

OUTCOME

	PO Arts		PO Science	PO Commerce
	PSO And CO's		PSO And CO's	PSO And CO's
Sr.No	Name Of Department	Sr.No	Name Of Department	B.COM.I
1	Marathi	9	Chemistry	B.COM.II
2	Hindi	10	Physics	B.COM.III
3	English	11	Zoology	
4	Political Science	12	Mathematics	
5	Economics	13	Botany	
6	Geography	14	Computer Science	
7	Sociology	15	Microbiology	
8	History			

Shri Vijaysinha Yadav Mahavidyalaya, Peth Vadgaon
Department of Botany
Programme Specific Outcome and Course Outcome
on CBCS syllabus of Botany 2022-23

Programme Specific Outcome

Sr. No.	Programme Specific Outcome
PSO 1	Acquisition of knowledge of molecular biology, biotechnology and bioinformatics
PSO 2	Acquiring the basic procedure in the field of microbiology and plant pathology.
PSO 3	Awareness of natural resources and environment
PSO 4	Aptitude for scientific work & ability to pursue studies far beyond graduation
PSO 5	Life science as a career, which is the need now-a-day
PSO 6	Applications of scientific principles for organization of scientific exhibitions and competitions
PSO 7	Development of presentation skills and confidence in students
PSO 8	Skills based practicals and experiments & development of skill of handling of instruments and practical material
PSO 9	Enhancement the interests in the subject
PSO 10	Enhancement of scientific attitude, temper & hobbies
PSO 11	Abilities to apply scientific methods, collection of scientific data, problem solving methodology, Research Paper & project writing, etc
PSO 12	Contribution in scientific method & scientific programs


Head
Department of Botany
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Course Outcome

Sr. No.	Class	Theory Paper No.	Title of the Paper	Course Outcome
1	B. Sc. I	DSC 13 A. I	Biodiversity of Microbes, Algae and Fungi	1. Aptitude for identification of microbes, algae & fungi 2. Acquisition of knowledge of ultra structure & economic importance of above group
2		DSC 14 A. II	Biodiversity Of Archegoniate-Bryophytes, Pteridophytes and Gymnosperms.	1. Aptitude for identification of Archegoniates 2. Acquisition of knowledge of ultra structure & economic importance of above group
3		DSC 13 B. III	Plant Ecology	1. Acquisition of knowledge of evolution radiations 2. Acquisition of knowledge of succession of plant community and Ecosystem
4		DSC 14 B. IV	Plant Taxonomy	1. Acquisition of knowledge of Plant nomenclature by ICBN. Ex situ conservation of plants via Botanical Gardens 2. To follow the accepted system of classification of Angiosperm
		Practical		Acquisition of practical knowledge increases skills and working ability of students to perform experiments on plants.
5	B. Sc. II	DSC 13 C. V	Embryology of Angiosperms	1. Acquisition of knowledge of pollination biology and plant insect relationship 2. Aware about embryology of Angiosperm
6		DSC 14 C. VI	Plant Physiology	1. To know the plant water relationship and role of minerals as a nutrition in plants 2. Acquisition of knowledge of carbon reduction pathways and significance of photosynthesis 3. Acquiring knowledge of plant growth regulators and their practical application

7		DSC 13 D. VII	Plant Anatomy	<ol style="list-style-type: none"> 1. Acquiring basic knowledge of tissue system in higher plants 2. Acquiring the knowledge of different tissues and their role in higher plants. 3. Acquiring the knowledge of adaptive radiation in tissue system
8		DSC 14 D. VIII	Plant Metabolism	<ol style="list-style-type: none"> 1. Acquiring the through knowledge of enzymes. 2. Acquiring the knowledge of mechanism of enzyme action, structure and properties of enzymes. 3. Role of Nitrogen in plant metabolism 4. Role of respiration 5. Acquiring the knowledge of breaking seed dormancy
		Practical		Acquisition of practical knowledge increases skills and working ability of students to perform experiments on plants.
9	B. Sc. III	DSC- E 25. IX	Genetics and Plant Breeding	<ol style="list-style-type: none"> 1. Acquiring the knowledge of genetics and methods of breeding techniques in crop plants
10		DSC- E 26 X	Microbiology, Plant pathology and Mushroom Culture Technology	<ol style="list-style-type: none"> 1. Acquiring the basic procedure in the field of microbiology and plant pathology. 2. Acquiring technology of mushroom cultivation
11		DSC-E 27 XI	Cytology and Research Techniques in Biology	<ol style="list-style-type: none"> 1. Acquiring knowledge of cell biology 2. Ability to handle various instruments in biological research such as SEM, Spectrometer, micrometer
12		DSC- E 28 XII	Horticulture and Gardening	<ol style="list-style-type: none"> 1. To develop the skills in horticulture including nursery, landscaping, gardening, floriculture 2. Students will be able to demonstrate their knowledge, skills and attributes in horticultural profession.
13		DSC- F25 XIII	Plant Biochemistry and molecular Biology	<ol style="list-style-type: none"> 1. Students are acquainted with basic as well as recent knowledge in the field of molecular biology
14		DSC- F 26 XIV	Bioinformatics, Biostatistics and Economic Botany	<ol style="list-style-type: none"> 1. Acquisition of knowledge of bioinformatics, biostatistics and economic botany 2. Students are aware about spices, beverages and fibers, cereals, legumes and oils
15		DSC- F 27	Plant Biotechnology and	<ol style="list-style-type: none"> 1. Acquisition of knowledge of plant biotechnology, protoplast culture and

		XV	Paleobotany	recombinant DNA technology (research methodology) 2. Acquainted the scope of Paleobotany in the present scenario and understand the fossil genera.
16		DSC- F 28 XVI	Bio fertilizers and Herbal Drug Technology	1. Acquisition of basic knowledge of biofertilizers, herbal drug technology 2. Student become familiar with organic manures, herbal medicines, herbal cosmetology and pharmacognocny
		Practical		Acquisition of practical knowledge increases skills and working ability of students to perform experiments on plants.


 Head
 Head
 Department of Botany
 Shri. Vijaysinha Yadav College
 Peth Vadgaon, Dist. Kolhapur.

Estd. : July, 1999

॥ प्रज्वलितो ज्ञानमय-प्रदीपः ॥

UGC (2F & 12B) Dt. 16-8-2011
Perm. AF. No. SU/AFFI/T-2/UMK/4818 Dt. 15-7-2010

Shri. Shahu Shikshan Prasarak Seva Mandal, Peth-Vadgaon's



NAAC Accredited - 'B++' (2.83)
Aug. 2016

SHRI. VIJAYSINHA YADAV COLLEGE

PETH-VADGAON

Tal. Hatkanangale Dist. Kolhapur (Maharashtra) 416 112 ☎ (0230) 2471599

Affiliated to Shivaji University, Kolhapur



vyadavcollege@rediffmail.com

www.vympv.ac.in

President :

Shri. Gulabrao Pol
I.P.S.

Secretary :

Sou. Vidya Gulabrao Pol
M.A., B.Ed.

Vice President :

Smt. Vijayadevi V. Yadav

Principal :

Dr. Vijaya R. Chavan
M.Sc., Ph.D.

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Attainment levels:

For University Exam

Level 1	below 45 % Students scoring more than 60% marks
Level 2	45-60 % Students scoring more than 60% marks
Level 3	$\geq 60\%$ Students scoring more than 60% marks

For Internal Exam

Level 1	below 60 % Students scoring more than 60% marks
Level 2	60-80 % Students scoring more than 60% marks
Level 3	above 80% Students scoring more than 60% marks

Program outcome Level	Target Attainment (Exclusive Method)
Level 1	0.5- 1.0
Level 2	1.0 - 1.5
Level 3	1.5 -2.0
Level 4	2.0- 2.5
Level 5	2.5 -3.0

Department of Computer Science

Calculation for Program Outcome Attainment for the Year 2022-23(B. Sc. III Computer Science)

Attainment of course outcome										
Semester (Theory)	Course Code (Paper No.)	Course Title	% of students above 60% Universit ymarks	Level of Attainment	80% of Attainmen t Level in endterm exam (I)	% of students above 60% internal marks	Level of attainment	20% of Attainmen tLevel in internal exam (II)	Attainmen tof Course (I+II)	
SemesterV (Theory)	Paper-IX	Core Java	100	3	2.4	100	3	0.6	3	
	Paper-X	C# Programming	100	3	2.4	100	3	0.6	3	
	Paper-XI	Linux Part I	100	3	2.4	100	3	0.6	3	
	Paper-XII	Python Part I	100	3	2.4	100	3	0.6	3	
SemesterVI (Theory)	Paper-XIII	Advanced Java	100	3	2.4	100	3	0.6	3	
	Paper-XIV	ASP.Net	100	3	2.4	100	3	0.6	3	
	Paper-XV	Linux Part II	100	3	2.4	100	3	0.6	3	
	Paper-XVI	Python Part II	100	3	2.4	100	3	0.6	3	
									Total	30
									Average	3

MAPPING

Rubrics developed to validate POs for some Programmes

Correlation level 1, 2 and 3 are defined as follows:

1. Slight (Low) 2. Moderate (Medium) 3. Substantial (High)

Assessment Tools:

Program Outcomes	Courses considered	Method of Assessment	Source of data collection
PO 1- PO 10	Contributing course is considered for CO to PO mapping	1) Direct Assessment Internal evaluation <ul style="list-style-type: none">• Unit Tests• Assignments 2) External Evaluation University Exam	Result file and University Ledger

Mapping Factor (Correlation Level):

It indicates to what extent ascertain component (either assessment method to CO or CO to PO or CO to PSO)

3: Indicates Substantial (high) mapping (high contribution towards attainment)

2: Indicates Moderate (medium) mapping (medium contribution towards attainment)

1: Indicates Slight (low) mapping (some contribution towards attainment)

Calculation for Program Outcome Attainment for the Year 2022-23

(B. Sc. III Computer Science)

Step 1] CO's are mapped with CIE (Continuous internal evaluation) marks

1] Computer Science: Sem. V & VI

Paper IX: Core Java

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average	3	3	3	3

Paper X: C# Programming

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
CO 5	3			
Total average	3	3	3	3

Paper XI: Linux Part I

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3			
CO 4	3			
CO 5	3		3	3
CO 6	3		3	3
CO 7	3			
Total average	3	3	3	3

Paper XII: Python Part I

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average	3	3	3	3

Paper XIII: Advanced Java

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3			
CO 2	3	3		3
CO 3	3	3		3
CO 4	3			
CO 5	3		3	3
CO 6	3		3	3
Total average	3	3	3	3

Paper XIV: ASP.Net

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
CO 5	3			
Total average	3	3	3	3

Paper XV: Linux Part II

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3			
CO 4	3			
CO 5	3		3	3
CO 6	3		3	3
CO 7	3			
Total average	3	3	3	3

Paper XVI: Python Part II

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average	3	3	3	3

Step 2] COs are mapped with POs. The CO levels corresponding to each PO are averaged to obtain overall CO level for each PO

Computer Science

1]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3	3	3	3							3	3	3		
CO 2		3	3	3	3							3	3	3		
CO 3		3	3	3	3	3						3	3	3		
CO 4		3	3	3	3				3	3		3	3	3		
Paper IX		3	3	3	3	3	-	-	3	3		3	3	3		

2]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3		3			3					3			3		3
CO 2	3		3			3					3			3		3
CO 3	3		3			3					3			3		3
CO 4	3		3			3		3			3			3		3
CO 5	3		3			3		3			3			3		3
Paper X	3		3	-	-	3	-	3	-	-	3	-	-	3		3

3]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3				3		3				3	3	3		
CO 2		3				3		3				3	3	3		
CO 3		3				3		3				3	3	3		
CO 4		3				3		3				3	3	3		
CO 5		3				3		3				3	3	3		
CO 6		3				3		3				3	3	3		
CO 7		3				3		3				3	3	3		
Paper XI		3			-	3	-	3	-	-	-	3	3	3		

4]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3	3				3		3	3		3	3	3	3		
CO 2	3	3				3		3	3		3	3	3	3		
CO 3	3	3				3		3	3		3	3	3	3		
CO 4	3	3				3		3	3		3	3	3	3		
Paper XII	3	3	-	-	-	3		3	3	-	3	3	3	3		

5]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3	3	3	3							3	3	3		
CO 2		3	3	3	3							3	3	3		
CO 3		3	3	3	3	3						3	3	3		
CO 4		3	3	3	3				3	3		3	3	3		
CO 5		3	3	3	3	3			3	3		3	3	3		
CO 6		3	3	3	3							3	3	3		
Paper XIII		3	3	3	3	3			3	3		3	3	3		

6]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3		3			3					3			3		3
CO 2	3		3			3					3			3		3
CO 3	3		3			3					3			3		3
CO 4	3		3			3		3			3			3		3
CO 5	3		3			3		3			3			3		3
Paper XIV	3		3	-	-	3	-	3	-	-	3	-	-	3		3

7]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3				3		3				3	3	3		
CO 2		3				3		3				3	3	3		
CO 3		3				3		3				3	3	3		
CO 4		3				3		3				3	3	3		
CO 5		3				3		3				3	3	3		
CO 6		3				3		3				3	3	3		
CO 7		3				3		3				3	3	3		
Paper XV		3			-	3	-	3	-	-	-	3	3	3		

8]

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3	3					3		3	3	3	3			3	
CO 2	3	3					3		3	3	3	3			3	
CO 3	3	3					3		3	3	3	3			3	
CO 4	3	3					3		3	3	3	3			3	
Paper XVI	3	3	-	-	-	-	3	-	3	3	3	3	-		3	

Department of Commerce

Course Outcomes

B.COM I - Semester (I & II)

English for Business communication (Compulsory English) Paper (I & II)

1. To offer relevant and practically helpful pieces of prose and poetry to students so that they not only get to know the beauty and communicative power of English but also its practical application.
2. Students are trained to draft trade letters using various structures and layouts which will help students to write letters when needed at the place of their work in future.
3. To expose students to techniques of paragraph writing.
4. To enable students to develop an idea and use appropriate linking devices like cohesion and coherence.
5. To enable students to use appropriate language as per the register.

Financial Accounting Paper (I & II)

1. To enable the students to learn principles and concepts of Accountancy.
2. Students are enabled with the Knowledge in the practical applications of accounting.
3. The student will get thorough knowledge on the accounting practice prevailing in partnership firms and other allied aspects.
4. To find out the technical expertise in maintaining the books of accounts.
5. To encourage the students about maintaining the books of accounts for further reference.

Insurance Paper (I & II)

1. To enable the student to know the fundamental of insurance.
2. To expose the students to procedural part and documentation in life.
3. To create awareness among the students to become a life insurance agent.

Principle of marketing Paper (I & II)

1. This course enables the students, the practical knowledge and the tactics in the marketing.
2. To study and critically analyze the basic concepts and trends in Marketing.
3. To aware of the recent changes in the field of marketing.
4. Provide you with opportunities to analyze marketing activities within the firm

Macro Economics Paper (I & II)

1. Identifying the basic concepts and theories of Macro economics
2. Awareness about changing macroeconomic policies and theories.
3. Understanding various concept such as GDP, GNP, NNP, PI, DI.
4. Identifying the factors determine gross domestic product, employment, general level of price, and interest rate.

