



LOKNETE DR.BALASAHEB VIKHE PATIL. (PADMA BHUSHAN AWARDEE) Establishment 4 August 2004

PRAVARA RURAL EDUCATION SOCIETY'S

ARTS, COMMERCE & SCIENCE COLLEGE, ALKUTI

ID.No. PU/AN/ACS/78/2004

College code No.757

A/p.Alkuti, Tal.Parner, Dist.Ahmednagar.Pin-414305



• Phone: (02488) 250457

Email ID :Principal.acsalkuti@pravara.in

A.Q.A.R 2023-24



Criteria - 1

Curricular Aspects

KEY INDICATOR : 1.2

Academic Flexibility

1.2.1 Number of programs in which choice based credit system (CBCS) Elective course system has been implemented



LOKNETE DR.BALASAHEB VIKHE PATIL. (PADMA BHUSHAN AWARDEE) Establishment 4 August 2004

PRAVARA RURAL EDUCATION SOCIETY'S

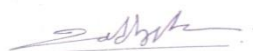
ARTS, COMMERCE & SCIENCE COLLEGE, ALKUTI

Tal-Rahata, Dist-Ahmadnagar



Programme Code	Programme name	Year of Introduction	Status of implementation of CBCS / elective course system (Yes/No)	Year of implementation of CBCS / elective course system	Link to the relevant document
ACSABA01	B.A. English	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/TYBA-EnglishFinalsyllabus-2021-22withQpattern-AGC%20(1)06052022.pdf
ACSABA02	B.A. Marathi	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/TYBA%20%20Marathi%20Final%20Year%202021-2227082022.pdf
ACSABA03	B.A. Hindi	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/T.Y.B.A.%20Hindi%20Gen%20and%20Spl%20Syllabus%202021-202201.07.2021.pdf
ACSABA04	B.A. Economic	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/T.Y.B.A.%20Hindi%20Gen%20and%20Spl%20Syllabus%202021-202201.07.2021.pdf
ACSBA05	B.A. History	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/T.Y.B.A.%20Hindi%20Gen%20and%20Spl%20Syllabus%202021-202201.07.2021.pdf
ACSABA06	B.A. Geography	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/TYBA%20(Geography)22.07.2021.pdf
ACSACOM	B.Com.	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus2021/Revised%20Syllabus%20T%20Y%20B%20Com%20Semester%20V%20A.%20Y.%202021-22%20%2010-12-2113122021.pdf
ASCKBSC	B.Sc. Chemistry	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus

					2021/T.Y.B.Sc.%20(Chemistry)_03.07.2021.pdf
ACSAMCOM	M.Com. Business Administration	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus%202019/M%20Com%20Revised%20Syllabus%20Sem%20I%20(CBCS%202019)%20From%20A.Y.%202019-20_02.092020.pdf
ACSAMSC	M.Sc. Analytical Chemistry	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus%202019/M.Sc.-Chemistry%20%20%20(Part-I)%20%20(For%20Colleges)_24.082019.pdf
ACSABA01	B.A. English	2019-20	Yes	2019-20	Link to the relevant document
ACSABA02	B.A. Marathi	2019-20	Yes	2019-20	http://collegecirculares.unipune.ac.in/sites/documents/Syllabus_2021/TYBA-English_Final_syllabus-2021-22_with_Q_pattern-AGC%20(1)_06052022.pdf


 IQAC Co-Ordinator
 Arts, Commerce & Science College
 Alkute, Tal. - Parner, Dist. A' Nagar




Principal
 Art's, Commerce & Science College
 Alkute, Tal. Parner, Dist. A' Nagar

Syllabus of THE (CBCS)

F. Y. B. A Compulsory English
(w. e. f. 2019-2020)
(Choice Based Credit System)
70:30-Pattern
(70-Semester-End Exam & 30-Internal Evaluation)



Prescribed Text: *Literary Gleam: An Anthology of Prose and Poetry* (Board of Editors-Orient BlackSwan)

Objectives:

- To expose students to the best examples of prose and poetry in English so that they realize the beauty and communicative power of English
- To instill human values and develop the character of students as responsible citizens of the world
- To develop the ability to appreciate ideas and think critically
- To enhance employability of the students by developing their linguistic competence and communicative skills
- To revise and reinforce structures already learnt in the previous stages of learning.

