



'Social Transformation Through Dynamic Education'

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
(Arts, Science, Commerce & Community College)
DST-FIST Funded College (Level-0)

Founder

Dr. Patangrao Kadam

M. A., L. L. B., Ph. D.

Affiliated to Shivaji University, Kolhapur.

Accredited with 'B⁺⁺' Grade by NAAC, Bengaluru (CGPA 2.96)

Principal

Dr. D. G. Kanase

M. Sc., Ph. D.

P. O. Box No. 74, Sangli- 416416. Phone: (0233) (O) 2535229, Tele. Fax.- 2535993

Email:-bvpkc_sangli@yahoo.co.in; Website: <http://dpkmsangli.bharativedyapeeth.edu>

No.: B.V.D.P.K.M.S./ /20 -

Date: 26/09/2022

Notice

All the B.A, B.Com, and B.Sc. students are hereby informed that Department of English, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli has displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) on the notice board at the department.

Kindly go through it.

(Ms. R. D. Waghmare)

HEAD

Department of English
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.

Bharati Vidyapeeth's
Dr.Patangrao Kadam Mahavidyalaya, Sangli
Department of English
B.A. English

PROGRAM OUTCOMES:

1. Students will be able to appreciate literary and linguistics developments of different countries and different periods.
2. Students will comprehend major trends, movements, and isms and different critical and linguistics approaches.
3. Students will develop acumen to appreciate, interpret and critically evaluate prescribed text.
4. Students will be able to interpret, analyse and evaluate different varieties of written and spoken English.
5. Students will be able to analyse unseen poem and prose stylistically.
6. Students will learn different approaches to syllabus design and methods of teaching.

PROGRAM SPECIFIC OUTCOMES:

1. To understand the major and minor forms of literature.
2. To develop interest in literature and language.
3. To understand the short stories, poems, novels and dramas.
4. To know the literary theories, terms and concepts of Criticism.
5. To appreciate the literary works.
6. To understand the structure and function of grammatical units.

Department of English	
Course	Outcomes
BA.III (English) English Paper- I (English Communication) For	<ol style="list-style-type: none"> 1. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces. 2. The students will be able to face job interviews confidently and efficiently. 3. The students will be able to acquire soft skills required at workplaces and in real life. 4. The students will be able to learn group behavior and team work.
Paper No. VII (DSE-E11 Introduction To Literary Criticism)	<ol style="list-style-type: none"> 1. Students are able to understand the major trends in criticism. 2. Students are able to interpret critical concepts. 3. Students are able to study the original contributions to literary criticism. 4. Students are acquainted with literary and critical movements.
Paper No. VIII (DSE-E12 English Poetry)	<ol style="list-style-type: none"> 1. Students will be able to trace the development of the poetry in English from the days of Shakespeare to the contemporary India. 2. Students will be able to appreciate and analyze the poems properly. 3. Students will have a fairly comprehensive view of the Western and Eastern poetic tradition and they will be able to relate it to various literary movements. 4. Students will have an insight into poetry and they will be able to make a lively and interesting reading.
Paper No. IX (DSE-E13 English Drama)	<ol style="list-style-type: none"> 1. Students are able to understand different forms of drama. 2. Students are able to relate drama to their ideological or socio-political contexts. 3. Students are able to improve their creative and imaginative faculties through the reading of drama. 4. Students are able to know about various aspects of the drama.
Paper No. X	<ol style="list-style-type: none"> 1. Students are able to understand different forms of novel.

(DSE-E14 English Novel)	<ol style="list-style-type: none"> 2. Students are able to relate novels to their ideological or socio-political contexts. 3. Students are able to improve their creative and imaginative faculties through the reading of novels. 4. Students are able to know about various aspects of the novel.
Paper No. XI (DSE-E15 Language And Linguistics)	<ol style="list-style-type: none"> 1. Students know the concept of communication. 2. Students are familiar with varieties of the English language. 3. Students know different levels of study of the English language. 4. Students know basic units of grammar.
Paper No. (BSc. III) English For Communication	<ol style="list-style-type: none"> 1. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces. 2. The students will be able to face job interviews confidently and efficiently. 3. The students will be able to acquire soft skills required at workplaces and in real life. 4. The students will be able to learn group behavior and team work.
Paper No. BA-II(SEM-VI)(English Communication) For	<ol style="list-style-type: none"> 1. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces. 2. The students will be able to face job interviews confidently and efficiently. 3. The students will be able to acquire soft skills required at workplaces and in real life. 4. The students will be able to learn group behavior and team work.
Paper No. XII (DSE-E136 Introduction To Literary Criticism)	<ol style="list-style-type: none"> 1. Students are able to understand the major trends in criticism. 2. Students are able to interpret critical concepts. 3. Students are able to study the original contributions to literary criticism. 4. Students are acquainted with literary and critical movements.
Paper No. XIII (DSE-E137 English Poetry)	<ol style="list-style-type: none"> 1. Students will be able to trace the development of Indian. 2. Students will be able to appreciate and analyze the poems properly.

		<ol style="list-style-type: none"> 3. Students will have a fairly comprehensive view of the Western and Eastern poetic tradition and they will be able to relate it to various literary movements. 4. Students will have an insight into poetry and they will be able to make a lively and interesting reading.
Paper No. XIV (DSE-E138 English Drama)		<ol style="list-style-type: none"> 1. Students are able to understand historical and psychological concept of the Drama. 2. Students are able to relate drama to their ideological or socio-political contexts. 3. Students are able to improve their creative and imaginative faculties through the reading of drama. 4. Students are able to know about various aspects of the drama.
Paper No. XV (DSE-E139 English Novel)		<ol style="list-style-type: none"> 1. Students are able to understand development of novel. 2. Students are able to understand aspect of novel. 3. Students are able to relate novels to their ideological or socio-political contexts. 4. Students are able to improve their creative and imaginative faculties through the reading of novels.
Paper No. XVI (DSE-E140 Language And Linguistics)		<ol style="list-style-type: none"> 1. Students know words and phrases. 2. Students know and identify elements and types of clauses. 3. Students know types of sentences. 4. Students know the different ways of structuring clauses.
Paper No. (BSc. III) English Communication	For	<ol style="list-style-type: none"> 1. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces. 2. The students will be able to face job interviews confidently and efficiently. 3. The students will be able to acquire soft skills required at workplaces and in real life. 4. The students will be able to learn group behavior and team work.
Paper No. (English Communication)	For	<ol style="list-style-type: none"> 1. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces. 2. The students will be able to face job interviews confidently and efficiently.

	<ol style="list-style-type: none"> 3. The students will be able to acquire soft skills required at workplaces and in real life. 4. The students will be able to learn group behavior and team work. 1. The students will be able to learn to value and respect others' opinions and views and develop democratic attitude. 2. The students will be able to face competitive examinations confidently and efficiently with adequate linguistic confidence. 3. The students will be able to acquire professional skills required in media writing such as writing editorials. 4. The students will be able to learn to appreciate and enjoy reading poetry and prose passages.
<p>Paper No. III (DSC-C5 Literature and Cinema)</p>	<ol style="list-style-type: none"> 1. The students will be able to understand film and its relationship to literature. 2. The students will be able to acquire film literacy through a working knowledge of basic film terminology. 3. The students will be able to develop critical approaches to engage with film adaptations 4. The students will be able to establish a clear understanding of literature through film adaptations of literary texts.
<p>Paper No. VI (DSC-C30 Partition Literature)</p>	<ol style="list-style-type: none"> 1. The students will be able to understand cause and effect of Partition event. 2. The students will be able to explain the hidden human dimensions of the partition. 3. The students will be able to understand the impact of partition on society. 4. The students will be able to understand historical events.
<p>Paper No. (B.Com II -(English For Business Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to describe and recommend sales products. 2. The students will be able to narrate function of the product. 3. The students will be able to learn how to use English for talking to the customers. 4. The students will be able to learn how to use English for discussing prices, discount, etc.
<p>Paper No. BA. PART-II SEMESTER -IX (English For Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces.

	<ol style="list-style-type: none"> 2. The students will be able to face job interviews confidently and efficiently. 3. The students will be able to acquire soft skills required at workplaces and in real life. 4. The students will be able to learn to value and respect others' opinions and views and develop democratic attitude.
<p>Paper No. V (DSC-C29 Literature and Cinema)</p>	<ol style="list-style-type: none"> 1. The students will be able to understand film and its relationship to literature. 2. The students will be able to acquire film literacy through a working knowledge of basic film terminology. 3. The students will be able to develop critical approaches to engage with film adaptations 4. The students will be able to establish a clear understanding of literature through film adaptations of literary texts.
<p>Paper No. IV (DSC-C6 Partition Literature)</p>	<p>The students will be able to understand effect of Partition on Women.</p> <ol style="list-style-type: none"> 1. The students will be able to know the term of Home and Exile. 2. The students will be able to explain the hidden human dimensions of the partition. 3. The students will be able to understand the impact of partition on society. 4. The students will be able to understand historical events.
<p>Paper No. B.Com II (English For Business Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to describe and recommend sales products. 2. The students will be able to narrate function of the product. 3. The students will be able to learn how to use English for talking to the customers. 4. The students will be able to learn how to use English for discussing prices, discount, etc.
<p>Paper No. I BA. PART-I SEMESTER -I (English For Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to acquire communication skills. 2. The students will be able to understand human values through poems and prose. 3. The students will be able to improve the language competence. 4. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces.

<p>Paper No. I</p> <p>B.Sc. PART-I SEMESTER -I</p> <p>(English For Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to acquire communication skills. 2. The students will be able to understand human values through poems and prose. 3. The students will be able to improve the language and business competence. 4. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces.
<p>Paper No. I</p> <p>B.Com. PART-I SEMESTER -I</p> <p>(English For Business Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to acquire communication skills. 2. The students will be able to understand human values through poems and prose. 3. The students will be able to improve the language and business competence. 4. The students will be able to learn how to use English for discussing prices, discount, etc.
<p>Paper No. II</p> <p>BA. PART-I SEMESTER -II</p> <p>(English For Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to acquire communication skills. 2. The students will be able to understand human values through poems and prose. 3. The students will be able to improve the language competence. 4. The students will be able to acquire professional skills required in telephonic communication.
<p>Paper No. II</p> <p>B.Sc. PART-I SEMESTER -II</p> <p>(English For Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to acquire communication skills. 2. The students will be able to understand human values through poems and prose. 3. The students will be able to improve the language and business competence. 4. The students will be able to communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces.
<p>Paper No. II</p> <p>B.Com. PART-I SEMESTER -II</p> <p>(English For Business Communication)</p>	<ol style="list-style-type: none"> 1. The students will be able to acquire communication skills. 2. The students will be able to understand human values through poems and prose. 3. The students will be able to improve the language and business competence. 4. The students will be able to speak in English at private sector.



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No.: B.V.D.P.K.M.S./ /2022-23

Date: 15/08/2022

Notice

All the B.A. students are hereby informed that Department of Economics, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Economics on our college website (https://bvdpkmsangli.edu.in/media/pdf/A2-Economics_CO_PO_051023.pdf) And also, all the files have been shared on our respective WhatsApp group.

Kindly go through it.


(Mr. T. R. Sawant)

HEAD
Department of Economics
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli.

Department of Economics

Program Outcomes (POs)
Program Specific Outcomes (PSOs)
Course Outcomes (COs)

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli.

Department of Economics

Program Outcomes (POs)

After completing the graduation in Economics, the student will be able to,

- PO 1: Justify knowledge of Indian economy.
- PO 2: Explain market structure and pricing policy.
- PO 3: Interpret monetary policy and fiscal policy.
- PO 4: Evaluate international trade issues.
- PO 5: Predict economic growth in five-year plans.
- PO 6: Use of various research techniques in his / her future research.

Program Specific Outcomes (PSOs)

After completing the graduation in Economics, the student will be able to,

- PSO 1: Outline basic concepts of economics.
- PSO 2: Analyse economic behavior in practice.
- PSO 3: Justify historical and current events from an economic perspective.
- PSO 4: Find alternative approaches to economic problems through exposure to coursework in allied fields.
- PSO 5: Create students' ability to suggest solutions for various economic problems.
- PSO 6: Predict growth rate of Primary, Secondary and Service sector of the economy with help of economic parameters.

Course Outcomes (COs)

B. A. in Economics

After the successful completion of this course students will be able to, B.A. I

Sem. I

1. Economics Course - 1 Indian Economy I

- CO 1: Explain features of Indian economy at independence era and structural changes in the Indian economy.
- CO 2: Express his / her own views on poverty and unemployment.
- CO 3: Analyse problems of social inequality and rising of economy, problems, and remedies of regional imbalance in India
- CO 4: Identify trend of population growth, impact of population on economic growth and population policy 2000.

Sem. II

2. Economics Course - 2 Indian Economy II

- CO 1: Identify changing role of agriculture in Indian Economy.
- CO 2: Outline agricultural productivity, Green Revolution, need of 2nd Green Revolution.
- CO 3: Analyse need of industrialization, Industrial Policy since 1991, Problems and prospects of Cottage and Small-scale Industries and Foreign Investment Policies since 1991.
- CO 4: Explain concept, implementation, and impact on Indian economy of Liberalization, Privatization and Globalization.

B.A. II

Sem. III

3. Economics Course - 3 Principles of Macro Economics I

- CO 1: Analyse concept of macroeconomics with definition, nature, and scope.
- CO 2: Explain concept of GNP², NNP³, GDP, GDP at market price, Per Capita Income and Disposable Income.
- CO 3: Explicate functions of money and theories of money, Index numbers and its importance.
- CO 4: Analyse Say's market law, Keynesian theory of employment, consumption

function. investment function and multiplier.

4. Economics Course - 4 Money and Banking

CO 1: Analyse functions of commercial banks, types of banks, investment policy of commercial banks, process of credit creation and its limitations.

CO 2: Analyse features of bank account, opening KYC and closing account, bankers and customers rights and obligations.

CO 3: Identify History and organizational structure of Reserve Bank of India with functions, monetary policy, and credit creation

CO 4: Analyse process and importance of loan, advantages, and disadvantages of bank merge.

5. CC – Principles of Co-operation Paper I

CO 1: Explain meaning, definition, features, and principals of co-operation.

CO 2: Illustrate role of co-operation in mixed economy.

CO 3: Explain the role of co-operative registrar.

CO 4: Analyse role of cooperative auditor.

Sem. IV

6. Economics Course - 5 Principles of Macro Economics II

CO 1: Explain inflation with meaning, types, causes, effects, and remedies of controlling inflation.

CO 2: Identify Hawtrey and Schumpeter theory of trade cycles.

CO 3: Analyse meaning, nature, and scope of Public Finance with principle of maximum social advantage. As well as taxation and budget.

CO 4: Illustrate public debt, Deficit Financing and Fiscal Policy.

7. Economics Course - 6 Banks and Financial Markets

CO 1: Compare Capital Market and Money market in India with Role of SEBI.

CO 2: Demonstrate Indian Financial Institutions, like Non - Bank Financial Institutions, Loan companies in India, EXIM Bank and Mutual Funds.

CO 3: Analyse Recommendation of the Narasimham Committee of 1991 and 1998.

CO 4: Applying E - Banking Service in daily use.

8. Co-operatives in India Paper II

- CO 1: Illustrate state co-operative bank functions, importance and problems.
- CO 2: Explain the problems and remedies of co-operative marketing.
- CO 3: Analyse role and problems of consumer co-operatives as well as sugar co-operatives.
- CO 4: Analyse role of national institutions in co-operation.

B.A. III

Sem. V

9. Economics Course - 7 Principles of Micro Economics I (DSE E-71)

- CO 1: Explain Meaning, Nature, and Scope of Micro Economics as well as its importance and limitations.
- CO 2: Express his / her own views about consumer behavior.
- CO 3: Describe various parameters related to demand and supply.
- CO 4: Explain production theories and cost - benefit analysis of the firm.

10. Economics Course - 8 Economic of Development (DSE E-72)

- CO 1: Explain indicators of economic development, Sustainable and green development.
- CO 2: Identify underdeveloped economies, characteristics of underdeveloped economies. affecting factors on economic development.
- CO 3: Analyse Ricardian classical approach to the development, Myrdal's theory of economic development, Rostow's stages of economic growth and balanced and unbalanced theory of growth.
- CO 4: Build up resources for economic development like Human Capital, Technology. FDI, Aids etc.

11. Economics Course - 9 International Economics I (DSE E-73)

- CO 1: Explain what trade is and trade theories of Ricardian and Heckscher-Ohlin theory of international trade.
Similarities, and dissimilarities in inter-regional and international trade.
- CO 2: Clarify of gains from international trade and its measurement.
- CO 3: Explain meaning of exchange rate, PPP10 theory, concept of fixed exchange rate, flexible exchange rate and floating exchange rate.

CO 4: Explicate tariffs and quotas, free trade, and trade protection policy.

12. Economics Course - 10 Research Methodology in Economics I (DSE E-74)

CO 1: Analyse basic concept of research and its methodology.

CO 2: Carry out a literature review, Steps of research, features of good research design and importance of research design.

CO 3: Use of methods of data collection in his/her research.

CO 4: Clarify sources of primary and secondary data and importance of data collection.

13. Economics Course - 11 History of Economic Thoughts I (DSE E-75)

CO 1: Explain thoughts of classical economist like, Adam Smith's theory of value and canon and taxation, Malthusian theory of population etc.

CO 2: Describe economic thoughts of great economist Fredrick List on stages Economic growth.

CO 3: Analyse thoughts of Karl Marks about economic development.

CO 4: Manipulate scientific concept of socialism and materialist, Theory of value, Theory of Surplus value and Concept of falling rate of profit.

Sem. VI

14. Economics Course - 12 Principles of Micro Economics II (DSE E-196)

CO 1: Analyse the economic behavior of individual firms and markets.

CO 2: Explain a firm's profit maximizing strategies under different market conditions.

CO 3: Justify the factor pricing.

CO 4: Comprehension classical and Keynesian theory of interest and risk and uncertainty theory of profit.

15. Economics Course - 13 Economics of Planning (DSE E-197)

CO 1: Analyse development of planning and planning machinery in India.

CO 2: Evaluate sectorial performance of the Indian economy.

CO 3: Explain NITI Ayog, need for establishment, organization, objectives, and work.

CO 4: Identify plan models in Indian plan period.

16. Economics Course - 14 International Economics II (DSE E-198)

CO 1: Illustrate difference between balance of trade and balance of payments.

CO 2: Discuss the various types of foreign capital.

CO 3: Compute the trends of Foreign Direct Investment in India.

CO 4: Analyse the impact of international institutions on Indian economy.

17. Economics Course - 15 Research Methodology in Economics II (DSE E-199)

CO 1: Analyse optimum size of sampling.

CO 2: Use techniques of data analysis in research.

CO 3: Classified the data in tabular form.

CO 4: Clarify how to write a research proposal for grants.

18. Economics Course - 16 History of Economic Thoughts II (DSE E-200)

CO 1: Illustrate views of Mahatma Phule on agriculture and education.

CO 2: Explain views of Dr. Babasaheb Ambedkar on money, agriculture, and development policy. As well as Drain theory of Dadabhai Nauroji.

CO 3: Justify views of Mahatma Gandhi views on village development, Swadeshi and Gram Swarajya.

CO 4: Clarify economic thoughts of Gopal Krishna Gokhale, D. R. Gadgil, V. M. Dandekar and Amartya Sen.



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And also all the files have been shared on our respective what's App group.

Kindly go through it.

(Dr. N. V. Gaikwad)

HEAD

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BHARATI VIDYAPEETH'S

Dr. Patangrao Kadam Mahavidyalaya, Sangli

Department of Geography (2022-23)

B.A. (Geography)

PROGRAM OUTCOMES:

1. Acquire the knowledge of Geography and will correlate it with their practical life.
2. Demonstrate knowledge of physical and cultural features of the earth and locate them on a map.
3. Apply various statistical formulas to analyse data. Identify and obligate to professional ethics, moral responsibilities and scientific norms.
4. Involve in independent and lifelong learning. Demonstrate project management and entrepreneurial skills.
5. Students will read, interpret, and generate maps and other geographic representations as well as extract, analyse and present information from a spatial perspective.
6. Develop a sense of research to predict cause and affect relationships.

PROGRAMME SPECIFIC OUTCOMES:

1. Student will gain the knowledge of physical geography. They will gather knowledge about the fundamental concepts of Geography and will have a general understanding about the geomorphologic and geotectonic process and formation. Imbibing knowledge, skills and holistic understanding of the Earth, atmosphere, oceans and the planet through analysis of landform development; crustal mobility and tectonics, climate change.
2. Inculcating a tolerant mind-set and attitude towards the vast socio-cultural diversity of India by studying and discussing contemporary concepts of social and cultural geography. Explaining and analysing the regional diversity of India through interpretation of natural and planning regions.
3. Analysing the differential patterns of the human habitation of the Earth, through studies of human settlements and population dynamics. Understanding and accounting for regional disparities, poverty, unemployment and the impacts of globalization
4. Understanding the history of the subject; over viewing ancient and contemporary geographical thought and its relationship with modern concepts of empiricism, positivism, radicalism, behaviourism, idealism etc.
5. Sensitization and awareness about the hazards and disasters to which the subcontinent is vulnerable; and their management.

6. Training in practical techniques of mapping, cartography, software, interpretation of maps, photographs and images etc. so as to understand the spatial variation of phenomena on the Earth's surface. They will learn how to prepare map based on GIS by using the modern geographical map making techniques.

COURSE OUTCOMES OF B.A. III (Geography)

Paper 7: EVOLUTION OF GEOGRAPHICAL THOUGHT

- 1) Student should be able to understand in-depth about the Evolution of Geographical Thought.
- 2) Students should be able to analyse the recent trends in geography.
- 3) Student should be able to make use of various models of paradigms and debates in the Geographical studies.
- 4) Understanding of recent trends in geography.

Paper 8: GEOGRAPHY OF INDIA

- 1) The student understands the dimensions and physiography of India.
- 2) The students are fully aware about the climatic seasons in India.
- 3) The student learns about soils, vegetation's, drainage systems in India.
- 4) The student acquires an importance of agriculture and industry in Indian economy.

Paper 9: POPULATION GEOGRAPHY

- 1) The student understands sources of demographic data.
- 2) The student learns distribution and trends of population growth in the developed and less developed countries.
- 3) The student understands population composition in different regions of the world.
- 4) The student understands the problem of over population and will be act for control population.

Paper 10: ECONOMIC GEOGRAPHY

- 1) Student should be able to understanding about the economic geography.
- 2) Student able to get knowledge about locational factors of economic activities with special reference to agriculture and industry.
- 3) Student able to understanding of the basic concepts related to manufacturing and major manufacturing industries (selected countries) of the world.
- 4) Student able to understanding of the transport and trade.

Paper 11: URBAN GEOGRAPHY

- 1) The student learns the importance of urban settlements.
- 2) The student understood the types of Urban Settlements, Site and Situations.
- 3) The student learns relationship between human activities and urban development.
- 4) The student gets knowledge of present urban problems and thinks about solutions of it.

Paper 12: POLITICAL GEOGRAPHY

- 1) The student understands the Political geography as a fundamental branch of Human Geography.
- 2) The student learns theories of Political Geography.
- 3) The student aware about resource conflicts and discuss regarding solutions, displacement.
- 4) To further the understanding of the students of uneven outcomes of political processes and the ways in which political processes are themselves affected by spatial structures.

Paper 13: FUNDAMENTALS OF MAP MAKING AND MAP INTERPRETATION

- 1)The student understands the elements map, and able to draw graphical scale and projection.
- 2) The student receives the knowledge about the analysis of landforms and its identification.
- 3) The student obtained the skills about map interpretation S.O.I. topographical maps and I.M.D. weather maps.
- 4) The students acquire different cartographic techniques and methods used for representation of demographic and physio- socio-economic database

Paper 14: ADVANCED TOOLS, TECHNIQUES & FIELD WORK IN GEOGRAPHY

- 1) The student obtains computer knowledge & skill of interpretation aerial photograph and satellite image.
- 2) The student gets hands of GIS and made use of GPS in day today life.
- 3) The student processes the geographical data using with different statistical methods.
- 4) The student does field work by use of modern techniques and able to write project report.



'Social Transformation Through Dynamic Education'

Bharati Vidyapeeth's

Dr. Patangrao Kadam Mahavidyalaya, Sangli

(Arts, Science, Commerce & Community College)

DST-FIST Funded College (Level-0)

Founder

Dr. Patangrao Kadam

M. A., L. L. B., Ph. D.

Affiliated to Shivaji University, Kolhapur.