Money and Finance Paper (I & II)

- 1 To explain the nature, functioning and issues related to money, banks & non banking financial institutions in India to the students.
- 2 To acquaint the students fully with changing role of financial institutions in the process of growth & development.
- 3 To build up the capability of students for knowing banking concepts and operations.
- 4 To make the students aware of banking business and practices Business statistics

Business Statistics Paper (I & II)

1. To understand the different concept of population and sample and to make students familiar with Calculation of various types of averages and variation.
2. To use regression analysis to estimate the relationship between two variables and to use frequency distribution to make decision.
3. To understand the techniques and concept of different types of index numbers.

BCOM III Semester V & VI

Modern management practices Paper (I & II)

1. To impart knowledge of modern management
2. To understand concepts of CRM
2. To understand the Japanese and Chinese Management Practices
4. To understand the concept of time and stress management

Department of Commerce

Program Outcomes

PO 1: Learners will gain knowledge in the fundamentals of commerce and a deep understanding of all the courses undertaken.

PO 2: Learners will be able to join the industry or setup own entities, peruse further professional and other courses.

PO 3: This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc., well trained professionals to meet the requirements.

PO 4: After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.

PO 5: Capability of the students to make decisions at personal & professional level will increase after completion of this course.

PO 6: Students can independently start up their own Business.

PO 7: Students will get the knowledge of finance and commerce.

PO 8: The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.

PO 9: Learners will be equipped to face upcoming challenges in the industry and business as the specializations offered expose them to practical aspects.

PO 10: Learners will be responsible citizens as various academic and co-curricular courses imbibe sensitivity, moral and ethical values among them.



Head
Department of Commerce
Sri. Venkatesh Yadav College
Peth Vadgaon, Dist. Kolhapur.

Business Regulatory Framework Paper (I & II)

1. The student will well verse in basic provisions regarding legal frame work governing the business world.
2. To know the students with the basic concepts, terms & provisions of Mercantile and Business Laws.
3. To develop the awareness among the students regarding these laws affecting trade business, and commerce.
4. Student would be recall various definitions and would be able to evaluate the provision of Law of contract 1872

Business Environment Paper (I & II)

1. Student should able to understand the significance and position of Indian economy at the world level.
2. Students should study the scenario of agricultural and industrial sectors.
3. Student should aware regarding Indian economy is facing some of the fundamental economic problems.
4. They should able to make plans and solutions to these being as a citizen.
5. Student should understand the correlations between economical and social problems.

Co-operative Development Paper (I & II)

1. To study the cooperative legislations and fund management
2. To understand the institutional arrangement for cooperative education and training
3. To understand the nature, registration, legislation and audit of housing cooperatives
4. To understand the cooperative audit system and provisions

Advanced Accountancy paper I

1. To understand the basic concepts of income tax and basis of charge.
2. To identify the residential status and its implication on tax liability.
3. To understand the manner of computation of total income.

Advanced Accountancy paper II (Auditing)


1. To understand the concept and types of audit
2. To identify the residential status and its implication on tax liability
3. To understand the concept of exemption from income
4. To know the computation of income from various sources as well as total income

Advanced Accountancy paper III

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.

Advanced Accountancy paper IV (Taxation)

1. To understand the basic concepts of income tax and basis of charge
2. To identify the residential status and its implication on tax liability
3. To understand the manner of computation of total income
4. Students can understand Income Tax system properly, and can get the knowledge of different tax provisions.


Head
Department of Commerce
Shri. Vajaynath Yashwanth College
Peth Vadgaon, Dist. Kolhapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2020 onwards.)

Economics of Development

Semester: V

- Identify the dimensions of development
- Distinguish the fundamental and contemporary development debate
- Know the theories of economic development
- Realise the role of state in economic development

Economics of Planning

Semester: VI

- Get acquainted with economic planning and its importance in development
- Get acquainted with development of planning and planning machinery in India
- Evaluate Sectoral performance of the Indian economy
- Compare and analyse Indian models of economic development


Head

Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2020 onwards.)

History of Economic Thoughts-I

Semester: V

- Understand the basic economic ideas of various economic thinkers of the world
 - Understand the development of economic thoughts

History of Economic Thoughts-II

Semester: VI

- Understand the economic concepts and theories of Neo-Classical and Indian thinkers.
- Understand the development of economic thoughts


Head,
Department of Economics
Shri. Vijaysinha Yadav College
Pethvadgaon

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2020 onwards.)

Research Methodology in Economics-I

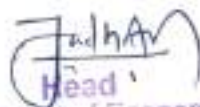
Semester: V

- Get acquainted with the basic concepts of research and its methodologies.
- Select and define appropriate research problem and parameters.
- Understand the sampling techniques as a method of data collection

Research Methodology in Economics-II

Semester: VI

- Use techniques of data analysis in research
- Write a research report and thesis
- Write a research proposal (grants)


Head

Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2019 onwards.)

Macro Economics

Semester: III

- Identifying the basic concepts and theories of Macro economics
- Awareness' about changing macroeconomic policies and theories.
- Understanding various concept such as GDP, GNP, NNP, PI, DI.
- Identifying the factors determine gross domestic product, employment, general level of price, and interest rate.

Macro Economics

Semester: IV

- Realizing law of market, consumption function and investment function.
- Judging the role of fiscal policy and monetary policy in a developing economy.
- Evaluating types, merits and demerits of taxes.
- Comprehending the role of public finance in developing economy.


Head
Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2020 onwards.)

Principles of Micro Economics-I

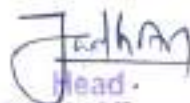
Semester: V

- Explain what economics is and explain why it is important
- Understand consumer decision making and consumer behaviour
- Define the concept of utility and satisfaction
- Derive revenue and cost figures as well as curves
- Understand producer decision making and producer behaviour

Principles of Micro Economics-II

Semester: VI

- Identify the market structure
- Analyse the economic behavior of individual firms and markets
- Analyse a firm's profit maximising strategies under different market conditions
- Understand the factor pricing


Jadhav
Head.

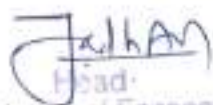
Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Program Specific Outcome of Economics (PSO)

- Understanding how different of completion in a market affect pricing and outcome.
- Understanding the efficiency and equity implication of market interface, including government policy.
- Developing research knowledge in economics
- Development the skill of data collection and use of sampling techniques in research
- Developing the knowledge about theories of economic growth and Development and issues of economic planning.
- Creating awareness about changing macro-economic polies in Indian economy


Head

Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Solapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2018 onwards.)

Indian Economy

Semester: I

- To introduce the students to the Indian economy.
- To develop an understanding of challenges facing the Indian economy.
- To acquaint the students with Structure of the Indian economy and Changes Taking Place therein

Indian Economy

Semester: II

- To acquaint the students with the policies and performance of major sectors in Indian Economy.
- To explain the economic reforms introduced in India since 1991.

Jadhav
Head.

Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur

Shri. Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2020 onwards.)

International Economics- I

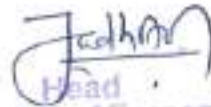
Semester: V

- Explain international trade
- Understand the measurement of gains from international trade
- Distinguish different rates of exchange

International Economics-II

Semester: VI

- Measure the terms of trade
- Distinguish between balance of trade and balance of payments
- Analyse the balance of payments
- Understand the various types of foreign capital
- Analyse the impact of international institutions on Indian economy


Head

Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Shri.Vijaysinha Yadav College, Pethvadgaon

Department of Economics

Course Outcome

(Syllabus to be implemented from June, 2019 onwards.)

Bank and financial Institution

Semester: III

- Understand the meaning, function and role of commercial banking.
- Comprehending the procedure of an account opening. Operating and closing.
- Knowing the structure, function and role of RBI in economic development.
- judging the progress of financial inclusion.

Bank and financial Institution

Semester: IV

- Evaluating the importance, characteristics and components of the financial market.
- Understanding the role and types of development banks and non-banking financial institute.
- Identifying recent trends in Indian banking such as E-banking, MICR Clearing, ATMs, Credit cards and Debit Cards, Demat Account.


Head

Department of Economics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Department of English

Programme Outcomes [PO]

1. To equip the students with Knowledge and Life Skills.
 2. To create Social, Cultural, Political, Environmental, Economic and Moral awareness among the students.
 3. To introduce the students with various disciplines of Arts and Fine Arts.
 4. To develop leadership qualities among the students.
 5. To develop the employment and Entrepreneurship Skills.
 6. To develop the responsible citizens of the country.
 7. To develop National Integrity among the students.
- To inculcate Humanistic and Scientific Values among the students.

Programme Specific Outcomes [PSO]

1. Capacity of functional communication in English.
2. Skill to read, comprehend and appreciate good quality text.
3. Proficiency in English Grammar.
4. Ability to appreciate culture texts such as films, documentaries etc.
5. Capacity of translation of simple texts.
6. Capacity of creating a text on the given topic.
7. Confidence of giving a presentation on a given topic.
8. To acquaint and appreciate major genres of literature.
9. To develop an ability to analyze and evaluate literature.

Course Outcome [CO]

Course: B. A. I

1. To acquaint the students with translated modern Indian literature in English.
2. To introduce the students with the forms of literature such as Short Story, Poetry, Drama and Novel.
3. To develop literary competence among the students.

Course: B. A. II

1. To acquaint the students with translated modern Indian literature in English.
2. To introduce the students with the forms of literature such as Short Story, Poetry,

Drama and Novel.

To develop literary competence among the students.

B. A. Part II

**ABILITY ENHANCEMENT COMPULSORY COURSE (AECC) (CBCS) ENGLISH
FOR COMMUNICATION (Compulsory English)**

Course Objectives:

1. To enable the students to develop communication skills in English, both oral and written.
2. To equip the students with the language skills for use in their personal, academic and professional lives.
3. To develop the student's essential employability skills.
4. To help the students to enter the job market with confidence and the ability to work effectively.
5. To help the students to learn and practice both language and soft skills.
6. To encourage the active involvement of the students in learning process.
7. To enable the students to cultivate a broad, human and cultured outlook.

B. A. Part II

(Discipline Specific Core) (DSC-C5) English (Paper III) (Semester III)

LITERATURE AND CINEMA (CBCS)

Course Objectives:

1. To introduce film and its relationship to literature to the students
2. To acquire film literacy through a working knowledge of basic film terminology
3. To develop critical approaches to engage with film adaptations
4. To establish a clear understanding of literature through film adaptations of literary texts
5. To introduce the students to the issues and practices of cinematic adaptations

B. A. Part II

**(Discipline Specific Core) (DSC-C29) English (Paper V) (Semester IV) LITERATURE
AND CINEMA (CBCS)**

Course Objectives:

1. To introduce film and its relationship to literature to the students
2. To acquire film literacy through a working knowledge of basic film terminology
3. To develop critical approaches to engage with film adaptations
4. To establish a clear understanding of literature through film adaptations of literary texts

5. To introduce students to the issues and practices of cinematic adaptations

B. A. Part II

(Discipline Specific Core) (DSC-C6) English (Paper IV) (Semester III) PARTITION LITERATURE (CBCS)

Course Objectives:

1. To create an awareness of the partition scenario among the students
2. To explain the hidden human dimensions of the partition to the students
3. To elaborate on the impact of partition on society

B. A.III

Compulsory English

Ability Enhancement Compulsory Course (CBCS)

ENGLISH FOR COMMUNICATION

Course Objectives:

1. To enhance students' communication skills
2. To impart employability skills to students
3. To prepare students for competitive examinations
4. To enable students to acquire professional skills such as media writing
5. To enable students to learn manners and etiquettes required at workplace
6. To enhance students' reading comprehension skills
7. To create interest in English literature among students
8. To inculcate human values and ethics in order to enable students' to become good citizens of the country

Course Outcomes: After the completion of the course, the students will be able to:

1. Communicate in English, in oral and written modes, in their day-to-day lives as well as at workplaces.
2. Face job interviews confidently and efficiently.
3. Acquire soft skills required at workplaces and in real life.
4. Learn group behaviour and team work.
5. Learn to value and respect others' opinions and views and develop democratic attitude.
6. Face competitive examinations confidently and efficiently with adequate

linguistic confidence.

7. Acquire professional skills required in media writing such as writing editorials.
8. Learn to appreciate and enjoy reading poetry and prose passages.
9. Acquire human values and develop cultured outlook.

INTRODUCTION TO LITERARY CRITICISM (CBCS)

Discipline Specific Elective

Semester V (Paper VII) (DSE- E11) & Semester VI (Paper XII) (DSE- E136)

Course Objectives:

1. To introduce students to the major trends in literary criticism.
2. To familiarize students with the major critical concepts.
3. To help students to study the original contributions made in the field of literary criticism.
4. To acquaint students with the various literary and critical movements.
5. To train students to write critical appreciation of poetry.

Course Outcomes:

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.
5. Students are able to understand the meaning and appreciate the poems critically.

ENGLISH POETRY (CBCS)

Discipline Specific Elective

Semester V (Paper VIII) (DSE – E12) and Semester VI (Paper XIII) (DSE – E137)

Course Objectives:

1. To make students engaged and curious readers of poetry
2. To introduce students to poetry from various cultures and traditions
3. To make students understand that poetry gives intellectual, moral and linguistic pleasures
4. To make students hear and read poems aloud and to memorize lines

Course Outcomes:

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.

ENGLISH DRAMA (CBCS)

Discipline Specific Elective

Semester V (Paper IX) ((DSE – E13) & Semester VI (Paper XIV) (DSE – E138)

Course Objectives:

1. To make students understand different forms of drama
2. To enable students to relate drama to their ideological or socio-political contexts
3. To help students improve their creative and imaginative faculties through the reading of drama
4. To enable students to know about various aspects of the drama

Course Outcomes:

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.

ENGLISH NOVEL (CBCS)

Discipline Specific Elective

Semester V (Paper X) ((DSE – E14) & Semester VI (Paper XV) (DSE – E139)

Course Objectives:

1. To make students understand different forms of novel.
2. To enable students to relate novels to their ideological or socio-political contexts.
3. To help students to improve their creative and imaginative faculties through the reading of novels.
4. To enable students to know about various aspects of the novel.

Course Outcomes:

1. Students are able to understand different forms of novel.
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.

LANGUAGE AND LINGUISTICS

Semester V –Paper XI (DSE -E 15)

Course Objectives:

1. To orient students to the concept of communication.
2. To make the students familiar with varieties of the English language.
3. To acquaint students with different levels of the study of language.
4. To study the basic units of grammar.

Course Outcomes:

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.

LANGUAGE AND LINGUISTICS (CBCS)

Discipline Specific Elective

Semester VI – Paper XVI (DSE - E140)

Course Objectives:

1. To acquaint students with structures and functions of words and phrases.
2. To enable students to know and identify elements and types of clauses.
3. To study Subordination and Coordination.
4. To study different ways of structuring clauses.

Course Outcomes:

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

Head

Department of English
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Department of Geography

COURSE OUTCOMES (CO)

B. A. Part - I (Paper No. I & II)

- 1) Students should know the fundamental branches of Geography in general and Geomorphology and Climatology in particular.
- 2) Students should get acquainted with the Geomorphological and Climatological concepts.
- 3) Students should know the basis of Human development by studying these Physical branches of Geography.

B. A. Part - II (Paper No. III to VI)

I) Soil Geography (Paper No. III)

- 1) Students should know soil geography is the fundamental branch of Physical Geography.
- 2) To familiarize the students with the basic and fundamental concepts of soil geography.
- 3) With this study, students understand soil is key resource for the development of any country.
- 4) Students should know that concept, causes and controlling factors soil erosion, soil degradation and Conservation of Soils.
- 5) Students should know the concept, need and methods soil of management.
- 6) Students should know classification, characteristics and distribution of soils.