Semester-I

Prose:

1. Engine Trouble — R. K. Narayan
2. On Saying 'Please' — A. G. Gardiner
3. The Gift of the Magi — O. Henry

Poetry:

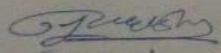
1. A Red, Red Rose — Robert Burns
2. Leave this Chanting and Singing — Rabindranath Tagore
3. The Felling of a Banyan Tree — Dilip Chitre

Grammar:

1. Articles
2. Prepositions
3. Verbs
Regular and Irregular Verbs
Auxiliary Verbs: Primary and Modal
4. Punctuation

Communication Skills:

1. Greeting and Taking Leave


Principal
Art's, Commerce & Science College
Alkuti, Tal. Parner, Dist. A'nagar

2. Introducing Yourself
3. Introducing People to One Another
4. Making Requests and Asking for Directions
5. Making and Accepting Apology



Semester- II

Prose:

1. In Sahyadri Hills, A Lesson in Humility — Sudha Murthy
2. The Model Millionaire — Oscar Wilde
3. The Eyes are not Here — Ruskin Bond

Poetry:

1. My Heart Leaps Up — William Wordsworth
2. Ozymandias — P. B. Shelley
3. Success is Counted Sweetest — Emily Dickinson

Grammar:

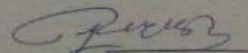
1. Tenses
2. Subject-Verb Agreement
3. Vocabulary

Communication Skills

1. Inviting and Accepting/Declining Invitations
2. Making a Complaint
3. Congratulating, Expressing Sympathy and Offering Condolences
4. Making Suggestions, Offering Advice and Persuading

- Each semester shall have 3 credits for teaching. Each credit is equal to 15 hours, so this course shall have 45 teaching hours. In addition to that there shall be three hours allotted to internal evaluation. Changes as per the university guidelines shall be communicated from time to time.




Principal



F. Y. B. A- Optional English (General Paper-1)
(w. e. f. 2019-2020)
(Choice Based Credit System)
70:30-Pattern
(70-Semester-End Exam & 30-Internal Evaluation)

Prescribed Text: *Initiations: Minor Literary Forms & Basics of Phonology* (Board of Editors- Orient BlackSwan)

Objectives:

- a) To expose students to the basics of literature and language and develop an integrated view about language and literature in them
- b) To acquaint them with minor forms of literature in English and help them to appreciate the creative use of language in literature
- c) To introduce them to the basics of phonology of English so that they can pronounce better and speak English correctly.
- d) To prepare students to go for detailed study and understanding of literature and language
- e) To enhance the job potential of students by improving their language skills

Semester - I

Prose Pieces:

- 1. A Lesson My Father Taught Me - A.P.J. Abdul Kalam
- 2. Toasted English - R. K. Narayan

Short Stories:

- 1. The Romance of a Busy Broker - O. Henry
- 2. The Open Window - Saki

Principal
Art's, Commerce & Science College
Tal. Pamer, Dist. Anajpur

Poetry:

1. Sonnet 29: 'When in disgrace with Fortune and men's eyes' - William Shakespeare
2. The World is too much with Us - William Wordsworth
3. The Listeners - Walter de la Mare
4. No Men are Foreign - James Kirkup

Language Studies:

Introduction to the Sounds of English: Part - I

(Discrepancy between English Spelling and Pronunciation, Phonetic Symbols and Transcription, The Concept of Phoneme and Minimal Pairs.)

Semester - II

Short Stories:

1. The Doll's House - Katherine Mansfield
2. The Thief - Ruskin Bond

Poetry:

1. I remember; I remember - Thomas Hood
2. Where the Mind is without Fear - Rabindranath Tagore
3. The Mountain and the Squirrel - R. W. Emerson
4. Up - Hill - Christina Rossetti

One Act Plays:

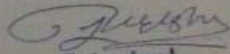
1. The Monkey's Paw - W.W. Jacobs
2. Swansong - Anton Chekhov

Language Studies:

Introduction to the Sounds of English: Part - II

(The Concept of Syllable, Monosyllabic and polysyllabic Words, The Concept of Word Stress and Different Standards of Pronunciation i.e. British Received Pronunciation, General American English and General Indian English.)




Principal
Art's, Commerce & Science College
Alkuti, Tal. Pamer, Dist. Anagar

S. Y. B. A.



Discipline Specific Course (DSC-1A)

(Old Special Paper-I)

(Choice Based Credit System-70:30-Pattern)

(w. e. f- 2020-2021)

(03 Credit Course)

Title of the Paper: Appreciating Drama

Preamble:

Drama is an age-old form of literature. Moreover, it is a performing art form. It has been undergoing several transformations in its form and performance till date. In this sense, the world of drama has been exploring and exposing very many distinguishing theoretical, literary and theatrical dimensions. At the backdrop of the very dynamics of drama, the syllabus prescribed under this paper attempts to give justice to the multi-dimensional aspects of drama. The course contents and the evaluation patterns are radically designed to keep pace with the age of technology and to empower the learners for futuristic academic avenues.