Accredited with 'B⁺⁺' Grade by NAAC, Bengaluru (CGPA 2.96)

Principal

Dr. D. G. Kanase

M. Sc., Ph. D.

P. O. Box No. 74, Sangli- 416416. Phone: (0233) (O) 2535229, Tele. Fax.- 2535993

Email:-bvpc_sangli@yahoo.co.in; Website: <http://dpkmsangli.bharativedyapeeth.edu>

No.: B.V.D.P.K.M.S./2022-23

Date: 10/8/2022

Notice

All the B. A. students are hereby informed that Department of Physical Education, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Physics on our college website (https://bvdpkmsangli.edu.in/media/pdf/A4Physical_Education_CO_PO_051023.pdf).

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.


(Dr. R. S. Kamble)
HEAD

Department of Physical Education
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli

Department of Physical Education

Program Outcomes (POs)

After successfully completing B. A. (Physical Education) programme students will be able to,

PO1: Technical Knowledge- Use technical knowledge of preparation of play fields as well as care and maintenance of sports equipments.

PO2: Scientific Knowledge- Explain basics of anatomy, physiology, dietetics, scientific knowledge of exercises and effects of exercises on various systems of human body.

PO3: Technical Skills: Demonstrate techniques of individual games, team games and gymnastics; perform yogasana and pranayam participate in various individual and team games as well as in recreational games.

PO4: Health and Fitness: Inculcate healthy habits and adopt healthy, active lifestyle; make effective use leisure time; develop physical fitness by performing physical activity.

PO5: Communication: Communicate effectively on health and healthy lifestyle with the community and society by acquiring knowledge of health, fitness, health education and community health.

PO6: Research attitude: Understand the need & importance of research and innovation in physical education as well as in sports and develop research attitude.

Department of Physical Education
Program Specific Outcomes (PSOs)

After successfully completing B. A. (Physical Education) programme
Students will be able to,

PSO1: Understand the meaning of physical education for personal development.

PSO2: Experience to perform basic skills of team games, gymnastics, yogasanas and pranayamas.

PSO3: Inculcate healthy habit and adopt physically active lifestyle.

PSO4: Apply knowledge of physical education and health education for the wellbeing of society.

PSO5: On completion of this course students will have hands of experience to Athletics events and Weight Lifting, Badminton, Table Tennis with Their Different Styles. Modern Techniques & Performance. Asana and Pranayam. Detail about First Aid with Practical's.

PSO6: The basic knowledge in anatomy physiology to know at higher level. The content of course is also important to qualify the NET, SET, GATE and other job-oriented examinations for physical students.

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Physical Education
COs

B. A. Part- III Semester- V Course: Health Education (Paper-VII)

Course Code: DSE-E41 After successfully completion of these course students will be able to,

CO1: Explain concept, nature and scope of health education.

CO2: Analyze factors influencing on health.

CO3: Identify communicable diseases and explain causes and prevention of communicable diseases.

CO4: Identify and describe health problems in family, community, school and colleges.

B. A. Part- III Semester- V Course: Recreation in Physical Education (Paper-VIII)

Course Code: DSE-E42 After successfully completion of these course students will be able to,

CO1: Explain concept of rhythm and rhythmic exercises.

CO2: Analyze need and importance of rhythmic exercises.

CO3: Explain concept of rhythm and recreation.

CO4: Describe recent trends in recreation.

B. A. Part- III Semester- V Course: Yoga (Paper-IX)

Course Code: DSE-E43 After successfully completion of these course students will be able to,

CO1: Explain aims and objectives of yoga in human life

CO2: Describe promotive, preventive and curative aspects of physical health tackled through yogic practices.

CO3: Explain nature of mental health problems.

CO4: Describe promotive, preventive and curative aspects of mental health tackled through yogic practices.

B. A. Part- III Semester- V Course: Anatomy and Physiology (Paper-X)

Course Code: DSE-E44 After successfully completion of these course students will be able to,

- CO1: Explain meaning and importance of anatomy and physiology.
- CO2: Identify types of bones and joints in the human body.
- CO3: Explain major movements around joints.
- CO4: Describe structure and functions of respiratory system and muscular system
- CO56: Analyze the effects of exercise on respiratory system.

B. A. Part- III Semester- V Course: Dietetics and Nutrition (Paper-XI)

Course Code: DSE-E45 After successfully completion of these course students will be able to,

- CO1: Describe the components of diet and their functions.
- CO2: Illustrate sources of balanced nutrients.
- CO3: Explain causes, signs and symptoms of underweight and obesity.
- CO4: It analyzes the effect of diet and nutrition on human body.

B. A. Part- III Semester- VI Course: Health Education Program (Paper-XII) Course

Code: DSE-E166 After successfully completion of these course students will be able to,

- CO1: Explain importance of exercise in health and fitness.
- CO2: Describe adverse effects of drugs, alcohol and tobacco on sports performance.
- CO3: Explain concept, scope, need, importance and role of population education.
- CO4: Illustrate aims and objectives, programs and projects of World Health Organization..

B. A. Part- III Semester- VI Course: Research in Physical Education Course (Paper-XIII)

Code: DSE-E167 After successfully completion of these course students will be able to,

- CO1: Explain concept and meaning of research.
- CO2: Explain types and methods of research.
- CO3: Describe various stages in research process.

CO4: It describes the research outcome physical education in society.

B. A. Part- III Semester- VI Course: Yoga and Health (Paper-XIV)

Course Code: DSE-E168 After successfully completion of these course students will be able to,

CO1: Explain concept of emotional health.

CO2: Describe effects of yogic exercises on respiratory and nervous system.

CO3: Analyze psychological basis of sports.

CO4: Analyze contribution of yogic practices for the development of sports performances.

B. A. Part- III Semester- VI (Paper-XV)

Course: Anatomy and Physiology of Exercise

Course Code: DSE-E169 After successfully completion of these course students will be able to,

CO1: Explain constituents of blood and its functions

CO2: Describe structure and function of heart.

CO3: Explain meaning of blood pressure, pulse, blood groups and oxygen debt.

CO4: Describe structure and function of digestive, nervous and excretory system.

B. A. Part- III Semester- VI Course: Dietetics and Hygiene (Paper-XVI)

Course Code: DSE-E170 After successfully completion of these course students will be able to,

CO1: Explain different types of foods and its effects on health.

CO2: Describe need, importance and composition of athletic diet.

CO3: Describe desirable hygienic habits.

CO4: Illustrate school health programs and its supervision.

B.A.III Practical Outcomes

1. Explain objectives and rules of first aid.
2. Demonstrate fundamental skills of Badminton, foot ball and cricket techniques and styles of weight lifting, Judo, wrestling, triple jump and Javelin throw, 110 m. Hurdles, baton exchange.
3. Demonstrate techniques of gymnastics-front role, back role, cartwheel, dive and role, and hand stand.
4. Demonstrate Asanas and pranayamas.
5. Identify materials in first aid box.
6. Identify types of fractures, its signs and symptoms Use sling and splint.
7. Identify types, signs and symptoms of bleeding.
8. Explain artificial respiration and its methods.
9. Apply bandage, slings and do simple dressing.
10. Present recreational game.
11. Mark the 400 m track.



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No.: B.V.D.P.K.M.S./ /20 -

Date: 22/08/2022

Notice

All the B.A. students are hereby informed that Department of Political Science, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Political Science on our college website

https://bvdpkmsangli.edu.in/media/pdf/A5-Political_Science_CO_PO_051023.pdf

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

(Dr. Vandana Satpute)

HEAD

Department of Political Science
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Political Science

Program Outcomes (POs)
Program Specific Outcomes (PSOs)
Course Outcomes (Cos)

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Political Science

Program Outcomes (POs)

After completing the graduation in Political Science, the student will be able to,

PO1: Develop leadership with public vision.

PO2: Enhance innovative approach of the student towards profession in Political Science.

PO3: Becomes a responsible citizen will informed in fundamental right and obligations as well.

PO4: Develop inclusive understanding of representation.

PO5: The course curriculum inculcates among students a basic understanding of the Citizen- state relationship.

PO6: Understanding inter-relationship between policy decisions and its effects on Society.

Program Specific Outcomes (PSOs)

After completing the graduation in Political Science, the student will be able to,

PSO1: Learn organization of government machinery and representation.

PSO2: Get effectiveness in translating the government philosophy into programme.

PSO3: Deal with the concepts and dimensions of international politics.

PSO4: Understand the constitutional and legal provision of America.

PSO5: Understand the continuity and change within the western political traditions.

PSO6: Critical evaluation of social economic and political variables for a proper understanding of the plurality of Indian society.

Course Outcomes (COs)
B.A. in Political Science
(2021-2022)

	Course Name	Course Outcomes (COs)
B.A.I	DSC (B4) Paper-I Introduction to Political Science	CO1: Acquire domain Knowledge. CO2: Understand importance of Political Science. CO3: Understand sub disciplines of Political Science. CO4: Understand Concept of State and Democracy. CO5: Understand Key Concepts of Political Science.
	DSC (B18) Paper-II Indian Constitution	CO1: The students will get knowledge about making and philosophy of Indian Constitution. CO2: The students will become aware about Fundamental Rights. CO3: The students will become aware about Directive Principles and Fundamental Duties. CO4: The students will understand about working of Legislature, Executive and Judiciary. CO5: The students will understand about working and role of Judiciary.
B.A.II	DSC (D7) Paper-III Political Process in India	CO1: Understanding the nature and characteristics of Indian Federalism CO2: Examining the Institutions of Electoral process in India. CO3: Discussing the party System of India. CO4: Analyzing the issues in Indian Politics.
	DSC (D8) Paper-IV Indian Political Thought Part -I	CO1: Analyzing the selected thought of Kautilya. CO2: Analyzing the selected thought of Mahatma Phule. CO3: Analyzing the selected thought of Justice M.G. Ranade. CO4: Analyzing the selected thought of B.G. Tilak.

	DSC (D35) Paper-V Local Self Government in Maharashtra	CO1: Understanding historical background of local self-government CO2: Examining the institutions of Rural local self-government. CO3: Examining the institutions of Urban local self-government. CO4: Discussing the constitutional amendments and challenges before local self-government.
	DSC (D36) Paper-VI Indian Political Thought -II	CO1: Analyzing the selected thought of M. K. Gandhi. CO2: Analyzing the selected thought of Jawaharlal Nehru. CO3: Analyzing the selected thought of Justice Dr. B.R. Ambedkar. CO4: Analyzing the selected thought of M. N. Roy.
	CGE Paper- I Public Administration	CO1: Explaining the Nature, scope of Public Administration. CO2: Explaining the Principles of Organization. CO3: Discussing the Public Corporation. CO4: Explaining the Changing perspective in Public Administration.
	CGE Paper- II Public Administration	CO1: Discussing the Personnel Administration. CO2: Discussing the Financial Administration, budgetary process in India and parliamentary financial committee. CO3: Discussing Delegated Legislation. CO4: Understanding the concepts of good governance, discussing right to information.
B.A.III	DSE E-76 Paper No. VII Political Theory	CO1: Getting basic knowledge of Political Theory. CO2: Understanding of approaches to Political Theory. CO3: Knowing Behavioral movement in Political Science. CO4: Acquiring knowledge about concepts of Power, Authority and Legitimacy.
	DSE E-77 Paper No. VIII Public Administration	CO1: Acquiring information about various concepts in Public Administration.

		<p>CO2: Getting knowledge about Organization, its Bases, Principles and Units.</p> <p>CO3: Getting acquainted with the budgetary process in India.</p> <p>CO4: Understanding the interface between citizens and Public Administration; and other agencies in society and Public Administration.</p>
	DSE E-78- Paper No. IX International Politics	<p>CO1: Getting acquainted with the concepts and dimension of International Politics.</p> <p>CO2: To understand main theories of International Politics.</p> <p>CO3: To know the working of international and regional organizations and the new world order that emerged after the end of cold war.</p> <p>CO4: To understand India's international influencer aspects.</p>
	DSE E-79 Paper No. X Comparative Politics	<p>CO1: Students will be familiar with basic theory of Comparative Politics</p> <p>CO2: Students be able to understand constitutionalism, federalism.</p> <p>CO3: Students shall understand party system and pressure groups and its functioning.</p> <p>CO4: Students shall understand classification of political parties and pressure groups.</p>
	DSE E-80 Paper No. XI Western Political Thought – I	<p>CO1: Students will get acquainted with the western tradition from Plato to Rousseau</p> <p>CO2: Students will understand the evolution of western Political idea.</p> <p>CO3: Students will be able to study historical aspects of western state and society.</p> <p>CO4: students are expected to develop critical thinking and arguments from this course.</p>

	DSE E- 201 Paper No. XII Modern Political Concepts	CO1: Student will know modern concepts such as Feminism, Multiculturalism, Environmentalism and Civil Society etc. CO2: This will enable students to have comprehensive idea of contemporary scenario in political science. CO3: To know about new points of view of modern society. CO4: To know more about various movements.
	DSE E- 202 Paper NO. XIII Politics and Movements in Maharashtra	CO1: Student will know the Political System of Maharashtra. CO2: They will understand the process of formation of Maharashtra State. CO3: Student will know the movements, pressure groups and Political Parties in Maharashtra. CO4: This will provide comprehensive idea of contemporary politics of Maharashtra.
	DSE E- 203 Paper No. XIV Foreign Policy of India	CO1: Student will understand, 'what is Foreign Policy and what are The objectives of Foreign Policy.' CO2: This will provide comprehensive idea of foundation of Indian Foreign Policy. CO3: Student will come to know India's relation with super powers and neighboring countries. CO4: It will bring attention of the students towards the current national and international political situation and foreign policy.
	DSE E- 204 Paper No. XV Comparative Government (With special reference to UK & USA)	CO1: To familiarizes students with composition, functions, and law-making process of legislative bodies in UK and USA. CO2: To introduce the students with execution process of laws in UK and USA.

		<p>CO3: To introduce the Judicial System in UK and USA and procedure of adjudication.</p> <p>CO4: Students will understand the role of Pressure Groups in the Politics of UK and USA.</p>
	<p>DSE E- 205 Paper No. XVI Western Political Thought-II</p>	<p>CO1: The students will understand Political views of J.S. Mill, Karl Marx, Gramsci & Hannah Arendt.</p> <p>CO2: The students will get acquainted with various aspects of state and society with western perspective.</p> <p>CO3: Students will understand important philosophy and ideology of Political thinkers.</p> <p>CO4: To weigh the influence of modern political thinkers on Indian Society.</p>



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Principal

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No.: B.V.D.P.K.M.S./

/2022-2023

Date: 14/08/2022

Notice

All the B.A. I and II year students of Sociology Subject are hereby informed that, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus and Course Outcomes (COs) of Sociology on our college website (https://bvdpkmsangli.edu.in/media/pdf/A6-Sociology_CO_PO_051023.pdf) And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.


(Mr. S. A. Kamble)

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli.

Department of Sociology

Course Outcomes (COs)

Bharati Vidyapeeth's

Dr. Patangrao Kadam Mahavidyalaya, Sangli.

Course Outcomes (COs)

B.A. I & II in Sociology

	Course Name	Course Outcomes (COs)
B.A.I	DSC (B2) Paper-I Introduction to Sociology	CO1: Understand Nature of Sociology CO2: Understand Basic Concept in Sociology CO3: Understand Social Institutions and their functions CO4: Understand Key Concepts Social Groups
	DSC (B16) Paper-II Principles of Sociology	CO1: The students will knowledge Culture CO2: Understand Basic Concept of Socialization CO3: Understand Social control CO4: The students will understand concept of social change.
B.A.I	Paper-I Scientific Method (Compulsory)	CO1: To make acquainted with science CO2: To import value education CO3: To explain the major teaching principles of causation CO4: To discuss the major problem of scientific method
	Paper-II Scientific Method (Compulsory)	CO1: Explain the importance of Techniques of Social Research. CO2: Explain the importance of scientific method. CO3: To create awareness about Science and Technology among students with Scientific method.
B.A.II	DSC – D3 Paper No- III Social Issues in India	CO1: Understanding social Issues Its Classification and need of study. CO2: Awareness about Issues related Elderly and awareness about Female Foeticide. CO3: Awareness about Issues of crime and Juvenile Delinquency. CO4: Understanding Human Right and cyber-Crime.
	DSC – D4 Paper No- IV Social Movement in India	CO1: Understanding of meaning characteristics elements of social movement.

		<p>CO2: Awareness about peasant problem and its impact.</p> <p>CO3: Understanding Dalit movement.</p> <p>CO4: Awareness women movement.</p>
	DSC – D31 Paper No- V Gender and Violence	<p>CO1: Understanding meaning, Nature, and major Gender Issues.</p> <p>CO2: Awareness about Domestic Violence.</p> <p>CO3: Understanding about types of violence against women.</p> <p>CO4: Awareness about women’s Harassment at workplace</p>
	DSC – D32 Paper No- VI Sociology of Health	<p>CO1: Understanding nature subject matter and importance of sociology of health.</p> <p>CO2: Awareness about major diseases in India.</p> <p>CO3: Understanding Health Policy in India.</p>



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No.: B.V.D.P.K.M.S./

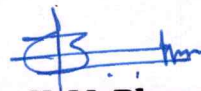
/2022-2023

Date: 14/08/2022

Notice

All the B.A. I and II year students of Marathi Subject are hereby informed that, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus and Course Outcomes (COs) of Marathi on our college website (https://bvdpkmsangli.edu.in/media/pdf/A7-Marathi_CO_PO_051023.pdf) And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.


(Dr. K. M. Bhawari)

Marathi subject (C.O.)

B.A. part - 1 Compulsory Marathi (2017-2018)

१. साहित्यातील जीवनदर्शन, समकाल, व्यवहार याची जाणीव दिली.
२. साहित्यविषयक आकलन क्षमता वाढविली.
३. उपयोजित भाषा कौशल्य प्राप्त केले.
४. युवक गटातील विद्यार्थ्यांची मनोभूमिका पक्की केली.

B.A. part - 1 Compulsory Marathi (2019-2020)

१. विद्यार्थ्यांची मराठी भाषा आणि साहित्य विषयी अभिरुची विकसित केली.
२. मराठी साहित्यपरंपरा, लेखक, कवी यांचा परिचय करून दिला.
३. विद्यार्थ्यांमध्ये मातृभाषा, राष्ट्रीय एकात्मता आणि उच्च मानवी मूल्यांविषयी जाणीव निर्माण केली.
४. विद्यार्थ्यांना व्यक्तिमत्व विकासाला आवश्यक असणाऱ्या घटकांचा परिचय करून दिला.

B.A. part - 1 Optional Marathi (2017-2018)

१. ललित साहित्य प्रकारांची ओळख करून दिली.
२. साहित्यातून मानवीजीवन व व्यवहार समजावून दिला.
३. विद्यार्थ्यांमध्ये वाङ्.मयीन अभिरुची विकसित केली.
४. विद्यार्थ्यांमधील साहित्य आणि संस्कृती, भाषा आणि संस्कृती यांचा अनुबंध तपासला.

B.A. part - 1 Optional Marathi (2019-2020)

१. विद्यार्थ्यांची मराठी भाषा आणि साहित्याविषयी अभिरुची विकसित केली.
२. मराठी साहित्यपरंपरा, लेखक, कवी यांचा परिचय करून दिला.
३. काव्यप्रतिमा आणि कवितेतील सौंदर्य स्थळे यांची जाणीव करून दिली.
४. निबंधलेखनाच्या माध्यमातून भाषा उपयोजनाची कौशल्ये विकसित केली.

B.A. part - 2. Paper No. 3. (2017-2018)

(सभासद बखर व अनुवाद प्रक्रिया)

१. मध्ययुगीन मराठी वाङ्मयाचा व भाषेचा परिचय करून घेतला.
२. विद्यार्थ्यांना बखर या वाङ्मय प्रकाराची ओळख झाली.
३. विद्यार्थ्यांना अनुवाद प्रक्रियेचा परिचय झाला.
४. समकालीन जाणीवा व्यक्त करणाऱ्या कथांचा परिचय करून घेतला.

B.A. part - 2. Paper No. 3. DSC-C1 (2019-2020)

(काय डेंजर वारा सुटलाय - नाटक)

१. नाटक या वाङ्मय प्रकाराचे आकलन करून घेतले.
२. नाट्याभ्यासाद्वारे प्रयोगरूप नाटक व नाट्य क्षेत्रातील ज्ञानसंपदानास चालना मिळाली.
३. नाट्याभ्यासातून सभ्यता, संस्कृती, राष्ट्रीय एकात्मता व बंधुता वाढीस लागण्यास मदत झाली.
४. विद्यार्थ्यांमध्ये संवादलेखन कौशल्य विकसित झाले.

B.A. part - 2. Paper No. 4. (2017-2018)

(जनाबाईंचे अभंग व संपादन प्रक्रिया)

१. विद्यार्थ्यांना अभंग या काव्यप्रकाराची ओळख झाली.
२. मध्ययुगीन मराठी वाङ्मयाचा व भाषेचा परिचय करून घेतला.
३. संपादन प्रक्रियेचा परिचय झाला.
४. समकालीन जाणीवा व्यक्त करणाऱ्या कवितेचा परिचय करून घेतला.

B.A. part - 2. Paper No. 4. DSC-C2 (2019-2020)

(काव्यगंध)

१. मराठी काव्यपरंपरा व साहित्यप्रवाहांची ओळख करून घेतली.
२. मराठी काव्यातून प्रकट होणारा माणूस आणि समाज यातील परस्पर संबंध शोधले.
३. कवितेच्या कलात्मक आकृतीबंधाचे मोल अभ्यासले.
४. काव्यप्रवाहानुरूप काव्यलेखनाचे विशेष समजावून घेतले.



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Email:-bvpkc_sangli@yahoo.co.in; Website: http://dpkmsangli.bharativedyapeeth.edu

No.: B.V.D.P.K.M.S./

/2022-23

Date: 16/08/2022

Notice

All the B.A. I and II year students of Hindi Subject are hereby informed that, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus and Course Outcomes (COs) of Hindi on our college website (<https://bvdpkmsangli.edu.in/media/pdf/A8-Hindi Course Outcomes 051023.pdf>) And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

(Dr. S. R. Jadhav)

भारती विद्यापीठाचे,
डॉ. पतंगराव कदम महाविद्यालय, सांगली

Course Outcomes (COs) (फलनिष्पत्ति)

बी. ए. भाग - 1

हिंदी ऐच्छिक

सेमी. - 1

हिंदी कविता (DSC-A2) (पेपर-1)

फलनिष्पत्ति (Outcomes)

1. छात्रों की हिंदी कविता के प्रति रुचि बढी तथा छात्र हिंदी कविता से परिचित हुए।
2. छात्र हिंदी के प्रतिनिधि कवियों से परिचित हुए।
3. छात्रों में हिंदी भाषा के श्रवण, पठन एवं लेखन की क्षमताओं का विकास हुआ।
4. छात्रों में नैतिक मूल्य, राष्ट्रीय मूल्य एवं उत्तरदायित्व के प्रति आस्था निर्माण हुई।
5. छात्रों की विचार क्षमता तथा कल्पनाशीलता में वृद्धि हुई।

सेमी. - 2

हिंदी गद्य साहित्य (DSC-A14) (पेपर-2)

फलनिष्पत्ति (Outcomes)

1. छात्रों की हिंदी साहित्य के प्रति रुचि बढी तथा छात्रों को साहित्य की विविध विधाओं का परिचय हुआ।
2. छात्रों को हिंदी के प्रतिनिधि गद्यकारों का परिचय हुआ।
3. छात्रों में हिंदी भाषा के श्रवण, पठन एवं लेखन की क्षमताओं का विकास हुआ।
4. छात्रों में नैतिक मूल्य, राष्ट्रीय मूल्य एवं उत्तरदायित्व के प्रति आस्था निर्माण हुई।
5. छात्रों की विचार क्षमता तथा कल्पनाशीलता को बढावा मिला।

बी. ए. भाग – 2

हिंदी ऐच्छिक

सेमी. – 3

अस्मितामूलक विमर्श और हिंदी गद्य साहित्य (पेपर-3)

फलनिष्पत्ति (Outcomes)

1. छात्रों को कथा साहित्य का स्वरूप, तत्व एवं प्रकारों का अध्ययन हुआ।
2. छात्रों को समीक्षा मानदंडों के आधार पर कथा साहित्य का परिचय तथा अध्ययन हुआ।
3. छात्रों को कथेतर साहित्य का समीक्षात्मक अध्ययन हुआ।
4. छात्रों को कथा और कथेतर साहित्य का वर्तमान प्रासंगिकता के साथ अध्ययन हुआ।

सेमी. – 3

हिंदी संतकाव्य तथा राष्ट्रीय काव्यधारा (पेपर-4)

फलनिष्पत्ति (Outcomes)

1. छात्रों की हिंदी साहित्य के प्रति रुचि बढी तथा छात्रों को काव्य के विविध प्रकारों का परिचय हुआ।
2. छात्रों को मध्यकालीन और आधुनिक हिंदी कवियों का परिचय हुआ।
3. छात्रों में नैतिक मूल्य, राष्ट्रीय मूल्य एवं उत्तरदायित्व के प्रति आस्था निर्माण हुई।
4. छात्रों को आधुनिक हिंदी कविता में चित्रित विविध विमर्शों का परिचय हुआ।

सेमी. – 4

रोजगार परक हिंदी (पेपर-5)

फलनिष्पत्ति (Outcomes)

1. छात्रों में हिंदी में कार्य करने की विचार क्षमता, कल्पनाशीलता एवं रुचि विकसित हुई।
2. छात्रों को रोजगार उन्मुख शिक्षा एवं कौशल प्रदान हुआ।
3. छात्रों में कार्यालय और व्यवसाय में हिंदी प्रयोग का कौशल ज्ञान विकसित हुआ।
4. छात्रों को पत्राचार के स्वरूप का परिचय हुआ।
5. छात्र अनुवाद और व्यावहारिक लेखन के महत्व तथा उपयोगिता से परिचित हुए।

सेमी. - 4

अस्मितामूलक विमर्श और हिंदी पदय साहित्य (पेपर-6)

फलनिष्पत्ति (Outcomes)

1. छात्र हिंदी के प्रतिनिधि कवियों से परिचित हुए।
2. छात्रों में हिंदी भाषा के श्रवण, पठन एवं लेखन की क्षमताओं का विकास हुआ।
3. छात्रों की हिंदी साहित्य के प्रति रुचि बढी तथा छात्रों को काव्य के विविध प्रकारों का परिचय हुआ।
4. छात्रों में नैतिक मूल्य, राष्ट्रीय मूल्य एवं उत्तरदायित्व के प्रति आस्था निर्माण हुई।



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No.: B.V.D.P.K.M.S./


/20 ~~2-2-23~~

Date: 17/08/2022

Notice

All the B.A. I and II year students of History Subject are hereby informed that, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus and Course Outcomes (COs) of History on our college website (https://bvdpkmsangli.edu.in/media/pdf/A9-History_CO_PO_051023.pdf) And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.


