EPS analysis.
4. **Business communication 1** – to understand language and writing skills with business correspondence.
5. **Foundation course 1** – to understand basics of Indian society, disparity, constitution.
6. **Commerce 1** – to understand business and its environment, society and contemporary issues.



7. **Business economics 1** – to understand demand, supply, market structure and strategies of pricing.

FYBAF- SEM 2

1. **Financial accounting 2** – to study advances in consignment accounts, branch accounts and fire insurance.
2. **Auditing 1** – to know what is audit, its procedures documentation and techniques and types of audit.
3. **Taxation 1 (indirect tax)** – to know about M-VAT act 2002
4. **Business communication 2** – to study presentation skills, group communication
5. **Foundation course 2** – to study human rights, straits, conflicts.
6. **Business law 1** – to get the legal knowledge of contract act, SOGA, COPRA
7. **Business mathematics 1** – to know ratio proportion, interest, annuity, calculation of MF



SYBAF

Preamble :

This is a revised part of the undergraduate programme (Six Semesters) in B.Com (Accounting and Finance), to be taught in Semester III & IV from the academic year 2017-18 onwards. Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision. The subjects of Accounting and Finance are more of practical oriented and cover area of: Financial Accounting, Taxation, Cost Accounting.

Completion of the course, students should have acquired the following knowledge and skills:

SEM 3

1. **Financial accounting 3** – get more insight on special accounting areas such as amalgamation, forensic accounts.
2. **Cost accounting 2** – understand methods of costing i.e. contract and process costing.
3. **Taxation 2 (direct tax 1)** – know various heads of income and deductions under chapter vi A
4. **IT in accounting 1** – know office productivity tools web and e-commerce related to accounts.
5. **FC in commerce 3** – get the insight if financial systems, markets, instruments, services.
6. **Business law 2** – know about partnership act, factories act.
7. **Business economics 2** – get deep insight into macro economics such as public finance, GDP and fiscal management



SEM 4

1. **Financial accounting 4** – understand redemption of preference shares, debentures and company final accounts
2. **Management accounts** – analyse and interpret vertical statements through ratios, cash flows etc.
3. **Taxation 3 (direct tax 2)** – understand returns, section 139, 90, 91 and ethics in taxation.
4. **IT in accountancy 2** – understand business process, MIS in computerised environment
5. **FC in management 4** – understand the basic functions of management.
6. **Research methodology** – nurture the research habits and make them aware about 100 marks projects and terminologies related to it.
7. **Law 3** – to understand in depth about company law.



TYBAF

Preamble :

This is a revised part of the undergraduate programme (Six Semesters) in B.Com (Accounting and Finance), to be taught in Semester V & VI from the academic year 2017-18 onwards. Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision. The subjects of Accounting and Finance are more of practical oriented and covers area of: Financial Accounting, Taxation, Cost Accounting and Financial Management.

Completion of the course, students should have acquired the following knowledge and skills:

SEM 5

(OLD SYLLABUS)

1. **Financial accountings 5** – to get deeper insight about company final accounts w.r.t AS-14, buy back of shares.
2. **Cost accounting 3** – to understand uniform costing, process costing and new trends in costing.
3. **Financial management 2** – to know risk, return, capital structure, cash and receivable management techniques.
4. **Taxation 3** – to understand total income concept, deductions under chapter vi A
5. **Auditing 3** – to get deep insight into company audit, report writing and professional ethics.
6. **Management 2** – to learn marketing production and HRM aspects of management.