Objectives:

1. To introduce Drama as a major form of literature
2. To introduce minor forms of Drama
3. To acquaint and enlighten students regarding the literary and the performing dimensions of drama
4. To acquaint and familiarize the students with the elements and the types of Drama
5. To encourage students to make a detailed study of a few sample masterpieces of English Drama from different parts of the world
6. To develop interest among the students to appreciate and analyze drama independently
7. To enhance students' awareness regarding aesthetics of Drama and to empower them to evaluate drama independently

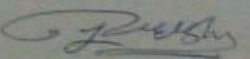
Semester-III

Course contents-

UNIT-I

Theory of Drama:

1. Drama, the Literary Form
2. Drama, the Performing Art Form
3. Elements of Drama:
 - i) Literary Elements: (Theme, Plot, Characters, Diction, Conflict, Setting etc.)
 - ii) Theatrical Elements: (Stage directions, Light effects, Music, Costumes, Stage


Principal
Art's, Commerce & Science College
Alkuli, Tal.Pamer, Dist.Anugol

- property, Makeup etc.)
4. Types of Drama: (Tragedy, Comedy, Tragicomedy, Problem play, Absurd drama)
 5. An Introduction to Minor Forms of Drama: (e.g. One-act-play, Skit, Street play, a short Radio play, Pantomime etc.)

UNIT-II

A Midsummer Night's Dream by William Shakespeare

Semester-IV

Title of the Paper: Appreciating Drama

UNIT-I

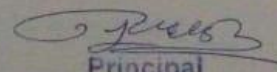
Arms and the Man by George Bernard Shaw

UNIT-II

The Fire and the Rain by Girish Karnad

Select Bibliography:

1. Abrams M.H. 1957. A Glossary of Literary Terms. Madras: Macmillan India Press.
2. Anandlal. 2004. Ed. The Oxford Companion to Indian Theatre. New Delhi: Oxford University Press.
3. Berthold M. 1999. The History of World Theatre. New York: Continuum.
4. Briggs J. & Jefferson N.C. 2003. Encyclopedia of Stage Lighting. : McFarland
5. Brown J.R. 1972. Theatre Language. London: The Penguin Press.
6. Craig E.G. 1911. On the Art of the Theatre. London: William Heinemann Ltd.
7. Crook T. 1999. Radio Drama. Routledge; 1st Edition
8. Dharwadkar A. 2005. Theatres of Independence. New Delhi: Oxford University Press
9. Hughes M. 2013. A History of Pantomime. Remember When
10. Jagadale U.S. 2014. Communication in Drama: A Pragmatic Approach. PartridgeIndia.
11. Mamet D. 1994. Goldberg Street: Short Plays and Monologues. Grove Press


Principal
Art's Commerce & Science College

S. Y. B. A.

Discipline Specific Course (DSC-2A)

(Old Special Paper-II)

(Choice Based Credit System-70:30-Pattern)

(w. e. f- 2020-2021)

(03 Credit Course)



Title of the Paper: Appreciating Poetry

Rationale:

Poetry has been the oldest form of literature and continues to be an important part of art and culture. It conveys a thought, describes a scene, or narrates a story in a concentrated, lyrical arrangement of words. It can be structured with rhyming lines and meter or can also be freeform that follows no formal structure. Poetry on the level of content offers a huge variety of aesthetic and worldly experiences. It offers new perspectives to look at the usual matters. The present course is designed in line with such liberating and enriching nature of poetry. This is an introductory course and it is intended that students learn the basics of poetry through its theory and the practical application of some of the terms related to poetry. Given its elementary nature this course cannot afford to be ambitious in its scope and selection of poems. Poems are not necessarily selected from different nationalities and cultures and no specific theme is maintained in the selection of poems. However it is seen in the selection that students get exposed to a variety of experiences through poems of different mold and that their aesthetic and human sensibilities get enriched.

Objectives:

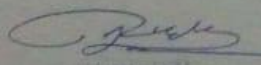
1. To acquaint students with the terminology in poetry criticism (i.e. the terms used in appreciation and critical analysis of poems)
2. To encourage students to make a detailed study of a few sample masterpieces of English poetry
3. To enhance students awareness in the aesthetics of poetry and to empower them to read, appreciate and critically evaluate poetry independently

Semester-III

Course Content-

Prescribed Text: *Mirage: An Anthology of English Poetry* Ed. Board of Editors, Orient Blackswan

A) Theory of Poetry


Principal
Arts, Commerce & Science College
Tel. Pomer, Dist. Anagar

- (a) What is poetry? Significant development in the art of poetry during major periods
- (b) Elements of poetry: Rhythm, Meter, Sound Structure, Stanza Forms,
- (c) Figures of Speech, Symbols, Imagery, Simile, Metaphor, Personification and other Poetic Devices like Repetition and Contrast.
- (d) Types of Poetry: Elegy, Sonnet, Dramatic Monologue, Lyric, Ode, Ballad