(Mr. A. A. Kumbhar)

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli

Department of History

1. History Course -1 Rise of Maratha Power I (DSC-B-1)

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

Co 1: Understand the background of Rise of Maratha Power

Co 2: Explain the contribution of Chhatrapati Shivaji Maharaj in the Treaty of Purander,
Coronation, Expedition to Karnataka

Co 3: Acquaint himself with the contribution of Chh. Sambhaji Maharaj, Chh. Rajaram
Maharaj, Maharani Tarabai in Maratha War of Independence

Co 4: Know the Importance of Sources for understanding Maratha History

2. History Course - 2 Polity, Society & Economy Under the Maratha II (DSC-B-2)

Co 1: Understand the background of polity under the Maratha Empire

Co 2: Explain the contribution of Chh. Shivaji Maharaj in the Agriculture, Industry
and Trade

Co 3: Acquaint the students with the political, socio-economic and religious life of the people
during the 1600-1707 period.

Co 4: Know the Importance of policy and contribution of Shivaji Maharaj

3. History Course - 3 History of Modern Maharashtra (1900-1960) III (DSC-D-1)

Co 1: Understand the beginnings and growth of nationalism consciousness in Maharashtra

Co 2: Explain the contribution of Maharashtra to the national movement

Co 3: Give an account of various movements of the peasants, workers, women and backward
classes

Co 4: Know the background and events which led the formation of separate state of Maharashtra

4. History Course - 4 History of India (1757-1857) IV (DSC-B-15)

Co 1: Acquaint himself with significant events leading to establishment of the rule of East India Company

Co 2: Know the colonial policy adopted by the company to consolidate its rule in India

Co 3: Understand the Structure change initiated by colonial role in Indian economy

Co 4: Explain the various against rule of the East India Company

5. History Course - 5 History of Modern Maharashtra (1960-2000) V (DSC-D-29)

Co 1: Acquaint himself with the contribution of eminent leaders of Maharashtra

Co 2: Know about the economic transformation of Maharashtra

Co 3: Understand the salient feature of change in society

Co 4: Explain the growth of education

6. History Course - 6 History of Freedom Struggle (1757-1857) VI (DSC-B-30)

Co 1: Understand the events lead to the growth of nationalism in India

Co 2: Acquaint himself with Major events of the freedom struggle under the leadership of Mahatma Gandhi

Co 3: Explain the contribution of revolutionaries, Left Movement and Indian National Army

Co 4: Know the concept of communalism and the causes and effects of the partition of India

7. History Course - 7 Social Reform In India IDS I (DSC)

Co 1: Understand the salient features of Prominent socio- religious reform movement

Co 2: Explain the thought and work of Mahatma Phule for radical transformation of Indian society

Co 3: Know the measures taken by Rajashri Shahu Maharaj for emancipation of lower classes

and women

Co 4: Understand the thought of Ambedkar on the annihilation of the cast system and untouchability in India

Co 5: Know how the Indian constitution embodies the values of social justice and equality

8. History Course - 8 Social Reform In Maharashtra IDS II (DSC)

Co 1: Know about the beginnings of social reform in Maharashtra by the Paramhansa Mandali and Prarthana Samaj

Co 2: Understand the contribution of women reformers

Co 3: Explain the contribution of social reformers in the fight for social justice

Co 4: Explain the role played by educational reforms in transformation of society



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No.: B.V.D.P.K.M.S./


/2022-23

Date: 18/08/2022

Notice

All the B.A. I and II year students of Psychology Subject are hereby informed that, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus and Course Outcomes (COs) of Psychology on our college website (<https://bvdpkmsangli.edu.in/media/pdf/A10-Psychology CO PO 051 023.pdf>) And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.


(Miss. T. H. Shaikh)

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli

Department Of Psychology

Course Outcomes (Cos)

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Course Outcomes (Cos)
B.A.I & II in Psychology

B.A. I [Sem . I] Paper No- I Understanding Psychology (Outcomes) :

- 1.To acquaint students with basic concepts of Psychology.
2. To make students aware with neuroscience and behaviour.
3. To make students aware with motivation, various approaches of motivation and human needs .
4. To understand emotions, range and the roots of emotions.

B.A.I [Sem. II] Paper No- II Basic Principles of Psychology (Outcomes) :

1. To make the students aware with learning, classical conditioning and operant conditioning.
2. To makes the students familiar with foundations of memory.
3. To understand personality, various approaches, and assessment techniques of personality.
4. To make students aware with intelligence, theories of intelligence, Emotional intelligence, mental retardation and intellectually gifted.

B.A. II [Sem. III] Paper No- III Psychology for Living (Outcomes) :

1. To acquaint the students with Processes of Psychology for Living
2. To Introduce Students the Concept of Stress.
3. To acquaint the students with Understanding Mental Disorders
4. To Introduce Students Various Psychotherapies and their Uses.

B.A. II [Sem. III] Paper No- IV Social Psychology (Outcomes) :

1. To acquaint the students with Processes of Social Psychology.
2. To Introduce Students the Concept of Social Perception.
3. To acquaint the students with the Self and Self-Esteem.
4. To Introduce Students the Concept of Attitude Formation, Persuasion and Cognitive Dissonance.

B.A. II [Sem. IV] Paper No- V Modern Social Psychology (Outcomes):

1. To acquaint the students with Processes of Liking (Attraction) and Sources of Liking.
2. To Introduce Students the Concept of Social Influence, Conformity and Compliance.
3. To acquaint the students with Understanding Prosocial Behavior.
4. To Introduce Students the Concept of Aggression, its Causes and Controls.

B.A.II [Sem. IV] Paper No- VI Applied Psychology (Outcomes) :

1. To acquaint the students with Processes Personal Control, Decision Making and Personal Growth.
2. To Introduce Students the Work, Career, Play and using Leisure Positively.
3. To acquaint the students with Making and Keeping Friends.
4. To Introduce Students the Concept of Love and Commitment.



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No.: B.V.D.P.K.M.S./ /20 -

Date:

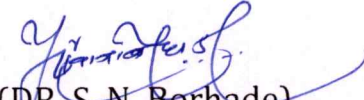
Date:- 18/07/2022

Notice

All the B.Com. students are hereby informed that Department of Commerce, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Commerce on our college website (https://bvdpkmsangli.edu.in/media/pdf/Com-CO_PO_051023.pdf) And also, all the files have been shared on our respective WhatsApp group.

Kindly go through it.




(DR. S. N. Borhade)

HEAD

Department of Commerce
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.

BHARATI VIDYAPEETH'S
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Commerce

PROGRAMME: B. COM.

PROGRAMME OUTCOME (POs)

1. Understand application of knowledge of commerce in business service sector, industry, marketing, finance, entrepreneurship development etc.
2. Develop communication skills and computer awareness and practical application of income tax.
3. Designed to equip the students for a career in financial analysis, personal financial advisor, consultants etc.
4. After completing the Bachelors in Commerce (B. Com.) program, students would gain a thorough grounding in the fundamentals of Commerce and Finance.
5. The commerce and finance focused curriculum offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business.
6. The all-inclusive outlook of the course offers a number of value based and job oriented courses ensures that students are trained into up-to-date. In advanced accounting courses beyond the introductory level, affective development will also progress to the valuing and organization levels.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

By the end of the programme, the student will be able to

1. Understand the basic concepts of the commerce, management, accounting, costing, taxation and economics.
2. Analyze relationship among commerce, trade industry, services, management and administration.
3. Perform all accounting activities and can handle type of business very well.
4. Develop communication skills, computer awareness and rules of income tax act.
5. Think about commercial and professional way or point of view.
6. Understanding legal issue/ law relating to banking and insurance sector

COURSE OUTCOME (CO)

B.Com. I Semester- I

Course: - Management Functions and Applications Paper-I

1. Describe the basic principles and functions of business management.
2. Explain basic management concepts, principles and practices.
3. Illustrate the Contribution towards development of management theories.
4. Elaborate the concepts of Organizing, Direction and Communication.

Course: - Financial Accounting Paper-I

1. Adapt basic knowledge about Accounting Concepts and Conventions, Accounting Process, Accounting Standards & IFRS
2. Acquaint students with accounting treatment about Amalgamation of Partnership Firms.
3. Demonstrate accounting for Consignment Accounts.
4. Understand the accounting process of Accounts of Professionals

Course: - Principles of Marketing Paper-I

1. Understand the concepts and principles of Marketing.
2. Adapt basic knowledge of practical market as well as tools and techniques of marketing to the students.
3. Give basic knowledge of 4P's of marketing and retailing.
4. Explain marketing research process and marketing information system.

Course: - Insurance Paper-I

1. Know the fundamentals of Insurance.
2. Understand procedural part and documentation in Life Insurance business and General Insurance business.
3. Create awareness among them to become a life Insurance Agent.
4. Describe the fundamentals of General Insurance.

Course: - English for Business Communication Paper-I

1. The students will be able to acquire communication skills.
2. The students will be able to understand human values through poems and prose.
3. The students will be able to improve the language and business competence.
4. The students will be able to learn how to use English for discussing prices, discount, etc.

Course: - Micro Economics Paper I

1. Explain Demand and consumer behavior with indifference curve.
2. Analyze importance of demand forecasting in business decision and various methods of demand forecasting.
3. Apply firm theories in business situation.
4. Explain production cost curves and revenue curves of the firm.

B.Com. I Semester- II

Course: - Management Functions and Applications Paper-II

1. Understand the concept of motivation and different theories of motivation.
2. Give basic knowledge about the concept of Leadership.
3. Describe the different concepts and Techniques of Co-ordination and Control.
4. Illustrate the Social and Ethical Issues in Management.

Course: - Financial Accounting Paper-II

1. Simulate accounting situations of Single-Entry System.
2. Demonstrate accounting for Conversion of Partnership Firm into a Limited Company.
3. Acquaint students with accounting treatment regarding Branch Accounts.
4. Explain the accounting process Computerized Accounting System.

Course: - Principles of Marketing Paper-II

1. Provide basic knowledge of concepts, principles, tools and techniques of marketing.
2. Understand the concepts of Consumer Behaviour and Market Selection.
3. Describe the Distinguishing characteristics of rural marketing.
4. Create awareness among them about recent developments in marketing.

Course: - Insurance Paper-II

1. Impart theoretical knowledge of fire insurance.
2. Enlighten students with different sides of marine insurance.
3. Impart conceptual knowledge of Personal Accident insurance, Health insurance, Motor Insurance and Crop Insurance.
4. Acquaint students with the Growth of general insurance business in India.

Course: - English for Business Communication Paper-I

1. The students will be able to acquire communication skills.
2. The students will be able to understand human values through poems and prose.
3. The students will be able to improve the language and business competence.
4. The students will be able to speak in English at private sector.

Course: - Micro Economics Paper II

1. Explain Equilibrium of firm and industry in short run and long run with measuring producer's surplus under perfect competition.
2. Illustrate price determination and price discrimination under monopoly as well as measurement of monopoly power.
3. Interpret price war, price leadership and kinky demand curve under Oligopoly market.
4. Justify Ricardo's & Modern theory of rent, Money and Real wage and Wage differentials.

B.Com. II Semester- III

Course: - Fundamentals of Entrepreneurship Paper-I

1. To impart theoretical knowledge of Entrepreneurship
2. To develop Entrepreneurship qualities and skills
3. To acquaint students with Steps involved in the formation of Small Enterprises
4. To enlighten students with Recent Trends and Concepts in Entrepreneurship

Course: - Corporate Accounting Paper-I

1. Demonstrate accounting for issue of bonus shares, rights shares and sweat equity.
2. Demonstrate accounting for issue of debentures and redemption of debentures.
3. Explain the accounting of profit/loss prior to and after incorporation.
4. Practice the fundamental accounting process on Tally ERP.

Course: - Business Statistics Paper-I

1. To explain the scope of statistics in business and apply sampling techniques in real life.
2. To summarize data by means of measures of central tendency and dispersion.
3. To explain the merits and demerits of various measures of central tendency and dispersion.
4. To carryout analysis of bivariate data using simple correlation and simple linear regression.

Course: - English for Business Communication Paper-III

1. The students will be able to describe and recommend sales products.
2. The students will be able to narrate function of the product.
3. The students will be able to learn how to use English for talking to the customers.
4. The students will be able to learn how to use English for discussing prices, discount, etc.

Course: - Macro Economics Paper I

1. Explain the relevance of national income, concepts, and its applications in economic policy making.
2. Illustrate methods of measuring national income with difficulties and importance.
3. Justify Keynesian theory of employment.
4. Explain the output and employment generation process through investment and consumption.

Course: - Money and Financial System Paper 1

1. Explain functions of money and measurement of money supply.
2. Analyse functions of commercial banks and types of banks.
3. Interpret changing nature of banking business.
4. Identify recent trends in banking system.

B.Com. II Semester- IV

Course: - Fundamentals of Entrepreneurship Paper-II

1. To acquaint students with family business in India
2. To impart conceptual knowledge of Service and Agro Entrepreneurship
3. To aware students about Business Plan and Project Report
4. To inspire the students through successful stories of Entrepreneurs

Course: - Corporate Accounting Paper-II

1. Demonstrate accounting for redemption of Preference Shares.
2. Compute the value of shares as per distinct methods and differentiate between them.
3. Simulate practice of preparing financial statements as per the provisions of Indian Companies Act, 2013.
4. Practice the store accounting through Tally ERP.

Course: - Business Statistics Paper-II

1. understand discrete and continuous random variables, their respective probability distributions.
2. Identify the applications of Binomial, Poisson and normal distributions.
3. Measure trend and seasonal variations in time series data.
4. Compute and interpret simple and weighted index numbers.

Course: - English for Business Communication Paper-IV

1. The students will be able to describe and recommend sales products.
2. The students will be able to narrate function of the product.
3. The students will be able to learn how to use English for talking to the customers.
4. The students will be able to learn how to use English for discussing prices, discount, etc.

Course: - Macro Economics Paper II

1. Apply practical decisions at their business level in future.
2. Analyse public finance system of state and its impact on economy.
3. Justify the trade and business practices through international trade theories and other relevant concepts.
4. Explicate the international monetary exchange system and determination of rate exchange.

Course: - Money and Financial System Paper II

1. Apply e - banking services.
2. Prepare provide consultancy and guidance for investment in financial markets.
3. Analyse business practices of NBFCs and AIFI Expected Skills Impartation.
4. Identify administrative structure, Functions and Role of NHB and EXIM Bank.

B.Com. III Semester- V

Course: - Business Regulatory Framework Paper -I

1. Know the Essential element and Kinds of Contract
2. Describe the different labor law.
3. Understand the Sale of Goods Act,1932 and Goods and Services Tax (GST)
4. Describe the Indian Partnership Act-1932 and Limited Liability Partnership Act 2008

Course: - Modern Management Practices Paper-I

1. Impart knowledge of modern management
2. Understand concepts of Customer Relationship Management (CRM)
3. Know the concepts of emotional and social intelligence
4. Understand the concept of lean and talent management

Course: - Co-operative Development Paper I

1. Explain meaning, definition, features, and principals of co-operation.
2. Identify agriculture and non-agriculture credit co-operative institutions,
3. Analyse types, management, progress, and problems of urban co-operative banks.
4. Analyse role and problems of consumer co-operatives as well as sugar co -operatives.

Course: - Business Environment Paper I

1. Explain relationship between business environment and sustainable development.
2. Justify food security and agriculture renewal action plan.
3. Explicate 1991's industrial policy, MSME's, progress of industrial sector in globalization etc.
4. Identify problems of Indian economy like as population, unemployment and poverty, inequality of income etc.

Course: - Advanced Accountancy Paper-I

1. Practice the preparation of financial statements of banks.
2. Demonstrate accounting for farms and hire purchase system.
3. Simulate accounting situations of insurance claim.
4. Explain the accounting process on Tally with GST.

Course: - Advanced Accountancy Paper-II (Auditing)

1. Understand the concept and types of audits
2. Identify the residential status and its implication on tax liability
3. Understand the concept of exemption from income
4. Know the computation of income from various sources as well as total income

Course: - Advanced Costing Paper- I

1. Understand the basic concepts of cost accounting.
2. Classify the cost and apply the same for cost determination.
3. Understand the cost accounting procedure in respect of materials.
4. Know the application of cost accounting in determination of labour cost.

Course: - Advanced Costing Paper- II

1. Identify the meaning of overheads and its classification
2. Understand different methods of absorption of overheads.
3. Find out the reasons for difference between profit as per cost and financial accounts.
4. Understand meaning of activity-based costing and its practical application.

Course: - Advanced Banking Paper I

1. Explain Regulatory Framework for Banking in India.
2. Understand the important laws relating banking sector.
3. Knowledge of legal provisions for banking business practices.
4. Understand different provisions under cyber-Laws.

Course: - Advanced Banking Paper II

1. Explain Retail and Corporate Banking systems.
2. Understand the Retail and Corporate Banking Practices.
3. Apply the knowledge in banking business.
4. Analyse differentiates Retail and Corporate Banking.

Course: - Business Regulatory Framework Paper -II

1. Develop awareness about the Company Act- 2013
2. Understand the Security Exchange Board of India Act-1992, Consumer Protection Act-1986 and Competition Act-2002
3. Apply the practical aspects of Business Transactions and Cyber Laws
4. Impart knowledge of Negotiable Instrument

Course: - Modern Management Practices Paper-II

1. Impart knowledge of total quality management.
2. Understand the Japanese and Chinese Management Practices
3. Know the concept of Event and Performance Management
4. Understand the concept of time and stress management

Course: - Co - operative Development Paper II

1. Illustrate cooperative legislations and fund management.
2. Interpret institutional arrangement for cooperative education and training.
3. Clarify nature and elements of audit of co-operative housing societies.
4. Analyse responsibilities and powers of cooperative auditor.

Course: - Business Environment Paper II

1. Explain implementation and impact of Liberalization, Privatization and Globalization on Indian Economy.
2. Justify economic planning and service sector in India.
3. Identify relationship between Indian rupee and foreign currency with multinational corporations.
4. Extend objectives and performance of IMF, IBRD, WTO and SAARC.

Course: - Advanced Accountancy Paper-III

1. Practice the preparation of cost sheet.
2. Demonstrate accounting for financial statement analysis and ratio analysis.
3. Understand and Practice the preparation of cash flow statement.
4. Explain the accounting process on Tally with GST.

Course: - Advanced Accountancy Paper-IV (Taxation)

1. Understand the basic concepts of income tax and basis of charge.
2. Identify the residential status and its implication on tax liability.
3. Understand the manner of computation of total income.
4. Know the basic concepts about GST.

Course: - Advanced Costing Paper- III

1. Understand the concepts of job and unit costing.
2. Know the applications of process costing and joint product and by product accounting.
3. Understand procedure of contract costing and its practical implementation
4. Identify meaning of service costing and its application.

Course: - Advanced Costing Paper- IV

1. Know the applications of marginal costing in decision making.
2. Understand the concept of standard costing and analysis of variances.
3. Know the concept and types of budgets and concept of budgetary control.
4. Understand prospects of cost accounting standards.

Course: - Advanced Banking Paper III

1. Explain the Importance of Head Office of the Bank.
2. Understand the Structure of Branch Office – Small and Medium Bank Branch.
3. Understand the Structure of Branch Office - Large Bank Branch.
4. Explain Nature and Importance of Information and System Audit of the Banks.

Course: - Advanced Banking Paper IV

1. Understand the nature and structure of Financial Market in India.
2. Understand business practices in money market.
3. Understand business practices in capital market.
4. Understand functioning of different Intermediaries in Financial Markets.



'Social Transformation Through Dynamic Education'

Bharati Vidyapeeth's

Dr. Patangrao Kadam Mahavidyalaya, Sangli

(Arts, Science, Commerce & Community College)

DST-FIST Funded College (Level-0)

Founder

Dr. Patangrao Kadam

M. A., L. L. B., Ph. D.

Affiliated to Shivaji University, Kolhapur.

Accredited with 'B⁺⁺' Grade by NAAC, Bengaluru (CGPA 2.96)

Principal

Dr. D. G. Kanase

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No.: B.V.D.P.K.M.S./⁰⁷ /20 23-24

Date: 03/09/2023

Department of Chemistry

Notice

All the B. Sc. and M. Sc. students are hereby informed that Department of Chemistry, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli has displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) on website of the college.

Visit the Page at:

M. Sc. Analytical Chemistry	https://bvdpkmsangli.edu.in/media/pdf/MS1-Analytical 051023.pdf
M. Sc. Organic Chemistry	https://bvdpkmsangli.edu.in/media/pdf/MS2-Organic Chemistry 051023.pdf
B. Sc. Chemistry	https://bvdpkmsangli.edu.in/media/pdf/S1-Chemistry-NEP 2020 051023.pdf


Co-ordinator
M.Sc.(Chemistry)
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.




HEAD,
Department of Chemistry
Dr. Patangrao Kadam Mahavidyalaya
SANGLI 416 416

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Chemistry

Program Outcomes:

- PO-1:- Student will gain fundamental knowledge of chemistry which will help the for PG studies and Research
- PO-2:- Student will be able to know good laboratory practices and lab safety.
- PO-3:- To make the learner proficient in analyzing the various observations and chemical phenomena presented to him during the course.
- PO-4:- Students will be able to apply the fundamental knowledge to address the cross-cutting issues such as sustainable development
- PO-5:- Students will be able to solve various problems by identifying the essential parts of a problem, formulate strategy for solving the problem, applying appropriate techniques to arrive at a solution, test the precision and accuracy of the solution and interpret the results.
- PO-6:- Students will be able to communicate effectively i.e. being able to articulate, comprehend and write effective reports, make effective presentations and documentation and capable of expressing the subject through technical writing as well as through oral presentation.

Program Specific Outcomes:

- PSO-1:- Students will be able to explain fundamental concepts of inorganic, physical, organic, industrial and analytical chemistry.
- PSO-2. Identify chemical formulae and solve numerical problems.
- PSO-3. Students can use modern chemical tools, Models, Charts and Equipments.
- PSO-4. Students will be able to prepare and qualify for competitive examinations
- PSO-5. Students will understand good laboratory practices and safety.
- PSO-6. Students will develop research oriented skills.