TYBAF - SEM 6

1. **Financial accounting 6** – to know banking final accounts insurance company accounts, foreign currency.
2. **Cost accounts 4** – to get insight into emerging methods of costing that is budgetary control, marginal costing, std. Costing
3. **Financial management 3** – to understand financial policy, portfolio theory and dividend decisions.
4. **Taxation 4** – to have deep analysis about TDS advance tax DTAA u/s 90 and set off tax liability of individual and HUF.
5. **Financial accounting 7** – to know electricity company final accounts cooperative society IFRS and IND-AS
6. **Economics 3** – to clear the ideas of agriculture sector, industrial sector, service sector, money and banking



DEPARTMENT OF BANKING AND INSURANCE

SUBJECT OUTCOME

BBI Course Scope Financial Institutions like Stock Markets, Banking, and Insurance organization play an important role in economic development of the country. The course provides training for the understanding of fundamentals of economic, finance and commercial accounting and provides various employment opportunities under Banking, Insurance, and various financial sectors. The course provides knowledge of principles and practices that are to be followed in the banking industry. The course also provides knowledge regarding various laws governed under banking, insurance, and financial institutions.

SEM I

ENVIRONMENT AND MANAGEMENT OF FINANCIAL SERVICES

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

- To understand the Indian Financial system
- To know the phases of development of Banking and Insurance
- To know the regulatory framework of Banking and Insurance

PRINCIPLES OF MANAGEMENT

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

- To understand different aspects of management
- To understand organization structure of Banking and Insurance companies.
- To increase awareness about Indian and International leaders in Banking and Insurance Industry.

BUSINESS COMMUNICATION I

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

- To provide right message to the right person.



- To disseminate knowledge and develop skills and attitudes among the people working in the organization.

QUANTITATIVE METHODS I

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

- To develop a strong foundation in mathematics and statistical theory as the basis for growth over a professional career.
- To develop a high level of expertise in the application of statistics or psychometrics to educational research.
- To develop the ability to serve as a consultant to educational researchers, and to employ the appropriate quantitative methods in a wide variety of contexts.
- To develop the capability of conducting and publishing high-quality methodological research.

FOUNDATION COURSE I

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

- To understand the multi-cultural diversity of Indian society through its demographic composition.
- To understand the concept of disparity as arising out of stratification & inequality.
- To examine the causes & effects of conflict arising out of regionalism & linguistic differences.

FINANCIAL ACCOUNTING I

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

- To provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.
- To effectively manage the material resources available.



- To provide information about financial accounting.

BUSINESS ECONOMICS I

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

To understand demand analysis

To understand Supply and Production Decisions and Cost of Production.

To understand Market structure and pricing practices

SEM II

PRINCIPLES AND PRACTICES OF BANKING & INSURANCE

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

- To understand the various concepts related to Banking.
- To understand the various concepts related to Insurance.
- To highlight the insurance business environment.

ORGANIZATIONAL BEHAVIOUR

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

- It helps to understand organizational events
- To understand & predict events.
- It helps manager to manage human resource effectively

BUSINESS COMMUNICATION I

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

- To provide right message to the right person.



- To disseminate knowledge and develop skills and attitudes among the people working in the organization

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- To effectively manage the material resources available.
- To provide information about financial accounting.

BUSINESS LAW

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

- To develop an understanding of legal framework.
- To understand the purpose of legal logic of law- meaningfully when understand.

SEM III

IT IN BANKING & INSURANCE

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

- To introduce the concepts of E Banking and Electronic commerce
- To study MS-Office Packages for Institutional Automation
- To study Cyber Law and Securities law

FINANCIAL MARKETS

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

- To provide cheap funding for companies via IPO or SPO's.
- To create efficiency in financial intermediation.

DIRECT TAXATION

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

- To study residential status



- To study various heads of income under I and II
- To learn the computation of total income and taxable income

ORGANIZATIONAL BEHAVIOUR

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

- To understand individual behavior by means of Personality, Learning, Perception , Workplace emotions and decision making
- To understand group dynamics in terms of group communication, Politics, Negotiations, virtual teams and group decision making.
- To understand organizational dynamics
- To study the practices, issue and strategies of OB in Banking and Insurance sector.