B) Poems:

- 1. The Nightingale- Philip Sidney
- 2. Sonnet 3- William Shakespeare
- 3. The Sun Rising- John Donne
- 4. London- William Blake
- 5. Ode on a Grecian Urn- John Keats
- 6. To a Skylark- P. B. Shelley



Semester-IV

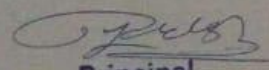
Prescribed Text: *Mirage: An Anthology of English Poetry* Ed. Board of Editors, Orient Blackswan

Poems:

- 1. My Last Duchess- Robert Browning
- 2. Sailing to Byzantium- W. B. Yeats
- 3. Futility- Wilfred Owen
- 4. A Bird Came Down the Walk- Emily Dickinson
- 5. Talking in Their Sleep- Edith M. Thomas
- 6. What Is Life- John Clare
- 7. Sympathy- Paul Laurence Dunbar
- 8. The Awakening- James Weldon Johnson
- 9. The Wind- Amy Lowell
- 10. Freedom- Rabindranath Tagore
- 11. Caged Bird- Maya Angelou
- 12. Failure of Communication- Judith Wright

Select Bibliography:

- 1. Abrams M.H. 1957. *A Glossary of Literary Terms*. Madras: Macmillan India Press.
- 2. Drew Elizabeth. 1959. *Poetry- A Modern Guide to Its Understanding and Enjoyment*. Dell Publishing Co.
- 3. Lennard John. 2005. *The Poetry Handbook: A Guide to Reading Poetry for Pleasure and Practical Criticism*. OUP.
- 4. Moon Brian. 2001. *Studying Poetry: Activities, Resources and Texts*. NCTE.
- 5. Oliver Mary. 1994. *A Poetry Handbook*. Harcourt Brace & Company.
- 6. Williams Rhian. 2009. *The Poetry Tool Kit: The Essential Guide to Studying Poetry*. Bloomsbury
- 7. Wolosky Shira. 2001. *The Art of Poetry: How to Read Poem*. OUP.


Principal
Arts, Commerce & Science College

S.Y.B.A. Geography (G2) Syllabus for Semester III
Name of Subject: Economic Geography- I, Subject Code: Gg.210 (A)

Objectives:

1. To introduce students to the basic principles and concepts of economic geography
2. To acquaint students with the applications to economic geography for development in different areas
3. The students should be able to integrate various factors of economic development and dynamic aspect of economic geography.

Sr. No.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Introduction to Economic Geography	1. Definition, nature and scope of economic geography. 2. Need and significance of economic geography 3. Economic geography and its relation with social sciences 4. Approaches of the study of economic geography	12	03
2	Economic Activity	1. Introduction and concept of economic activity with problems and prospect 2. Primary activity 3. Secondary activity 4. Tertiary activity	12	
3	Concept and classification of resources	1. Concept of resources 2. Renewable energy Resources i. Hydro electricity ii. Solar energy iii. Wind energy 3. Non-renewable Resources i. Coal, ii. Iron ore iii. Mineral oil 4. Conservation of resources	12	
4	Agriculture	1. Role of Agriculture in Indian economy 2. Factors influencing agriculture in India a) Physical b) Socio-economic c) Political and cultural 3. Agro-based industries in India a) Dairy industry b) Cotton industry 4. Agro-Tourism	12	

Savitribai Phule Pune University



[Signature]
 Principal
 Art's, Commerce & Science College
 Alkute, Tal. Pamer, Dist. A' Nagar

7

Objectives:

The objectives of the course are to develop following Skills among the students

- 1.To introduce basic concepts and fundamental structure of Disaster Management (DM).
- 2.To inculcate critical thinking and problem-solving abilities on disaster management.
- 3.To enable students to assess the situation and design plan for Disaster management

Unit no.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Fundamental Concepts, Measurement / Parameter and Types of Disasters	a) Disaster, Hazard, Risk, Vulnerability, Resilient b) Magnitude, Intensity, Frequency, Duration, Spatial dispersion c) Natural Disaster and Man- Made Disaster (Types and Definition)	06	02
2	Phases of Disaster Management Role of Geographers and organizations	a) Concept: Mitigation, Preparedness, Response, Recovery, Rehabilitation. b) Role of Geographers: Approaches; Application of GIS and RS in DM c) Introduction to National, State level organisations and Role of District level organisation.	08	
3	Comparative Assessment of Disaster Management- I	a) Earthquake: - India and Japan b) Flood:- India and Netherland c) COVID-19: India and Germany	08	
4	Assessment of Disaster Management- II	Assignment based on Primary or secondary data on any one Geographical scale- local/ regional/national/ global	08	

1. Disaster Management Guidelines, GOI-UND Disaster Risk Program (2009-2012)
2. Damon, P. Copola, (2006) Introduction to International Disaster Management, Butterworth Heineman.
3. Gupta A.K., Niar S.S and Chatterjee S. (2013) Disaster management and Risk Reduction, Role of Environmental Knowledge, Narosa Publishing House, Delhi.
4. Murthy D.B.N. (2012) Disaster Management, Deep and Deep Publication PVT. Ltd. New Delhi.
5. Modh S. (2010) Managing Natural Disasters, Mac Millan publishers India LTD.
6. Dr. Mrinalini Pandey (2017) Disaster Management. Wiley India Pvt. Ltd.