Course Outcomes

Course Outcomes B. Sc. I (NEP-2020) Semester I	
Course	Outcomes
DSC-3A Paper I (Inorganic Chemistry)	After completion of these courses, students should be able to, CO-1: To learn and understand introductory inorganic chemistry. To understand size, shape and electron distribution in shells and sub- shells of an atom. CO-2: To learn different types of bonds and nature of bonding in inorganic compounds. Calculations of different energies associated with ionic bonding. CO-3: Knowledge of nature of bonding, geometry, stability, and magnetic characters of covalent compounds by applying VBT. CO-4: Understanding of role of acids and bases in chemistry. The study is useful in all chemical areas. CO-4: To learn and understand the properties and uses of the compounds of p-block elements.
DSE-4A Paper II, (Organic Chemistry)	CO-1: To understand the fundamentals and basic principles involved in organic chemistry CO-2: To know the spatial arrangement of atoms of organic molecule and types of stereoisomers. CO-3: To learn general properties and fundamental reactions of aromatic compounds. CO-4: To understand the basic knowledge, method of preparation and reactions of heterocyclic compounds namely Pyrrole and Pyridine.

Course Outcomes B. Sc. I (NEP-2020) Semester II	
Course DSC-3B: Paper -III (Physical Chemistry)	Outcomes After completion of these courses, students should be able to, CO-1: To understand basic concepts and rules of logarithms, graphs, derivative and integrations. CO-2: To gain Knowledge and coherent understanding of basic concepts in thermodynamics CO-3: To understand basic concepts in kinetics and first order, second order reactions with characteristics and suitable examples. CO-4: To know the terms such as surface tension, viscosity and refractive index with suitable examples. CO-5: To learn of basic concepts in electrochemistry, conductors and conductivity cells, measurement of conductance with suitable examples and numerical problems.
DSC-4B: Paper-IV, (Analytical Chemistry)	CO-1: To learn various analytical procedures, sampling, accuracy and precision CO-2: To know difference between classical and industrial chemistry, concentration terms and IPR CO-3: To know terms involved in chromatographic separation techniques CO-4: To understand various type of titrations, neutralization curves, indicators used in various titrations CO-5: To know about the chemical nature and cleansing action of soap
Course Outcomes B. Sc. I (Chemistry Practical)	
Course Laboratory practical	Outcomes After completion of these courses, students should be able to, CO-1: To learn preparation of standard solution. CO-2 : To determine percentage purity of the given sample. CO-3 : To learn separation and identification of different cations by Paper Chromatographic technique. CO-4: Organic estimations such as acetone, Vitamin-C and ester. CO-5: Identification of organic compounds including acids, bases, phenols and neutrals. CO-6: Estimation of Aniline, Acetamide, Aspirin Tablet

	CO-7 : To learn kinetics of reaction. CO-8 : To determine viscosity of given liquids CO-9: To determine the equivalent weight of Magnesium.
Course Outcomes B. Sc. II (Chemistry) Semester-III	
Course DSC-3C: Paper V (Physical Chemistry)	Outcomes After completion of these courses, students should be able to, CO-1: Understand the concept of conductivity and transport number of the aqueous solutions with different applications. CO-2: Gain knowledge of basic concepts in thermodynamics and concept of Entropy CO-3: Learn and understand third order reaction and methods for determination of order of reactions and numerical problems. CO-4: Study the behavior of gases, ideal gas as model system and its extension to real gases. CO-5: Study the concepts such as adsorption phenomenon, dynamic nature of surface and its applications.
DSC-4C: Paper VI (Analytical Chemistry)	CO-1: Study the basic concepts in gravimetric analysis CO-2: Learn the different water analysis techniques CO-3: Understand basic principle of corrosion and electroplating. CO-4 : Study the column and ion exchange chromatography CO-5: Understand of working of petroleum industries, biofuels, copyrights and trademarks
Course Outcomes B. Sc. II (Chemistry) Semester-IV	
Course DSC-D3- Paper No. VII (Inorganic Chemistry)	Outcomes After completion of these courses, students should be able to, CO-1: Understand the basic concepts of coordination chemistry. CO-2: Study the concept of chelate formation.. CO-3: Understand the properties of elements of 3d series. CO-4: Know the properties of 4f elements. CO-5: Learn the basic knowledge about inorganic semi-micro analysis.
DSC- D4 - Paper No. VIII (Organic Chemistry)	CO-1: Learn about the synthesis, reactivity and applications of carboxylic acids.

	<p>CO-2: Study about classification, preparation and applications of amines and diazonium salts.</p> <p>CO-3: Understand the classification, configuration and structure of carbohydrates.</p> <p>CO-4: Understand the nomenclature and reactivity of aldehydes and ketones.</p> <p>CO-5: Study the basic knowledge conformational analysis of organic compound.</p>
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Course Outcomes B. Sc. II (Chemistry Practical)

Course	Outcomes
Laboratory practical	<p>After completion of these courses, students should be able to,</p> <p>CO-1: Identification of organic compounds including acids, bases, phenols and neutrals.</p> <p>CO-2: Preparation of organic compounds and their purification.</p> <p>CO-3: Organic estimations such as acetone, Vitamin-C and ester.</p> <p>CO-4: Separation, identification and determination of R_f values using TLC.</p> <p>CO-5: Understand the gravimetric analysis of Fe and Ba.</p> <p>CO-6: Preparation of inorganic complexes.</p> <p>CO-7: Able to find out the unknown concentration by performing titration.</p> <p>CO-8: Understand semimicro analysis.</p> <p>CO-9: Study the chemical kinetics of hydrolysis of ester.</p> <p>CO-10: Illustrate the experiment of instrumental methods such as conductometry, refractometry, polarimetry etc.</p> <p>CO-11: Able to measure viscosities of different liquids.</p>

Course Outcomes B.Sc. III (Chemistry)**Semester-V**

Course	Outcomes
Paper No. IX (Inorganic Chemistry)	After completion of these courses, students should be able to, CO-1: Study the theoretical concepts of hard and soft acids and bases. CO-2: Understand the metal ligand bonding in transition metal complexes. CO-3: Study basic concepts and classification of inorganic polymers. CO-4: Study classification of conductors, insulators and semiconductor CO-5: Study synthesis and structures of organometallic compounds.
Paper No. X (Organic Chemistry)	CO-1: Study the basic concept of spectroscopy. CO-2: Understand factors affecting UV-absorption spectra. CO-3: Understand factors affecting on vibrational frequency. CO-4: Interpret IR-spectra on basic values of IR-frequencies. CO-5: Learn basic principle of NMR spectroscopy, chemical shift, shielding and deshielding. CO-5: Study instrumentation of mass spectrometry, and fragmentation pattern. CO-7: Solve the combined problem of UV, IR, and NMR.
Paper No. XI (Physical Chemistry)	CO-1: Learn and understand quantum Chemistry, Heisenberg's uncertainty principle, concept of energy operators (Hamiltonian), learning of Schrodinger wave equation. Physical interpretation of the ψ and ψ^2 . Particle in a one dimensional box CO-2: Gain Knowledge about spectroscopy, Electromagnetic spectrum, Energy level diagram, Study of rotational spectra of diatomic molecules: Rigid rotor model, Microwave oven, vibrational spectra of diatomic molecules, simple Harmonic oscillator model, Raman spectra: Concept of polarizability, pure rotational and pure Vibrational Raman spectra of diatomic molecules, related knowledge will be gained by the students. CO-3: Learn and understand photochemical laws, reactions and various photochemical phenomena.

	<p>CO-4: Learn the various types of solutions, vapour pressure, temperature relations.</p> <p>CO5: Learn and understand the knowledge of emf measurements, types of electrodes, different types of cells, various applications of emf measurements.</p>
<p>Paper No. XII (Analytical Chemistry)</p>	<p>CO-1: Understand the basic concepts of Gravimetric Analysis and learns different types of precipitations.</p> <p>CO-2: Understand the flame photometry and its applications and limitations.</p> <p>CO-3: Understand the theory of colorimetry, applications of colorimetry and spectrophotometry</p> <p>CO-4: Understand the different types of electrodes, titrations and their applications</p> <p>CO-5: Understand the different types of chromatographic techniques and their applications</p>
<p>Course Outcomes B.Sc. (Chemistry) Semester-VI</p>	
<p>Course</p> <p>Paper No. XIII (Inorganic Chemistry)</p>	<p>Outcomes</p> <p>After completion of these courses, students should be able to,</p> <p>CO-1: Understand the thermodynamic and kinetic aspects of metal complexes.</p> <p>CO-2: Study the nuclear reactions and role of radio isotopes.</p> <p>CO-3: Understand properties and classification of lanthanides and actinides.</p> <p>CO-4: Study techniques involved in extraction of iron from its ore.</p> <p>CO-5: Understand role of metals and non-metals in our health.</p>
<p>Paper No. XIV (Organic Chemistry)</p>	<p>CO-1: Study the various Name reaction and reagents with examples.</p> <p>CO-2: Learn mechanism of rearrangement reaction.</p> <p>CO-3: Understand basic terms used in retrosynthetic analysis.</p> <p>CO-5: Solve electrophilic and nucleophilic addition reaction problems</p> <p>CO-5: Study analytical and synthetic evidences of natural products such as citral and nicotine.</p>

	CO-7: Learn different types of drugs and their synthesis and uses.
Paper No. XV (Physical Chemistry)	CO-1: Learn and understand phase rule, Learn and understand One component, Two component and Three component systems phase diagrams with suitable examples. CO-2: Gain Knowledge about basic concept of Thermodynamics, free energy, Gibbs-Helmholtz equation and its applications, Able to solve problem related with it. CO-3: Understand basic concept of solid state chemistry, learn basic terms, Laws of crystallography, learn crystal structure analysis using X-rays CO-4: Understand kinetics of Simultaneous reactions such as i)opposing reaction ii)side reaction iii)consecutive reactions: iv) chain reaction v) explosive reaction CO-5: Learn and understand the knowledge of distribution law, its modifications, applications of distribution laws, process of extraction, determination of solubility, distribution indicators, and molecular weights.
Paper No. XVI (Industrial Chemistry)	CO-1: Understand the methods of manufacturing of sugar CO-2: Understand the mechanism of manufacture of industrial heavy chemicals. CO-3: Understand the different types of polymers and their applications CO-4: Understand the different types of hydrocarbons and application of petrochemicals. CO-5: Understand the different methods for nonmaterial preparations and their applications.
Course Outcomes B.Sc.III (Chemistry Practical)	
Course Laboratory practical	Outcomes After completion of these courses, students should be able to, CO-1: Understand the gravimetric estimation such as Fe, Ba, Ni. CO-2: Study different types of inorganic preparations. CO-3: Understand titration and percentage purity of different types of solutions CO-4: Separation of binary mixture and identification of individual compound.

	<p>CO-5: Preparation of organic compounds and their purification.</p> <p>CO-6: Preparation of organic derivatives.</p> <p>CO-7: Organic estimation</p> <p>CO-8: Understand the kinetic reactions and their mechanisms, energy of activation, partial molar volume.</p> <p>CO-9: Understand different instruments such as pH Meter, potentiometer, refractometer etc.</p>
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Bharati Vidyapeeth's
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DST-FIST Funded College (Level-0)

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Principal

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No.: B.V.D.P.K.M.S./

12022-23

Date: 08/08/2022

Notice

All the B.Sc. students are hereby informed that Department of Physics, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Physics on our college website (<https://bvdpkmsangli.edu.in/media/pdf/S2-Physics NEP CO PO PSO 051023.pdf>).

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

(Dr. D. P. Nade)

HEAD;

Department of Physics

Dr. Patangrao Kadam Mahavidyalaya

SANGLI 416 416

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Physics

B.Sc. (Physics)

Program Outcomes:

1. Apply the basic principles of Physics to the events occurring around us and also in the world.
2. Design and carry out experiments to understand the laws and basic concepts in science.
3. To acquire a wide range of problem-solving skills, both analytical as well as technical and to apply them.
4. To enhance the student's academic abilities, personal qualities, and transferable skills will allow them to develop as responsible citizens.
5. Develop a sense of research to predict cause-and-effect relationships.
6. Involve in independent and lifelong learning.

Program Specific Outcomes:

1. To understand the basic laws and explore the fundamental concepts of Physics.
2. Gain a wide spectrum of skills that will enable them to solve theoretical and experimental problems.
3. Acquire the skill to gauge the physical properties of materials.
4. Providing a hands-on learning experience such as in measuring the basic concepts in properties of matter, heat, optics, electricity and electronics.
5. Apply and verify theoretical concepts through laboratory experiments.
6. Illustrate the principles of electricity, magnetism, thermodynamics, optics and spectroscopy

Shivaji University, Kolhapur

B.Sc. Part-I Physics Syllabus (NEP-2020) with effect from August, 2022

COURSE OUTCOME		
SEMESTER-I		
Course Code	Part	Course Outcome
DSC A1	Mechanics-I	<ol style="list-style-type: none">1. Students are able to understand and identify scalar and vector physical quantities apply vector algebraic methods to elementary exercises in mechanics2. Students are able to solve second order, homogenous ordinary differential equations in mechanics3. Students are able to understand the conceptual evolution of conservation laws of momentum and energy for both single and system of particles4. In general, students are capable of correlating above concepts and methods in mechanics to both theoretical and experimental domains revealing analytical as well as numerical skills
DSC A2	Mechanics-II	<ol style="list-style-type: none">1. Students are able to understand and apply Newton's Law of Gravitation to celestial objects and geometry of planetary orbits under the action of central force.2. Students are able to solve numerical problems based on Kepler's Laws of planetary motion and understand simple concepts like weightlessness, Geosynchronous satellite and GPS3. Students are able to setup differential equation for simple harmonic motion and its allied cases

		Students are able to derive elastic constants for beam supported at both ends and at one end and also able to explain the phenomenon of surface tension on the basis of molecular forces
SEMESTER II		
DSC B1	Electricity and Magnetism-I	<ol style="list-style-type: none"> 1. Students are able to understand the physical significance of gradient, divergence and curl 2. Students are able to apply concepts in vector calculus such as gradient, divergence and curl related to vector and scalar fields using Gauss, Stokes and green's theorem 3. Students are able to understand and apply concepts of electrostatic field, potential to point charges, electric dipole and geometrically regular charged bodies 4. Students are able to understand and apply concept of capacitor to isolated conductor, parallel plates, cylindrical and spherical capacitors and allied modifications in it, energy density in electric field and solve numerical exercise in electrostatics
DSC B2	Electricity and Magnetism-II	<ol style="list-style-type: none"> 1. Students are able to understand importance of complex numbers in analysis of AC Circuits contacting Inductance(L) Capacitor(C) and Resistance (R) and their various configurations 2. Students are able to define and apply the concepts in AC circuits such as Impedance (Z), reactance (XC and XL), Admittance, Susceptance and Quality Factor (Q) 3. Students are able to understand and design AC bridge: Owen's Bridge and understand basic working principle of Ballistic galvanometer

		4. Students reveal mastery in basic terminology in network analysis for further studies and apply Network theorems to simple circuits
DSC A	LAB: MECHANICS	<ol style="list-style-type: none"> 1. Students are able to derive elastic constants for beam supported at both ends and at one end 2. Students are able to derive elastic constant (η) of a wire under torsional oscillations (Searle's Method) 3. Students are able to explain the phenomenon of surface tension on the basis of molecular forces 4. Students are able to derive the relation between surface tension and excess pressure 5. Students are able to perform an experiment to determine ST by Jaeger's method 6. Students are able to discuss and state the factors affecting the ST 7. In general, students are capable of correlating above concepts and methods to both theoretical and experimental domains revealing analytical as well as numerical skills
DSC B	LAB ELECTRICITY AND MAGNETISM	<ol style="list-style-type: none"> 1. In general, students are capable of applying above concepts in network analysis to both theoretical and experimental domains 2. Students are able to understand simple elementary concepts such as magnetization and intensity of magnetization 3. Students are able to state Biot-Savart's law and are capable to apply it to straight, circular wires and solenoid 4. Students are able to understand concept of magnetic

		<p>vector potential along with Ampere`s circuital law</p> <p>5. Students are able to understand the explain the phenomenon of hysteresis in magnetism</p> <p>6. Students are able to discriminate different magnetic materials based on their characteristic properties</p>
B.Sc.-II		
SEMESTER III		
DSC-C1	(Thermal Physics and Statistical Mechanics - I	<p>1. Know the Zeroth Law, First Law, Second Law and Third Law of Thermodynamics.</p> <p>2. Describe various types of Thermometers.</p> <p>3. State the nature of heat transfer, transport phenomena in gases behavior of gases ate different temperatures.</p> <p>4. Apply the thermodynamics laws for practical use</p>
DSC-C2	Waves and Optics -I	<p>1. Assess fluctuations and acoustic process in nature and technology in various forms.</p> <p>2. Analyse the mechanism and the machinery noise levels.</p> <p>3. Distinguish between different sounds and noise levels in the environment.</p> <p>4. Solve the numerical on sound and acoustics, viscosity and low pressure</p>
SEMESTER IV		
DSC-D1	Thermal Physics and Statistical Mechanics - I	<p>1. Describe various thermodynamic potentials.</p> <p>2. Know different theories of radiation.</p> <p>3. Know the Classical Statistics and Quantum Statistics.</p> <p>4. Solve the numerical problems using mathematical tools</p>

DSC- D2	Waves and Optics -I	<ol style="list-style-type: none"> 1. Explain the phenomenon of interference, diffraction and polarization. 2. Interpret wavelength, resolving power and specific rotation. 3. Calculate wavelength of unknown sources. 4. Understand various applications of the light waves
Group I, II, III and IV	B.Sc. Part II PHYSICS LAB Experiments (DSC C1, C2, D1, D2 Paper V, VI, VII, VIII)	<ol style="list-style-type: none"> 1. To study the various properties of thermal physics like thermal conductivity. 2. To study the working of various thermometers. 3. To study the temperature coefficient of resistance by various methods. 4. To understand the mechanical equivalent of heat through an experiment. 5. To study the motion of coupled oscillation, coefficient of viscosity, 6. To study the optical properties using different instruments.
B.Sc.-III		
SEMESTER V		
DSE-E1	Mathematical Physics	<ol style="list-style-type: none"> 1. Acquire knowledge of methods to solve partial differential equations with examples of important partial differential equations in Physics. 2. Apply the special functions, such as the Hermite polynomial, the Legendre polynomial, the Laguerre polynomial and Bessel functions and their differential equations and their applications in various physical problems 3. Use the beta, gamma and error functions in doing integrations.

		4. Understand maths of complex numbers and application of Cauchy-Riemann Equations.
DSE-E2	Quantum Mechanics	<ol style="list-style-type: none"> 1. Describe de Broglie's hypothesis of matter waves, Davisson-Germer experiment. 2. Apply the knowledge of basic quantum mechanics, to set up one-dimensional Schrodinger's wave equation and its application to a matter wave system. 3. Understand the Schrodinger wave mechanics and operator formalism. 4. Solve the Schrodinger equation for simple 1D time-independent potentials
DSE-E3	Classical Mechanics and Classical Electrodynamics	<ol style="list-style-type: none"> 1. Apply Lagrangian methods to solve for the motion of rigid bodies. 2. Apply the calculus of variations to solve minimization problems and knowledge of the formulation of dynamics in terms of a variational principle. 3. Explain the fundamental concepts of special relativity and how to perform Lorentz transformations. 4. Solve the problems based on the motion of a charged particle in the presence of a uniform electromagnetic field.
DSE-E4	Digital and Analog Circuits and Instrumentation	<ol style="list-style-type: none"> 1. Analyse different types of digital electronic circuits using various tools and know the techniques to prepare the most simplified circuit using various methods. 2. Explain the principles of oscillation and design various oscillator circuits. 3. Acquire the skill in using CRO for various physical measurements. 4. Demonstrate knowledge of analog electrical devices,

		particularly operational amplifiers and their applications.
DSE-F1	Nuclear and Particle Physics	<ol style="list-style-type: none"> 1. Impart knowledge about basic nuclear physics properties and nuclear models for the understanding of related reaction dynamics. 2. Explain how energy and other properties of accelerated particle beams are measured. 3. Describe the properties of radiation used for detection and the parameters that affect the precision, efficiency, and sensitivity of the measurement. 4. Explain the interaction between elementary particles and their classification.
DSE-F2	Solid State Physics	<ol style="list-style-type: none"> 1. Explain the Crystal systems, Crystal planes and directions, and Miller indices. 2. Describe Bragg's Law and its relation to crystal structure. 3. Illustrate the Characteristic features of various types of magnetic materials. 4. Demonstrate an in-depth understanding of the band structure of solids.
DSE-F3	Atomic and Molecular Physics and Astrophysics	<ol style="list-style-type: none"> 1. Explain the change in behaviour of atoms in an externally applied electric and magnetic field. 2. Understand the molecular spectra and find molecular properties from molecular spectra. 3. Interpret the rotational and vibrational Raman Spectra. 4. Acquire knowledge stellar evolution of a small and massive star, pulsars, neutron star and black holes.
DSE-F4	Energy	<ol style="list-style-type: none"> 1. Analyse the viability of wind and alternative energy

	Studies and Materials Science	<p>projects.</p> <ol style="list-style-type: none"> 2. Explain the field applications of solar energy. 3. Describe the biogas generation and its impact on the environment. 4. Explain the phenomenon of superconductors and its various applications.
B.Sc. Part III	Physics Laboratory Experiments	<ol style="list-style-type: none"> 1. To study the various kind of motion through an experiment 2. To study the elasticity, surface tension, oscillation through an experiment 3. To study the interaction of light with material medium and its properties 4. To empower the student to understand the different aspect of electricity and magnetism. 5. To understand the basic electronics and its application in daily use. 6. To test the skill of various aspect of experimental physics.



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Founder

Dr. Patangrao Kadam

M. A., L. L. B., Ph. D.

Principal

Dr. D. G. Kanase

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Email:-bvpkc_sangli@yahoo.co.in; Website: <http://dpkmsangli.bharatvidyapeeth.edu>

No.: B.V.D.P.K.M.S./ /20 -

Date: 14/08/2022

Notice

All the B.Sc. students are hereby informed that Department of Microbiology, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli has displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Microbiology, on notice board of the department. All files are also shared on our respective WhatsApp group.

Kindly go through it.


(Ms.B.K.Bhavikatti)

HEAD
Department of Microbiology
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.



BHARATI VIDYAPEETH'S
DR. PATANGRAO KADAM MAHAVIDYALAYA, SANGLI
DEPARTMENT OF MICROBIOLOGY
B.Sc. Microbiology

***** Program Outcome *****

1. To promote understanding of basic and advanced concepts in microbiology and expose the students to various emerging areas of Microbiology.
2. To expose the students to different processes used in industries and in research field and prepare the students to accept the challenges in life sciences.
3. To develop skills in students that are required in diverse areas such as medical, industrial, environment, genetics, agriculture, food and others.
4. To demonstrate key practical skills/competencies in working with microbes for study and use in the laboratory as well as outside, including the use of good microbiological practices.
5. To become competent enough to use microbiology knowledge and skills to analyze problems involving microbes, articulate these with peers/ team members, and undertake remedial measures/studies etc.
6. To develop a broader perspective of the discipline of microbiology to enable him to identify challenging societal problems and plan his professional career to develop innovative solutions for such problems.

***** Program specific Outcome *****

1. To acquire present and updated knowledge of the microbiology which is applicable in many areas such as medical, industrial, environment, genetics, agriculture, food and others.
2. To understand the working principles and applications various equipment's in the microbiology laboratory.
3. To perform different important tests like Ame's test, enzyme assay, antibiotic production.
4. To study various mutants and the process of DNA separation by electrophoresis.
5. To determine physical and chemical composition of soil and isolate agriculturally significant organisms such as plant pathogens and biofertilizers.
6. To study fermentative production and estimation of citric acid, amylase and wine.