MUTUAL FUND MANAGEMENT

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

- To introduce the concept of Mutual Fund and its classification
- To study the fund selection criteria
- To understand the Financial Planning in Mutual fund

FC III (OVERVIEW OF BANKING)

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

To overview banking industry

To understand the working of commercial banks and the relationship between banker and customer

To understand the concept of Universal banking, micro insurance and Financial inclusion.



SEM IV

FC IV (OVERVIEW OF INSURANCE)

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

- To understand the concept of life Insurance and Health Insurance.
- To know does the home insurance and motor insurance works
- To understand the role of insurance in logistics

COST ACCOUNTING

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

- To ascertain the cost as per unit of the different product manufactured by the business concern.
- To provide a correct analysis of cost both by processes or operations & by different element of cost.
- To ascertain the profitability of each of products & advice the management as to how these profit can be increased.
- To advice management on future expansion policies & proposed capital projects.

CORPORATE LAW

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

- To have an overview of Company law
- To study the Regulatory Framework Governing Stock Exchanges as per Securities Contracts Regulation Act 1956
- To understand the working of Security Exchange Board of India
- To know The Depositories Act, 1996

IT IN BANKING AND INSURANCE

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



- To understand E-Banking Business models
- To introduce concept of Technomanagement
- To know the applications of It in Banking
- To study the MS-Office packages used for institutional automation

BUSINESS ECONOMICS II

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

- To introduce microeconomic data and theory
- To study money, inflation and monetary policy
- To know the constituents of fiscal policy
- To understand theories and issues of international trade

CUSTOMER RELATIONSHIP MANAGEMENT

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

- Understand customer needs better
- Maintain long -term customer relationships
- to pursue a strategy of Relationship Marketing

ENTREPRENEURSHIP MANAGEMENT

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

- To understand the various aspects of Entrepreneurship.
- To highlight the key areas of new ventures such as Marketing, Operations, Finance and HR.
- To increase awareness about evolving concepts in Entrepreneurship.



SEM V

5.1. MARKETING IN BANKING AND INSURANCE

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

- To study concepts in marketing.
- To explain the scope of marketing management-analyzing opportunities, selecting target segments, developing the market mix, managing the marketing effort.
- To provide understanding of the communication mix, advertising campaigns, media planning, budgeting, marketing mix decisions, scope and limitations of market research.
- To develop strong concepts in marketing strategies for emerging technology and mature markets.
- To provide understanding about the internet as a strategic medium for marketing and sales efforts for a company.

5.2 FINANCIAL SERVICE MANAGEMENT.

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

- To ensure regular and adequate supply of funds to the concern..
- To ensure optimum funds utilization. Once the funds are procured, they should be utilized in maximum possible way at least cost.
- To ensure safety on investment, i.e., funds should be invested in safe ventures so that adequate rate of return can be achieved.
- To plan a sound capital structure-There should be sound and fair composition of capital so that a balance is maintained between debt and equity capital.

5.3 INTERNATIONAL BANKING AND FINANCE

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



- The paper will discuss the concepts and broad activities of International Banking and Finance besides studying developments in India in this context.

5.4 FINANCIAL REPORTING ANALYSIS.

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

- To describe some of the challenges facing financial reporting.
- To identify the major policy setting bodies & their role in the standard setting process.
- To understand issues relating to ethics & financial accounting

5.5 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

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

To study the Overview Of Investment Alternatives

To Introduce Securities Market

To study financial statement analysis, fundamental analysis and technical analysis

To study Portfolio Theory , Capital Asset Pricing Model, Efficient Market Hypothesis

5.6 AUDITING

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

- To examine the system of internal check.
- To check arithmetical accuracy of books of accounts, verifying posting, casting, balancing etc.
- To verify the authenticity and validity of transactions.
- To check the proper distinction between capital and revenue nature of transactions.
- To confirm the existence and value of assets and liabilities.



6.1 STRATEGIC MANAGEMENT

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

- To develop an understanding of the general and competitive business environments.
- To enable to understand and resolve cases through strategic decision making.
- To develop an understanding of strategic management concepts and techniques.