Savitribai Phule Pune University


Principal
 Art's, Commerce & Science College
 Alkuti, Tal.Parner, Dist.A'nagar

26

CBSE: 2020-21		S.Y.B.A.	Geography	
Sr. No.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Introduction to GIS	1. Definition of GIS 2. Stages of GIS Development 3. Objectives of GIS 4. Components GIS 5. GIS Applications	06	2
2	Data Types & Models	1. Spatial Data – Concept, Sources; Data Models – Raster & Vector 2. Non-spatial Data – Concept, Sources; Data Models – Relational, Network, Hierarchical & Object-orientated	06	
3	Software based Practical	1. Geo-referencing of Toposheet/Map 2. Digitization of Point, Line & Polygon (at least one layer of each) 3. Data Attachment 4. Creation of Layout and Map	18	

Course Outcomes:

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

- Comprehend knowledge about the concepts in GIS.
- Acquire skills of map making using GIS.

Reference Books:

- Burrough, P. A. and McDonnell, R. A. (2000): Principles of Geographical Information Systems, Oxford University Press, New York.
- Chang, K. T. (2008): Introduction to Geographic Information Systems, Avenue of the Americas, McGraw-Hill, New York.
- Debashis, C. and Sahoo, R. N. (2015): Fundamentals of Geographic Information System, Viva Books Private Limited.
- DeMers, M. N. (2008): Fundamentals of Geographic Information Systems, John Wiley and Sons, New Delhi.
- Heywood, I., Cornelius, S. and Carver, S. (2011): An Introduction to Geographical Information Systems, Pearson Education, New Delhi.
- Karlekar, S. (2007): Bhaugolik Mahiti Pranali (GIS), Diamond Publications, Pune.
- Korte, G. B. (2001): The GIS Book, Onward Press, Bangalore.
- Longley, P. A., Goodchild, M. F., Maguire, D. J. and Rhind, D. W. (2002): Geographical Information Systems and Science, John Wiley & Sons, Chichester.
- Lo Albert, C. P., Yeung and Albert K. W. (2002): Concepts and Techniques of Geographical Information Systems, Prentice Hall of India, New Delhi.
- Pandey, J. and Pathak D. (2015): Geographic Information System, TERI Press, The Energy and Resources Institute, New Delhi.
- Paul, A. L., Michel, F. G., Maguire, D. J. and Rhind, D. W. (2002): Introduction to Geographic Information Systems and Science, John Wiley and Sons Ltd.

S.Y.B.A. Geography Syllabus

Name of Subject: APPLIED COURSE OF DISASTER MANAGEMENT

Subject Code: SEC – A Semester - III



[Signature]
Principal
Art's, Commerce & Science College
Alkuti, Tal. Pamer, Dist. A'nagar

25

CBSE: 2020-21		S.Y.B.A.		Geography	
Sr. No.	Topic	Sub Topic & Learning Point	No of Practical	Credits	
1.	Introduction to Cartography	1. Definition of Cartography 2. Development of cartography a. Traditional b. Modern 3. Use of Cartography	02	04	
2.	Cartographic techniques	1. Techniques of representation of data (Use and limitations) a. Simple line graph b. Simple bar Graph c. Pie diagram d. Choropleth Map e. Isopleth Method (Isoheight or Isothermal) f. Flow diagram (At least 01 example of each manually and using computer)	06		
3.	Surveying	1. Definition of Surveying 2. Types of North Direction (True, Magnetic and Grid North) 3. Types of Survey (Any three) a. Plane Table Survey : (Radiation Method and Intersection Method) b. GPS Survey and plotting c. Dumpy level / Auto level survey i) Rise and Fall Method ii) Collimation Method d. Demonstration of Total Station 4. Measurement of land: i) Measurement of survey field ii) Example on measurement of area (Circle, Square, Rectangle, Triangle, Uneven shape) iii) Conversion of area (hector into Acer, Square km into square meter, Square meter to Square feet)	08		
4.	Excursion / village/city survey and report writing	Study tour to places of geographical interest anywhere in the country Or Socio- economic survey of village/city	04		

Savitribai Phule Pune University



[Signature]
Principal

Art's, Commerce & Science College
Alkuti, Tal. Parnar, Dist. Ahnagar

23

S.Y.B.A. Geography (SI) Syllabus for Semester III
Name of Subject: Population Geography, Subject Code: Gg.220 (A)

Objectives:

1. To understand the history of population.
2. To introduction of the basic concepts in Population Geography.
3. To understand the types of Population data.