*****Course Outcomes*****

B.Sc. -I Microbiology Semester- I and II	
Course	Outcomes
Course I (DSC A 25) A introduction to Microbiology	<ol style="list-style-type: none"> 1. To develop a good knowledge of the development of the discipline of Microbiology and the contributions made by prominent scientists in this field. 2. To develop a very good understanding of the characteristics of different types of microorganisms, methods to organize/classify these into and basic tools to study these in the laboratory. 3. To explain the useful and harmful activities of the microorganisms and scope of different branches of Microbiology. 4. To describe characteristics of bacterial cells, cell organelles and various appendages like capsules, flagella or Pilli.
Course II (DSC A 26) Basic techniques in Microbiology	<ol style="list-style-type: none"> 1. To study the staining techniques for the observation of bacteria and bacterial cell components. 2. To study the working principle, handling and use of microscopes for the study of microorganisms. 3. To understand the principles of sterilization and disinfection of culture media, glassware and plastic ware and other objects to be used for microbiological work. 4. Study basic instruments to be used in microbiology.
Course III (DSC B 25) Bacteriology	<ol style="list-style-type: none"> 1. To describe the nutritional requirements of bacteria and other microbes that grow under extreme environments. 2. To understand the basic laboratory experiments to isolate, cultivate and differentiate bacteria. 3. To study the preservation of bacteria in the laboratory. 4. To study pure culture techniques.
Course IV (DSC B 26) Microbial Biochemistry	<ol style="list-style-type: none"> 1. To develop a very good understanding of various biomolecules which are required for development and functioning of a bacterial cell. 2. To develop the knowledge of how the carbohydrates make the structural and functional components such as energy generation and as storage food molecules for the bacterial cells. 3. To make well conversant about multifarious structures and functions of proteins, enzymes, lipids and nucleic acids. 4. To differentiate the concepts of aerobic and anaerobic respiration and how these are manifested in the form of different metabolic pathways in microorganisms.
Practical Course Paper I and II Introduction to	<ol style="list-style-type: none"> 1. To understand the basic techniques in Microbiology laboratory. 2. To study the working principle, handling and use of compound microscope for the study of microorganisms. 3. To understand the working principles and applications various equipment's in

Microbiology and Basic Techniques in Microbiology Learning Objectives	Microbiology laboratory. 4. To study the preparation, sterilization and use of various culture media.
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B.Sc. -II Microbiology Semester- III and IV

Course	Outcomes
Paper V C-9-DSC- 5: Microbial Physiology & Metabolism	<ol style="list-style-type: none"> 1. To make the students to learn concepts of microbial physiology. 2. To develop a good understanding regarding effect of environmental factors on growth of microorganisms 3. To understand the mechanism of transport across microbial cell membrane. 4. To clear he basic concept of microbial metabolism.
Paper VI C9-DSC- 6: Applied Microbiology	<ol style="list-style-type: none"> 1. To develop the knowledge regarding air microflora and its role and analysis. 2. To study water microbiology, water analysis and its purification and disinfection. 3. To study milk microbiology and quality control of milk. 4. To learn the basic understanding of industrial microbiology
Paper VII C-5-: DSC-7: Microbial Genetics & Molecular Biology	<ol style="list-style-type: none"> 1. To learn the basic concepts of Microbial genetics. 2. To gain knowledge regarding types of mutation. 3. To demonstrate the model of gene transfer in bacteria. 4. To gain the knowledge about DNA repair and Lac operon.
Paper VIII C5: DSC-8: Basics in Medical Microbiology & Immunology	<ol style="list-style-type: none"> 1. To learn about basic concept of medical microbiology. 2. To make aware students about disease. 3. To understand the defence mechanism of vertebrate body. 4. To learn about concept of antigen and antibody.
Practical Course III	<ol style="list-style-type: none"> 1. To understand basic techniques n special staining. 2. To study the biochemical characteristics of different microorganisms. 3. To study the effect of environmental factors of microorganisms
Practical Course IV	<ol style="list-style-type: none"> 1. To study the techniques of bacteriology analysis of water. 2. To understand the primary screening techniques of industrially important microorganisms. 3. To study isolation and identification of pathogens.

B.Sc. -III Microbiology Semester- V and VI

Course	Outcomes
Course XIII DSE F49: Microbial Genetics	<ol style="list-style-type: none"> 1. To understand the basic concepts of bacterial genome, organization of genome and mechanism of gene expression. 2. To study the concept of mutation, its type and detection mutants. 3. To study genetic complementation- Cis-trans test. 4. To understand the techniques in molecular biology such as – DNA sequencing, DNA finger printing and PCR. The study Genetic Engineering, its tools, techniques and application.
Course XIV DSE F50: Microbial Biochemistry	<ol style="list-style-type: none"> 1. To study enzymes with its properties, structure, specificity and action of enzyme. 2. To study purification of enzyme. 3. To understand assay of enzyme and immobilization of enzyme. 4. To study microbial metabolism and assimilation of Carbon, Nitrogen and Sulphur. The study biosynthesis of different biomolecules.
Course XV DSE F51: Environmental Microbiology	<ol style="list-style-type: none"> 1. To know the characteristics of liquid and solid wastes. 2. To know how to treat the industrial waste generated from various industries. 3. To know the biological safety. 4. To study Bioremediation and its application in various fields.

Practical Courses

Course	Outcomes
Practical – I (Virology and Microbial Genetics)	<ol style="list-style-type: none"> 1. To study isolation of coliphage from sewage sample and observe the plaques. 2. To understand effect of U. V. light on bacteria and plot the graph with respect to bacterial growth. 3. To study the process of DNA isolation and observe DNA fibres. 4. To study isolation of streptomycin resistant mutant with gradient plate technique.
Practical – II (Food and Industrial Microbiology)	<ol style="list-style-type: none"> 1. To study the assay of amylase by DNSA method. 2. To study assay of Vitamin B12 /Penicillin and observe zone of stimulation surrounding the solution. 3. To understand the basic steps in wine production and examine the pH, color and alcohol content. 4. To study isolation of lactic acid bacteria from fermented food.

<p>Practical – III (Agricultural and Environmental Microbiology)</p>	<ol style="list-style-type: none"> 1. To study isolation of <i>Azotobacter</i> / <i>Rhizobium</i> / <i>Xanthomonas</i> /PSB from soil/samples and its importance in soil. 2. To determine the Biological Oxygen Demand of industrial wastes and understand its importance. 3. To estimate Calcium and Magnesium from soil and understand its importance in soil. 4. To determine Chemical Oxygen Demand of industrial wastes and understand its importance.
<p>Practical – IV (Medical Microbiology)</p>	<ol style="list-style-type: none"> 1. To study human pathogenic organisms isolates from clinical sample. 2. To determine minimum inhibitory concentration (MIC) of pathogenic organisms. 3. To perform serological tests for malaria and typhoid. 4. To understand clinical significance of haematological tests such as haemoglobin, PCV, total and differential count of blood cells.



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No.: B.V.D.P.K.M.S./20 -

Date: 09/09/2022,

Notice

All the B.Sc. students are hereby informed that Department of Zoology, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Zoology on our college website

<https://bvdpkmsangli.edu.in/media/pdf/S4-Zoology CO PO 051023.pdf>

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

V. S. Kumbhar

(Dr. Mrs. V. S. Kumbhar)
HEAD,

Department of Zoology

Patangrao Kadam Mahavidyalaya,
SANGLI, 416416

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli.
Department of Zoology B.Sc. (Zoology)

Program Outcomes:

On completion of this course a Graduate student should be able to:

1. Analyze interactions among the various animals of different phyla, their distribution and their relationship with the environment.
2. Understand the basic concepts about chordates and non-chordates, external morphology and understand the various systems.
3. Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.
4. To study of developmental of animal and understand the physiological processes of animals and relationship of organ systems.
5. Understands about various concepts of genetics, molecular biology and its importance in human health and study of insect vectors.
6. Gain knowledge of Agro based Small Scale industries like sericulture, apiculture, fish farming, aquaculture, dairy farming and vermicompost preparation.

Program Specific Outcomes:

1. Understand the biological diversity and grades of complexity of various animal forms through their systematic classification and comparative structural studies.
2. Understand the nature and basic concepts of developmental biology, genetics, taxonomy, applied Zoology and Biostatistics.
3. Explain the molecular and cellular basis of physiological functions in animals.
4. Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology, Ecology, Cell biology, Developmental biology, Genetics, Applied Zoology, Clinical science, tools and techniques of Zoology, Toxicology, Sericulture, Biochemistry, Fish biology, Animal biotechnology, Immunology and research methodology.
5. Recognized the relationship between structure and functions at different levels of biological organization (e. g. Cells Organs, Organisms and Species) for the major group of animal.
6. Understand the applications of biological sciences in apiculture, aquaculture, agriculture, dairy farming and medicine.

Course Outcomes:

B. Sc – I (Semester – I)

Zoology Paper - I (DSC-15A Animal Diversity - I)

1. State the animal classification and list the various animals in a given phylum.
2. Comment on the modifications of common animal forms of the groups studied.
3. Enlist the examples of the phylum studied.
4. Students will be able to evaluate animals according to the level of organization, body plan, symmetry, germ layers, coelom development etc.

Zoology Paper - II (DSC-16A Cell Biology and Evolutionary Biology)

1. Understand the concept of a cell and study ultrastructure of prokaryotic and eukaryotic cell.
2. Describe the structure and functions of cell organelles.
3. Describe the concept of origin of life and understanding on the process and theories in evolutionary biology.
4. To study the distribution of animals on earth, its pattern, evolution and causative factors.

Semester - II

Zoology Paper - III (DSC-15B Animal Diversity and Insect Vector)

1. To study the morphology and various systems in rat.
2. To study mosquito born diseases with respect to their caused organism.
3. To study Housefly born diseases with respect to their caused organism.
4. To study Flea born diseases with respect to their caused organism.

Zoology Paper - IV (DSC-16B Genetics)

1. Explain Mendel's principle, its extension and chromosomal basis and determination of gene action from genotype to phenotype and concepts of inheritance.
2. Discuss Linkage, crossing Over and Sex Determination with their types and significance.
3. Explain the concept of mendelian genetics, gene, gene regulation and multiple alleles.
4. Identify genetic disorders based on karyotypes and traits.

Zoology Practical's (DSC- 15A, B and 16A, B)

1. Identify various animals based on morphological features.
2. Identify the blood group in human and prepare blood smear and identify the various cells.
3. Stained preparation of mitochondria from oral mucosa by using Janus Green-B.
4. Explain the evidences of evolution.
5. Demonstration of Digestive system, Lungs, Heart, Kidney, Testis, Ovary and Brain of rat.
6. Explain the transmission cycles of pathogens vectored by major arthropod vectors including mosquitoes, Housefly and Flea.

B. Sc – II (Semester – III)

Zoology Paper - V (DSC Animal Diversity - II)

1. To study general characters and Classification of Protochordates, Agnatha and Pisces.
2. To study the general characters and various systems in frog.
3. To study general characters and Classification of Reptiles (Venomous and non-venomous snakes).
4. To write down general characters and classification of Aves and mammals.

Zoology Paper - VI (DSC Biochemistry)

1. To study the overall concept of cellular metabolism.
2. Explain the pathways of glucose breakdown and synthesis and their regulation.
3. Describe HMP-pathways and gluconeogenesis.
4. Describe the general properties and classification of enzymes.

Semester – IV

Zoology Paper - VII (DSC Reproductive Biology)

1. Understand the structure and hormone of pituitary gland.
2. Describe the female reproductive anatomies and explain how the embryo forms from the zygote and foetal development during the three trimesters of gestation.
3. Explain the roles played by the male reproductive tract and accessory glands in the functional maturation, nourishment, storage, and transport of sperm.
4. To study causes diagnosis and management of infertility in male and female.

Zoology Paper - VIII (DSC Applied Zoology - I)

1. Knowledge of some parasitic diseases that could be transmitted between animals and man (Zoonotic diseases).
2. Explain the diseases spread by bacteria.
3. Study of different insect pests.
4. To develop the knowledge of poultry in an operational farm for more profit, management, feed requirements, etc.

Zoology Practical – I

1. Identify animals of higher groups in Invertebrates and Vertebrates.
2. Distinguish between poisonous and non-poisonous snakes.
3. Explain the modifications and adaptations in animals.
4. Explain the use of tools in Pest control.
5. Describe External features and economic importance of freshwater and Marine water fishes and other aquaculture organisms.
6. Develop skill in simple biochemical laboratory procedures.

Zoology Practical – II

1. Identify the histological slides of reproductive organ/tissues.
2. Comment on merits and demerits of contraceptive devices / methods.
3. Perform vaginal smear technique to identify the phases of estrous cycle.
4. Distinguish the male and female anatomical features of reproductive system in mammals.
5. Identify the life cycle stages of few parasites and diseases spread by vectors.
6. Explain the effects of household insects on human health.

B. Sc – III (Semester – V)

Zoology Paper - IX (DSE-E29 Comparative Anatomy of Vertebrates)

1. Students will have understood the structures of different systems such as, integumentary, skeletal, digestive, respiratory, circulatory, nervous and sensory organs in comparative way among the vertebrate groups.
2. Understand comparative account of the different vertebrate systems.
3. Learn the comparative account of integument, skeletal components, their functions and modifications in different vertebrates.

4. Demonstrate an understanding of the evolutionary history of vertebrates and the evolutionary relationships among different groups of vertebrates.

Zoology Paper - X (DSE-F29 Molecular Cell Biology and Animal Biotechnology)

1. Explain the concepts of DNA replication, DNA damage and repair, and gene expression in eukaryotic and prokaryotic organisms.
2. Transcription and Translation in prokaryotes and eukaryotes.
3. Understanding the regulation of gene expression in prokaryotes using operon concept and Eukaryotes.
4. Learn the methods of DNA sequencing and various tools and techniques like DNA isolation, PCR, transformation, restriction of molecular biology.

Zoology Paper - XI (DSE-F30 Biotechniques and Biostatistics)

1. Students will understand basic principles and techniques in genetic manipulation and genetic engineering.
2. Students will understand gene transfer technologies for animals and animal cell lines.
3. Demonstrate an understanding of the concepts of mammalian cell culture.
4. Explain the concept and types of central tendency, correlation and regression with their properties.

Zoology Paper - XII (DSE-F31 Aquatic Biology)

1. Gain theoretical knowledge in hydrobiology, abiotic factors and aquatic organisms.
2. Comprehend the importance of estuaries, marshes, wetlands and coral reef community.
3. Discuss the aquatic adaptations of common freshwater forms. Illustrate the Physico-chemical properties of water.
4. Structures of the various endocrine glands, their development, their histology and the regulation of hormone synthesis and secretion.

B. Sc – III (Semester – VI)

Zoology Paper - XIII (DSE-E30 Developmental Biology of Vertebrates)

1. Explain the Types of Eggs, fertilization and Cleavage.
2. Students will have knowledge about early development in chick and frog embryology.
3. Students will learn the different aspects of early, late and postembryonic development.
4. Understand the development of multicellular organisms from a single cell zygote.

Zoology Paper - XIV (DSE-E32 Immunology)

1. Overall Immune system of human beings, cells and organs involved in immunity.
2. Understanding of cells and organs of immune systems.. .
3. Students are able to understand basic concepts of Immunology, properties of immune system and types of immunity.
4. Explain the structure, classes and function of antibodies and antigen antibody interaction.

Zoology Paper - XV (DSE-E31 Applied Zoology - II)

1. Explain the basic concepts of apiculture like systematics, colony organization, polymorphism, morphology and foraging.
2. Study of Indigenous, Exotic breeds of cattle and commercial importance of dairy farming.
3. Explain the importance of institutions pertinent to Pearl and prawn culture. Discuss the setup of Pearl business.
4. Aqua culture systems, induced breeding techniques, post harvesting techniques.

Zoology Paper - XVI (DSE-F32 Insect Vectors and Histology)

1. Describe the basic biology (life cycle, reproduction, host-seeking behavior) of major insect vectors.
2. Explain the transmission cycles of pathogens vectored by major arthropod vectors including mosquitoes, Housefly and Fleas.
3. To be able to describe the organs, and to differentiate their histological structures.
4. To be able to describe the normal structure and function of various cell types, tissues, and organs, and to differentiate their histological structures.

B. Sc – III (Practical)

Zoology Practical – I

Comparative anatomy and developmental biology of vertebrates

1. Explain the anatomical features of brain, heart and skin of vertebrates.
2. To study of developmental study of frog.
3. Prepare permanent slides of chick embryo whole mounts.
4. Sketch, label and explain the whole mounts and transverse sections of chick embryo.
5. To study of histological structure of placenta.
6. To study the gametes of frog and rat.

Zoology Practical – II

Applied Zoology – II and Immunology

1. Explain the basic concepts of apiculture like casts of honey bees, Bee hive and model of bee hive.
2. To study of freshwater prawn culture, pearl culture and goat farming.
3. Identify the microscopic structure of the lymphoid organs.
4. Demonstrate immuno-electrophoresis technique.
5. Detect the human blood groups by antigen -antibody reactions.
6. Prepare the human blood smear to identify various blood cells.

Zoology Practical – III

Molecular biology, Animal biotechnology, Biostatistics & Biotechniques

1. To study microtechnique.
2. To study of permanent histological slides HE technique.
3. To study the different types of histochemical technique- AB pH- 1, AB pH- 2.5.
4. Explain the principle and applications of paper chromatographic technique with example.
5. Understand the applications of statistical tools like mean, mode, median, mean deviation, standard deviations.
6. Solve the statistical problems based on Central Tendency, Dispersion, Correlation and regression.

Zoology Practical – IV

Aquatic biology, insect vector & diseases

1. Determination of pH, acidity-alkalinity and hardness of water sample.
2. Determination of dissolved oxygen and free CO₂ of water sample.
3. To study instruments used in limnology and their significance.
4. Description of head- origin, structure and modification; types of mouthparts and antennae.
5. To study the mosquito, sandfly, housefly, flea born diseases.
6. To study histology of mammalian organs.



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No.: B.V.D.P.K.M.S./ /20 -

Date: 09/09/2022

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(https://bvdpkmsangli.edu.in/media/pdf/S5-Botany-NEP_Co_PO_051023.pdf)

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

(Dr. V. B. Awale)

HEAD

Department of Botany
Dr. Patangrao Kadam Mahavidyalaya,
SANGLI-416 416.



**BHARATI VIDYAPEETH'S
Dr. PATANGRAO KADAM MAHAVIDYALAYA, SANGLI.**

DEPARTMENT OF BOTANY

B.Sc. BOTANY

PROGRAM OUTCOMES

- 1. To increase knowledge of basic natural sciences**
- 2. To aware about scientific knowledge**
- 3. To study modern technique**
- 4. To understand advanced biotechnological techniques**
- 5. To create awareness about Environment and sustainability**
- 6. Successful career in Botany like Forestry, Plant Nursery, Plant Tissue Culture, Plant Research Institutes**

Programme Specific Outcomes: **PSOs of B.Sc. Botany**

- PSO1. Critically evaluation of ideas and arguments by collection relevant information about the plants.
- PSO2. Identify problems and independently propose solutions using creative approaches, acquired through interdisciplinary experiences., and a depth and breadth of knowledge/expertise in the field of Plant Identification.
- PSO3. Accurately interpretation of collected information and use taxonomical information to evaluate and formulate a position of plant in taxonomy.
- PSO4. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.
- PSO5. Students will be able to present scientific hypotheses and data both orally and in writing in the formats that are used by practicing scientists.
- PSO6. They will be able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology, and life history.

Course Outcomes of B.Sc. Botany – 2023-24

Class/ Program	Course Code and Name/ Title	Outcomes
B. Sc. I SEM – I NEP	P – I - 88181 - Microbes, Algae, and Bio fertilizers	<ol style="list-style-type: none"> 1. The students will develop understanding about the diversity, identification, classification and economic importance of Viruses. 2. The students will develop understanding about the diversity, identification, classification and economic importance of Bacteria 3. The students will develop understanding about the diversity, identification, classification and economic importance of Algae. 4. They learn the use of Organic Biofertilizers such as <i>Rhizobium, Nostoc and Trichoderma</i> etc
	P – II - 88181 – Cell Biology and Analytical Techniques	<ol style="list-style-type: none"> 1. Students Gain knowledge about Cell Science Cell biology gives knowledge about cell organelles, importance and their function 2. Understand component of cell is cell wall, Plasma Membrane, organelles and Cytoplasmic matrix. 3. Cell organelles w. r. t. ultra structure, chemical composition and functions 4. They Understand Research Techniques such as Microscopy, and Chromatography.
B. Sc. I SEM - II	Paper – III- Mycology, Phytopathology and Mushroom Cultivation	<ol style="list-style-type: none"> 1. The students will develop understanding about the diversity, identification, classification and economic importance of Fungi. 2. Understand the scope and importance of Plant Pathology. To give knowledge about plant disease, plant growth, plant metabolism and structure between different groups of plant. 3. Know the diseases caused by fungal, bacterial, mycoplasma, nematodal and viral pathogens 4. Understand the mushroom cultivation techniques.
	Paper -IV – Archegoniate (Bryophytes and Gymnosperms)	<ol style="list-style-type: none"> 1. Understand the diversity of Pteridophytes and Gymnosperms 2. Understand the economic importance of Pteridophytes and Gymnosperms . 3. They understand Internal structure. 4. They come to know the life cycle of archegoniate
B. Sc. I SEM – II	Botany Practical Paper	Students understand practically by handling of plant materials, Equipments and apparatus

(Annual)	(Based on Paper I, II, III and IV)	<ol style="list-style-type: none"> 1. Students learn the Vegetative and Morphological characters of Plants. 2. Study of diversity of Algae, Fungi, Bryophytes, Pteridophytes, and Gymnosperms. 3. They learn the forms of Bacteria 4. Students learn the use of bio fertilizers and organic manure. 5. They know the structure of Prokaryotic and Eukaryotic cells. 6. Learn the different lab techniques such as Microscopy, and Chromatography etc.
B. Sc. II Sem. III	P – V Plant Systematics and Anatomy	<ol style="list-style-type: none"> 1. To know the scope and importance of the plant systematics. 2. To understand plant morphology, nomenclature and classification 3. To prepare and demonstrate herbarium and to understand importance of Botanical gardens. 4. To examine internal organization of plant organs.
	P – VI Genetics and Molecular Biology	<ol style="list-style-type: none"> 1. To understand the principles of Mendelian inheritance and gene interaction. 2. To differentiate between structural and numerical variations in chromosomes. 3. To know the composition and significance of nucleic acids. 4. To summarize concept of central dogma and genetic code.
B. Sc. II Sem. IV	P – VII Plant Ecology and Economic Botany	<ol style="list-style-type: none"> 1. To understand core concepts of biotic and abiotic components. 2. To prepare map of Phytogeographical regions of India. 3. Know importance of plants and plant products and their utility. 4. To understand importance and conservation of Germplasm.
	P – VIII Plant Physiology, Nursery, and Gardening Techniques	<ol style="list-style-type: none"> 1. To understand various physiological processes in plants. 2. To understand significance and mechanism of photosynthesis. 3. To design outlines of landscaping and home gardening. 4. To prepare different types of gardens and to know garden equipments.
B. Sc. II SEM – II (Annual)	Practical Paper-I	<p>Students understand practically by handling of plant materials, equipments and apparatus</p> <ol style="list-style-type: none"> 1. Students learn the Vegetative and Morphological characters of Plants. 2. Students understand the diagnostic characters of some Angiospermic plant families 3. Double staining technique 4. Maceration technique 5. They can calculate Protein sequence. 6. They practically learn isolation of DNA.
	Practical Paper -	Students understand practically

	II	<ol style="list-style-type: none"> 1. Students learn the different ecological adaptations and ecological instruments. 2. They know the Phytogeographical regions of India 3. To learn the different techniques such as Chromatography. 4. To prepare millets product. 5. Students come to know the different horticultural techniques such as Budding, Layering, Grafting, Potting, Bonsai etc. 6. Understand use of Ganong's respirometer
B.Sc. III Botany Sem. V	P – IX - 79688 Genetics and Plant Breeding	<ol style="list-style-type: none"> 1. Understand the Science of Heredity, Mendelism, laws of heredity 2. Study of multiple alleles, linkage and crossing over 3. Euploidy, aneuploidy and chromosomal aberrations. 4. Understand the science of plant breeding.
	P – X - 79689 Microbiology, Plant Pathology And Mushroom Culture Technology	<ol style="list-style-type: none"> 1. The students will develop understanding about the diversity, identification, classification and economic importance of different microbes such as viruses, bacteria etc. 2. Understand the scope and importance of Plant Pathology. To give knowledge about plant disease, plant growth, plant metabolism and structure between different groups of plant. 3. Know the diseases caused by fungal, bacterial, mycoplasma, nematodal and viral pathogens and Different control measures of plant diseases 4. Understand the mushroom cultivation techniques.
B.Sc. III Botany Sem. V	P – XI - 79690 Cytology and Research Techniques in Biology	<p>Students Gain knowledge about Cell Science Cell biology gives knowledge about cell organelles, importance and their function.</p> <ol style="list-style-type: none"> 1. prokaryotic and eukaryotic cell 2. Understand component of cell is cell wall, Plasma Membrane, organelles and Cytoplasmic matrix. 3. Cell organelles w. r. t. ultra structure, chemical composition and functions 4. Understand Research Techniques such as Colorimetry, Micrometry, Spectrophotometry, Thin Layer Chromatography, Microscopy etc.
B.Sc. III Botany Sem. V	P – XII – 79691 Horticulture and Gardening	<ol style="list-style-type: none"> 1. To understand scope , importance & disciplines of horticulture. 2. To understand different horticultural practices & methods. 3. To understand production technology, harvesting and preservation techniques of fruits, vegetables, Ornamentals, floriculture. 4. Knowledge of horticulture and floriculture is useful for development of small scale industries for the youth.