II) Resource Geography (Paper No. IV)

- 1) To understand the concept and classification of resources in the world.
- 2) To get information about the major resources (water, forest, energy and human)
- 3) Students should know the sustainable development of resources.
- 4) To make students aware about the cartographic techniques.

III) Oceanography (Paper No. V)

- 1) Students should know oceanography is the fundamental branch of Physical Geography.

- 2) To familiarize the students with the basic and fundamental concepts of oceanography.
- 3) With this study, students understand marine is key resource for the development of any country.
- 4) Students should know physical and chemical properties of oceans.
- 5) Students should know types of oceanic currents and currents of Atlantic, Pacific and Indian oceans.
- 6) Students should know hypsographic curve, wind rose, iso-salinity lines and isotherms.

IV) Agricultural Geography (Paper No. VI)

- 1) To understand the concept and development of Agriculture.
- 2) To examine the role of agricultural determinants towards the changing cropping pattern.
- 3) To study the Green Revolution.
- 4) The course also aims to familiarize the students with the Agricultural concepts and modern technologies used in Agriculture.

Inter Disciplinary Subject

I) Concepts in Tourism Geography and Development and Planning of Tourism (Paper No. I & II)

- 1) To familiarize the students with aspects of tourism which have a relation with the subject matter of Geography
- 2) To orient the students to the logistics of tourism industry and the role of tourism in regional development.
- 3) To understand the impact of tourism on physical and human environments.
- 4) To familiarize the students with local, regional and national tourism.

B. A. Part –III (Paper No. VII to XIV)

I) Evolution of Geographical Thought (Paper No. VII)

- 1) Students should be able to understand in-depth about the evolution of the Geographical thought.
- 2) Students should be able to analyse the recent trends in Geography.

- 3) Students should be able to make use of various models of paradigms and debates in the Geographical studies.
- 4) Understanding of recent trends in Geography.

II) Geography of India (Paper No. VIII)

- 1) In-depth understanding the dimensions and physiography of India.
- 2) The students are fully aware about the climatic seasons in India.
- 3) Detailed knowledge about soil, vegetation and drainage system in India.
- 4) Understanding and importance of agriculture and Industry in Indian economy.
- 5) Detailed knowledge about the economic steps of India.

III) Population Geography (Paper No. IX)

- 1) This paper would bring an understanding of population Geography along with relevance of demographic data.
- 2) The students would get an understanding of distribution and trends of population growth in the developed and less developed countries along with population concepts.
- 3) The students would get an understanding of the dynamics of population.
- 4) An understanding of the implications of population composition in different regions of the world.
- 5) An appreciation of the contemporary issues in the field of population studies.

IV) Economic Geography (Paper No. X)

- 1) In-depth understanding about the Economic Geography.
- 2) Detailed knowledge about locational factors of economic activities with special references to agriculture and industry.
- 3) Detailed understanding of the basic concepts related to manufacturing industries (selected countries) of the world.
- 4) Understanding of the transport and trade.

V) Urban Geography (Paper No. XI)

- 1) The students were known the importance of Urban settlement through Urban Geography.
- 2) The students understood the types of urban settlement site and situation.

- 3) The students were familiar with an idea of relationship between human activities and urban development.
- 4) Detail understanding of students regarding present urban problems and students are capable to handling of present problematic situations in urban areas.
- 5) The students are developed as a good urban planner and environmental conservator.

VI) Geography of Health and Wellbeing (Paper No. XII)

- 1) Understand various geographical perspectives related to human health.
- 2) Create awareness of human health and environmental trends.
- 3) The students are familiar with geographical background of diseases and their regional pattern.
- 4) Detail understanding of pressure on environmental quality and human health.
- 5) Create awareness among the students of malnutrition and hygiene.
- 6) The students are familiar with the process of health care planning in India.
- 7) The students are aware about impact of climate change on human health.

Practical Papers:

VII) Fundamentals of Map Making and Map Interpretation (Paper No. XIII)

- 1) In depth understanding the map, concept of scale and projection.
- 2) Detailed knowledge about the analysis of landforms and its identification.
- 3) The students are deeply aware about basic information to the students about S.O.I. topomaps and I.M.D. weather maps and obtained the skills about map interpretation.
- 4) The students are deeply familiar with different cartographic techniques and methods used for representation of demographic and physio- socio-economic database

VIII) Advanced Tools, Techniques & Field Work in Geography (Paper No. XIV)

- 1) In depth understanding the importance of field work and advanced Techniques in Geography.

- 2) The students are trained to implement modern tool and techniques in Geography.
- 3) Detailed knowledge about the use of computer for analysis of Geographical data.
- 4) The students are deeply aware about the basics and trained in instrumental survey.
- 5) The students are deeply familiar with computer, GIS, GPS and Remote Sensing.

B. Sc. Part – I (Paper No. I to IV)

- 1) To introduce the latest basic concepts in Physical Geography, Specifically in Geomorphology, Climatology and Oceanography.
- 2) To get aware about the concepts in Human Geography i.e. Human races, population growth, distribution, migration, sex ratio, age structure, rural and urban settlements.
- 3) To understand about the growth and development of towns and cities with the help of theories.

PROGRAMME SPECIFIC OUTCOME (PSO)

- 1) The Students are known the Human development by studying these Physical branches of Geography.
- 2) The students are understood the branches of Geography, concepts in Physical Geography and Geomorphology and Climatology in detail.
- 3) The students are acquired knowledge about the basic and fundamental concepts of soil geography.
- 4) The students are understood soil is key resource for the development of any country with concept, causes and controlling factors of soil erosion, soil degradation and Conservation of Soils. Along with the concept, need and methods soil of management.
- 5) Students are known classification, characteristics and distribution of soils.
- 6) The students are understood the Human Geography as a basic branch of Geography along with the Dichotomy, Environmentalism and possibilism.
- 7) The students are well prepared with the knowledge of the racial groups in the world, man- environment conflict and Ecological crises. They are familiar about the World population growth, distribution and the population policies.
- 8) The students are familiar with the fundamental concepts of oceanography, they are also known oceans are the best alternative source to the earth resources.
- 9) Students are talented about physical and chemical properties of oceans and get detailed about types of oceanic currents and currents of Atlantic, Pacific and Indian oceans.
- 10) The students are individually ready to prepare graphs and diagrams of oceanic statistical data.
- 11) The students are well acquainted with new emerging concepts and development of Agriculture. They are aware about agricultural determinants towards the changing cropping pattern and Green Revolution.
- 12) They are aware about the Agricultural concepts and modern technologies used in Agriculture.

- 13) The students are familiar with aspects of tourism which have a relation with the subject matter of Geography and students are oriented in relation to the logistics of tourism industry and the role of tourism in regional development.
- 14) The students are individually examining an impact of tourism on physical and human environments.
- 15) The students are acquainted with distinct dimensions, physical setup, climate and mechanism of monsoon, soils and vegetation of India.
- 16) Regional study of India helps the students to understand recent trends in regional study.
- 17) The students have known an importance of research, principles, techniques of research and methodology.
- 18) The students are understood the process and value of geographical research and also they are able to apply skills and ICT in geography.
- 19) The students are well acquainted with the relationship of human activities with resources at global level.
- 20) The students are able to apply global economic situation at local level.
- 21) The students are acquainted about regional resources.
- 22) The students well familiar with different agricultural products, means of transportation and their network of the India.
- 23) The students are got the knowledge of transport and trade in India.
- 24) The students are aware about fundamental concepts of Urban Geography and types of Urban Settlements, site & Situation.
- 25) The students are capable up to some level for handling the present problematic situation in urban and rural areas.
- 26) The course matter of Urban Geography has been prepared the students for good planner and environmental Conservator.
- 27) The students are able with distinct dimensions of Political Geography.
- 28) The students are known the role of geographical factors in influencing the political character of countries / regions.
- 29) The students are understood the geo-political issues in India and World.

- 30) The students are understood with the importance of map making & map Interpretation.
- 31) The students are understood map, concept of projection and concept of scale.
- 32) The students are trained in analysis of landforms, map Interpretation (S.O.I. topomaps and I.M.D. maps).
- 33) The students are trained in applications of different cartographic techniques and methods used for representation of demographic and physio- socio-economic database.
- 34) The students are aware about the applications of modern tool & techniques in Geography.
- 35) The students are developed their skills in instrumental (Plain Table and Prismatic Compass) survey.
- 36) The students are able to use computer for analysis of Geographical data.
- 37) The students are understood the basic information about Arial Photographs, Remote Sensing, GIS and GPS.

DEPARTMENT OF HINDI

2022-23

Programme Outcome (PO): -

- To introduce students with arts & fine arts.
- To inculcate students with Languages.
- To introduce them various social sciences.
- To make them capable of leadership & community
- To develop students' national integration, social awareness.
- To make aware about social, political & economic.

Programme Specific Outcome (POS): -

- Introduced students' various forms of Hindi Literature.
- To introduced students Hindi Literature & Language.
- To develop interest in reading Hindi Literature.
- To understand various techniques, devices of writing Hindi Literature.

Course Outcome (CO)-

- To introduce modern Hindi poetry form to students.
- To introduced essay writing, one act play, short stories of Hindi literature.
- To make them understand novel form of Hindi Literature.
- To understand Hindi Literary criticism.

- To understand Indian & Western Literary criticism.
- To understand History of Hindi Literature.
- To make them aware about ancient Hindi literary writers.
- To introduce students' Hindi language in social media like what's app, Facebook, twitter, Instagram, email.
- To make student capable of translation form Hindi to other languages.
- To introduced students Hindi Language structures, sounds & syntax.
- To make students enable for perfection of Hindi language in use.

Attainments-

- From conducting exams, we achieve the progress report of students.
- From giving projects we improve research skill of students.
- Presenting seminars, we improve communication skill of students.
- From arranging interview, we increase daring of students.

Shri. Vijaysinha Yadav Mahavidyalaya, Peth Vadgaon

Tal-Hatkanangale. Dist-Kolhapur.

Dept. of History - 2022-23

POs, PSOs and COs

PROGRAMME OUTCOME

After successfully completing this course the student are expected to imbue with following quality which help them in their future life to achieve the expected goals.

PO1 Realization of human values and Ethics.

PO2 Development of Indian historical culture.

PO3 Sense of social awareness and social Movement in Ancient to till today.

PO4 Creating critical approach towards socio-economic and cultural problems.

PO 5 Created innovative sense in their specialized discipline.

PO6 Developing awareness about historical monuments.

PO7 Gained historical analytical ability.

PO8 This Programme has been designed to impart knowledge of the methods of history to the students.

PO9 They will learn about deep and sophisticated consciousness of history embedded in the various traditions of history writing in India.

PO10 It will impart knowledge of fundamentals of digital history to the students which will help them to incorporate digital technologies and methods in their research and teaching.

Head

Department of History
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur

+

PROGRAMME SPECIFIC OUTCOME

After completion of this programme students will be able to: -

- PSO 1:** Knowledge of multiple perspectives through which significant developments in the history of the Indian subcontinent from earliest times up to the period after independence.
- PSO 2:** Familiarity with the significant patterns of development in certain parts of the modern and early modern world as well as certain non-Indian ancient societies.
- PSO 3:** Ability to carefully read a complex historical narrative, evaluate its deployment of evidence, and understand its argument as well as critically analyze.
- PSO 4:** Ability to identify patterns of change and continuity with regards to issues of contemporary significance over long durations as well as across diverse geo-cultural zones
- PSO 5:** Greater ability to distinguish between that which is historical that is time-place context driven, hence changeable and challengeable.
- PSO 6:** Sensitivity to gender and social inequities as well as acquaintance with the Historical trajectories of these issues
- PSO 7:** Capability to assume leadership roles and apply the above mentioned analytical abilities in various other non-familiar contexts.
- PSO 8:** Possess knowledge of the values and beliefs of multiple cultures so as to Effectively engage in a multi cultural society and interact with diverse groups.



Head
Department of History
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

COURSE OUTCOMES

Rise of the Maratha Power (1600-1707) (I) DSE

- CO1** To describe fundamentals causes of rise of Maratha power.
- CO2** To discuss the Chhatrapati Shivaji Maharaja's achievement till 1664.
- CO3** To discuss the Chhatrapati Shivaji Maharaja's achievement till 1680.
- CO4** 1600 to 1707 was a period of rapid change in the history of Marathas.
- CO5** The course is designed to acquaint the students with the political, socio-economic and religious life of the people during the 1600-1707 period.
- CO6** It will educate the students about the policy and contribution of Chhatrapati Shivaji Maharaj.

Polity, society and Economy under the Marathas (1600-1707) (II) DSE 2

- CO 7** Describe the forts from multiple viewpoints- as sources of history, as centres of control, as sites of historical events, and as heritage sites.
- CO 8** To explain history of the rise of Maratha power with main emphasis on life and work of Chhatrapati Shivaji Maharaj.
- CO9** The course is also expected to apprise the students with the sacrifices made by Maratha leaders and people to protect freedom and sovereignty of the region.
- CO10** Imagine the political, socio-economic and religious life of the people during the 1600-1707 period.
- CO11** The course is designed to acquaint the students with the political, socio-economic and religious life of the people during the 1600-1707 period.
- CO 12** to explain the policy and contribution of Chhatrapati Shivaji Maharaj.

History of Modern Maharashtra (1900 to 1960) (III) DSC

- CO13** Explain the beginnings and growth of nationalist consciousness in Maharashtra.
- CO14** Explain the contribution of Maharashtra to the national movement
- CO15** Give an account of various movements of the peasants, workers, women and backward classes
- CO16** Discuss the background and events which led to the formation of separate state of Maharashtra.
- CO17** To explain concept of Modern Maharashtra.
- CO18** Tell the historical events and transformations which have played an important role in making of modern Maharashtra.

History of India (1757-1857) (IV) DSC

- CO19** Describe the significant events leading to establishment of the rule of East India Company.
- CO20** Tell the colonial policy adopted by the company to consolidate its rule in India.
- CO21** Find the structural changes initiated by colonial rule in Indian economy.
- CO22** Explain the various revolts against rule of the East India Company.
- CO23** To define the East India Company established and consolidated its rule in India.
- CO24** To analyze the impact of colonial rule on the Indian Economy.

History of India (1858-1947) (VI) DSC

- CO25** Explain the events which lead to the growth of nationalism in India
- CO26** To categorized the major events of the freedom struggle under the leadership of Mahatma Gandhi.
- CO27** Explain the contribution of Revolutionaries, Left Movement and Indian National Army
- CO28** Define the concept of Communalism and the causes and effects of the partition of India.
- CO29** Identify events leading to emergence of national consciousness in India.
- CO30** Described the prolonged struggle launched by the Indian National Congress under the leadership of Mahatma Gandhi.

History of Modern Maharashtra (1960-2000) (V) DSC

- CO31** This was also a period of massive expansion of education as well as social transformation.

CO32 Tell the students to significant leaders, events and transformations in history of Maharashtra.

CO33 Explain the contribution of eminent leaders of Maharashtra.

CO34 To critique the economic transformation of Maharashtra.

CO35 Recognize the salient features of changes in society.

CO36 Evaluate the History of Modern Maharashtra during the 1960 to 2000.