Sr. No.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Introduction	1. Definition, Nature and Scope, 2. Contextual significance of Population Geography, 3. Relation between Population Geography and other social Sciences.	12	03
2	Population Data & Presentation	1. Census of India 2. National Sample Survey, Sample Registration Survey, NFHS, DLHS, 3. Presentation of Population Data – Maps, Graphical Presentation, Computer Application	12	
3	Population Growth and Demographic Attributes	1. Factors affecting Growth of Population 2. Fertility, Mortality - (Concept, Measurement) 3. Migration - Concept, Causes, Types	12	
4	Composition of Population	1. Age-Sex pyramid, Age Structure 2. Occupational Structure, Dependency Ratio 3. Longevity, Life Expectancy. (with Reference to India)	12	



[Signature]
Principal
 Art's, Commerce & Science College
 Alkuti, Tal. Parner, Dist. Anagar

11

S.Y.B.A. Geography (S1), Syllabus for Semester IV
Name of Subject: Population Geography, Subject Code: Gg.220 (B)

Objectives:

1. To introduce students to the Population Policy of India and China.
2. To understand the Health indicator in India.
3. To acquaint students with the concept of urbanization in population geography.
4. To understand population theories.

Sr. No.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Concept and theories of Population	1. Population and space: over Population, Optimum Population, Under Population 2. Malthusian Theory 3. Marxian Theory	12	03
2	Problems of Population and Population Policies	1. Population Problems in India, 2. Population Problems in developed countries 3. Population Policies in India and China	12	
3	Population as a Resources Contemporary Issues	1. Health Indicator in India 2. Population as Social Capital 3. Human Development Index.	12	
4	Urbanization	1. Concept of urbanization 2. History of urbanization in India, Trends of World urbanization. 3. Problems of Urbanization in India	12	

Reference Books:

1. Barrett H. R., 1995, Population Geography, Oliver and Boyd Publication.
2. Bhende A. and Kanitkar T., 2000, Principles of Population Studies, Himalaya Publishing

Savitribai Phule Pune University


Principal
 Art's, Commerce & Science College
 Aikuli, Tal.Pamer, Dist.A'nagar

13

S.Y.B.A. Geography (G2) Syllabus for Semester IV**Name of Subject: Environment Geography- II, Subject Code: Gg.210 (B)****Objectives:**

1. To create awareness about dynamic environment among the students.
2. To acquaint students with the fundamental concepts of Environment Geography.
3. To acquaint students about the past, presents and future utility and potentials of natural resources.
4. To make aware students about the problems of environment, its utilization and conservation in the view of sustainable development.

Sr. No.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Environmental Disaster	1. Meaning and concepts of environmental disaster 2. Classification of Disaster 3. Natural Disaster a) Earthquake b) Flood 4. Biological Disaster a) Swine flu b) Novel Corona (COVID-19)	12	03
2	Environmental Problems	1. Global Warming and climate change 2. Ozone Depletion 3. Acid rain 4. Over use of chemical fertilizers, pesticides and insecticides	12	
3	Environmental Planning and Management	1. Need of Planning and Management 2. Micro, macro and meso level Planning and Management with reference to India 3. Environmental impact assessment	12	
4	Environmental Policies	1. Introduction of environmental policies 2. Environmental education in India 3. Kyoto Protocol	12	

Savitribai Phule Pune University



Principal
Art's, Commerce & Science College
Alkuti, Tal. Pamer, Dist. A'nagar

5

S.Y.B.A. Geography (S1), Syllabus for Semester IV**Name of Subject: Geography of Maharashtra, Subject Code: Gg.220****(B)Objective :**

1. To make students aware about the Agriculture problems and prospects of Maharashtra.
2. To understand the population distribution and settlement pattern in Maharashtra.
3. To understand the concept of rural development.
4. To understand the prospectus in Tourism activity in Maharashtra and the role of MTDC and Role of MIDC in industrial development in rural area of Maharashtra