B.Sc. III Botany Sem. VI	P – XIII - 81680 Plant Biochemistry And Molecular Biology	<ol style="list-style-type: none"> 1. Students can Understand the current status of Biochemistry. 2. Learn the scope and importance of molecular biology. 3. Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material. (Watson & Crick Model) 4. Gene action and regulation in governing specific functioning and characters
	P – XIV -81681 Bioinformatics, Biostatistics and Economic Botany	<ol style="list-style-type: none"> 1. students can Understand the concept of Bioinformatics and different databases and retrieval tools 2. Understand the techniques of statistics to biological data 3. Determine test of significance. 4. Understand the scientific name, part used of some economically important plants.
B.Sc. III Botany Sem. VI	P – XV - 81682 Plant Biotechnology and Paleobotany	<ol style="list-style-type: none"> 1. Understand the biotechnology scope, significance, To learn advanced techniques and achievement. 2. Know the transgenic technology for the improvement of quality and quantity of plant and there by product. 3. Understand the advantages of in vitro propagation in various areas. 4. Know the scope of Paleobotany, types of fossils and geological time scale and fossil genera representing different fossil groups.
	P – XVI - 81683 Biofertilizers, Herbal Drug Technology	<ol style="list-style-type: none"> 1. Study of Organic Biofertilizers such as Green Manures, <i>Rhizobium</i>, <i>Trichoderma</i> etc 2. Learn the different herbal drugs and their uses. 3. Learn the Adulterants used in herbal drugs 4. They learn biochemical techniques to identify drug adulterants.
Annual Pattern	Practical paper I (Based On Paper No. X and XV)	<p>Students understand practicals by handling and sectioning plant materials.</p> <ol style="list-style-type: none"> 1. Preparation of different culture media such as PDA and M.S. 2. Learn the tissue culture techniques. 3. Learn the plant diseases and their symptoms 4. Isolation and Quantification of DNA molecule. 5. Learn the Steps involved in genetic engineering. 6. Learn the different types and forms of Fossils such as <i>Lyginopteris</i>, <i>Enigmocarpon</i>
	Practical paper II (Based on Paper No. IX and XIV)	<p>Students understand practicals by handling and sectioning plant materials.</p> <ol style="list-style-type: none"> 1. Genetic examples on Linkage, Crossing Over and Polygene inheritance 2. The Mitosis and Meiosis techniques. 3. Learn the karyotype analysis 4. To know the emasculation and Breeding technique in

		<p>various families such as Malvaceae, Poaceae, Fabaceae</p> <p>5. Study of the different economically important plants such as Gram, Soybean, Ground Nut, Cotton, Black Pepper etc.</p> <p>6. Learn the methods of Central tendency measurement and Graphical data presentation.</p>
Annual Pattern	<p>Practical paper III (Based on Paper no. XI and XVI)</p>	<p>Students understand practicals by handling and sectioning plant materials.</p> <p>1.They know the structure of Prokaryotic and Eukaryotic cells.</p> <p>2. Learn the different lab techniques such as Photomicrography, Micrometry, Spectrophotometry etc.</p> <p>3. Students learn the use of biofertilizers and organic manure.</p> <p>4.Learn the preparation techniques of herbal products.</p> <p>5.Students come to know the different techniques to identify drug adulteration.</p> <p>6. Know the techniques of Phytochemical analysis of Primary and Secondary Metabolites.</p>
	<p>Practical paper IV (Based on Paper no. XII and XIII)</p>	<p>1. Students come to know the different horticultural techniques such as Budding, Layering, Grafting, Potting etc.</p> <p>2. Student understands the procedure of making Bonsai, Bottle garden, floral Rangoli and floral pot</p> <p>3. They can learn the use of different garden implements such as Cutter, Scissors, Sprayer and Spade.</p> <p>4. Students learn the plantation techniques of some economically important Ornamental plants such as Rose, Gerbera, Marigold</p> <p>5. They know the technique of Identification and Preparation of Hedge, Edge and Indoor Plants.</p> <p>6. Learn the Qualitative analysis techniques of Sugar, Starch, Proteins and Lipids.</p>



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DST-FIST Funded College (Level-0)

Founder

Dr. Patangrao Kadam

M. A., L. L. B., Ph. D.

Affiliated to Shivaji University, Kolhapur.

Accredited with 'B⁺⁺' Grade by NAAC, Bengaluru (CGPA 2.96)

Principal

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No.: B.V.D.P.K.M.S./ /20 -

Date: 08-09-2022

Notice

All the B.Sc. students are hereby informed that Department of Statistics, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Statistics on our college website

<https://bvdpkmsangli.edu.in/media/pdf/S6-Statistics NEP CO PO PSO 051023.pdf>.

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

(Mr. C. A. Shete)

HEAD,

Department of Statistics

Dr. Patangrao Kadam Mahavidyalaya

SANGLI 416 416

Bharati Vidyapeeth's

Dr. Patangrao Kadam Mahavidyalaya Sangli

Department of Statistics (2022-23)

Program Outcomes:

PO-1: Students learn to design data collection plans and basic tools of descriptive statistics also handling of raw data.

PO-2: Students will get knowledge of Statistics which will help for post graduation and further studies in research.

PO-3: Students will able to understand various problems and identify the solution using appropriate statistical method also test the precision of this method and interpret the results with proper conclusion.

PO-4: Students will able to enhance programming knowledge.

PO-5: Students will able to apply the statistical knowledge to address the problems related to economy, business, marketing, quality control etc.

PO-6: Students will able to make presentation, writing project reports also they communicate effectively.

Program Specific Outcomes:

PSO-1: Students learn different types of discrete and continuous distribution with their properties and application.

PSO-2: Students learn identify situations where one way analysis of variance is appropriate also interpret the Analysis of variance.

PSO-3: Students will able to formulate and solve linear programming problem, assignment problem, transportation problem.

PSO-4: Students will able to explain different meanings of quality concepts and its influence.

PSO-5: Students will understand the concept of sampling distribution of a statistic and properties, difference between the parameter and statistic.

PSO-6: Students will develop Programming skills.

Course Outcomes

Course Outcomes B.Sc.I (Statistics)	
Semester-I	
Course	Outcomes
Paper No.1 (Descriptive Statistics-I)	After completion of these courses, students should able to, CO-1: The Students will acquire knowledge of meaning and scope of Statistics, various statistical organizations. CO-2: Able to acquire knowledge data , data types and data presenting methods. CO-3: To get knowledge about concept of Population, sample and various sampling methods. CO-4: understand concept of measure of central tendencies and dispersion
Paper No.2 (Elementary Probability theory)	CO-1: Students will able to distinguish between random and non-random experiments. CO-2: Acquire knowledge of concept of probability and use of basic probability rules. CO-3: Understand the concept of conditional probability and independence of events, also univariate random variable and its probability distribution. CO-4: Acquire knowledge of mathematical expectation of univariate random variable.

Course Outcomes

Course Outcomes B.Sc.I (Statistics)	
Semester-II	
Course	Outcomes
Paper No. III (Descriptive Statistics-II)	After completion of these courses, students should able to, CO-1: Students will acquire knowledge of correlation coefficient and interpret its value. CO-2: To know regression coefficient, interpret its value nad use of regression analysis. CO-3: To learn about Qualitative data including concept of independence and association between two attributes. CO-4: Understand vital statistics and concept of mortality and fertility and growth rates.
Paper No. IV (Discrete Probability Distributions)	CO-1: Able to acquire knowledge of bivariate discrete distributions, independence of bivariate random variable, mathematical expectation of bivariate discrete random variable. CO-2: To know one point distribution, two point distribution, Bernoulli distribution. CO-3: To learn uniform distribution, binomial distribution, Hypergeometric Distribution. CO-4: To understand Poisson distribution, Geometric distribution and negative binomial distribution.

Course Outcomes B.Sc. I (Statistics Practical)

Course
(Laboratory Practical)

Outcomes

After completion of these courses, students should able to,

CO-1: To acquire knowledge of computations using MS-Excel.

CO-2: To represent statistical data diagrammatically and graphically.

CO-3: To compute various measure of central tendency, dispersion, moments, skewness and kurtosis.

CO-4: To compute correlation coefficient and regression coefficient.

CO-5: To understand consistency, association and independence of attributes.

CO-6: To interpret summary statistics of computer output.

CO-7: To know applications of some standard discrete probability distributions.

CO-8: To compute the various fertility rates, mortality rates and growth rates.

Course Outcomes

Course Outcomes B.Sc.II (Statistics)	
Semester-III	
Course	Outcomes
Paper No. V (Probability Distribution-I)	After completion of these courses, students should able to, CO-1: Understand the concept of discrete and continuous distributions with real life situations. CO-2: To distinguish between discrete and continuous distribution. CO-3: To find various measure of random variable and probabilities using its probability distribution. CO-4: To know relations among the different distributions and understand the concept of transformation of univariate and bivariate continuous random variable.
Paper No. VI (Statistical Methods-I)	CO-1: Understand the concept of multiple linear regression. CO-2: Understand the concept of multiple correlation and partial correlation. CO-3: To acquire knowledge of concept of sampling theory for example simple random sampling and stratified sampling. CO-4: To understand the need of vital statistics and concept of mortality and fertility.

Course Outcomes

Course Outcomes B.Sc.II (Statistics)	
Semester-IV	
Course	Outcomes
Paper No. VII (Probability Distribution-II)	After completion of these courses, students should able to, CO-1: Able to know some standard continuous probability distribution with real life situations. CO-2: To find various measure of continuous random variable and probabilities using its probability distribution. CO-3: To understand the relations among the different distributions. CO-4: To understand the chi-square, t and F distributions with their applications and interrelations.
Paper No. VIII (Statistical Methods-II)	CO-1: Able to know the concept and use of time series. CO-2: To understand the meaning, purpose and use of Statistical Quality Control, Construction and working of control charts for variables and attributes. CO-3: To understand the concept of testing of hypothesis using appropriate test statistics, CO-4: To apply the small sample tests and large sample tests in various situations.

Course Outcomes B.Sc. II (Statistics Practical)

Course (Laboratory Practical)	Outcomes
	<p>After completion of these courses, students should able to,</p> <p>CO-1: To be able to compute probabilities of standard probability distribution.</p> <p>CO-2: To compute the expected frequencies and test the goodness of fit.</p> <p>CO-3: To understand how to obtain random sample from standard probability distribution and sketch of the p.m.f./p.d.f. for given parameter .</p> <p>CO-4: To fit plane of multiple regression and compute multiple and partial correlation coefficients.</p> <p>CO-5: To Draw random samples by various methods.</p> <p>CO-6: To construct various control chart (mean chart, range chart, etc.).</p> <p>CO-7: To understand the applications of poisson , geometric and negative binomial distributions .</p> <p>CO-8: Sketch of discrete and continuous distributions for various parameters using MS-Excel.</p>

Course Outcomes

Course Outcomes B.Sc.(Statistics)	
Semester-V	
Course	Outcomes
Paper No. IX (Probability Distributions)	After completion of these courses, students should able to, CO-1: To acquire knowledge of important univariate distributions such as Laplace, Cauchy, Lognormal, Weibull, Logistic, Pareto, Power series distribution. CO-2: To acquire knowledge of multinomial and bivariate normal distribution. CO-3: Understand the concept of truncated distribution and information of various measure of these probability distributions. CO-4: To apply standard continuous probability distribution.
Paper No. X (Statistical Inference-I)	CO-1: To acquire knowledge about important inferential aspects of point estimation. CO-2: Understand the concept of random sample from a distribution, sampling distribution of a statistic, standard error of important estimates such as mean and proportion. CO-3: To acquire knowledge about inference of parameters of standard discrete and continuous distribution. CO-4: To understand concept of Fisher information and CR inequality and acquire knowledge of different methods of estimation.

Course Outcomes

Course Outcomes B.Sc.(Statistics)	
Semester-V	
Paper No. XI (Design of Experiments)	CO-1: To acquire knowledge of basic terms used in design of experiments. CO-2: Understand the concept of one-way and two-way analysis of variance. CO-3: To know various design of experiments such as CRD, RBD, LSD and factorial experiments. CO-4: To acquire knowledge of using an appropriate experimental design to analyze the experimental data.
Paper No. XII (R-Programming and Quality management)	CO-1: To know importance of R programming and acquire knowledge of identifiers and operators used in R. CO-2: To acquire knowledge of conditional statements and loops used in R. CO-3: To understand the quality tools used in quality management. CO-4: To learn process and product control used in Quality management.

Course outcomes

Course Outcomes B.Sc.(Statistics)	
Semester-VI	
Course	Outcomes
Paper No. XIII (Probability theory and application)	After completion of these courses, students should able to, CO-1: To acquire knowledge about order statistics and associated distributions. CO-2: To understand the concept of convergence and Chebychev's Inequality and its uses. CO-3: To understand concept of law of large number and central limit theorem and its uses. CO-4: To acquire knowledge of terms involved in reliability theory as well as concept and measures.
Paper No. XIV (Statistical Inference-II)	CO-1: Understand concept of interval estimation. CO-2: To acquire knowledge of interval estimation of mean, variance and population proportion. CO-3: To acquire knowledge of important aspects of test of hypothesis and associated concepts. CO-4: To learn concept about parametric and non-parametric methods and understand some important parametric as well as non-parametric tests.

Course outcomes

Course Outcomes B.Sc.(Statistics)	
Semester-VI	
Paper No. IX (Sampling Theory)	<p>CO-1: To get basic knowledge of complete enumeration and sample, sampling frame sampling distribution, sampling and non-sampling errors, principles steps in sample surveys, sample size determination, limitations of sampling etc.</p> <p>CO-2: To understand the concept of various sampling methods such as simple random sampling, stratified random sampling, systematic sampling and cluster sampling.</p> <p>CO-3: To get an idea of conducting sample surveys and selecting appropriate sampling technique.</p> <p>CO-4: To understand comparing various sampling techniques also get ratio and regression estimators.</p>
Paper No. XVI (Operations Research)	<p>CO-1: To understand concept of linear programming problem and acquire knowledge of solving LPP by graphical and simplex method.</p> <p>CO-2: To acquire knowledge of transportation, Assignment and sequencing problems.</p> <p>CO-3: To know concept of queuing theory.</p> <p>CO-4: To learn simulation technique and Monte Carlo technique of simulation.</p>

Course Outcomes B.Sc. III (Statistics Practical)

Course	Outcomes
(Laboratory Practical)	<p>After completion of these courses, students should able to,</p> <p>CO-1: To compute the expected frequencies and test the goodness of fit.</p> <p>CO-2: To understand multivariate and bivariate normal distribution.</p> <p>CO-3: To learn point estimation by method of moment and method of maximum likelihood.</p> <p>CO-4: To learn interval estimation for location and scale parameter.</p> <p>CO-5: To get knowledge of testing of hypothesis using non-parametric tests.</p> <p>CO-6: To learn analysis of completely randomized design. Randomized block design, Latin square design and factorial design.</p> <p>CO-7: To determine sample size in simple random sampling also learn various sampling methods.</p> <p>CO-8: To learn data input output, graphical representation, measure of central tendency and dispersion, simulation using R-programming.</p> <p>CO-9: To get knowledge about construction of CUSUM and EWMA chart in MS- Excel.</p> <p>CO-10: To solve linear programming problem using simplex method and Big-M method.</p>



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No.: B.V.D.P.K.M.S./ /20 -

Date: 31/08/2022

Notice

All the B.Sc. students are hereby informed that Department of Computer Science, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Computer Science on our college website (<https://bvdpkmsangli.edu.in/media/pdf/S7-Computer Science NEP CO PO PSO 051023.pdf>).

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.



(A.B. Bokane)

**Head of Department,
Computer Science**

Dr Patangrao Kadam Mahavidyalaya,
Sangli.

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli

Department of Computer Science	
Sr. No	Program Specific Outcome
PSO 1	To provide opportunities to the students to acquire computer knowledge of latest software & hardware technology.
PSO 2	To provide opportunity to students to learn the latest trends in Computer Science.
PSO 3	To provide opportunities to the students to develop different software's using computer programming languages
PSO 4	To provide opportunities to the students to do the jobs in IT Industry as software developer, Database administrator, Software tester, Data Scientist etc. and to formulate analyse and solve real life problems faced in IT Industry

Program Outcomes	
Sr. No	Program Outcome
PO-1	Student will gain fundamental knowledge of computer which will help the for PG studies and Research
PO-2	Student will be able to know good laboratory practices and lab safety.
PO-3	To make the learner proficient in analysing the various observations and Computer phenomena presented to him during the course.
PO-4	Students will be able to apply the fundamental knowledge to address the cross-cutting issues such as sustainable development
PO-5	Students will be able to solve various problems by identifying the essential parts of a problem, formulate strategy for solving the problem, applying appropriate techniques to arrive at a solution, test the precision and accuracy of the solution and interpret the results.
PO-6	Students will be able to communicate effectively i.e. being able to articulate, comprehend and write effective reports, make effective presentations and documentation and capable of expressing the subject through technical writing as well as through oral presentation.

Program Name – B.Sc. I

Course Name/ paper	Course Outcome By the end of each of the following course, the students will be able to:
Paper I DSC – 11 A Problem solving using Computers	<p>CO 1: Design algorithms and flowcharts, basic knowledge of programming and logic development.</p> <p>CO 2: Students can solve real world problems using appropriate set, function, and relational models.</p> <p>CO 3: Design E-R Model for given requirements and convert the same into database tables.</p> <p>CO 4: Implement algorithms in the ‘C’ language and Develop modular programs using control structures and arrays in ‘C’</p>
Paper-II DSC-12A DBMS	<p>CO 1: Collect data, how to retrieve, modify and delete data, how to avoid duplicate data.</p> <p>CO 2: Student can Understand the basic principles of database management systems.</p> <p>CO 3: Draw Entity-Relationship diagrams to represent simple database application scenarios.</p> <p>CO 4: Ability to solve real world problems using appropriate set, function, and relational models.</p>
Paper-III DSC-11B Programming Skills using ‘C’	<p>CO 1: Design algorithms and flowcharts, basic knowledge of programming and logic development.</p> <p>CO 2: Define a problem at the view level & ability to understand the physical structure of the programming flow</p> <p>CO 3: Implement the logic by using different loops, Control Structure like as if, else, Switch, while, do while etc.</p> <p>CO 4: Ability to normalize the array and structure</p>
Paper-IV DSC -12B Relational Database management System	<p>CO 1: Create the database using queries and form some operation on that database like create table, select data from that table, modify table data, and programmers using PLSQL blocks.</p> <p>CO 2: Create database tables in PostgreSQL. and able to write and execute simple and nested queries.</p> <p>CO 3: Use database techniques such as SQL & PL/SQL. CO 4: Understand and able to implement concept of transactions</p>

Practical's	<p>CO 1: Get the knowledge about basic computer programming language and database management system.</p> <p>CO 2: Perform advanced database operations to study data security and its importance.</p> <p>CO 3: Get the knowledge about some operation on that database like create table, select data from that table, modify table data, and programmers using PLSQL blocks.</p> <p>CO 4: Implement the logic by using tools like ERD</p>
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Program Name – B.Sc. II	
Course Name/ paper	Course Outcome By the end of each of the following course, the students will be able to:
Paper V DSC-11C PHP	<p>CO 1: Learn HTML for designing</p> <p>CO 2: Analyze the basic structure of a PHP web application and be able to install and maintain the web server, compile, and run a simple web application.</p> <p>CO 3: Learn how databases work and how to design one, as well as how to use PHP work with MySQL.</p> <p>CO 4: Hypertext pre-processor, in that you can create dynamic websites, connectivity with my-sql server</p>
Paper-VI DSC-12C C++	<p>CO 1: Get the idea of creating classes and objects the basics of oops. The initialization & declaring the object with constructor and destructor. Inheritance chapter lets to know about reusing classes. Polymorphism is used to run time binding.</p> <p>CO 2: Understand the concept of object oriented programming</p> <p>CO 3: Learn use the benefits of object oriented design and understand when it is an appropriate methodology to use.</p> <p>CO 4: Create and Design object oriented solutions for small systems involving multiple objects</p>
Paper VII DSC-12D Data Structure	<p>CO 1: Understand the basic concepts such as Abstract data types, liner and non-liner data. Able to analyses and implement various kinds of searching and sorting techniques.</p> <p>CO 2: Understand different methods of organizing large amount of data using data structure.</p> <p>CO 3: Choose appropriate data structure as applied to specified problem definition.</p> <p>CO 4: Understand various techniques for representation of the data in the real world.</p>
Paper VIII DSC-11D Cyber security	<p>CO 1: Create awareness about cybercrimes.</p> <p>CO 2: Effectively communicate in a professional setting to address information security issues</p> <p>. CO 3: Protect and defend computer systems and networks from cybersecurity attacks.</p>

	CO 4: Diagnose and investigate cybersecurity events or crimes related to computer systems and digital evidence.
Practical's:	<p>CO 1: Identify Hypertext pre-processor, in that they can create dynamic websites, connectivity with using My-Sql database server. It is server side scripting language, learn HTML for designing.</p> <p>CO 2: Develop object-oriented programming approach and enhance to design, implement, and evaluate a computational system to meet desired needs within realistic constraints.</p> <p>CO 3: Handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures</p> <p>CO 4: Use linear and non-linear data structures like stacks, queues , linked list etc.</p>

Program Name – B.Sc. III	
Course Name/ paper	Course Outcome By the end of each of the following course, the students will be able to:
Paper IX Core Java	<p>CO 1: Object oriented programming concepts using Java.</p> <p>CO 2: Get knowledge of input, its processing and getting suitable output.</p> <p>CO 3: Understand, design, implement and evaluate classes and applets.</p> <p>CO 4: Understand concept of Multiprogramming and Exception Handling</p>
Paper-X C# Programming	<p>CO 1: cover the practical aspects C#.NET framework.</p> <p>CO 2: Introduce the students to the basics of OOPs and windows application program.</p> <p>CO 3: Understand design/implementation issues involved with variable allocation and binding, control flow, types, subroutines.</p> <p>CO 4: Develop a greater understanding of the issues involved in c# programming language design and implementation.</p>
Paper XI LINUX Part I	<p>CO 1: Get a good working knowledge of Linux.</p> <p>CO 2: Use any Linux distribution.</p> <p>CO 3: Learn advanced subjects in computer science practically.</p> <p>CO 4: Understand the processes background and fore ground by process and signals system calls.</p>
Paper XII Python Part I	<p>CO 1: Develop distributed business applications, develop web pages.</p> <p>CO 2: Using advanced server-side programming through servlets and Java server pages. Using advanced server-side programming through servlets and Java server pages.</p> <p>CO 3: Demonstrate approaches for performance and effective coding to learn database programming using Java.</p> <p>CO 4: Study web development concept using Servlet and JSP.</p>

<p>Paper XIII Advanced Java</p>	<p>CO 1: Develop distributed business applications, develop web pages.</p> <p>CO 2: Using advanced server-side programming through servlets and Java server pages. Using advanced server-side programming through servlets and Java server pages.</p> <p>CO 3: Demonstrate approaches for performance and effective coding to learn database programming using Java.</p> <p>CO 4: Study web development concept using Servlet and JSP</p>
<p>Paper XIV ASP .NET</p>	<p>CO 1: This course will cover the practical aspects of multi-tier web-based application development</p> <p>CO 2: Using the .NET framework.</p> <p>CO 3: The goal of this course is to introduce the students to the basics of distributed Web application development.</p> <p>CO 4: Perform form validation with validation controls</p>
<p>Paper XV Linux Part II</p>	<p>CO 1: This course covers design principles of Linux Operating System Memory management.</p> <p>CO 2: Structure of File system and virtual file system is also elaborated.</p> <p>CO 3: This course contains details of shell programming and introduces System administration</p> <p>CO 4: Elaborate the system calls for process management and file management.</p>
<p>Paper XVI Python Part II</p>	<p>CO 1: Learn how to write functions and pass arguments in Python.</p> <p>CO 2: Learn how to build and package Python modules for reusability.</p> <p>CO 3: Learn how to use exception handling in Python applications for error handling.</p> <p>CO 4CO 1: Learn how to write functions and pass arguments in Python.</p>

<p>Practical Paper – IV Based on Paper No. IX, X, XIII and XIV.</p>	<p>CO 1: Acquire a good knowledge of the computer network, its architecture and operation; understand and apply the principles and practices of computer networks.</p> <p>CO 2: Understand object-oriented programming concepts, and apply them in solving Problems.</p> <p>CO 3: Build and debug well-formed Web Forms with ASP. NET Controls.</p> <p>CO 4: Create custom controls with user controls</p>
<p>Practical Paper – V Based on Paper No. XI, XII, XV and XVI.</p>	<p>CO 1: Understand the basic commands of Linux operating system and can write shell scripts</p> <p>CO 2: Create file systems and directories and operate them; Students will be able to create processes background and foreground etc.</p> <p>CO 3: Understand various OOP's Concepts</p> <p>CO 4: Apply the logic to solve programs</p>
<p>Practical Paper – VI Major Project work done by the student.</p>	<p>CO 1 Learn software designing process using appropriate techniques, skills, and tools necessary for developing computer application (software).</p> <p>CO 2: Apply design and development principles in the construction of software systems of varying complexity.</p> <p>CO 3: Understand how to build a software.</p> <p>CO 4: Learn and understand all SDLC models to design a software</p>



'Social Transformation Through Dynamic Education'

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
(Arts, Science, Commerce & Community College)
DST-FIST Funded College (Level-0)

Founder

Dr. Patangrao Kadam

M. A., L. L. B., Ph. D.

Affiliated to Shivaji University, Kolhapur.