6.2 CENTRAL BANKING

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

- To manage the monetary & credit system of the country.
- To stabilise the internal & external value of rupee.

6.3 INTERNATIONAL BUSINESS

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

- To understand different aspects of IB
- To increase awareness about international agencies such IMF, World Bank, WTO.
- To understand the practical aspects of Export quotations
- To highlight various theories relating to international trade

6.4 HUMAN RESOURCE MANAGEMENT

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

- To highlight the role of human resources in success of an enterprise.
- To understand various processes involved in increasing the value of human assets.




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- To understand ways for maintaining high employees morale and sound human relations by sustaining and improving the various conditions and facilities.

6.5 BUSINESS ETHICS AND CORPORATE GOVERNANCE

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

- To understand ethical issues in business.
- To highlight the role of Corporate Governance practices in maintaining Transparency in business transactions.
- To highlight the importance of commitment to values and ethical conduct of Business.
- To increase awareness about the statutory and legal compliances involved in corporate governance.

6.6 TURNAROUND MANAGEMENT

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

- To enable students to understand need for revival of sick and stressed business unit.
- To make students aware of the different turnaround strategies.
- To give an overview of the recent business scenario.

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BMS Department

B.M.S COURSE OBJECTIVES

Programme Objectives:

On Completion of the BMS program students should have acquired the following knowledge and skills:

- Understand the various business Models and factors affecting the various business organisations.
- Comprehend Basic understanding & knowledge of management studies w.r.t Finance, Marketing & Human resources.
- Capability to analyse and solve business problems.
- To prepare students to exploit opportunities which are being continuously created in the management field.
- Working in groups solving case studies and doing presentation which builds a platform for their MBA studies.

FYBMS SEM I

Foundation of human skills:

- On successful completion of this course students will be able to :
 - 1) Understand the basic behaviour pattern of human, the most important resource of a business and to deal with them in an apt manner
 - 2) Deal and negotiate with different kinds of human nature and greater awareness of human nature.

Business Economics - I:

- On successful completion of this course students will be able to :
 - 1) Understand scope and importance of business economics with basics of market demand, and supply curves.
 - 2) Understand market structures in perfect competition, monopoly and imperfect competition.

Foundation course - I:

- On successful completion of this course students will be able to :
 - 1) Understand the multi-cultural diversity of Indian society through its demographic composition.



- 2) Understand Philosophy of the constitution as set out in the preamble.
- 3) Understand growing social problems in India its impact on youth and challenges for the future.

Business Law:

- On successful completion of this course students will be able to :
 - 1) Understand essentials and elements of Contract Act, 1872 and scope of Sales of Goods Act, 1930.
 - 2) Understand various negotiable instruments under Negotiable Act, 1981 and objective of Consumer Protection Act, 1986.
 - 3) Understand Company Law and Intellectual Property Rights in depth.

Business communication - I:

- On successful completion of this course students will be able to :
 - 1) Understand the theory of communication its concepts, channels and objectives.
 - 2) Understand problems or barriers in communication and importance of listening skills.
 - 3) Draft business correspondence like mails, letters.
 - 4) Master in language and writing skills.

Introduction to Financial Accounts:

- On successful completion of this course students will be able to :
 - 1) Understand and interpret the preparation of basic financial statements such as profit & Loss A/c and Balance sheet.
 - 2) Have basic knowledge of Indian accounting standards, accounting concepts & conventions and IFRS.
 - 3) Deal with Bank Reconciliation statements.

Business statistics:

- On successful completion of this course students will be able to :
 - 1) Understand and interpret basic statistical concepts of Averages, Dispersion, correlation & regression.
 - 2) Have basic knowledge of probability and time series analysis.



F.Y.B.M.S Semester – II

Principles of Marketing:

- On successful completion of this course students will be able to:
- To critically analyse the marketing theories and concepts and understand the relevance in perspective to current business scenario in India
 - To develop basic marketing skills among students in order to cater to the marketing industries.