Sr. No.	Topic	Sub Topic & Learning Point	Hours	Credits
1	Agriculture	1. Importance of Agriculture in Economy of Maharashtra 2. Major Crops - Wheat, Rice, Jawar, Bajra. 3. Cash Crops and Horticulture - Cotton, Sugarcane, Pomegranate, Grapes. 4. Problems of agriculture in Maharashtra.	12	03
2	Population and Settlement	1. Population distribution of Maharashtra 2. Population composition - Sex Ratio, Literacy, Occupational structure, Migration 3. Rural and Urban Settlements 4. Potential of Major Cities in Maharashtra – Mumbai, Pune, Nagpur	12	
3	Rural Development of Maharashtra	1. Concept of Rural Development 2. Parameters of Rural Development 3. Schemes For Rural Development 4. Case Studies – Hivare Bazar and Ralegan Siddhi (Ahmednagar), Patoda (Aurangabad)	12	
4	Tourism	1. Growth and development of tourism in Maharashtra 2. Tourism Potential of Maharashtra 3. Agro-Tourism 4. Role of MTDC	12	

Savitribai Phule Pune University

17



[Signature]
Principal
Art's, Commerce & Science College
Alodi, Tal. Parnate, Dist. Ahmednagar

S.Y.B.A. Geography (S2), Syllabus for Semester III
Name of the Subject: Scale and Map Projection, subject Code: Gg, 201 (A)
Practical Geography-I No. of Credits: 04

Workload: Six Periods per week per batch consisting of 12 Students; however the last batch needs to have more than six students.

(Examination for the course will be conducted at the end of the semester)

Objectives of Course:

1. To introduce the basic concepts in Practical Geography
2. To enable students to use various Scales and Projection Techniques in Geography.
3. To acquaint students with the utility of various Projections in Geographical knowledge.
4. To explain the elementary and essential principles of practical work in Geography.

Course Outcome:

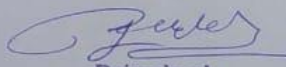
After the successful completion of the course, the students will be able to:

1. Develop practical skill and use of map scale and projection.
2. To make students aware of the new techniques, accuracy and skills of map making.

Note:

1. Use of Map stencils, Log tables, Calculator, computer, Statistical Tables is allowed at the time of Examination.
2. Students must check the practical's regularly and Journal should be certified by practical in-charge and Head of the Department before the examination.
3. Students without a certified journal should not be allowed for the practical examination.
4. Each of the practical batches needs a separate question paper.




Principal
Art's, Commerce & Science College
Alkute, Tal. Parner, Dist. A'nagar

Sr. No.	Topic	Sub Topic & Learning Point	No of Practical	Credits
1.	Introduction of Maps	1. Definition of Map 2. Elements of Map 3. Classification of Map: a. On the basis of scale: i) Small scale ii) Large Scale b. On the basis of function: i) Physical ii) Cultural 4. Use of map	03	04
2.	Map Scale	1. Definition of Map Scale. 2. Types of Map Scale a. Verbal Scale b. Numerical Scale c. Graphical Scale 3. Conversion Scale (British and Metric System) a. Verbal scale to Representative fraction b. Representative fraction into Verbal scale 4. Construction of Simple Graphical scale (At least two examples from each)	06	
3.	Basic of map projection	1. Definition and types of map projection 2. Basic Concepts of Projection: Latitude, Longitude, Parallel of latitude, Meridian of longitude, Prime meridian, Equator, Direction 3. Calculation of time basis on meridian and GMT (Calculation of minimum two examples)	04	
4.	Construction, properties and use of map projections	1. Zenithal Projection a. Zenithal Polar Gnomonic Projection 2. Conical Projection a. Conical projection with one standard parallel/Simple conical projection 3. Cylindrical Projection a. Cylindrical equal area projection 4. Mercator projection (At least two examples from each projection)	07	

Savitribai Phule Pune University



Principal

Art's, Commerce & Science College
Alkuti, Tal. Parnar, Dist. A' Nagar

20

S. Y. B. A. GEOGRAPHY**Equivalence of Previous syllabus along with new syllabus:**

Pager	Old Course (2013 Annual Pattern)	New Course (2019 Semester Pattern)
G2	Gg-210 Elements of Climatology and Oceanography OR	Gg: 210(A)Environmental Geography I OR
G2	Gg-210 Geography of Disaster Management	Gg: 210(A)Economic Geography -I Gg: 210(B)Environmental Geography II OR Gg: 210(B)Economic Geography -II
S1	Gg-220 Economic Geography OR	Gg: 220(A)Geography of Maharashtra - I OR
S1	Gg-220 Tourism Geography	Gg: 220(A) Population Geography – I Gg: 220(B) Geography of Maharashtra – II OR Gg: 220(B) Population Geography – II
S2	Gg-201 Fundamentals of Geographical Analysis	Gg: 201(A)Practical Geography – I (Scale and Map Projections)
S2		Gg: 201(B)Practical Geography – II (Cartographic Techniques, Surveying and Excursion / Village / Project Report)

S.Y.B.A. Geography (G2) Syllabus for Semester III**Name of Subject: Environment Geography- I, Subject Code: Gg.210 (A)****Objectives:**