Social Reforms in India (IDS) DSC

CO37 To explain the salient features of prominent socio-religious reform movements.

CO38 Explain the thought and work of Mahatma Phule for radical transformation of Indian society.

CO39 Know the measures taken by Rajashri Shah Maharaj for emancipation of lower classes and women.

CO40 To Critique the thoughts of Ambedkar on the annihilation of the caste system and untouchability in India.

CO41 To discover the Indian constitution embodies the values of social justice and equality.

CO42 Discuss the social reforms in India under the British Rule.

Social Reforms In Maharashtra (IDS) DSC

CO43 Explain about the beginnings of social reforms in Maharashtra by the Paramhansa Mandali and Prarthana Samaj.

CO44 Classified the contribution of women reformers

CO45 Explain the contribution of Social reformers in the fight for social justice

- CO46 Explain the role played by educational reforms in transformation of society.
- CO47 Describe the Social reforms in Maharashtra under the British rule.
- CO48 Explain the role of Social Reformers of Maharashtra during the Company and British rule in Maharashtra.

Early India (from beginning to 4th c. BC) VII) DSC

- CO49 Evaluate the transition of humans in India from Hunters to Farmers
- CO 50 Explain the transition from Early to Later Vedic period.
- CO 51Categorises the causes for the first and second urbanizations
- CO Discusses the teachings of Gautama Buddha and Vardhamana Mahavira
- CO 53Describe the rise and growth of the Mauryan Empire
- CO 54Explain the salient features of Ashoka's Dhamma

History of Medieval India (1206-1526 AD) (VIII) DSE

- CO55 Asses the fundamental changes in polity, society, religion and culture of India.
- CO56 To compare historiography on political structures and cultures across different realms of the Rajputs, Delhi Sultanate.
- CO 57 Describe the different types of historical sources available for writing the history of medieval India.
- CO 58 Explain the contributions of medieval rulers like Allaudin Khilji, Muhammad-bin-Tuqhlaq, Krishnadevraya, and Mahmud Gavan.
- CO 59 Critique the administration and economy of the Delhi sultanate and Vijayanagar Empire.
- CO 60 Describe the significant developments which took place in religion, society and culture.

Age of Revolutions (IX) DSC

- CO61 Explain the causes and consequences of the Reformation.
- CO 62 Discover the role played by Martin Luther.
- CO 63Discusses the salient features of the Industrial revolution.
- CO 64 Describe the account of the American revolution.
- CO 65Explain the causes, effects and major events of French Revolution.

CO 66 Explain the role of major leaders of the French Revolution

Political History of the Marathas (X) DES-E-230

CO67 Explain the political condition up to 1740

CO68 To tell the role of Madhavrao, Mahadaji shinde and Nana .

CO69 Describe the role of Agriculture and Industries Trade in economic development.

CO70 To describe the role of cultural development during the period.

CO71 Explain the causes and effects of the Battle of Panipat.

CO72 Prepare the political condition of the Marathas after 1761.

History: Its Theory (XI) DSE

CO73 Explain the definition and scope of the subject of History

CO74 Describe the process of acquiring historical data

CO75 Evaluate the methods of writing history

CO76 To determine tools of writing of History.

CO 77 Analyze the process of acquiring historical data

CO78 Explain the process of presenting and writing history

Ancient India (From 4th c. BC to 7th c. AD) (XII) DSC

CO79 To describes the fundamentals of Ancient Indian History.

CO80 Explain the great kings in Ancient India.

CO81 Give the political ,economic and religious developments which took place in early historic India

CO82 Explain the role played by Major Satavahana, Kushana, Gupta and Vakataka Kings

CO83 Give an account of the developments in the Post-Gupta period

CO84 Evaluate the society and culture of Ancient India

History of Medieval India (1526-1707 AD) (XIII) DSE

CO85 Identify the various sources for writing Medieval Indian history

CO86 Explain important developments in religion, society and culture

CO87 Describe the condition of Industry and trade

CO88 To explain the analysis religion and cultural.

CO89 Explain the role of rulers like Babar, Akbar, Chandbibi and Ibrahim Adilshah II

CO90 Categorized the administrative and revenue system

Making of the Modern World (16th to 19th Century) (XIV)

CO91 Describe the causes and consequences of the Glorious revolution in England

CO92 Explain the concept of Nationalism and account for its rise and spread.

CO93 Describe the unification of Italy and Germany.

CO94 Identify the rise, growth and impact of Imperialism.

CO95 Explain the significance of the Partition of Africa

CO96 Describe the life and thoughts of important leaders like Metternich, Karl Marx and Abraham Lincoln

Polity, Economy and Society under the Marathas (XV) DSE

CO97 Describe the various sources for writing the history of the Marathas

CO98 Explain the significant developments in the polity of the Marathas

CO99 Describe the economic conditions

CO100 Explain the social conditions.

CO101 Categorized the economic and social condition prevalent under Maratha rule.

CO102 Introduce the students to the sources of Maratha history.

Methods and Applications of History (XVI) DSE

CO103 Explain the nature of archival sources

CO104 Define the conceptual clarity about recent trends in history.

CO105 Describe about the application of history in museums.

CO106 Explain the concept and scope of heritage tourism.

CO107 Describe the trends of local and oral history and will know about the tools of local history like Survey, Interview and Questionnaire.

CO108 To the relevance of monumental heritage and its relationship with the discipline of history through the concept of Heritage tourism.



Head

Dept. of History

Head

Department of History
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur.

Principal

PROGRAMME SPECIFIC OUT COME

आवश्यक अनुषंगीक निवड(सी.जी.ए.-1)

मराठी अभ्यास पत्रिका - १

पीएसओ-1 सीइजी-1

बी.ए. भाग १, सत्र -१

विद्यार्थ्यांची मराठी भाषा आणि साहित्यविषयक अभिरुची विकसित करणे

बी.ए. भाग १, सत्र -१

पाठ्यपुस्तक-अक्षरबंध (विद्याशाखीय विषेश गाभा डी.एस .सी.-ए.1)

पीएसओ-2 डी.एस .सी.-ए.1 बी.ए. भाग १

मराठी साहित्य परंपरा, लेखक, कवी यांचा परिचय करून घेणे

विद्याशाखीय विषेश गाभा (डी.एस .सी.सी.1)

मराठी अभ्यास पत्रिका - ३

बी.ए. भाग २, सत्र -३

साहित्यकृती : काय डेंजर वारा सुटलाय (नाटक)

पीएसओ-3 डी.एस .सी.-ए.1 बी.ए. भाग २ पेपर नं 3

नाटक व आत्मचरित्र या वाङ्मय प्रकाराचे आकलन करून घेणे

विद्याशाखीय विषेश गाभा (डी.एस.सी.सी.26)

मराठी अभ्यास पत्रिका - ५

साहित्यकृती : जुगाड (कादंबरी)

बी.ए. भाग २, सत्र -४ पीएसओ-4 डी.एस.सी.- 26 बी.ए. भाग २

पेपर नं 6 कादंबरी व कविता या वाङ्मय प्रकारांचे ओळख करून घेणे

बी.ए. भाग ३ सत्र ५ व ६

पीएसओ-5 काव्यशास्त्र बी.ए. भाग २ पेपर नं 7

पौर्वात्य काव्यशास्त्राची ओळख करून घेणे

पीएसओ-6 भाषाविज्ञान आणि मराठी भाषा बी.ए. भाग 3 पेपर नं 8

आधुनिक भाषाविज्ञानाचा परिचय करून घेणे

पीएसओ-7 मराठी वाङ्मयाचा इतिहास बी.ए. भाग 3 पेपर नं 9

मध्ययुगीन मराठी वाङ्मय परंपरांचा व इतिहासाचा परिचय करून घेणे

पीएसओ-8 मराठी भाषा: उपयोजन आणि सर्जन बी.ए. भाग 3 पेपर नं 10

विविध क्षेत्रातील भाषिक कौशल्ये आणि क्षमता विकसित करणे

पीएसओ-9 वाङ्मयप्रवाहांचे अध्ययन (ग्रामीण साहित्य) बी.ए. भाग 3 पेपर नं 11

ग्रामीण साहित्य प्रवाहांची प्रेरणा, स्वरूप, वैशिष्ट्ये व विकास समजावून घेणे

□□□□□□□□ आउट्कम

- १) विविध क्षेत्रासाठी भाषिक कौशल्ये व क्षमता विकसित होतील
- २) व्यक्तिमत्त्व विकास होईल
- ३) मराठी विविध साहित्य प्रवाहांचा परिचय होईल
- ४) विद्यार्थ्यांचा वाङ्मयीन दृष्टिकोण विकसित होईल
- ५) मराठी वाङ्मयाच्या इतिहासाचा परिचय होईल
- ६) साहित्य निर्मिती प्रक्रिया आणि स्वरूप समजेल

पोग्राम स्पेसिफिक आउटकम

- सीईजी 1 : मराठी भाषा आणि साहित्यविषयक अभिरुची विकसित करणे
- डीएससी- ए 1 : लेखक कवी यांचा परिचय करून देणे
- बी.ए. २ पे. 3 मध्ययुगीन वाङ्मयाचा परिचय करून देणे
- बी.ए. २ पे. 4 अहंग वाङ्मयाचा परिचय करून देणे
- बी.ए. ३ पे. 7 पौरवत्य काव्यशास्त्राची ओळख करून देणे
- बी.ए. ३ पे. 8 आधुनिक भाषा विकासाचा परिचय करून देणे
- बी.ए. ३ पे. 9 मध्ययुगीन वाङ्मयाचा परिचय करून देणे
- बी.ए. ३ पे. 10 भाषिक कौशल्यांचा विकास करणे
- बी.ए. ३ पे. 11 विविध सहित्यप्रवाहांचे स्वरुप स्पष्ट करणे

कोर्स आऊटकम

बी.ए. भाग १

- सीईजी 1 : १) मराठी यशस्वी साहित्यिकांचा परिचय होईल
- २) व्यक्तिविषेश - बापुजी साळुंखे यांचा परिचय होईल
- ३) व्यक्तिविकासात भाषेचे महत्त्व लक्षात येईल
- ४) भाषिक कौशल्ये समजतील
- ५) प्राचीन कवींचा परिचय होईल
- ६) निबंधाचे स्वरुप समजेल
- ७) निबंधलेखन कौशल्य प्राप्त होईल

डीएससी- ए 1 : १) कथा या वाङ्मय प्रकाराचा परिचय करून देणे

- २) भास्कर चंदनशीव यांच्या कथांचे चित्रण समजेल
- ३) चित्रपट निर्मिती प्रक्रिया समजेल

- ४) चित्रपट निर्मितीचे घटक समजतील
- ५) काव्यप्रकाराचा परिचय होईल
- ६) लोकनाथ यशवंत यांच्या कवितांचे चित्र समजेल
- ७) वृत्तपत्रिय लेखनाचा परिचय होईल

बी.ए.भाग २

काय डेंजर वारा सुटलाय (नाटक)

- १) नाटक या वाङ्मय प्रकाराचे आकलन होईल
- २) संवादलेखन कौशल्य विकसित होईल
- ३) नाटकातील समकालीन प्रश्न समजतील
- ४) प्रयोगरूप नाटक व नाट्यक्षेत्रातील ज्ञानसंपादनास चालना मिळेल

माती, पंख आणि आकाश (आत्मचरित्र)

- १) आत्मचरित्र या वाङ्मय प्रकाराचे आकलन होईल
- २) आत्मवृत्तपर लेखन कौशल्य विकसित होईल
- ३) आत्मचरित्रातील समकालीन प्रश्न समजतील
- ४) आत्मचरित्रकाराच्या चरित्राची जडण घडण समजण्यास मदत होईल

बी.ए.भाग २

पाठ्यपुस्तक - काव्यगंध

- १) मराठी काव्यपरंपरा व प्रवाहांची ओळख होईल
- २) काव्यातील माणूस आणि समाज यांचा परस्पर संबंध लक्षात येईल
- ३) कवितेच्या कलात्मक आकृतीबंधाचे मोल लक्षात येईल
- ४) काव्यप्रवाहानुरूप काव्यलेखनाचे विशेष समजतील

जुगाड (कादंबरी)

- १) कादंबरी या वाङ्मय प्रकाराची ओळख होईल
- २) मानवी मूल्यांविषयीची जाणिव होईल

- ३) कादंबरी लेखनाचे विशेष समजतील
- ४) वृत्तांतलेखन कौशल्ये रुजतील

बी.ए.भाग ३

पेपर क्रमांक ७ : साहित्यविचार

- १) पौर्वात्य काव्यलक्षणांचा परिचय होईल
- २) ललित व ललितेतर साहित्याचे स्वरूप समजेल
- ३) साहित्य प्रयोजनांचे आकलन होईल
- ४) साहित्याची निर्मिती प्रक्रिया व त्याचे स्वरूप कळेल
- ५) भाषेतील अलंकार समजतील

पेपर क्रमांक ८ : मराठी भाषा व भाषाविज्ञान

- १) भाषेच्या उत्पन्नकाळाचा अभ्यास होईल
- २) भाषाविज्ञानाचा परिचय होईल
- ३) मराठी भाषा आणि भाषाविज्ञान यांचा सहसंबंध लक्षात येईल
- ४) स्वनविचार, रूपविचार व वाक्यविचार यांचा परिचय होईल

पेपर क्रमांक ९ : मध्ययुगीन मराठी वाङ्मयाचा इतिहास

- १) मध्ययुगीन मराठी वाङ्मयाचा स्थूल परिचय होईल
- २) मध्ययुगीन मराठी वाङ्मयाचा कालिक अभ्यास होईल
- ३) मध्ययुगीन मराठी वाङ्मयाचे स्वरूप, वैशिष्ट्ये यांचा अभ्यास होईल
- ४) मध्ययुगीन मराठी वाङ्मयाच्या गद्य, पद्य रचनेचे विशेष समजतील

पेपर क्रमांक १० : मराठी भाषा व अर्थार्जनाच्या संधी

- १) सर्जनशील लेखनप्रक्रिया समजावून घेता येईल
- २) वैचारिक लेखनाचे स्वरूप समजेल
- ३) शोधनिबंध व प्रकल्पलेखन कौशल्य समजतील
- ४) आंतरजालावरील मराठी लेखन पद्य, गद्य, पद्य रचनेचा अभ्यास होईल

पेपर क्रमांक ११ : वाङ्मय प्रवाहांचे अध्ययन : (मध्ययुगीन)

पाठ्यपुस्तक -दृष्टांतपाठ निवडक (संपादन)

- १) मध्ययुगीन महाराष्ट्र व महानुभाव पंथ यांचा परिचय होईल
- २) महानुभाव वाङ्मयाच्या प्रेरणा समजतील
- ३) दृष्टांतपाठातील आशय व अभिव्यक्ती यांचा परिचय होईल
- ४) दृष्टांतपाठातील भाषिक वैभवाचा परिचय होईल

बी.ए.भाग ३

पेपर क्रमांक १२ : साहित्यविचार

- १) शब्दशक्तींचे आकलन होईल
- २) साहित्यातील रसाचे स्वरूप व रसप्रक्रिया समजेल
- ३) साहित्य भाषेचे आकलन होईल
- ४) भाषेतील छंद व वृत्ते यांचा अभ्यास होईल