Business Mathematics:

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

- To use elementary knowledge relating to Financial Mathematics, Matrices & determinants Derivatives and Numerical analysis in day to day business operations.
- To develop analytical ability of the learners to solve everyday business problems using the above concepts.

Industrial Law:

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

- Showcase practical knowledge of Industrial Laws and its application in the Industry.
- This course is designed to create awareness amongst the students and thereby develop analytical abilities and ability to apply legal provisions for the students in the industry.

Business Communication – II

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

- Prepare a written business report that is clear, logical, concise, grammatically correct, and clear to the target audience
 - Present an oral argument that is logical, compelling, and clear to the target audience
- Use effective communication skills to promote respect, trust and relationships.



Principles of Management:

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

- Become a professional and progressive manager in a challenging business environment. This subject enables the students to get a professional outlook, knowledge of various managerial functions and adaptation to dynamic business environment.
- It also helps enhance managerial and leadership skills of the students.

Foundation Course- II:

- The objective of this subject is to make students aware about the Indian society, human rights and the environment .
- The subjects also explains what is stress and conflict, its effects on humans and how can we manage and overcome stress and conflict situations.

Business Environment:

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

- Understand PESTEL in detail and its significance to Business.
- Also they will be able to apply various aspects of these learning in Business Environment.

S.Y.B.M.S Semester – III

Strategic management:

- On successful completion of this course students will be able to :
- 1) Learn the management policies and strategies at every level to develop conceptual skills in this area as well as their application in the corporate world.
 - 2) Critically examine the management of the entire enterprise from the top management view points.
 - 3) Deal with corporate level policy and strategy formulations areas. This course aims to developing conceptual skills in this area as well as their application in the corporate world.



Business planning and entrepreneurship management:

- On successful completion of this course students will be able to :
 - 1) Understand areas of discipline of management and entrepreneurship.
 - 2) Develop responsibility of full line of management function of a company with special reference to SME sector.

Information technology in business management:

- On successful completion of this course students will be able to :
 - 1) Learn basic concept of information technology, its support and role in management.
 - 2) Have practical hands on training required for office automation.
 - 3) Understand and execute basic concepts of email, internet and websites, domain and security therein.

Accounting for managerial decisions:

- On successful completion of this course students will be able to :
 - 1) Develop financial analysis skills required to evaluate the business performance by the managers.
 - 2) Understand core concepts of business finance such as Ratio analysis and Cash flow statement and its importance in managing a business.

Foundation course III:

- The objective of this subject is to make students aware about the Indian society, human rights and the environment .
- The subjects also explains what is stress and conflict, its effects on humans and how can we manage and overcome stress and conflict situations.

Introduction to cost accounting: (Finance Elective)

- On successful completion of this course students will be able to :
 - 1) Understand basic concepts and the tools used in cost accounting.
 - 2) Understand the principles and procedure of cost accounting and to apply them to different practical situation.

Corporate finance: (Finance Elective)



- On successful completion of this course students will be able to :
 - 1) Develop a conceptual framework of finance and to acquaint the participants with the tools, techniques and process of financial management in the realm of financial decision making.
 - 2) Understand the core concepts of corporate finance and its importance in managing business such as Cost of capital, Capital structure planning and capital budgeting decisions.
 - 3) Understand nature, importance, structure of corporate finance related areas.

Advertising: (Marketing Elective)

- On successful completion of this course students will be able to :
 - 1) Understand and examine the growing importance of advertising.
 - 2) Understand the construction of an effective advertisement.
 - 3) Understand the role of advertising in contemporary scenario.

Consumer behavior: (Marketing Elective)

- On successful completion of this course students will be able to :
 - 1) Develop an understanding about the consumer decision making process and its application in marketing function of firm.
 - 2) Have basic knowledge about issues and dimensions of consumer behaviour. Students are expected to develop the skill of understanding and analyzing consumer information and using it to create consumer oriented marketing strategies.