Accredited with 'B⁺⁺' Grade by NAAC, Bengaluru (CGPA 2.96)

Principal

Dr. D. G. Kanase

M. Sc., Ph. D.

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No.: B.V.D.P.K.M.S./

/20²²⁻²³

Date: 08/08/2022

Notice

All the B.Sc. I and II year students of Mathematics Subject are hereby informed that, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus and Course Outcomes (COs) of Sociology on our college website

(https://bvdpkmsangli.edu.in/media/pdf/S8-Mathematics_CO_PO_101023.pdf)

And also all the files have been shared on our respective WhatsApp group.

Kindly go through it.

(Mr. A. B. Khadtare)

**Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli**

Department of Mathematics

Program Specific Outcomes

1. Students gain a sound knowledge in foundational subjects related to pure and applied mathematics.
2. Acquire various skills related to computational techniques and related software's.
3. Being able to analyze the problem and propose a solution method and finalize the solution
and the process of solution in consultation with the peer group and faculty.
4. Develop the solution methodology and necessary software if required and prepare the report.

Course	Outcomes
B.Sc. I (Mathematics)	
Theory paper: 5A Differential Calculus	<ol style="list-style-type: none">1. Students acquaint themselves with the idea of complex numbers.2. Understand Meaning and significance of Hyperbolic functions and their relation with circular functions3. Get to know the significance of Leibnitz's theorem, De Moivre's Theorem, Euler's Theorem.4. Understand the concept of partial differentiation and learn to apply it for various problems in science and engineering.
Theory paper: 6A Calculus	<ol style="list-style-type: none">1. Students grasp the concept of mean value theorems and its significance.2. Study the special case of Taylor's expansion3. Learn the meaning and significance of Indeterminate forms and learn to apply it for various indeterminate limiting cases
Theory paper: 5B Differential Equations	<ol style="list-style-type: none">1. Understand the meaning, motivation and significance of differential equations.

	<ol style="list-style-type: none"> 2. Learn how to form and solve first order first degree ordinary differential equations. 3. Learn the methods of solving equations of first order and higher degree. 4. Solving higher order ordinary linear differential equations and homogeneous linear differential equations with constant coefficients.
<p>Theory paper: 6B Higher order Ordinary Differential Equations and Partial Differential equations.</p>	<ol style="list-style-type: none"> 1. Study the method of solution of general second order differential equation with variable coefficients. 2. Understand the concept, formation, and method of solution of ordinary simultaneous equations. 3. Study the motivation and concept of partial differential equations. Learn methods of solving Lagrange's equation and Charpit's method.
<p>Practical: CML-I (Computational Mathematics Laboratory – I)</p>	<ol style="list-style-type: none"> 1. Students get acquainted with the field of numerical computational methods and various areas covered within the subject of numerical computations with a bird's eye view of applications. 2. Learn to use electronic calculators and computers for simple calculations of algebraic and transcendental functions that are frequently required in science and technology. 3. Teacher gets to know student specific queries and helps students solve their individual problems with personal attention.
B.Sc. II (Mathematics)	
<p>Theory Paper: 5C Real Analysis – I</p>	<ol style="list-style-type: none"> 1. Learning basic concepts of set theory. 2. Study the principle of mathematical induction and apply it for proving results. 3. Acquire the concept of countability and determine countable and uncountable sets.
<p>Theory Paper : 6C Algebra – I</p>	<ol style="list-style-type: none"> 1. Understanding of the concept of Hermitian and Skew-Hermitian Matrix and their properties.

	<ol style="list-style-type: none"> 2. Grasp the concept of normal form and convert given matrix to Normal form. 3. Learn the concept of Eigen value and Eigen vector . To find Eigen values and Eigen vectors.
Theory Paper: 5D Real Analysis – II	<ol style="list-style-type: none"> 1. Study the concept of monotonic and bounded sequences. 2. Understand Epsilon-Delta concept of convergence of a sequence. 3. Study the methods of testing convergence of series.
Theory Paper : 6D Algebra – II	<ol style="list-style-type: none"> 1. Understand the concept of Cosets. 2. Learn the meaning of Normal subgroups of a group with examples. 3. Study the concept of a Permutation group with examples.
Practical : CML – II (Computational Mathematics Laboratory – II)	<ol style="list-style-type: none"> 1. Learn to solve linear systems of equations by Gauss-Elimination , Gauss-Jordan , Gauss Jacobi and Gauss-Seidel methods manually with use of electronic calculators . 2. Learn root finding methods viz. Newton-Raphson method, Bisection method. 3. Learn methods for evaluating numerical values of integrations using trapezoidal rule, simpson's 1/3 rd rule , simpson's 3/8 th rule.
Practical : CML – III (Computational Mathematics Laboratory – III)	<ol style="list-style-type: none"> 1. Learn the basic keywords of C programming language and practice them in computer lab. 2. Studying basic data types and input output methods in C and practice it in computer laboratory 3. Apply the knowledge of C programming for preparing C programs for the solution of various numerical methods learned in the paper CML-II



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No.: B.V.D.P.K.M.S./ /2022-23

Date: 01/09/2022

Department of Chemistry

Notice

All the B. Sc. and M. Sc. students are hereby informed that Department of Chemistry, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli has displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) on the blogspot of Department.

Visit the Pages at:

M. Sc. Analytical Chemistry

[https://drive.google.com/file/d/1cyxVhm0F3o_fxCBxUCV0tZH5bDcmb0zb/view?usp=share link](https://drive.google.com/file/d/1cyxVhm0F3o_fxCBxUCV0tZH5bDcmb0zb/view?usp=share_link)

B. Sc. Chemistry

[https://drive.google.com/file/d/1uSRwUcs5QiM8hjvyNjS2WCLgpxIe9uFi/view?usp=share link](https://drive.google.com/file/d/1uSRwUcs5QiM8hjvyNjS2WCLgpxIe9uFi/view?usp=share_link)

Co-ordinator
M.Sc.(Chemistry)

Dr. Patangrao Kadam Mahavidyalaya,
Sangli.



HEAD,

Department of Chemistry ..

Dr. Patangrao Kadam Mahavidyalaya
SANGLI 416 416

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Internal Quality Assurance Cell
Department of Chemistry

PROGRAMME OUTCOMES

Name of Programme: **M. Sc. Analytical Chemistry**

PO1: The M.Sc. analytical chemistry program at Shivaji University, Kolhapur provides the key knowledge base and laboratory resources to prepare students for careers as professionals in the field of chemistry and particularly in analytical chemistry enabling them to interface not only with various branches of chemistry (organic, inorganic, physical, biological, industrial, environmental, pharmaceuticals etc) but also with the related fields, and for professional courses and areas of research including medical, forensic, food, agriculture, dental, law, intellectual property, business programs etc.

PO2: Students will be able to solve various problems by identifying the essential parts of a problem, formulate strategy for solving the problem, applying appropriate techniques to arrive at a solution, test the precision and accuracy of the solution and interpret the results.

PO3: Students will be able to acquire domain specific knowledge and technical skills needed for employment in industries, teaching fields and pursue research. Students will be skilled in problem solving, critical thinking and analytical reasoning

PO4: Students will be able to apply the fundamental knowledge to address the cross-cutting issues such as sustainable development

PO5: Students will get perfect insight into qualitative and quantitative analytical chemistry and research ethics for production of quality research.

PO6: Students will be able to communicate effectively i.e. being able to articulate, comprehend and write effective reports, make effective presentations and documentation and capable of expressing the subject through technical writing as well as through oral presentation.

PROGRAMME SPECIFIC OUTCOMES

Name of Programme: M. Sc. Analytical Chemistry

PSO1: Students will be able to prepare and qualify subject specific competitive exams like NET, SET and GATE and also other general public administration exams like M.P.S.C. and U.P.S.C. etc. exams.

PSO2: Student will be able to utilize the knowledge and analytical skills in QA-QC and R&D departments in almost all the industries enabling them to secure jobs where analytical chemistry is the core requirement to ensure and ascertain the quality of the product.

PSO3: Students will have opportunity for higher education leading to Ph.D. program.

PSO4: Students will be able to explore contemporary research in chemistry and allied fields of science and technology, collaborate in team projects, communicate the results of scientific work in oral, written and electronic formats to both scientists and the public at large.

PSO5: Students can start their own laboratories/startups/ chemical industry/ business (entrepreneurship).

PSO6: Students will be able to interpret data from the state of art Analytical instruments for ascertaining the product/material.

Course Outcomes

M. Sc. I (NEP-2020) Semester I	
Course	Outcomes
OCH 101- (Organic Chemistry-I)	After completion of these courses, students should be able to, CO-1: To learn and understand types of reactions, structure, stability and reactivity of carbenes, arynes, nitrenes, and SN^1 , SN^2 , SN^i reactions. CO-2: To learn three, four and five membered system. To understand aromatic electrophilic substitution and nucleophilic aromatic substitution reactions. CO-3: To learn E1, into E1cB reaction, CO-4: To understand the concept of chirality, R/S configuration, conformational analysis of cyclohexane.
ICH 102- (Inorganic Chemistry-I)	CO-1: To understand CFT for Td, Oh, Sq. planar, TBP filled, CFSE and its applications. CO-2: To learn the classification, nomenclature, synthesis, bonding and properties of organometallic compounds. CO-3: To learn preparation, structure and properties of metal carbonyls. CO-4: To understand symmetry, point groups and Milliken symbolism rules.
E-ACH103- (Analytical Chemistry I) Elective paper	CO-1: To understand TGA, DTA, DTG and DSC and its applications. CO-2: To learn AAS in detail and its application, FES, ICP and its application. CO-3: To understand Beer-Lambert's law, structural problems and its application. CO-4: To understand IR spectroscopy in detail, problems and its applications.
CH104- (Research Methodology)	CO-1: To understand Research methodology and implementation of research. CO-2: To learn online searching, impact factor and paper writing for international journals. CO-3: To understand Errors, accuracy, precision. CO-4: To learn how to operate PC and How to learn standard programs.

M.Sc.I, Sem-I (Chemistry Practical)	
Course Laboratory practical	Outcomes After completion of these courses, students should be able to, CO-1: To learn ore, alloy analysis. CO-2: To learn preparation of coordination complexes CO-3: To learn instrumentation techniques. CO-4: To learn single stage preparation of important organic products. CO-5: To learn rate of reaction, kinetics of reaction. CO-6: To learn estimation and preparation of organic compounds.
M. Sc. I (NEP-2020) Semester II	
Course PCH 201- (Physical Chemistry-II)	Outcomes After completion of these courses, students should be able to, CO-1: To understand wave functions, spectroscopic term symbols and numericals. CO-2: To understand partition function, thermodynamic properties and numericals. CO-3: To know the theory of strong electrolyte, Debye Hukkel theory and numericals. CO-4: To learn kinetics of reaction and steady state approximation.
ACH 202- (Analytical Chemistry-II)	CO-1: To learn basics of analysis, statistics in chemical analysis and MS office in chemistry applications. CO-2: To understand volumetric and gravimetric analysis. CO-3: To understand Gas, HPLC and Ion exchange chromatography. CO-4 To learn Voltametry, polarography, amperometry and electrogravimetry analysis.
E-ACH203- (Analytical Chemistry) Elective paper	CO-1: To understand NMR and Instrumentation of FT-NMR and its applications. CO-2: To learn types of ionization, analyzers and application's. CO-3: To learn Rigid and non-rigid rotors and numericals. CO-4: To understand Raman Spectra, Vibrational Raman spectra and numericals.

Course Outcomes M.Sc.I, Sem-II (Chemistry Practical)

Course	Outcomes
Laboratory practical	After completion of these courses, students should be able to, Co-1: To learn ore, alloy analysis CO-2: To learn preparation of coordination complexes . CO-3: To learn instrumentation techniques. CO-4: To learn single stage preparation of important organic products. CO-5: To learn rate of reaction, kinetics of reaction. CO-6: To learn estimation and preparation of organic compounds.

M. Sc. II (NEP-2020) Semester III

ACH-3.1	(Advanced Analytical Techniques)	CO1: Develop knowledge of fundamental, instrumentation and working of state of art instrumental analytical techniques, effective use and choice of technique, written and/or oral communication of the concepts of analytical chemistry which will be useful as analytical chemist and R&D. CO2: Acquire knowledge of mass spectrometry, type of MS, ionization types and specific practical applications of MS. CO3: Acquire knowledge of basics of nanochemistry, nanomaterials and nanotechnology and application orientated synthesis and characterization of nanomaterials. CO4: This course gives wide understanding about the instrumental analytical techniques (SEM, TEM, EDS, STM, AFM, Raman, XFS, ESR, XPS, AES, SIMS etc.)employed for qualitative and quantitative analysis for contemporary research.
ACH-3.2	(Organic Analytical Chemistry)	CO1: Students will gain knowledge of the instruments used at the interface of Analytical-Organic chemistry useful for R&D and structural elucidation using UV-Visible, IR, ¹ H & ¹³ C NMR, Mass spectrometry data and interpretation of the same. CO 2: Students will acquire knowledge about the drug, their classification, sources of impurities (chemical, atmospheric and microbial contamination) in pharmaceutical raw materials and analysis of the same. CO 3: Students will gain knowledge about the

		<p>conventional and advanced analytical approaches for analysis of drug, vitamin, body fluids and clinical samples.</p> <p>CO 4: Students will have an idea of commonly used pesticides and their analysis and also about forensic science and forensic sample analysis.</p>
ACH-3.3:	(Electroanalytical Techniques in Chemical Analysis)	<p>CO1: Fundamental knowledge of electrochemistry, electrodes, types of electrodes, its construction will lay foundation for the course.</p> <p>CO2: Students will gain knowledge and skill in electroanalytical techniques like cyclic voltammetry and its types, polarography, coulometry and dynamic light scattering technique for qualitative and quantitative analysis.</p> <p>CO3: Students will be familiar with the advanced electrodes used for chemical analysis, liquid-liquid membrane electrodes, enzymes and gas electrodes.</p> <p>CO4: Students will learn about electrophoretic techniques, advances in electrophoresis techniques and its analytical applications.</p>
ACH-3.4)	(A) (Environmental Chemical Analysis and Control)	<p>CO1: Students will acquire knowledge about sampling, criteria of good sampling, handling, preservation and storage of the samples, pretreatment and post treatment of samples.</p> <p>CO2: Students will acquire knowledge of conditions and strategies required during sampling and electrochemical and spectral methods for analysis of environmental samples.</p> <p>CO3: Students will learn about the air and water pollution, sources of pollution, typical parameters and properties (physical, chemical and biological) to be measured in air and water pollution with relevance to specific case studies.</p> <p>CO4: Students will be acquainted with organic pollutants and their analysis with special reference to pesticide analysis.</p>
ACH-3.4)	(B) (Recent Advances in Analytical Chemistry)	<p>CO1: Students will be acquainted with ultra-purity and ultratrace analysis required in electronic and semiconductor processing.</p> <p>CO2: Students will learn Radio-Analytical techniques for analysis.</p> <p>CO3: Student will be well versed with C13, P15 and O17 NMR Spectroscopy applications.</p> <p>CO4: Student will learn about ESR spectrometry and its applications quantitative analysis.</p>
ACH-3.4	(B) (Recent Advances in Analytical Chemistry)	<p>CO1: Students will be acquainted with ultra purity and ultra trace analysis required in electronic and semiconductor processing.</p>

		<p>CO2: Students will learn Radio-Analytical techniques for analysis.</p> <p>CO3: Student will be well versed with C13, P15 and O17 NMR Spectroscopy applications.</p> <p>CO4: Student will learn about ESR spectrometry and its applications quantitative analysis.</p>
ACHP - V	Practical -V	<p>CO1: In-depth training on laboratory solution preparations on all concentration scales</p> <p>CO2: Training on laboratory safety and lab ethics in scientific work</p> <p>CO3: Training on planning, design and execution of experiments</p> <p>CO4: Training on uncertainty estimations for experimentally measured and derived properties of solutions</p>
ACHP - VI	Practical-VI	<p>CO1: Training on scientific literature search, defining the objective of the work, research skills, data representation in tabular and graphical form etc.</p> <p>CO2: Training on experimental verification of fundamental theories, comparison of data with literature and scientific discussion on any deviation of data from expected theoretical values or reported literature.</p> <p>CO3: Developing analytical skills</p> <p>CO4: Training on qualitative and quantitative analysis of analyte</p>
	Part-II semester-IV	
ACH4.1	(Modern Separation Method in Analysis)	<p>CO1: Students will learn about modern separation and chromatographic used for analysis of different type of samples.</p> <p>CO2: The student will understand instrumentation and mechanism of various separation techniques.</p> <p>CO3: Student will acquire knowledge regarding various choice of instrument and detectors to be used for analysis depending on the sample and matrix.</p> <p>CO4: Student will learn fundamentals of extractive chromatography, types of extraction techniques, advances in extraction methods and their hyphenations with chromatography leading to addressing challenging problems in analytical chemistry.</p>
ACH-4.2	(Organic Industrial Analysis)	<p>CO1: Acquire knowledge of handling and investigating the characteristics of the oils, fats, detergents and soap samples and analysis of the same providing opportunity in cosmetic, pharmaceuticals, dyes and polymers industries.</p>

		<p>CO2: Student will gain knowledge and importance of food quality, probe for food adulteration and adulterants, food preservative, food flavors and analysis of their components.</p> <p>CO3: Students will also gain knowledge about the animal food stuff and the additives added in the animal food stuff as antibiotics, dietary supplements and growth promoting drugs, preservatives etc. and analysis of the same.</p> <p>CO4: Student will learn about the analysis of cosmetics, face powder, hair dyes and hair care products, types of cosmetics, precautionary measures and composition of the cosmetics and specific roles of the ingredients. Will acquire knowledge about the paints, pigments and petroleum products, composition and analysis of the same using conventional and instrumental techniques.</p>
ACH-4.3	(Advanced Methods in Chemical Analysis)	<p>CO1: Students will be skilled in the techniques like fluorescence, phosphorescence, types of quenching, FRET and applications of the same in Analytical Chemistry and for addressing research problems.</p> <p>CO2: Students will gain knowledge of the kinetic methods of analysis supporting the analysis and data procured in research.</p> <p>CO3: The students will acquire the knowledge of advanced method of chemical analysis XPS, XRF, fluorescence and phosphorescence spectroscopy which will be beneficial in research.</p> <p>CO4: Students will acquire knowledge of identifying types of plastic and will also be able to and determination of metallic impurities in plastics</p>
ACH-4.4 (A)	(Industrial Analytical Chemistry)	<p>CO1: The students will acquire knowledge of analysis of metals, alloys, minerals and ores commonly used in the industry.</p> <p>CO2: The students will be acquainted with the analysis of real samples like cement, plaster of Paris, different commercial ores, soil composition, soil fertility, fertilizers etc using conventional and instrumental methods of analysis.</p> <p>CO3: Students will also gain the knowledge of analysis of commercial materials, explosives, polymers, resins, rubber, luminescent paints, lubricants and adhesives.</p> <p>CO4: These would offer opportunity to the students to get employment in industries for quality assurance and quality control (QA-QC) of the product.</p>

ACH-4.4 (B)	(Quality Assurance and Accreditation)	<p>CO1: Students will acquire knowledge of QA-QC which is essential for analytical chemist, This covers a variety of chemical fields and this knowledge would help students working on various materials, understanding the basics of samples, sampling, sample storage, and pre-post treatment of samples.</p> <p>CO2: Students will acquire knowledge of good laboratory practices, professional ethics, and instrumental analytical chemistry, awareness of health hazards, remedial measures, analytical method development and validation.</p> <p>CO3: The students would be aware of the importance of documentation for raw materials and finished products, their monitoring, maintenance and management.</p> <p>World-wide agencies involved in regulating the analytical protocols and establishing standards.</p> <p>CO4: Students will gain knowledge about the quality assurance and accreditation, evolution and significance of quality management, available accreditation agencies and advantages of accreditation.</p>
ACHP - VIII	Practical-VIII	<p>CO1: The students will acquire hands on training for conducting the representative experiments for the analysis of wide variety of samples of inorganic, organic and physical approaches by qualitative and quantitative analysis. Demonstrate professional and ethical attitude to serve the society</p> <p>CO2: Students will have knowledge of safety signs on container of chemicals, safety in handling of chemicals, MSDS sheets, learn sample preparation and characterization for confirming the purity.</p> <p>CO3: Students would acquire knowledge about the separation and estimation of amount of metal, metal ions, organic compounds etc. in given samples.</p> <p>CO4: Based on the experience of project work, students will have ability to start their R & D laboratory.</p>

Bharati Vidyapeeth's
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Internal Quality Assurance Cell
Department of Chemistry

M.Sc. Organic Chemistry
(NEP-2020)

Program Outcomes:

PO-1:-	To educate and prepare post graduate students from rural and urban area who will get employment on large scale in academic institutes, R & D and Quality control laboratories of Indian chemical/pharmaceutical industries as well as multinational and forensic Laboratories.
PO-2:-	To provide students with broad theoretical and applied background in all specialization of Chemistry with emphasis on qualitative and quantitative technique.
PO-3:-	To provide broad common frame work of syllabus to expose our young graduates to the recent and applied knowledge of interdisciplinary branches of chemistry involving applied organic, inorganic, physical, analytical, industrial, pharmaceutical, polymer, nano science & technology.
PO-4:-	To conduct lesser written tests and to encourage on non-written tests.
PO-5:-	To focus on encouraging students to conduct various academic activities like midterm tests, online tests, open book tests, tutorial, surprise test, oral, seminar, assignments and seminar presentation.

Program Specific Outcomes:

PSO-1:-	A graduate with a Master's degree in Chemistry has in-depth and detailed functional knowledge of the fundamental theoretical concepts and experimental methods of chemistry
PSO-2	The graduate has expert knowledge of a well-defined area of research within chemistry.
PSO-3	The graduate has specific skills in planning and conducting advanced chemical experiments and applying structural-chemical characterization techniques.
PSO-4	Skilled in examining specific phenomena theoretically and/or experimentally, the graduate is able to contribute to the generation of new scientific insights or to the innovation of new applications of chemical research.

M. Sc. I (NEP-2020) Semester I

Course	Outcomes
OCH 101- (Organic Chemistry-I)	After completion of these courses, students should be able to, CO-1: To learn and understand types of reactions, structure, stability and reactivity of carbenes, arynes, nitrenes, and SN^1 , SN^2 , SN^i reactions. CO-2: To learn three, four and five membered system. To understand aromatic electrophilic substitution and nucleophilic aromatic substitution reactions. CO-3: To learn E1, into E1cB reaction, CO-4: To understand the concept of chirality, R/S configuration, conformational analysis of cyclohexane.
ICH 102- (Inorganic Chemistry-I)	CO-1: To understand CFT for Td, Oh, Sq. planar, TBP filled, CFSE and its applications. CO-2: To learn the classification, nomenclature, synthesis, bonding and properties of organometallic compounds. CO-3: To learn preparation, structure and properties of metal carbonyls. CO-4: To understand symmetry, point groups and Milliken symbolism rules.
E-ACH103- (Analytical Chemistry I) Elective paper	CO-1: To understand TGA, DTA, DTG and DSC and its applications. CO-2: To learn AAS in detail and its application, FES, ICP and its application. CO-3: To understand Beer-Lambert's law, structural problems and its application. CO-4: To understand IR spectroscopy in detail, problems and its applications.
CH104- (Research Methodology)	CO-1: To understand Research methodology and implementation of research. CO-2: To learn online searching, impact factor and paper writing for international journals. CO-3: To understand Errors, accuracy, precision. CO-4: To learn how to operate PC and How to learn standard programs.