पेपर क्रमांक १३ : मराठी भाषा व भाषाविज्ञान

- १) मराठी भाषेची वर्ण व्यवस्था समजेल
- २) ध्वनी व अर्थपरिवर्तनाची व्यवस्था यांची माहिती होईल
- ३) बोलींचे स्वरूप व विशेष समजतील
- ४) प्रमाणभाषेच्या स्वरूपाचा अभ्यास होईल

पेपर क्रमांक १४ : मध्ययुगीन मराठी वाङ्मयाचा इतिहास

- १) □□□□□□□□ □□□□□□□□ □□□□□ □□□□□□□□
□□□□ □□□□
- २) □□□□□ □□□ व □□□□□□□ □□□□ □□□□□□
□□□□□□ □□□□ □□□□
- ३) बखर □□□□□□ □□□ □□□□□□ □□□□□□ □□□□□□
□□□□□□ □□□□□□□□ □□□□ □□□□
- ४) □□□□□□□□□□ □□□□ व □□□□□ □□□□□□□ □□□□□□
□□□□□□□ □□□□□□

पेपर क्रमांक १५ : मराठी भाषा व अर्थार्जनाच्या संधी

- १) □□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□ □□□□□□□
- २) □□□□□□□□ □□□□□□□□□□□□□□ □□□□□□
□□□□□□□□ □□□□□□ □□□□□□□□ □□□□□ □□□□□

३) उ००००००० व ०००० ००००००००० ०००००
००००००० ०००० ००००००

४) ००००००० ००००००० ००००० ०००००००० ००००

पेपर क्रमांक १६ : वाङ्मय प्रवाहांचे अध्ययन : ००००००००
(००००००००००००००) ००००००००००००-
०००००००००००० ००००० (००००००)

१) ०००० ०००० ०००००० ०००००००००० ००००००
००००

२) ००००००००००००० ००००००००० व ०००००००
००००००

३) ०००००००००००० ००००० ००००ल
००००००००००००००००००० ०००००० ००००

४) ०००००००००००० ००००० ००००ल
०००००००००००, ०००००००००००, ००००००००००
०००००० ००००००० ०००००

PROGRAMME OUTCOME (PO): B. SC. PROGRAMME OUTCOMES STUDENTS SEEKING ADMISSION FOR B.SC. PROGRAMME, PERMEATING FOLLOWING QUALITIES WHICH HELP THEM IN THEIR FUTURE LIFE TO ACHIEVE THE EXPECTED GOALS.

PO 1 Acquired the knowledge with facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, Computer Science etc.

PO 2 Understood the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.

PO 3 Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments.

PO 4 The skills of observations and drawing logical inferences from the scientific experiments. Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions.

PO 5 Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.

PO 6 Realized how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.

PO 7 Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.

PO 8 Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence, which inspires in evolving new scientific theories and inventions.

PO 9 Imbided ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.

PO 10 Developed various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.

**PROGRAMME SPECIFIC OUTCOMES (PSO)
DEPARTMENT OF MATHEMATICS**

Subject	Class	Outcomes
Mathematics	First Year	<ul style="list-style-type: none"> • Students will acquire basic domain knowledge of different subjects such as Differential calculus, Calculus, Differential Equations • Students will be able to apply the concepts in solving the problems such as extreme values, electric circuit problems, and orthogonal trajectories. • Students will be able to identify and solve ordinary and partial differential equations.
Mathematics	Second Year	<ul style="list-style-type: none"> • Students will be to understand the concepts of Real Analysis and Algebra. • Student is equipped with mathematical analysis ability, problem solving skills, creative talent necessary for various kinds of employment. • Students will be able to acquire basic Practical skills and exposure to computer programming through practical courses like SCILAB.
Mathematics	Third Year	<ul style="list-style-type: none"> • Students will possess subject knowledge required for higher studies, professional and applied courses like M. Sc., Computer studies, Management Studies. • Introduction to various courses like group theory, ring theory, field theory, metric spaces, operation research. • Students will be able to acquire programming skills through C++ programming. • Students will become employable; they will be eligible for career opportunities in Industry, academia.

COURSE OUTCOMES [CO]: DEPARTMENT OF MATHEMATICS

Name of the Department / Subject: Mathematics
Year: I (CBCS/NEP)

Paper Code	Name of the Paper	Outcome
DSC - 5A	Calculus	<ul style="list-style-type: none"> • Student will be able to apply De-Moivre's Theorem and properties of hyperbolic functions. • Student will be able to apply notion of successive derivatives and partial derivatives which arise in all applied sciences • Student will be able to solve extreme value problems using Lagrange's method
DSC - 6A	Differential Equations	<ul style="list-style-type: none"> • Students will understand various types of ordinary differential equations of first order and first degree and methods to solve them. • Students will learn various types and methods to solve linear differential equations with constant coefficients.
DSC - 5B	Multivariable Calculus	<ul style="list-style-type: none"> • Students will understand concept of functions of two variables. • Students will understand techniques of partial differentiation • Students will understand concept of Jacobians and Maxima, Minima.
DSC - 6B	Basic Algebra	<ul style="list-style-type: none"> • Students will understand different types and properties of matrices. • Students will be able to solve homogeneous and non-homogeneous linear equations. • Students will be able to find Eigen values and Eigen vectors of a matrix. • Students will learn to classify the various types of groups, subgroups.

COURSE OOUTCOMES (CO)

Name of the Department / Subject: Mathematics
Year: II (CBCS)


Paper Code	Name of the Paper	Outcome
DSC - 5C	Real Analysis - I	<ul style="list-style-type: none"> • Students will be able to understand types of functions and how to identify them. • Students will be able to use mathematical induction to prove various properties. • Students will be able to understand the basic ideas of Real Analysis. • Students will be able to prove and apply order properties of real numbers, completeness property and the Archimedean property.
DSC - 6C	Algebra - I	<ul style="list-style-type: none"> • Students will understand different types and properties of matrices. • Students will be able to solve homogeneous and non-homogeneous system of linear equations. • Students will be able to find Eigen values and Eigen vectors of a matrix. • Students will learn to classify the various types of groups, subgroups .
DSC - 5D	Real Analysis - II	<ul style="list-style-type: none"> • Students will understand sequence and its properties pertaining to convergence. • Students will understand The Bolzano-Weierstrass Theorem, Cauchy Convergence thm. • Students will understand convergence of series and able to solve the related problems
DSC - 6D	Algebra - II	<ul style="list-style-type: none"> • Students will understand Lagrange's theorem and various properties of subgroups. • Students will learn modular arithmetic and be able to apply Fermat's and Euler's theorem • Students will understand properties of normal subgroups, factor group.

COURSE OOUTCOMES (CO)

Name of the Department / Subject: Mathematics
Year: III (SEM V and SEM VI)

Paper Code	Name of the Paper	Outcomes
Paper IX	Mathematical Analysis	<p>Students will</p> <ul style="list-style-type: none"> • Understand the convergence and divergence of sequence and series of real numbers. • Understand the integration of bounded function on a closed and bounded interval. • Understand some families of Riemann integrable functions and properties of integration. • Be able to determine integrabilty of a function. • Understand extension of Riemann integral to the improper integrals.
Paper X	Abstract Algebra	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand basic concepts of group theory and its different examples. • Identify whether the given set with the compositions form Ring, Integral domain or field. • Understand the difference between the concepts Group and Ring. • Apply fundamental theorem, Isomorphism theorems of groups and Rings.
Paper XI	Optimization Techniques	<p>Students will be able to</p> <ul style="list-style-type: none"> • Form and solve Linear Programming Problems • Solve LPP by graphical methods. • Understand and solve Transportation and Assignment Problems .
Paper XII	Integral Transforms	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand Existence theorem of Laplace Transform. • Find solution linear differential equations by Laplace Transform. • Understand relation between Laplace and Fourier Transforms.

Paper Code	Name of the Paper	Outcomes
Paper XIII	Metric Spaces	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand the generalization of distance to metric notion with examples. • Appreciate the process of abstraction of limits and continuity to metric spaces. • Understand the interconnection within metric concept, open sets, closed sets and continuity. • Understand the properties of connected sets, compact sets, complete sets and apply them to explore properties of continuous functions on compact sets and uniform continuity.
Paper XIV	Linear Algebra	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand notion of vector space, subspace, and basis. • Understand concept of linear transformation and its application to real life situation. • Work out algebra of linear transformations. • Appreciate connection between linear transformation and matrices.
Paper XV	Complex Analysis	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand basic concepts of functions of complex variable and analytic functions. • Understand concept of complex integration and basic results thereof. • Understand concept of sequence and series of complex variable. • Apply concept of residues to evaluate certain real integrals.
Paper XVI	Discrete Structures	<p>Students will be able to</p> <ul style="list-style-type: none"> • Understand logic of compound statements. • Draw the Graphs and Trees. • Understand some Algorithms.


 Ms. D. B. Patil
 Head
 Department of Mathematics
 Shri. Vijaysirka Yadav College
 Peth Vadgaon, Dist. Kolhapur

SHRI. VIJAYSINHA YADAV COLLEGE PETH VADGAON

DEPARTMENT OF MICROBIOLOGY

UG

PROGRAMME OUTCOME (PO): B. SC. PROGRAMME
OUTCOMES STUDENTS SEEKING

ADMISSION FOR B.SC. PROGRAMME, PERMEATING
FOLLOWING QUALITIES WHICH

HELP THEM IN THEIR FUTURE LIFE TO ACHIEVE THE
EXPECTED GOALS

PO 1 Acquired the knowledge with facts and figures related to various subjects in pure science such as Physics, Chemistry, Botany, Zoology, Mathematics, Computer Science etc.

PO 2 Understood the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.

PO 3 acquired the skills in handling scientific instruments, planning and performing in laboratory Experiments.

PO 4 the skills of observations and drawing logical inferences from the scientific experiments. Analyzed the given scientific data critically and systematically and the ability to draw the Objective conclusions.

PO 5 Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.

PO 6 realized how developments in any science subject helps in the development of other Science subjects and vice-versa and how interdisciplinary approach helps in providing better Solutions and new ideas for the sustainable developments.

PO 7 Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.

PO 8 Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence, which inspires in evolving new scientific theories and inventions.

PO 9 Imbided ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.

PO 10 developed various communication skills such as reading, listening, speaking, etc., which will help in expressing ideas and views clearly and effectively

Paper – I (DSC 25 A) - Introduction to Microbiology After completion of this course, students will be able	
CO 1	To develop a good knowledge of the development of the discipline of Microbiology and the contributions made by prominent scientists in this field.
CO 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.
CO 3	To explain the useful and harmful activities of the microorganisms and scope of different branches of Microbiology.
CO 4	To describe characteristics of bacterial cells, cell organelles and various appendages like capsules, flagella or pili.

Paper – II (DSC 26 A) - Basic Techniques in Microbiology After completion of this course, students will be able	
CO 1	To study the staining techniques for the observation of bacteria and bacterial cell components
CO 2	To study the working principle, handling and use of microscopes for the study of microorganisms
CO 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

Paper - III (DSC 25 B) - Bacteriology After completion of this course, students will be able	
CO 1	To describe the nutritional requirements of bacteria and other microbes which grow under extreme environments.
CO 2	To understand the basic laboratory experiments to isolate, cultivate and differentiate bacteria
CO 3	To study the preservation of bacteria in the laboratory

Paper - IV (DSC 26 B) - Microbial Biochemistry After completion of this course, students will be able to,	
CO 1	To develop a very good understanding of various biomolecules which are required for development and functioning of a bacterial cell.
CO 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.
CO 3	To make well conversant about multifarious structures and functions of proteins, enzymes, lipids and nucleic acids.
CO 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 & II: Introduction to Microbiology and Basic Techniques in Microbiology After completion of this course, students will be able to,	
CO 1	To understand the basic techniques in Microbiology laboratory.
CO 2	To study the working principle, handling and use of compound microscope for the study of microorganisms.
CO 3	To study the simple and special staining techniques for the observation of bacteria and bacterial cell components.
CO 4	To understand the working principles and applications various equipment's in Microbiology laboratory.
CO 5	To study the preparation, sterilization and use of various culture media.

Paper III & IV: Bacteriology and Microbial Biochemistry After completion of this course, students will be able to,	
CO 1	To understand the basic laboratory experiments to isolate and cultivate
CO 2	To study various biochemical tests used to differentiate bacteria

Paper V - C-9-DSC- 5: Microbial Physiology & Metabolism After completion of this course, students will be able	
CO 1	To make the students to learn concepts of microbial physiology.
CO 2	To develop a good understanding regarding effect of environmental factors on growth of microorganisms.
CO 3	To understand the mechanism of transport across microbial cell membrane.
CO 4	To clear the basic concept of microbial metabolism.

Paper VI - C9-DSC- 6 : Applied Microbiology After completion of this course, students will be able	
CO 1	To develop the knowledge regarding air microflora and its role and analysis.
CO 2	To study water microbiology, water analysis and its purification and disinfection.
CO 3	To study milk microbiology and quality control of milk.
CO 4	To learn the basic understanding of industrial microbiology.

Paper VII - C-5-:DSC- 7 : Microbial Genetics & Molecular Biology	
After completion of this course, students will be able	
CO 1	To learn the basic concepts of Microbial genetics.
CO 2	To gain knowledge regarding types of mutation
CO 3	To demonstrate the model of gene transfer in bacteria.
CO 4	To gain the knowledge about DNA repair and Lac operon.

Paper VIII - C5: DSC- 8 : Basics in Medical Microbiology & Immunology	
After completion of this course, students will be able	
CO 1	To learn about basic concept of medical microbiology.
CO 2	To make aware students about disease.
CO 3	To understand the defense mechanism of vertebrate body.
CO 4	To learn about concept of antigen and antibody

Practical Course III	
After completion of this course, students will be able	
CO 1	To understand basic techniques n special staining.
CO 2	To study the biochemical characteristics of different microorganisms.
CO 3	To study the effect of environmental factors of microorganisms

Practical Course IV	
After completion of this course, students will be able	
CO 1	To study the techniques of bacteriology analysis of water.
CO 2	To understand the primary screening techniques of industrially important microorganisms.
CO 3	To study isolation and identification of pathogens

COURSE IX DSE - E 49 VIROLOGY	
After completion of this course, students will be able	
CO 1	To understand the basic concepts of virology
CO 2	To understand the impact of viruses on plants and animals
CO 3	To know the life cycle of viruses and control strategies

COURSE X : DSE - E 50 - IMMUNOLOGY	
After completion of this course, students will be able to,	
CO 1	Learn cells and organs of the immune system
CO 2	Understand the mechanism of immune system and antibody production
CO 3	Understand the concept of hypersensitivity and autoimmunity

COURSE XI : DSE - E 51 FOOD AND INDUSTRIAL MICROBIOLOGY	
After completion of this course, students will be able to,	
CO 1	Understand role of microorganisms in food preparations and spoilage
CO 2	Learn the scale up of industrial fermented products
CO 3	Learn the downstream processing and product recovery

COURSE XII : DSE - E 52 – AGRICULTURAL MICROBIOLOGY	
After completion of this course, students will be able to,	
CO 1	Learn the applications of microorganism in agriculture
CO 2	Learn the production and applications of Biofertilizers and biopesticide
CO 3	Understand the mechanism of microbial plant diseases

Course XIII DSE F49: MICROBIAL GENETICS	
After completion of this course, students will be able to,	
CO 1	Learn the basic concept of microbial genome
CO 2	Learn the concept of gene expression and regulation
CO 3	Understand the applications of genetic engineering in various fields

COURSE XIV DSE F50: MICROBIAL BIOCHEMISTRY	
After completion of this course, students will be able to,	
CO 1	Understand the basics of enzymes and its role in microbial metabolism
CO 2	Learn the methods for purification of enzymes
CO 3	Learn the impact of various physicochemical parameters on the activity of enzyme

COURSE XV DSE F51: ENVIRONMENTAL MICROBIOLOGY	
After completion of this course, students will be able to,	
CO 1	Understand the different types and characteristics of waste
CO 2	Understand the role of microbes in treatment of sewage / waste
CO 3	Understand the basic biological safety in laboratory and environmental monitoring

COURSE XVI DSE F52: MEDICAL MICROBIOLOGY	
After completion of this course, students will be able to,	
CO 1	Learn the various types of microbial diseases
CO 2	Understand the pathogenesis of microorganisms
CO 3	Understand the mechanism of action of different classes of antimicrobials

Practical Course I, II III & IV	
After completion of this course, students will be able to,	
CO 1	Perform isolation and cultivation of viruses
CO 2	Understand the isolation of mutants in the laboratory
CO 3	Learns the bioassay methods for industrial products
CO 4	Perform lab scale fermentation of industrial products
CO 5	Isolate agriculturally important microorganisms
CO 6	Learn the isolation of pathogens from clinical samples

Shri Vijaysinha Yadav College Peth Vadgaon
Department Of Political Science
Course Outcomes
2022-23

B. A. Political science

Program specific outcomes

1. Knowledge about political system of nation.
2. Study of national and international political affairs.
3. Study from competitive examination point of view.
4. Understanding the government mechanism, its functions, duties and responsibilities.
5. Creating appropriate and efficient political leaders.
6. Getting knowledge of political law.
7. Getting the knowledge of constitution of India.