S.Y.B.M.S Semester – IV

Foundation Course – IV:

- On successful completion of this course students will be able to :
 - Understand and appreciate the importance of ethics in personal life as well and in business.
 - To understand how ethics are applicable in Marketing, Finance and Human Resource Management



- To develop the skills of analysis, evaluation and synthesis in cost and management accounting.
- To impart and develop the learners knowledge in various facets of decision making and controlling operations.

Corporate Restructuring: (Finance Elective)

- On successful completion of this course students will be able to :
 - To showcase knowledge relating to legal, accounting and practical implication of corporate restructuring.
 - The subject covers the complex facets of corporate restructuring process.

Integrated Marketing & Communication: (Marketing Elective)

- On successful completion of this course students will be able to :
 - To equip the students with knowledge about the nature, purpose and complex construction in the planning and execution of an effective Integrated Marketing Communication program.
 - To understand the various tools of integrated marketing communication and the importance of co-ordinating them to an effective marketing communication program.

Rural Marketing: (Marketing Elective)

- The objective of this course is to expand the students view on Agriculture and Rural marketing environment so that they understand consumer and Marketing characteristics.
- The course also contributes to understand the emerging challenges in the upcoming global economic scenario

T.Y.B.M.S Semester – V

Ethics and governance:

- On successful completion of this course students will be able to :
 - 1) Understand significance of ethics and ethical practices in business which are to indispensable for progress of a country.
 - 2) Learn the applicability of ethics in functional areas like marketing, finance and human resource management.



- 3) Understand the emerging need and growing importance of good governance and CSR by organization.

Logistics and supply chain management:

- On successful completion of this course students will be able to :
 - 1) Understand key activities performed by the logistics function.
 - 2) Understand nature of supply chain, its function and supply chain management.
 - 3) Global trends in logistics and supply chain management.

Service marketing: (Marketing Elective)

- On successful completion of this course students will be able to :
 - 1) Understand distinctive features of services and key elements in service marketing.
 - 2) Provide insight into ways to improve service quality and productivity.
 - 3) Understand marketing of different services in Indian context.

Customer relationship management: (Marketing Elective)

- On successful completion of this course students will be able to :
 - 1) Understand concept of CRM and implementation of CRM.
 - 2) Provide insight into CRM initiatives, customer service and designing CRM strategy.
 - 3) Understand new trends in CRM, challenges and opportunities for organizations.

E-commerce and Digital Marketing: (Marketing Elective)

- On successful completion of this course students will be able to :
 - 1) Understand the increasing significance of e-commerce and its application in business and various sectors.
 - 2) Get an insight on digital marketing activities on various social media platforms and its emerging significance in business.
 - 3) Understand latest trends and practices in E-commerce and digital marketing.

Sales and Distribution Management: (Marketing Elective)

- On successful completion of this course students will be able to :



- 1) Understand role and scope of sales management and distribution management in a company.
- 2) Gain knowledge on market analysis and methods of sales forecasting.
- 3) Understand distribution channel management with its effective distribution strategy and channel designing.
- 4) Understand ethics and trends in sales and distribution management.

Wealth management: (Finance Elective)

- On successful completion of this course students will be able to :
 - 1) Understand an overview of various aspects related to wealth management.
 - 2) Understand relevance and importance of insurance in wealth management.
 - 3) Understands issues related to taxation in wealth management.
 - 4) Understand various concepts of retirement planning.

Risk Management: (Finance Elective)

- On successful completion of this course students will be able to :
 - 1) Understand fundamental aspects of risk management and control.
 - 2) Have a comprehensive overview of risk governance and assurance with respect to insurance sector.
 - 3) Understand the basic concepts, functions, process, techniques of risk management.

Investment analysis and portfolio management: (Finance Elective)

- On successful completion of this course students will be able to :
 - 1) Calculate and analyse concepts of Risk and Return associated with various investment avenues.
 - 2) Understand the terms which are often confronted while reading the newspaper, magazines such as beta and Capital asset pricing model for better correlation with the practical world.
 - 3) Understand various models and techniques of security and portfolio analysis.