M.Sc.I, Sem-I (Chemistry Practical)	
Course Laboratory practical	Outcomes After completion of these courses, students should be able to, CO-1: To learn ore, alloy analysis. CO-2: To learn preparation of coordination complexes CO-3: To learn instrumentation techniques. CO-4: To learn single stage preparation of important organic products. CO-5: To learn rate of reaction, kinetics of reaction. CO-6: To learn estimation and preparation of organic compounds.
M. Sc. I (NEP-2020) Semester II	
Course PCH 201- (Physical Chemistry-II)	Outcomes After completion of these courses, students should be able to, CO-1: To understand wave functions, spectroscopic term symbols and numericals. CO-2: To understand partition function, thermodynamic properties and numericals. CO-3: To know the theory of strong electrolyte, Debye Hukkel theory and numericals. CO-4: To learn kinetics of reaction and steady state approximation.
ACH 202- (Analytical Chemistry-II)	CO-1: To learn basics of analysis, statistics in chemical analysis and MS office in chemistry applications. CO-2: To understand volumetric and gravimetric analysis. CO-3: To understand Gas, HPLC and Ion exchange chromatography. CO-4 To learn Voltametry, polarography, amperometry and electrogravimetry analysis.
E-ACH203- (Analytical Chemistry) Elective paper	CO-1: To understand NMR and Instrumentation of FT-NMR and its applications. CO-2: To learn types of ionization, analyzers and application's. CO-3: To learn Rigid and non-rigid rotors and numericals. CO-4: To understand Raman Spectra, Vibrational Raman spectra and numericals.

Course Outcomes M.Sc.I, Sem-II (Chemistry Practical)

Course	Outcomes
Laboratory practical	After completion of these courses, students should be able to, Co-1: To learn ore, alloy analysis CO-2: To learn preparation of coordination complexes . CO-3: To learn instrumentation techniques. CO-4: To learn single stage preparation of important organic products. CO-5: To learn rate of reaction, kinetics of reaction. CO-6: To learn estimation and preparation of organic compounds.

M. Sc. Part –II (Sem – III) Organic Chemistry

Course Outcomes

Course	Outcomes
Paper No.- IX, OCH 3.1: ORGANIC REACTION MECHANISM	CO-1: Student should understand the difference between kinetic and non-kinetic methods of reaction mechanism. CO-2: They must know the exact concept of pericyclic reactions and photochemical reactions. CO-3: Student should study name reaction with their mechanism CO-4: They must know the Stereochemistry, migratory aptitude of different reactions.
Paper No. –X, OCH 3.2: ADVANCED SPECTROSCOPIC METHODS	CO-1: Student should know the difference in various spectroscopic techniques. CO-2: Student should understand principle of different spectroscopic techniques. CO-3: They came to predict the molecular structure of the given problem. CO-4: Student should solve the problems by combining spectroscopic entities.
Paper No. – XI, OCH 3.3 : ADVANCED SYNTHETIC METHODS	CO-1: Student should able to predict the designing of molecule with correct disconnection. CO-2: Students are skilled in reaction mechanism of different synthetic reagents and metals. CO-3 : Student should study the application of synthetic reagents and metals in organic synthesis. CO-4: Students are skilled to perform green synthetic

	procedure like microwave, ultrasonic bath, as well as different green solvents like ionic liquids.
Paper No.- XII (A), OCH 3.4(A): DRUG AND HETEROCYCLES	CO-1: Student should learn the synthesis of important drugs. CO-2: Student should study the computational designing. CO-3: Student should study the methods of preparation of heterocycles. CO-4: Student should study the reactions and applications of heterocycles

Course Outcomes M. Sc. Part -II (Sem - III) Organic Chemistry (Chemistry Practical)

Course	Outcomes
Organic Chemistry Practical Course OCHP- V and OCHP- VI	After completion of these courses, students should be able to, CO-1: Student should understand the difference between water soluble and ether soluble components. CO-2: Student must know the separation method of ternary mixture by micro technique (Green approach). CO-3: Student should understand two step preparations of different reactions. CO-4: Student should understand how and why to check TLC for monitoring the reaction. CO-5: Student should understand the method of solving spectral problems by spectra of different compounds

Course Outcomes M. Sc. Part -II (Sem - IV) Organic Chemistry

Course	Outcomes
Paper No.- XIII,OCH 4.1: THEORETICAL ORGANIC CHEMISTRY	After completion of these courses, students should be able to, CO-1: Student should understand the MOT and the concept of aromaticity. CO-2: They must know the free radical reactions. CO-3: Student should differentiate between kinetic and thermodynamic controlled reactions. CO-4: They should know the supramolecules with their structural explanation.
Paper No. - XIV, OCH 4.2: STEREOCHEMISTRY	CO-1: Student should understand difference between basic stereochemistry and modern stereochemistry. CO-2: Student must explore conceptual fact of stereoselective synthesis.

	<p>CO-3: Student should understand the shapes of ring other than five membered.</p> <p>CO-4: Student must learn the allenes, spiranes and biphenyls systems.</p>
<p>Paper No. – XV,OCH 4.3, CHEMISTRY OF NATURAL PRODUCTS</p>	<p>CO-1: Student should understand Classification and isolation methods.</p> <p>CO-2: Student should know Structure and synthesis of camphor, carvone, abietic acid, zingiberene, α-santonin, β-cuparenone and β- caryophyllene.</p> <p>CO-3: Student should understand different Structure, stereochemistry, synthesis and biosynthesis of the Morphine, Reserpine, Ephedrine and (+) Conin.</p> <p>CO-4: Student should study Occurrence, classification, biogenesis and physiological effects, Synthesis of PGE2 and PGF2.</p>
<p>Paper No. - XVI (A), OCH 4.4(A), APPLIED ORGANIC CHEMISTRY</p>	<p>CO-1: Student should know Structure and synthesis of Carbamate pesticides, pyrethroids, Plant growth regulators, Pheromones etc.</p> <p>CO-2: Student should learn the different unit processes such as Nitration of hydrocarbons, Bechamp reduction, halogenations etc.</p> <p>CO-3: Student should study the classification and synthesis of important dye intermediates</p> <p>CO-4: Students must know about synthesis of important polymers</p>
<p>Course Outcomes M. Sc. Part –II (Sem – IV) Organic Chemistry (Chemistry Practical)</p>	
<p>Course Organic Chemistry Practical Course OCHP-VII and OCHP-VIII</p>	<p>Outcomes</p> <p>CO-1: Student should understand the three step preparations.</p> <p>CO-2: Student must know the method of estimation of sulfur and nitrogen.</p> <p>CO-3: Student should understand how to assemble Kjeldahl's apparatus for estimation of nitrogen.</p> <p>CO-4: Student should understand Literature survey. Studies of reactions, synthesis, mechanism, isolation of natural products.</p> <p>CO-5: Student should understand standardization of reaction conditions, use of new methods etc.</p> <p>CO-6: Identification of organic compounds by spectroscopic methods</p>



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Principal

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No.: B.V.D.P.K.M.S./ /20 -

Date: 17/08/2022

Notice

All the M.Sc. students are hereby informed that Department of Microbiology, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli has displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Microbiology, on notice board of the department. All files are also shared on our respective WhatsApp group.

Kindly go through it.

(Ms.B.K.Bhavikatti)

HEAD

Department of Microbiology
Patangrao Kadam Mahavidyalaya,
Sangli.



**BHARATI VIDYAPEETH'S
DR. PATANGRAO KADAM MAHAVIDYALAYA, SANGLI**

DEPARTMENT OF MICROBIOLOGY

M.Sc. General Microbiology

M.Sc. General Microbiology

***** Program Outcome *****

This is a two-year M. Sc. program covering all general aspects of Microbiology.

1. It helps in developing competent Microbiologists who can progress to diverse fields of microbiological interests in various fields of industries, research, teaching, medical science and entrepreneurship. The course is aimed at adding to the knowledge base of Microbiology graduates through significant inputs of latest information on the subject.
2. It also envisages that the students read original research publications and develop the ability of critical evaluation of the study. Development of communication skills as well as laboratory work and team work, creativity, planning and execution are also a major objective of this program.
3. In the core courses, the students study the basics of Microbiology along with the basics of subjects allied to and useful in Microbiology (Techniques, Biostatistics, Computer handling and Bioinformatics, Biosafety, Scientific writing and Agricultural and Clinical Microbiology). The specializations include topics on various fields of Industrial Microbiology, Fermentation Technology, Quality assurance, Recombinant DNA Technology and Pharmaceutical Microbiology.
4. During this program students undertake a on job training, Research Project, field projects which the student is expected to study research methodology through experimental work, literature survey and report writing.
5. In On job training, the student is to take training in the industry for a period of at least two weeks which will help student to study Microbiological aspects in the industry.
6. Educational tour to various institutes and or industries provides actual microbiological applications in various fields of Microbiology.

*****Program specific Outcome*****

1. Understand the nature and basic concepts of Microbial systematic, Immunology, Environmental Microbiology and Research methodology.
2. Perform procedures as per laboratory standards in the areas of Microbial systematic, Immunology, Environmental Microbiology and Research methodology.
3. Acquire basic Microbiology laboratory skills and expertise in the use of instruments applicable to research, clinical methods and analysis of the observations. Understand the applications of basic microbial techniques in microbial systematics, environmental microbiology and research.
4. The knowledge can be gained about systematics of bacteria. The understanding new trends in systematics of bacteria can be done. Learning different approaches in bacterial systematics is possible.
5. Understand the role of microorganisms in human health, immune response to infection, Antibody diversity, Immune deficiency and autoimmunity, Hypersensitivity reactions and Vaccine.
6. Overall, the Program is reasoning and applications oriented, equipping the students eligible for higher studies, jobs in various sectors and entrepreneurship abilities.

*****Course Outcomes*****

Course	Outcomes
MIC-101: MICROBIAL SYSTEMATICS	<ol style="list-style-type: none"> 1. To gain knowledge of systematics of bacteria 2. To understand new trends in systematics of bacteria 3. To learn different approaches bacterial systematics 4. To understand basics of microbial systematics
MIC-102: IMMUNOLOGY	<ol style="list-style-type: none"> 1. Understand classes of immunoglobulin, organization and expression of immunoglobulin genes. 2. Know details of major histocompatibility complex and disease susceptibility. Understand cytokines and their medical significance. 3. Understand hypersensitivity reactions. Know immunodeficiencies and auto immunity. 4. Understand details of transplantation immunology and immunity to cancer.
MIC-103-C: ENVIRONMENTAL MICROBIOLOGY	<ol style="list-style-type: none"> 1. Understand concept of aeromicrobiology, biosafety and waste water management. 2. Understand bioremediation and biodegradation processes. 3. Know environmental laws. 4. Understand the methods of air sampling
RM-MIC-106 RESEARCH METHODOLOGY	<ol style="list-style-type: none"> 1. Understand the strategies and planning for developing research. 2. Understanding the methods of data collection and analysis. 3. Knowing the research ethics in biological field. 4. Understanding the essential methods of scientific writing.

<p>MIC-201: GENETICS AND MOLECULAR BIOLOGY</p>	<ol style="list-style-type: none"> 1. This course focuses on the current state of knowledge on the genetics of microorganisms and higher living beings. 2. The course provides knowledge about molecular basics of transcription, translation and replication process. First two units are devoted to classical genetics. 3. The last two units contain latest information on molecular biology techniques and newer trends in genetics and molecular biology. 4. This course helps to develop strong foundation in genetics which also helps in comprehending more modern concepts of molecular biology and recombinant technology.
<p>MIC-202: FERMENTATION TECHNOLOGY</p>	<ol style="list-style-type: none"> 1. Understanding about basic information of fermenter design and working. 2. Knowing fermentation media its economics and intellectual property of it. 3. Understanding production of industrially important microbial compounds. 4. Knowing about basic concepts in metabolic pathways.
<p>MIC-203-C: MICROBIAL ECOLOGY</p>	<ol style="list-style-type: none"> 1. Microbial ecology emerged as an energetic and dynamic branch of science which helps students to understand global ecosystems. 2. The course of Microbial ecology creates platform for students to investigate and explore microbial interactions and their activities for welfare of human being. 3. It also helps to understand practical implications and biotechnological applications of microbial ecology. 4. This course is helpful to understand microbial ecology in details.

*****Practical Course*****

Course	Outcomes
PRACTICAL COURSE – I: (MIC – 104)	<ol style="list-style-type: none"> 1. Students get to know about operating high end laboratory instruments. 2. They can learn basic practical skills in biochemistry. 3. They able to learn basic practical techniques of immunological methods. 4. Hence this lab course can make students aware and skilled in this subject.
PRACTICAL COURSE – II: (MIC – 105)	<ol style="list-style-type: none"> 1. Student will know the basic software's used in bacterial systematics. 2. Students came to know about cultivation of extremophiles. 3. Students gain knowledge about detection of pollution strength. 4. Students able to explore their knowledge in solving problems occurred bacterial taxonomy.
PRACTICAL COURSE – III: (MIC – 204)	<ol style="list-style-type: none"> 1. Students will be trained for isolation of RNA and DNA form bacteria. 2. Students will understand the basic production method in fermentation. 3. Students can be aware in quantitative and qualitative studies of water and air. 4. Students are skillful to use spectroscopies instruments.
PRACTICAL COURSE – IV: (MIC – 205)	<ol style="list-style-type: none"> 1. Student will be known to use chromatography knowledge for purification of biomolecules. 2. Students know how to preserve microorganisms. 3. Students will learn how to do environmental monitoring. 4. Students will learn basic computational techniques such as molecular docking and drug designing.

M.Sc. II General Microbiology

*****Program specific Outcome*****

1. Understand the nature and basic concepts of Biostatistics, Enzymology, Fermentation technology and Quality Control Microbiology.
2. Perform procedures as per laboratory standards in the areas of Biostatistics, Enzymology, Fermentation technology and Quality Control Microbiology.
3. Acquire basic Microbiology laboratory skills and expertise in the use of instruments applicable to research, methods in biochemistry and biostatistical analysis. Understand the applications of basic microbial techniques in Biostatistics, Enzymology, Fermentation technology and Quality Control Microbiology.
4. The knowledge can be gained about Biostatistical analysis and learning different software used in bioinformatics.
5. Understand the techniques and testing involved in Industrial wastewater treatment and learn testing required in Pharmaceutical Quality Control.
6. Overall, the Program is reasoning and applications oriented, equipping the students eligible for higher studies, jobs in various sectors and entrepreneurship abilities.

*****Course Outcomes*****

Course	Outcomes
MIC-301: Biostatistics, Bioinformatics and Scientific Writing	<ol style="list-style-type: none">1. To gain knowledge basic knowledge about basic biostatistical methods involved in microbiology.2. To gain details related to different statistical test involved in Biostatistics.3. To perceive information regarding to Bioinformatics and its application.4. To gain knowledge about Scientific Writing and Publication ethics
MIC-302: Enzymology and Enzyme Technology	<ol style="list-style-type: none">1. To understand basics about enzymes and their types.2. To gain knowledge about enzyme kinetics.3. To understand concept about enzyme structure.4. To know the applications of enzymes in different industries.
MIC-303: Fermentation Technology	<ol style="list-style-type: none">1. Understanding about basic information of fermenter design and working.2. Knowing fermentation media its economics and intellectual property of it.3. Understanding production of industrially important microbial compounds.4. Knowing about basic concepts in metabolic pathways.
MIC-304: Quality Control Microbiology.	<ol style="list-style-type: none">1. The course focuses on providing detail about Biosafety Laboratory and code of practices in biosafety labs.2. To understand good microbiological techniques.3. To gain knowledge about sterilization and sterility assurance.4. To obtain details about Biosafety Guidelines.

MIC-401: Food and Dairy Microbiology	<ol style="list-style-type: none"> 1. To gain detail about spoilage of varieties of food and learn about preservation techniques. 2. To understand importance of milk contamination and learn about fermented food product. 3. To acquire a detailed knowledge about food borne diseases and prevention. 4. To know about probiotics and enzymes involved in food industries.
MIC-402: Industrial Waste Management	<ol style="list-style-type: none"> 1. To know about types of industrial wastes and strategies regarding self-purification. 2. To understand microbiology and biochemistry of wastewater treatment and impact of pollutants. 3. To learn about different methods of wastewater treatment. 4. To gain knowledge of zero waste discharge concept.
MIC-403: Recombinant DNA technology	<ol style="list-style-type: none"> 1. To obtain knowledge about basic tools in rDNA Technology. 2. To understand basic cloning strategies. 3. To learn cloning strategies in Eukaryotes and Animals. 4. To learn scope and applications of rDNA technology.
MIC-404: Quality control Microbiology-II	<ol style="list-style-type: none"> 1. To gain information regarding Pharmaceutical Drug Regulatory affairs. 2. To know about cleanrooms and environmental monitoring. 3. To understand concepts of bioburden and pharmaceutical product testing. 4. To learn about quality management and auditing in pharma industries.

*****Practical Course*****

Course	Outcomes
Practical course V-MIC-305	<ol style="list-style-type: none">1. To obtain skill of using biostatistical methods in analysis.2. To gain skill to use basic tools of bioinformatics.3. To learn the use of software's needed in Scientific Writing.4. To learn estimation and assays regarding to enzyme and study different enzymatic activities.
Practical course VI-MIC-306	<ol style="list-style-type: none">1. To learn about calibration and validation of devices used in laboratory.2. To know the preparation of SOP's of instruments.3. To learn disinfection preparation and validation.4. To learn basic testing of pharma industries.
Practical course VII-MIC-405	<ol style="list-style-type: none">1. To gain skills to determine adulterants in food.2. To learn basic tests, need in dairy industry.3. To learn preparation of different fermentation media and products.4. Learn to determine different wastewater characteristics with proper methods.
Practical course VIII-MIC-406	To undertake a project with their own ideas or Industrial training should be done.



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Email:-bvpkc_sangli@yahoo.co.in; Website: <http://dpkmsangli.bharatvidyapeeth.edu>

No.: B.V.D.P.K.M.S./ /20 -

Date:

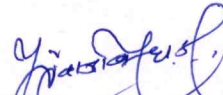
Date:- 18/07/2022

Notice

All the M.Com. students are hereby informed that Department of Commerce, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli is displayed Syllabus, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) of Commerce on our college website (https://bvdpkmsangli.edu.in/media/pdf/Com-CO_PO_051023.pdf) And also, all the files have been shared on our respective WhatsApp group.

Kindly go through it.




(DR. S. N. Borhade)

HEAD
Department of Commerce
Dr. Patangrao Kadam Mahavidyalaya,
Sangli.

BHARATI VIDYAPEETH'S
Dr. Patangrao Kadam Mahavidyalaya, Sangli
Department of Commerce

PROGRAMME: M. COM. (NEP-2020)

PROGRAMME OUTCOMES (POs)

- 1: To acquaint the learners with skills and capabilities to handle managerial and administrative responsibilities
- 2: To demonstrate the decision-making ability by application of theories in real life business situations
- 3: To imbibe entrepreneurial temperaments, skills and capabilities among the learners
- 4: To demonstrate the knowledge of commerce and industry in business applications
- 5: To acquaint the knowledge of accounting, costing, taxation and administration.
- 6: To acquaint with conventional and contemporary thoughts, ideas and practices

PROGRAMME SPECIFIC OUTCOMES (PSOs)

- 1: In depth understanding of core areas of accounting-financial accounting, cost accounting, management accounting, international accounting, investments, security and tax planning, business research methods
- 2: Application of knowledge in problem solving, decision making
- 3: Working in teams as well as taking initiative and leadership responsibilities
- 4: To apply modern tools techniques and methods
- 5: Applying inter personal communication skills
- 6: Ability to handle different functional areas of accounting, finance, taxation and administration.

COURSE OUTCOME (CO)

M.Com. I Semester- I

Course: - Business Management

By the end of the Course, to enable the student to

1. Understand the theoretical aspects of management and strategic management.
2. Describe the code of conduct for managers and functional areas of management.
3. Illustrate the Contribution of different management thinkers towards the management thoughts.
4. Understand the contemporary issues in management.

Course: - Managerial Economics

By the end of the Course, to enable the student to

1. Understand the variables and components of Managerial Economics.
2. Study the applications of demand analysis and concepts relate consumer behavior.
3. Get awareness regarding production, price determination and pricing practices and they should able to apply these in business decision making policies.
4. Understand the business cycle phenomenon and inflation for business decision making.

Course: - Advanced Accountancy – I

By the end of the Course, to enable the student to

1. Understanding the concept of accounting standard and practical implication of As-1 and As-2.
2. Familiarity with preparing final accounts of service industries.
3. Perfection in preparing the consolidated financial statement of holding company and its subsidiaries.
4. Understanding of preparation of financial statements of insurance companies with schedules.

Course: - Advanced Accountancy – II (Auditing)

By the end of the Course, to enable the student to

1. Understanding the basic concepts and objectives of audit.
2. Gain working knowledge of generally accepted auditing procedures.
3. Identify the skills and techniques of conducting audit of various entities.

4. Know the recent trends in practice of audit.

M.Com. I Semester- II

Course: - Organizational Behavior

By the end of the Course, to enable the student to

1. Describe theoretical concepts of organizational Behaviour.
2. Classify types of personalities
3. Summarize types of conflicts.
4. Summarize adoption of organizational culture.

Course: - Advanced Accountancy Paper - III (Research Methodology)

By the end of the Course, to enable the student to

1. Understand the basics of research.
2. Design research protocol for research problem.
3. Prepare the instruments for data collection.
4. Analyze and interpret the data.

Course: - Advanced Accountancy Paper – IV (Research Project)

By the end of the Course, to enable the student to

1. Identify the research problem and formulate objectives.
2. Choose appropriate methodology with proper tools and techniques .
3. Analyze and interpret the data collected from different sources.
4. Make decision or find out conclusions on the basis of data analysis.

Course: - Internship/ Apprenticeship

By the end of the Course, to enable the student to

1. Expose the students to the real-life situation
2. Develop an ability of critical thinking
3. Analyze the problem in an organization and suggest remedial actions
4. Gain working knowledge of the job/profession to get insights of the business

M.Com. II Semester- III

Course: - Management Accounting Paper I

By the end of the Course, to enable the student to

1. Understand the fundamentals of Management Accounting.

2. Explain the analysis and interpretation of financial statements.
3. Demonstrate the estimation of working capital requirements.
4. Practice to analyze the changes in financial position.

Course: - Business Finance- Paper-I

By the end of the Course, to enable the student to

- 1 Apply fundamental concepts of business finance and examine various finance decisions
- 2 Compare different types of capital structure
- 3 Compare and appraise various long-term and short-term sources of finance
- 4 Illustrate various components of Working Capital Management

Course: - Advanced Accountancy Paper –V

By the end of the Course, to enable the student to

1. Familiarity with accounting of business combination of companies
2. Perfection in accounting of different types of co-operatives.
3. Understanding the accounting for lease.
4. Understand the concept of social responsibility of accounting, environment accounting and human resource accounting.

Course: - Advanced Accountancy Paper –VI

By the end of the Course, to enable the student to

1. Understand basic elements of computation and tax liability
2. Analyse various sources of income and their taxability
3. Know the deductions from income and their implication on taxability
4. Enable to compute the Tax Liability

M.Com. II Semester- IV

Course: - Management Accounting Paper-II (Management Control System)

By the end of the Course, to enable the student to

1. Understand the fundamentals of Management Control System and Reporting.
2. Explain the marginal costing and cost-volume-profit analysis and practice decision making based thereon.
3. Simulate the budgetary control system and demonstrate the budgeting.
4. Practice to analyze the cost variances.

Course: - Business Finance- Paper-II

By the end of the Course, to enable the student to

- 1) Become familiar with practical trading techniques in Indian stock market
- 2) Understand how to build and evaluate the portfolio and different facets of portfolio management
- 3) Acquire conceptual understanding of Corporate Restructuring
- 4) Become aware of recent trends in business finance scenario with specific reference to Startup Funding, Angel Financing and FinTech services

Course: - Advanced Accountancy Paper VII (Costing)

By the end of the Course, to enable the student to

1. acquire the knowledge of elements of cost and cost sheet.
2. acquaint the knowledge and skill to prepare job cost sheet and contract account.
3. explain the costing process for processing units and service organizations.
4. understand to reconcile the cost and financial accounts.

Course: - Advanced Accountancy Paper VIII (Contemporary Issues in Accounting)

By the end of the Course, to enable the student to

1. Acquire the knowledge of rural development in accounting
2. Understand the concept of Inflation Accounting
3. explain the knowledge regarding Inflation Accounting
4. acquire the knowledge of contemporary issues in accounting.