Course outcomes

B.A. - 1 introduction to political science and Indian constitution

1. Acquiring the knowledge about political science and Indian constitution.
2. Getting awareness about ones right and duties.
3. Getting information about political parties and system of justice in India.
4. Get concept of democracy, Justice, secularism and communalism

B.A. part II

Paper no 3 and 5 political process in India and local self-Government Of Maharashtra.

1. Getting information about Indian federalism, electoral process and political process.
2. To study of the local government mechanism.
3. Developing leadership at local level.

Paper no. - 4 and 6 Indian political thought I, II

1. Study of the Indian political thinker and their thoughts.
2. Study of the contribution of political thinkers in the Independence movement and their need for modern society.

B.A. III

Paper 7 Political Theory

1. Getting basic knowledge of Political Theory.
2. To understanding the approach of a Political Theory.
3. Knowing behaviour Movement in Political Science.
4. Acquiring knowledge about concept of power, authority any legitimacy.

Paper 8 - Public Administration

1. Acquiring Information about various concept in public administration.
2. getting knowledge about organisation it's bases, principle and unit
3. Getting acquainted with the budgetary process in India.
4. Understanding the interface between citizen and public Administration and other agencies.



Head
Department of Political Science
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur

Shri Vijaysinha Yadav College Peth Vadgaon
Department Of Political Science
Course Outcomes
2022-23

Paper 9- International politics

- 1 Getting acquainted with concept of dimension of international politics.
- 2 To understand main theories of international politics.
- 3 To know the working of International and Regional organisation and the new World order that emerged after the end of cold war.

Paper 10 comparative politics

1. Student will be familiar with the basic theory of comparative politics.
2. Student be able to understand constitutionalism federalism.
3. Student shall understand party system and pressure group and its functioning.
4. Student shall understand classification of political parties and pressure groups.

Paper 11. Classical Western political thought

1. Student will get acquainted activated with the western tradition from Pluto to rousseau.
2. Student will understand the evolution of Western political ideas.
3. Student will be able to study historical aspect of western state and society.

Paper 12. Modern political concept

1. Student will know modern concept such as feminism, multiculturalism, environmentalism Scenario in political science.
2. this will be enable student to have comprehensive ideas of contemporary in Political Science

Paper 13. Movement in Maharashtra

1. Student will know the political system of Maharashtra.
2. They will understand the process of formation of Maharashtra state.
3. Student will know the movements, pressure groups and political parties in Maharashtra.
4. This will provide comprehensive ideas of contemporary politics of Maharashtra.

Paper 14 Foreign policy of India

1. Student will understand what foreign policy is and what the objectives of foreign policy are.
2. This will provide comprehensive idea of foundation of indian foreign policy.
3. Student will come to know India's relation with superpower and neighbouring countries.
4. It will bring attention of the students toward the current National and international Political situation and foreign policy.

Paper 15. Comparative government with special reference to UK and USA

1. To familiarizes students with composition function and law making process of Legislative bodies in UK and USA.
2. To introduce the student with execution process of law in UK and USA.
3. to introduce the judicial system in UK and USA and procedure of adjudication
4. Student will understand the role of pressure group in the politics of UK and USA.

Paper 16 modern Western political thought

1. The student will understand political views of J. S. mil, Karl Marks Gramsci.
2. the student will get acquainted with various aspect of state and Society with western perspective

Shri. Vijaysinha Yadav College, Peth Vadgaon

DEPARTMENT OF SOCIOLOGY

Programme Outcomes- 2022-2023

- I. To inculcate universal human values among the students**
- II. To equip the students with Life Skills along with soft skills.**
- III. To create Social, Cultural, Political, Environmental, Economic and Moral awareness among the students.**
- IV. To introduce the students with various disciplines of Arts and Social Science.**
- V. To develop leadership qualities among the students.**
- VI. To develop the employment and Entrepreneurship Skills.**
- VII. To develop the responsible citizens of the country.**
- VIII. To develop National Integrity among the students.**
- IX. To develop rational and scientific approach among the students.**

Shri. Vijaysinha Yadav College, Peth Vadgaon

DEPARTMENT OF SOCIOLOGY

Programme Specific Outcomes- 2022-2023

- i. To create ability to understand social life and behavior.**
- ii. To understand and able to criticize of social thoughts of thinkers and social reformers.**
- iii. To enhance proficiency in sociology.**
- iv. To acquaint skills and knowledge for the self-reliance.**
- v. To develop an ability to analyze and evaluate various social problems.**
- vi. To contribute in the movements of universal peace, social development, and social health.**

Shri Vijaysinha Yadav College, Peth Vadgaon

DEPARTMENT OF SOCIOLOGY

Course Outcome: 2022-23

Course: B.A. PART – I SEM – I, DSC-B2, SOCIOLOGY – I,

INTRODUCTION TO SOCIOLOGY [PAPER – I] Based on NEP-2020

1. The student learns to apply to sociological perspective in understanding how society shapes our individual lives.
2. It also provides a foundation for the other more detailed and specialized course in sociology.
3. The student learns how to read and interpret complex ideas and texts and to present them in a cogent manner.

Course: B.A.PART – I SEM – II, DSC-B16, SOCIOLOGY – II,

PRINCIPLES OF SOCIOLOGY [PAPER – II], Based on NEP-2020

1. The course is intended to introduce the student to a sociological way of thinking.
2. It also provides a foundation for the other more detailed and specialized course in sociology.
3. The course provides competitive atmosphere for the student.

**Course: Generic Elective for B. A. Part – I Semester I and II,
Science Technology and Development (STD)(THEORY),**

Code: CGE-1B and 2B Based on NEP-2020

- 1) Student should be able to understand in-depth about the concepts of science, technology, and development.
- 2) Students should be able to understand contribution of eminent scientists in the development of science and technology.
- 3) Students should be able to study non-conventional power resources in the country.
- 4) Students should understand impact of science and technology on human health.
- 5) Students should understand types of disasters and its management.
- 6) Students should understand means of communication and information technology.
- 7) Students should be able to understand science technology in space and ocean research.
- 8) Students should understand technology in India's defence and agriculture.

B.A. - PART- II, SOCIOLOGY

Course: B. A. Sociology -(CBCS) II DSC – D3 Semester - III, Paper No. III - Social Issues in India

1. To acquaint the student's Sociological study of Social Issues.
2. To able attention of the students for to need to study 'Socio- Cultural, Economic, and legal issues in India.

Course: B.A. Sociology -(CBCS) Part – II – DSC – D4 Semester - III, Paper No. IV - Social Movement in India

1. To understand the variety of ideas and debates about social movements in India.
2. To able critically engages with the multiple socio-political forces and ideologies which shape the terrain of the nation.

B.A. Part-Sociology (CBCS) – II - DSC – D31 Semester - IV, Paper No. V - Gender and Violence

1. To understand approaches of violence such as: Gendered violence is routine and spectacular, structural as well as situated.
2. To create ability to understand of the logic of that violence and awareness about peaceful society with reference of India.

B.A. Sociology -(CBCS) Part – II - DSC – D32 Semester - IV, Paper No.VI - Sociology of Health

1. To acquaint knowledge within students to the sociology of health, illness, and medical practice.
2. To able to understand the significance of socio-cultural dimensions in the construction of illness and medical knowledge.
3. To able to examine theoretical perspectives the dynamics shaping these constructions. Negotiations of health and illness are explored through ethnographies.

B.A.- PART- III [SOCIOLOGY]

Course: B. A. III SOCIOLOGY-(CBCS) -Semester – V, DSE – E66 SOCIOLOGY – VII, WESTERN SOCIOLOGICAL THINKERS

1. Understanding the grand foundational themes of sociology.
2. Application of theories and concepts from classical sociological theories to develop intellectual openness and curiosity.
3. Appreciation of the classical concepts and theories to develop awareness of the limits of current knowledge.

B. A. III SOCIOLOGY-(CBCS) Semester – V, DSE – E67, SOCIOLOGY– VIII METHODS OF SOCIAL RESEARCH (Part-I)

Students are introduced to the concept of conducting research, which is inclusive of formulating research designs, methods and analysis of data.

Students learn to differentiate between qualitative and quantitative aspects of research in terms of collection and subsequent analysis of data.

Through the competing theoretical perspectives and methodologies, students are able to understand that social reality is multi-faceted, heterogeneous and dynamic in nature.

Students are prepared to arrive at a critical understanding of the course. It also equips them with necessary skills for employment in any social research organization.

To introduce social research methods and methodology

To acquaint the various steps to conduct the research

B. A. III SOCIOLOGY -(CBCS) Semester – V, DSE – E68 SOCIOLOGY – IX POLITICAL SOCIOLOGY

1. An ability to comprehend the embeddedness of political and the social in each other.

2. Familiarity with different theoretical and conceptual issues in political sociology and a capacity to use them to grasp political phenomena in a cross-cultural and comparative perspective
3. Be able to understand and appreciate the diversity of ways in which politics operates historically and spatially to generate a more expansive notion of the realm of the political.
4. Be able to understand the relationship between state and society in shaping politics in India both historically and analytically.
5. Be able to generate hypotheses and research questions within the theoretical perspectives and ethnographic contexts in political sociology.

B. A. III SOCIOLOGY - (CBCS) Semester – V, DSE – E69 - SOCIOLOGY – X HUMAN RIGHTS

- 1) Conceptual understanding about the Human Rights
- 2) Identify issues and problems relating to the realization of human rights
- 3) Understand the nature & role of human rights in India
- 4) Contribute to the resolution of human rights issues and problems
- 5) Educate the society about the human rights and duties in order to create responsible citizenry

B. A. III SOCIOLOGY -(CBCS) Semester – V, DSE – E70 SOCIOLOGY – XI SOCIOLOGY OF RELIGION

1. Students will be acquainted with representative texts that symbolize the development of knowledge in the field of Sociology of Religion. They will be able to identify different theories, approaches and concepts that make up the study of religion, distinguish between them and also use terms specific to the field in specific context.
2. Students will be able to make a link between texts and paraphrase their arguments and use these to communicate their ideas in research papers, projects and presentations.

3. By encompassing contemporary developments the course enables students to think about linkages between religion and society at various levels.

B. A. III SOCIOLOGY -(CBCS) Semester – VI, DSE – E191 SOCIOLOGY – XII INDIAN SOCIOLOGICAL THINKERS

1. Understanding the characteristics and dynamics of the social world, and how postclassical sociologists attempt to understand the social world.

2. Appreciating the relevance and limits of the contemporary theories or theoretical approaches to make sense of social reality.

3. Understanding the basic methodological approaches of the thinkers, through some original texts and their role in building sociological knowledge.

B. A. III SOCIOLOGY-(CBCS) Semester – VI, DSE – E192 SOCIOLOGY – XIII METHODS OF SOCIAL RESEARCH (Part-II)

1. Students are introduced to the concept of conducting research, which is inclusive of formulating research designs, methods and analysis of data.

2. The thrust of the course is on empirical reasoning, understanding and analysis of social reality, which is integral to the concepts of quantitative research. Students learn to differentiate between qualitative and quantitative aspects of research in terms of collection and subsequent analysis of data.

3. Through the competing theoretical perspectives and methodologies, students are able to understand that social reality is multi-faceted, heterogeneous and dynamic in nature.

4. Students are prepared to arrive at a critical understanding of the course. It also equips them with necessary skills for employment in any social research organization.

B. A. III SOCIOLOGY -(CBCS) Semester – VI, DSE – E193 SOCIOLOGY – XIV SOCIAL ANTHROPOLOGY

1. To provide the conceptual understanding about anthropology

2. To understand the social aspects of tribal's in India.

3. An understating of emerging as well as enduring issues of concern in Indian rural society.

B. A. III SOCIOLOGY -(CBCS) Semester – VI, DSE – E194 SOCIOLOGY – XV RURAL SOCIOLOGY

1. An empathy for and ability to engage rural communities as living societies and understand grasp they condition as human condition.

2. An appreciation of rural world and familiarity with the trajectory of theoretical conversation on rural issues and their social, political and policy implications.

3. An understating of emerging as well as enduring issues of concern in Indian rural society

4. To be ready for a range of academic and professional roles that may require a knowledge of rural societies.

B. A. III SOCIOLOGY - (CBCS) Semester – VI, DSE – E195 SOCIOLOGY – XVI URBAN SOCIOLOGY

1. To appreciate the significance of the city and the process of urbanization and its Consequences across the globe, through cross disciplinary texts and ethnographic studies.

2. To understand the urban in the historical as well as modern contexts - the idea of Urbanism and urban space and the intersections in these of institutions, processes and Identities.

3. To learn about key urban processes such as migration, displacement and urban slums, as Well as critical contemporary issues.

4. To develop critical thinking and a reflective perspective through exposure to multicultural Thought; to enhance disciplinary knowledge, research-related skills and develop a problem-solving competence.

Shri Shahu Shikshan Prasarak Seva Mandal's
Shri Vijaysinha Yadav College, Peth Vadgaon
Department of Zoology
Program Outcome, Program-Specific Outcome and Course Outcome

PROGRAM OUTCOME (PO): B. Sc.

Program Outcome	Students seeking admission to B.Sc. programs, permeating the following qualities which help them in their future life to achieve the expected goals.
PO 1	Acquired knowledge of facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, Computer Science, etc.
PO 2	Understood the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.
PO 3	Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments.
PO 4	The skills of observations and drawing logical inferences from the scientific experiments. Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions.
PO 5	Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
PO 6	Realized how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
PO 7	Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.
PO 8	Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence, which inspires in evolving new scientific theories and inventions.
PO 9	Imbided ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.
PO 10	Developed various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.