Strategic Financial management: (Finance Elective)

- On successful completion of this course students will be able to :
 - 1) Comprehend fundamental aspects of corporate finance management.



- 2) Have a comprehensive overview of corporate governance and assurance with respect to finance sector.
- 3) Understand the basic concepts, functions, process, techniques of financial management such as dividend policies, Advanced techniques of capital budgeting.
- 4) Showcase elementary knowledge required to work in banking & finance industry.

T.Y.B.M.S Semester – VI

Operations Research:

- On successful completion of this course students will be able to :
 - To provide students with the basic understanding of the important everyday concepts of Transportation problems, assignment & Operations management.
 - To develop analytical ability of the learners to solve everyday business problems using the concepts of Linear Programming Problems, Decision Theory, Game theory.

Indian Ethos in Management:

- On successful completion of this course students will be able to :

The course is designed to throw light on the connection between Indian ethos and principles and the modern mgmt concepts that exist and rule current organisations

- The course gives the connection between modern thoughts and ancient wisdom from India
- The course content is a breather of fresh air which looks into various perspectives like stress mgmt, leadership style, business practises learning mgmt etc..

Corporate Communication & PR:

- On successful completion of this course students will be able to :
 - To provide students with the basic understanding of the concepts of CCPR
 - To introduce the various elements of corporate communication and consider their roles in managing organisation.



Risk management: (Finance Elective)

➤ On successful completion of this course students will be able to :

- To familiarize themselves with fundamental aspects of risk management and control.
- To give a comprehensive overview of risk governance and assurance with special reference to insurance sector.
- To introduce the basic concepts, functions, process, techniques of risk management.

International Finance: (Finance Elective)

➤ On successful completion of this course students will be able to :

- To process basic knowledge of foreign exchange conversions and determination of spot and forward rates, arbitrage opportunities, profitable borrowing and lending decisions in international markets.
- To understand about functioning of Euro Currency/ Euro Bond and other international Capital Markets.

Innovative Financial Services: (Finance Elective)

➤ On successful completion of this course students will be able to :

- To make the learners understand about financial services such as Hire purchase and lease purchase.
- To create awareness on innovations and happenings in finance industry.

Project Management: (Finance Elective)

➤ On successful completion of this course students will be able to :

- Understand Varied tasks and skills required by the project manager and project managers use many skills to get the job done.
- The business world is speeding up and product lifecycles are much shorter. This is forcing organizations to start new projects at an increasing rate. However, as projects become more complex, project failures, delays, and missed deadlines are becoming increasingly common. This gave an opportunity to our student, to visualizes and understand the need for project management study.



Brand Management: (Marketing Elective)

- On successful completion of this course students will be able to :
- To understand the meaning and Significance of Branding and Brand Management
 - To understand how Brand marketing programs are planned and implemented.
 - To understand the concept and sources of Brand Equity

Retail Management: (Marketing Elective)

- On successful completion of this course students will be able to :
- To familiarise students with retail management concepts and operations.
 - To acquaint students with the legal and ethical aspects of retail management.
 - To create awareness about emerging trends in Retail management.

International Marketing: (Marketing Elective)

- On successful completion of this course students will be able to :
- To understand the concept of International Marketing and Trade
 - To Understand the various environments which effect the smooth functioning of international marketing.
 - To understand and the various international marketing mix and elements To know to decent developments in the international and global market.

Media Planning & management: (Marketing Elective)

- On successful completion of this course students will be able to :
- Understand the different types of media used in modern day business.
 - Promotion being one of the pillars of marketing, choosing which media or type of advertising to use can be especially challenging for firms with limited budgets and know-how.
 - The main objective of this subject is to teach students to determine the best combination of media to achieve the marketing campaign objectives so that the ads are not lost in the clutter and reaches the target audience.



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