Programme Specific Outcome (PSO) - Zoology

Sr. No.	Programme Specific Outcome
PSO 1	Acquisition of knowledge of animal science to the pupils.
PSO 2	To understand the principle and working of laboratory techniques.
PSO 3	Acquisition of the knowledge of nutrition, agriculture & live stock in their daily life.
PSO 4	Awareness of natural resources and environment.
PSO 5	Aptitude for scientific work & ability to pursue studies far beyond graduation.
PSO 6	To understand and correlate human health as well as diseases, pathogens and vectors.
PSO 7	Abilities to apply statistical methods like collection, processing, analysis and interpretation of scientific data.
PSO 8	Ability to apply knowledge of taxonomy for identification of economically important organisms.
PSO 9	Life science as a career, which is the need now-a-day.

Course Outcome - B. Sc. I Zoology
(Syllabus Implemented in academic year 2022-23)

Paper I (DSC 15A) - Animal Diversity I

CO 1 - Aptitude for identification of Animals as per Scientific Classification

CO 2 - Acquisition of knowledge of anatomy and histology of different animals from various groups of Kingdom Animalia

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

CO 1 - Inculcation of Knowledge of Cell as well as structure and function of its organelles

CO 2 - Understanding various evolutionary theories and its relevance with present Evidences

Paper III (DSC 15B) – Animal Diversity and Insect Vectors

CO 1 - Inculcation of Knowledge of model Animal to know its anatomy and Histology

CO 2 - Aptitude for identification of Insects as vectors and pathogens as well as life cycle of vectors for control of diseases

Paper IV (DSC 16B) - Genetics

CO 1 - Inculcation of Knowledge of Genetics to solve criminal cases like pedigree analysis

CO 2 - Inculcation of Knowledge of Genetics to understand genetic disorders

Course Outcome - B. Sc. II Zoology
(Syllabus Implemented in academic year 2023-24)

Paper V (DSC ____) - Animal Diversity II

CO 1 - Aptitude for identification of Animals as per Scientific Classification

CO 2 - Acquisition of knowledge of anatomy and histology of different animals from various groups of Kingdom Animalia

Paper VI (DSC ____) - Biochemistry

CO 1 - Acquisition of knowledge of Biomolecules and their chemical processes

Paper VII (DSC ____) - Reproductive Biology

CO 1 - Acquisition of knowledge of anatomy and histology of reproductive organs in human being

CO 2 - Acquisition of knowledge of process of reproduction and its hormonal control in human being

CO 3 - Inculcation of Knowledge of assistive reproductive technology for human being

Paper VIII (DSC ____) - Applied Zoology I

CO 1 - Aptitude for identification of some pathogenic diseases and their control measures

CO 2 - Acquisition of knowledge of host parasite relationship and its use in human welfare

CO 3 - Aptitude for application of modern technologies in poultry management and its use for human welfare

Course Outcome - B. Sc. III Zoology
(Syllabus Implemented in academic year 2020-21)

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

- CO 1 - Acquisition of knowledge of vertebrate anatomy
- CO 2 - Acquisition of capacity to compare evolutionary relationship
- CO 3 - Aptitude to decide evolutionary relationship

Paper X (DSE - E30) - Molecular Cell Biology and Animal Biotechnology

- CO 1 - Aptitude for various processes of Nucleic acids and their role in cellular mechanism
- CO 2 - Acquisition of knowledge of molecular modeling and their use to improve quality of human life
- CO 3 - Acquisition of capacity for performing biotechnological tests

Paper XI (DSE-E31) - Biotechniques and Biostatistics

- CO 1 - Aptitude for use of various scientific instruments for molecular modeling
- CO 2 - Acquisition of capacity for performing various Biotechniques
- CO 3 - Acquisition of knowledge of Biostatistics for research

Paper XII (DSE-E32) - Aquatic Biology

- CO 1 - Acquisition of knowledge of aquatic environment for protection and conservation
- CO 2 - Acquisition of capacity to handle various limnological instruments
- CO 3 - Inculcate the knowledge of hormones and hormone related diseases

Paper XIII (DSE-F29) - Developmental Biology

- CO 1 - Acquisition of knowledge of developmental patterns in different vertebrate animals.
- CO 2 - Acquisition of knowledge of developmental patterns about different economically important animals.
- CO 3 - Acquisition of knowledge of developmental patterns about different research

Paper XIV (DSE-F30) - Immunology

- CO 1 - Acquisition of knowledge of immune system to improve health status
- CO 2 - Acquisition of capacity to handle various Immunological instruments

CO 3 - Acquisition of capacity to perform various Immunological tests

Paper XV (DSE-F31) - Applied Zoology II

CO 1 - Acquisition of knowledge of various aspects of Applied Zoology.

CO 2 - Social and economic growth of individual by applying knowledge of Applied Zoology

CO 3 - Aptitude for application of modern technologies in Applied Zoology and its use for human welfare

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

CO 1 - Aptitude for identification of Insects as vectors and pathogens

CO 2 - Aptitude for identification of life cycle of vectors for control of diseases

CO 3 - Knowledge of internal organs to know the diseased/abnormal/infected/altered conditions

Shri Vijaysinha Yadav Arts and Science College, Peth Vadgaon
Department of Chemistry

Programme Specific Outcome

Sr. No.	Programme Specific Outcome
PSO 1	Promote understanding of basic facts & concepts in chemistry while retaining the excitement of chemistry.
PSO 2	Make students capable of studying chemistry in academic & industrial courses.
PSO 3	Expose the students to various emerging new areas of chemistry & apprise them with their prevalent in their future studies & their applications in various spheres of chemical sciences.
PSO 4	Develop problem solving skills, ability & to acquire the knowledge of terms, facts, concepts, processes techniques & principles of subjects.
PSO 5	Expose & develop interest in the field of chemistry.
PSO 6	Develop proper aptitude towards the subjects.
PSO 7	Skills in chemistry practical work, experiments, laboratory materials & proper handling of instruments
PSO 8	Enhancement of scientific attitude & scientific hobbies
PSO 9	Abilities to apply scientific methods, collection of scientific data, problem solving, Research Paper Writing, etc.
PSO 10	Appreciation of the subject, contributions of scientists, scientific methods, scientific programs, etc.

Course Outcome

Sr. No.	Class	Paper No.	Title of the Paper	Course Outcome
1	B. Sc. I	I	DSC-3A- Chemistry paper I (Inorganic Chemistry)	<ol style="list-style-type: none"> 1. Acquisition of knowledge Atomic Structure and Periodicity of Elements. 2. Learning and Understanding chemical bonding and molecular structure (A) Ionic Bonding. 3. Learning and Understanding chemical bonding and molecular structure valence bond theory (VBT). 4. Learning and Understanding chemical bonding and molecular structure molecular orbital theory (MOT).
2		II	DSC-4A- Chemistry paper II (Organic Chemistry)	<ol style="list-style-type: none"> 1. Understanding fundamentals of organic chemistry, Generation, Structure, Stability and Reactions of Reactive Intermediates such as Carbocations, Carbanions and carbon free radicals. 2. Aptitude for identification of alteration in physiological processes by knowing symptoms of various diseases.
3		III	DSC 3B: Chemistry Paper-III (Physical Chemistry)	<ol style="list-style-type: none"> 1. Inculcation of Knowledge of Cell as well as structure and function of its organelles. 2. Understanding various evolutionary theories and its relevance with present evidences.
4		IV	DSC-4B-Chemistry Paper IV (Analytical Chemistry)	<ol style="list-style-type: none"> 1. Inculcation of Knowledge of Genetics to solve criminal cases like pedigree analysis.
5	B. Sc. II	V	DSC C3 Physical Chemistry	<ol style="list-style-type: none"> 5. Able to understand concept of conduction of electricity with different terms which is useful in various areas. 6. Able to understand order of reaction and methods to determine order of reaction. 7. Able to understand order of reaction and methods to determine order of reaction. 8. Able to understand physical properties of liquids with different terms. 9. Able to understand concept of entropy with

			physical significance.
6	VI	DSC C4 Industrial Chemistry	<p>10. Understand and use in industry & quality assurance.</p> <p>11. Understand and use in metal industry.</p> <p>12. Students can detect various ions in raw material sampling in various industries.</p> <p>13. Students who understand who measure conductance of various samples.</p> <p>14. To understand the process of sampling.</p>
7	VII	DSC D3 Inorganic Chemistry	<p>15. Able to understand transition series present in periodic table that's d block elements.</p> <p>16. Able to understand f block elements with properties and methods of separation.</p> <p>17. Able to understand coordinate covalent bond with different terms and IUPAC nomenclature of coordination compounds.</p> <p>18. Able to understand what is chelation with structural requirement of chelate formation and various applications of chelating agents like EDTA and DMG in industry.</p> <p>19. Able to understand homogeneous and heterogeneous catalysis and different applications of catalysts in industry.</p> <p>20. Able to understand concept of solvents and their use in chemistry and industry.</p>
8	VIII	DSC D4 Organic Chemistry	<p>21. Study about stereochemistry and different conformational isomers of ethane and stereoselectivity of reaction.</p> <p>22. To understand what is meant by polynuclear hydrocarbons and some examples of polynuclear hydrocarbons.</p> <p>23. Study the synthetic methods of heterocyclic compounds with mechanism.</p> <p>24. Introduction to name reactions with</p>

				mechanisms
9	B. Sc. III	IX	Paper No. DSE-E5, Chemistry Paper No. –IX (Inorganic Chemistry)	<p>25. Useful for the study of role of acids and bases in Chemistry.</p> <p>26. The study of non –aqueous solvents is important to learn all chemical properties of solutes and from the research point of view.</p> <p>27. Useful to understand geometry, stability and nature of bonding between metal ion and ligand in complexes.</p> <p>28. The topic deals with the synthesis and the applications of the semiconductors and Superconductors in electrical and electronic devices.</p> <p>29. The structure, method of preparation and the applications of organo metallic compound in various fields are explained.</p> <p>30. The classification, types, mechanism and applications of catalyst in industrial fields is explained.</p>
10		X	Paper No. DSE-E6 Chemistry Paper No. X (Organic Chemistry)	<p>1. Understanding of energy associated with electromagnetic radiation and its use in analytical technique.</p> <p>2. Knowledge of chromophore, auxochrome and calculation of λ_{max}.</p> <p>3. Knowledge of vibrational transitions, regions of IR spectrum, functional group recognition.</p> <p>4. Understanding of magnetic-non magnetic nuclei, shielding-deshielding, chemical shift, splitting pattern.</p> <p>5. Knowledge of molecular ion, fragmentation pattern and different types of ions produced.</p> <p>6. Student will predict the structure of organic compound with the help of provided spectral data.</p>
11		XI	Paper No. DSE- E7 Chemistry Paper No. XI (Physical Chemistry)	<p>1. Learning and understanding quantum Chemistry.</p> <p>2. Knowledge about spectroscopy, Electromagnetic spectrum, Energy level diagram, Study of rotational spectra of diatomic</p>

			<p>molecules</p> <ol style="list-style-type: none"> Learning and understanding photochemical laws, reactions and various photochemical phenomena. Learning the various types of solutions, relations vapour pressure, temperature relations. Learning and understanding the knowledge of emf measurements, types of electrodes, different types of cells, various applications of emf measurements.
12	XII	Paper No. DSE-E8 Chemistry paper No. XII (Analytical Chemistry)	<ol style="list-style-type: none"> Learning and understanding the techniques of gravimetric analysis. Knowledge of instrumental analysis of alkali and alkaline earth elements. Understanding, working and applications of optical methods as an analytical tool. Understanding theory and applications of potentiometric titrations. Understanding the basics of ion exchange and column adsorption chromatography, Quality control practices in analytical industries / laboratories.
13	XIII	Paper No. DSE-F5, Chemistry Paper No. –XIII (Inorganic Chemistry)	<ol style="list-style-type: none"> Understand the thermodynamic and kinetic aspects of metal complexes. Understand role of radio isotopes in medicinal, industrial and Archaeology fields Learning and understanding the characteristics, properties and separation of lanthanides and Actinides. Understanding techniques involve in ore dressing and extraction of cast iron from its ore. Knowledge about role of various metals and non metals in our health
14	XIV	Paper No. DSE-F6 Chemistry Paper No. XIV (Organic Chemistry)	<ol style="list-style-type: none"> Knowledge of reagents used in organic transformations and various reactions used in organic synthesis. Knowing basic terms used in retro synthetic analysis, retro synthesis of some organic compounds. Student will learn addition reaction across

			<p>$>C=C<$ and $-C\equiv C-$ bond</p> <ol style="list-style-type: none"> 4. Knowledge of terpenoids and alkaloids w.r.t. occurrence, isolation, characteristics and classification. 5. Understanding classification of drugs, Qualities of ideal drug. Synthesis and uses of some representative drugs and Drug action of sulpha drugs.
15	XV	Paper No. DSE-F 7 Chemistry Paper No. XV (Physical Chemistry)	<ol style="list-style-type: none"> 1. Learning and understanding of phase rule, learning of One component, Two component and Three component systems phase diagrams with suitable examples. 2. Knowledge about basic concept of Thermodynamics, free energy, Gibbs-Helmholtz equation and its applications, problem related with it. 3. Learning and understanding Space lattice, lattice sites, Lattice planes, Unit cell. 4. Learning of kinetics, Simultaneous reactions such as i)opposing reaction ii)side reaction iii)consecutive reactions: iv) chain reaction v) explosive reaction 5. Learning and understanding the knowledge of distribution law, its modifications, applications of distribution laws.
16	XVI	Paper No. DSE-F8 Chemistry Paper No. XVI (Industrial Chemistry)	<ol style="list-style-type: none"> 1. Learning and understanding the whole process of manufacture of sugar and byproducts of sugar industry. 2. Learning and understanding of physicochemical principles of production of ammonia, sulfuric acid, nitric acid and sodium carbonate along with its manufacturing plant. 3. Understanding and learning the classification, synthesis and applications of various polymers. 4. Understanding the petroleum Industry, fuels and need of use of ecofriendly fuels. 5. Understanding and learning of nanotechnology.

Estd. : July, 1999

॥ प्रज्वलितो ज्ञानमय प्रदीपः ॥

UGC (2F & 12B) Dt. 16-8-2011
Permi. All. No. SUWTEVT-2/UMK/4315 Dt. 15-7-2010

Shri. Shahu Shikshan Prasarak Seva Mandai, Peth Vadgaon's

SHRI. VIJAYSINHA YADAV COLLEGE
PETH VADGAON

Tal. Hatkanangale Dist. Kolhapur (Maharashtra) 416 112 ☎ (0230) 2471599

Affiliated to Shivaji University, Kolhapur

NAAC Accredited - 'B++' (2.83)
Aug. 2016

vyadavcollege@rediffmail.com

www.vympv.ac.in

President : **Shri. Gulabrao Pol**
I.P.S.

Secretary : **Sou. Vidya Gulabrao Pol**
M.A., B.Ed.

Vice President : **Smt. Vijayadevi V. Yadav**

Principal : **Dr. Vijaya R. Chavan**
M.Sc., Ph.D.

PROGRAMME OUTCOME (PO): B. Sc.

Programme Outcomes	Students seeking admission for B.Sc. programme, permeating following qualities which help them in their future life to achieve the expected goals.
PO 1	Acquired the knowledge with facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, Computer Science etc.
PO 2	Understood the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.
PO 3	Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments.
PO 4	The skills of observations and drawing logical inferences from the scientific experiments. Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions.
PO 5	Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
PO 6	Realized how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
PO 7	Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.

PO 8	Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence, which inspires in evolving new scientific theories and inventions.
PO 9	Imbined ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.
PO 10	Developed various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.

Shri Vijaysinha Yadav College, Pethvadgaon
DEPARTMENT OF PHYSICS

Attainment of Course Outcomes (COs)
2022-23
Criteria

Attainment level	% of students scoring $\geq 60\%$ marks	
	External Theory Exam	Internal Theory Exam
I	< 45%	> 60%
II	45-60%	60-80%
III	> 60%	>80%

Weightages of Attainments

Attainment of Course = 80% of (Attainment level in university examination)
+ 20% of (Attainment level in continuous internal evaluation CIE)

Assessment-CO and PO matrix is prepared for each course.

The attainment level for program outcomes (POs) is defined as follows:

Program outcome Level	Target Attainment
Level 1	0.5 > 1.0
Level 2	1.0 > 1.5
Level 3	1.5 > 2.0
Level 4	2.0 > 2.5
Level 5	2.5 > 3.0

Department of Physics
Calculation for Program Outcome Attainment for the Year 2021-22 (B. Sc. III Physics)

Attainment of course outcome										
Semester (Theory)	Course Code (Paper No.)	Course Title	% of students above 60% University marks	Level of Attainment	80% of Attainment Level in end term exam (I)	% of students above 60% internal marks	Level of attainment	20% of Attainment Level in internal exam (II)	Attainment of Course (I+II)	
Semester V (Theory)	Paper-IX	Mathematical	58.33	2	1.6	75	3	0.6	2.2	
	Paper-X	Quantum mechanics	41.66	1	0.8	100	3	0.6	1.4	
	Paper-XI	Classical mechanics and Classical Electrodynamics	41.66	1	0.8	100	3	0.6	1.4	
	Paper-XII	Digital and Analog circuits and Instrumentation	66.66	3	2.4	100	3	0.6	3	
Semester VI (Theory)	Paper-XIII	Nuclear and Particle Physics	66.66	3	2.4	91.66	3	0.6	3	
	Paper-XIV	Solid State Physics	50	2	1.6	100	3	0.6	2.2	
	Paper-XV	Atomic and Molecular Physics and Astrophysics	91.66	3	2.4	100	3	0.6	3	
	Paper-XVI	Energy studies Material Science	33.33	1	0.8	100	3	0.6	1.4	
									Total	17.6
									Average	2.2

Calculation for Program Outcome Attainment for the Year 2021-22 (B. Sc. III Physics)

CO's are mapped with CIE (Continuous internal evaluation) marks as follows

1] Physics: Sem. V & VI

Paper IX: Mathematical Physics

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Paper X: Quantum Mechanics

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Paper XI: Classical Mechanics and Classical Electrodynamics

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Paper XII: Digital and Analog circuits and Instrumentation

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Paper XIII: Nuclear & Particle Physics

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	2	3		2.5
CO 2	2	3		2.5
CO 3	2		3	2.5
CO 4	2		3	2.5
Total average				2.5

Paper XIV: Solid State Physics

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Paper XV: Atomic and Molecular Physics and Astrophysics

Course outcomes	Test 1	HA 1	HA 2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Paper XVI: Energy Studies and Material Science

Course outcomes	Test 1	HA 1	HA2	Average
CO 1	3	3		3
CO 2	3	3		3
CO 3	3		3	3
CO 4	3		3	3
Total average				3

Step 2] COs are mapped with PO's. The CO levels corresponding to each PO are averaged to obtain overall CO level for each PO as follows:

1] Paper IX: Mathematical Physics

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3	3	3			3		3	3		3	3			3	
CO 2	3	3	3			3		3	3		3	3			3	
CO 3	3	3	3			3			3		3	3			3	
CO 4	3	3	3			3			3		3	3			3	
Paper IX	3	3	3	-	-	3	-	3	3	-	3	3	-	-	3	

2] Paper X: Quantum Mechanics

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3	3	3			3			3		3		3		3	
CO 2	3	3	3			3			3		3		3		3	
CO 3	3	3	3			3			3		3		3		3	
CO 4	3	3	3			3			3		3		3		3	
Paper X	3	3	3	-	-	3	-	-	3	-	3		3	-	3	

3] Paper XI: Classical Mechanics and Classical Electrodynamics

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3	3	3	3		3			3		3	3		3		
CO 2	3	3	3	3		3			3		3	3		3		
CO 3	3	3	3	3		3			3		3	3		3		
CO 4	3	3	3	3		3			3		3	3		3		
Paper XI	3	3	3	3	-	3	-	-	3	-	3	3	-	3		

4] Paper XII: Digital and Analog circuits and Instrumentation

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1	3	3		3			3		3		3		3	3		3
CO 2	3	3		3		3	3		3		3		3	3		3
CO 3	3	3		3		3	3		3		3		3	3		3
CO 4	3	3		3			3		3		3		3	3		3
Paper XII	3	3	-	3	-	3	3	-	3	-	3		3	3		3

5] Paper XIII: Nuclear & Particle Physics

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		2.5	2.5			2.5			2.5		2.5			2.5		2.5
CO 2		2.5	2.5			2.5			2.5		2.5			2.5		2.5
CO 3		2.5	2.5			2.5			2.5		2.5			2.5		2.5
CO 4		2.5	2.5			2.5			2.5		2.5			2.5		2.5
Paper XIII		2.5	2.5	-	-	2.5	-	-	2.5	-	2.5			2.5		2.5

6] Paper XIV: Solid State Physics

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3	3			3			3		3			3		3
CO 2		3	3			3			3		3			3		3
CO 3		3	3			3			3		3			3		3
CO 4		3	3			3			3		3			3		3
Paper XIV		3	3	-	-	3	-	-	3	-	3	-	-	3	-	3

7] Paper XV: Atomic and Molecular Physics and Astrophysics

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3	3			3			3	3	3	3				
CO 2		3	3			3			3	3	3	3				
CO 3		3	3			3			3	3	3	3				
CO 4		3	3			3			3	3	3	3				
Paper XV		3	3	-	-	3	-	-	3	3	3	3	-			


8] Paper XVI: Energy Studies and Material Science

Course Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO 1		3	3			3			3	3	3				3	3
CO 2		3	3		3	3			3	3	3				3	3
CO 3		3	3			3			3	3	3				3	3
CO 4		3	3		3	3			3	3	3				3	3
Paper XVI		3	3	-	3	3	-	-	3	3	3		-		3	3

Step 3] development of overall CO-PO mapping matrix for all courses of Physics

The overall CO levels obtained for all courses from above step can be expressed in matrix form.

Courses	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
Paper IX	3	3	3	-	-	3	-	3	3	-	3	3	-	-	3	
Paper X	3	3	3	-	-	3	-	-	3	-	3		3	-	3	
Paper XI	3	3	3	3	-	3	-	-	3	-	3	3	-	3		
Paper XII	3	3	-	3	-	3	3	-	3	-	3		3	3		3
Paper XIII	-	2.5	2.5	-	-	2.5	-	-	2.5	-	2.5			2.5		2.5
Paper XIV	-	3	3	-	-	3	-	-	3	-	3	-	-	3	-	3
Paper XV	-	3	3	-	-	3	-	-	3	3	3	3	-			
Paper XVI	-	3	3	-	3	3	-	-	3	3	3		-		3	3
Average	3	2.93	2.92	3	3	2.93	3	3	2.93	3	2.93	3	3	2.87	3	2.87



Head
Department of Physics
Shri. Vijaysinha Yadav College
Peth Vadgaon, Dist. Kolhapur

Department Physics
Programme Specific Outcomes
AIMS AND OBJECTIVES OF B.Sc. PHYSICS

The Department of Physics recognizes that curriculum, course content and assessment of scholastic achievement play complementary roles in shaping education. The department is of the view that assessment should support and encourage the goals such as basic knowledge of the discipline of Physics including phenomenology, theories and techniques, concepts and general principles. This should also support the ability to ask physical questions and to obtain solutions to physical questions by use of qualitative and quantitative reasoning and by experimental investigation. The important student attributes including appreciation of the physical world and the discipline of Physics, curiosity, creativity and reasoned skepticism and understanding links of Physics to other disciplines and to societal issues should give encouragement. With this in mind, we aim to provide a firm foundation in every aspect of Physics and to explain a broad spectrum of modern trends in physics and to develop experimental, computational and mathematical skills of students. The programme also aims to develop the following abilities:

PSO1: Read, understand and interpret physical information – verbal, mathematical and graphical.

PSO2: Equip students in methodology related to Physics.

PSO3: Impart skills required to gather information from resources and use them.

PSO4: To give need based education in physics of the highest quality at the undergraduate level.

PSO5: Provide an intellectually stimulating environment to develop skills and enthusiasms of students to the best of their potential.

PSO6: Use Information Communication Technology to gather knowledge at will.

PSO7: Perform experiments and interpret the results of observation, including making an assessment of experimental uncertainties.

Department of Physics

Course Outcomes

B. Sc. I, Semester I

Physics Paper I: DSC 1 A: Mechanics I

After completing this course student will able to

CO1: Understand and recognize scalar and vector physical quantities.

CO2: Understand and able to apply the ordinary differential equations to physical Problems

CO3: Understand the Newton's laws of motion.

CO4: Understand the conservation of momentum and energy and related physical phenomenon.

CO5: Understand the rotational motion, moment of inertia and able to determine the M. I. of various systems in rotational motion.

Physics Paper II: DSC 2 A: Mechanics II

After completing this course student will able to

CO 1: Apply gravitational laws to a physical problem

CO2: recognize simple harmonic motions in nature and solve their equations

CO3: Understand Properties of matter (e.g. elasticity and surface tension) and apply this knowledge to physical problem.

B. Sc. I, Semester II

Physics paper III DSC B: Electricity and Magnetism I

C01: Prove and apply Gauss, Stokes and Greens theorems

C02: understand electrostatic field and potential and determine the same for different physical bodies.

C03: Capacitor and its types

C04: Energy in electrostatic field.

Physics Paper IV DSC 2B: Electricity and Magnetism II

After completing this course student will

C01: Solve and build desired A. C. circuits

C02: Get knowledge of magnetic effect of electric current and different magnetic materials

C03: Understand how different energies will convert into electrical energy using magnetic field

C04: Able to understand Maxwell's equations and its applications.

B. Sc. II, Semester III

Physics Paper V: DSC – C1 Thermal Physics and Statistical Mechanics - I

After completing this course student will

- CO1: Understand kinetic interpretation of temperature, Andrew's Expt. and different types of thermometers
- CO2: Understand kinetic theory of gases and concept of Transport phenomena.
- CO3: Understand thermo-dynamical state, thermodynamic equilibrium, various thermodynamic processes and first law of thermodynamics.
- CO4: Understand second and third laws of thermodynamics, Carnot's theorem, working of Carnot's engine, Otto engine and diesel engine and concept of entropy.

Physics Paper VI: DSC – C2 Waves and Optics - I

This course will enable Students to:

- CO1: Understand SHM and its solution, superposition principle and Lissajous figures and their uses.
- CO2: Understand travelling and standing waves on a string, plane waves and spherical waves.
- CO3: Understand define transducers and their types, to understand concept of acoustics of buildings, Sabine's experimental work and reverberation time.
- CO4: Understand the Piezo-electric effect, detection of Ultrasonic waves and applications of ultrasonic waves.

B. Sc. II, Semester VII

Paper VII: DSC – C1 Thermal Physics and Statistical Mechanics - II

This course will enable Students to:

- CO1: To understand various thermo dynamical functions, Maxwell's Relations, Joule -Thompson effect and Clausius- Claperyon Equation.
- CO2: To understand Black body radiation, Planck's law, Rayleigh-Jean's law, Stefan Boltzmann law and Wien's displacement law.
- CO3: To understand Phase Space, Macrostate, Microstate, Ensembles, Priori Probability.
- CO4: To understand thermodynamic Probability and Maxwell Boltzmann Distribution law.

B. Sc. II, Semester IV:

Paper VII : DSC – C2 Waves and Optics - II

This course will enable Students to:

- CO1: To Learn measuring skills in practical.
- CO2: understand the wave particle duality and its quantum mechanics.
- CO3: To understand the length of vibrating air columns, Resonance and can measure velocity of sound.
- CO4: To determine thermal conductivity, temperature coefficient of resistance, thermo-emf and specific heat.

B. Sc. III Semester V

PAPER IX: MATHEMATICAL PHYSICS

CO 1 Students can understand and solve partial differential equations of various physical phenomenon.

CO 2: Students will understand Frobenius method and special functions and their applications

CO 3: Students will learn some special integrals and its uses to solve physical equations

CO4: Students will learn complex analysis and its applications

PAPER X: QUANTUM MECHANICS

CO 1: Students understand the idea of wave function & uncertainty relations.

CO 2: Students clear the some concepts of physics by quantum mechanics.

CO 3: Students solve problems on barrier potential well, one and three dimensional potential well

CO 4: To understand the Schrodinger's equation for hydrogen atom.

PAPER XI: CLASSICAL MECHANICS AND CLASSICAL ELECTRODYNAMICS

CO 1: Students are able to understand Formulation of Lagrangian equation of motion and solution of problems.

CO 2: Students will able to use techniques of calculus of variation.

CO 3: Understand the special theory of relativity

CO 4: Students are able to understand charged particle dynamics.

PAPER XII: DIGITAL AND ANALOG CIRCUITS AND INSTRUMENTATION

CO 1: Student will review some basic concepts of digital electronics and various gates.

CO 2: students will understand and design transistors amplifiers and sinusoidal oscillators.

CO 3: Students will understand design, working and applications of CRO.

CO 4: Students will understand and design operational amplifier and timer circuits.

B. SC. III SEM VI

PAPER XIII: NUCLEAR AND PARTICLE PHYSICS

CO 1: Students are able to understand the size of nucleus and all its properties.

CO 2: Students know various method of accelerating various types of particles.

CO 3: Understanding the construction & working of Nuclear Detectors.

CO 4: Students are able to understand the different Nuclear Energy Levels.

Paper XIV: Solid State Physics

After completing this course student will able to

CO1: develop a clear concept of the crystal classes, symmetries and crystal structure.

CO2: understand the relationship between the real and reciprocal space

CO3: Student will learn magnetic properties of matter

CO4: Understand Band theory of solids and use in different physical phenomenon.

PAPER XV: ATOMIC, MOLECULAR SPECTRA & ASTRONOMY AND ASTROPHYSICS

CO 1: Develop a basic understanding of physics of atoms and molecules: definitions, units, laws and rules.

CO 2: Identify atomic effect such as Zeeman effect, Paschen-Back effect and Raman effect.

CO 3: Understanding of basic concepts of Astronomy & Astrophysics

CO 4: Analyze the spectra of diatomic molecules such as electronic, rotational, Vibration spectra.

Paper XVI: Energy studies and Material Science

After completing this course student will able to

CO1: understand basics of renewable energy sources

CO2: Understand Physics and mathematics of wind turbine generator.

CO3: Understand conversion of solar energy into electric energy, photovoltaic cell, solar PV system and solar potentials.

CO4: understand different types of disorder in the crystalline solids and it's important.

CO5: gain basic knowledge of superconductivity.