1. To create the awareness about dynamic environment among the student.
2. To acquaint the students with fundamental concepts of environment geography for development in different areas.
3. The students should be able to integrate various factors of Environment and dynamic aspect of Environmental geography.
4. To make aware the students about the problems of environment , their utilization and conservation in the view of sustainable development

Sr. No.	Topic	Sub Topics	Teaching Hours	Total Credits
1	Introduction to Environmental Geography	1. Definition, Nature and scope of Environmental Geography. 2. Types of Environment 3. Importance of Environmental Geography 4. Approaches to study of environmental Geography	12	03
2	Ecosystem	1. Meaning, concept and definition of ecosystem. 2. Structure (Biotic and Abiotic factors) and food chain, Tropic Level, food web, energy flow	12	

Savitribai Phule Pune University



[Signature]
Principal
Art's, Commerce & Science College
Alkuti, Tal. Parner, Dist. A'nagar

3

CBSE: 2020-21		S.Y.B.A.	Geography	
		3. Types of ecosystem a) Equatorial Forest and b) Pond Ecosystem		
3	Biodiversity and its conservation	1. Concept of biodiversity 2. Economic value and potential of biodiversity 3. Loss of biodiversity and hotspots in India 4. Conservation of biodiversity	12	
4	Environmental Pollution	1. Concept of Pollution 2. Air pollution-Causes, effects and control measures 3. Water pollution-Causes, effects and control measures 4. Soil pollution-Causes, effects and control measures	12	

Reference Book:

1. Miller G.T., 2004, Environmental Science Working with the Earth, Thomson Books Cole, Singapore
2. Saxena H.M., 2017, Environmental Geography(Ed III), Rawat Publications, Jaipur
3. Odum E.P. et al.2005, Fundamentals of Ecology, Ceneage Learning, India
4. Sharma P.D.2015, Ecology and Environment, Rastogi Publications, Meerut
5. Kormondy, Edward J, 2012, Concept of Ecology, PHI Learning Pvt.Ltd, New Delhi
6. Singh R.B.(Eds) 2009, Biogeography and Biodiversity, Rawat Publications, Jaipur
7. Singh S.Prayag, 1997, Environment Geography, Pustak Bhawan, Allahabad
8. Chandana R.C.2002, Environmental Geography, Kalyani Publication, Ludhiana
9. Goudie A, 2001, The Nature of The Environment, Blackwell .Oxford
10. Gholap T. N., 2000, Environment Science, Nishikant Publications, Pune. (Marathi)
11. Choudhar A.H., & et. al., 2014, Disaster Management, Atharva Publication, Pune. (Marathi)
12. Musmade A. H., More J. C. 2014, Geography of Disaster Management, Diamond Publication, Pune. (Marathi)
13. Saptarshi P. G., More J. C., Ugale V. R., 2009, Geography and Natural Hazads, Diamond Publishing, Pune. (Marathi)

Semester-I Early India: From Prehistory to the Age of the Mauryas



प्रारंभिक भारत: प्रागैतिहासिक काळ ते मौर्यकाळ

उद्दिष्ट्ये:

प्रारंभिक भारताचा इतिहास हा एकूणच भारतीय इतिहासाचा अतिशय महत्वाचा भाग आहे. कारण तो संपूर्ण भारतीय इतिहासाचे योग्य आकलन करण्यासाठी मूलाधार आहे. हा पेपर विद्यार्थ्यांना प्रागैतिहासिक काळ ते मौर्य काळापर्यंतच्या इतिहासाचे आकलन होण्याच्या उद्देशाने तयार केलेला आहे. भारतीय सभ्यता आणि संस्कृती तसेच राजकीय घराणी यांच्या उदय आणि विकासाचा कारणीभूत असणाऱ्या घटकांवर प्रकाश टाकण्याचा प्रयत्न केलेला आहे. विद्यार्थ्यांना राजकीय व्यवस्था, कला, साहित्य, तत्वज्ञान, धर्म, विज्ञान आणि तंत्रज्ञान या विविध महत्वाच्या बाबींसाठी प्रारंभिक काळातील भारतीयांनी दिलेल्या योगदानाचा परिचय करून देण्याचा उद्देश आहे. प्रारंभिक भारतीय इतिहासाच्या अभ्यासाद्वारे विद्यार्थ्यांमधील जिज्ञासू वृत्तीला चालना देण्याचा प्रयत्न केलेला आहे.

घटक I: प्रारंभिक भारत: साधने आणि प्रागैतिहासिक काळ

[12]

(अ) प्रारंभिक इतिहासाचे महत्व

(ब) इतिहासाची साधने - पुरातत्वीय (भौतिक अवशेष), आलेख (शिलालेख, मुफालेख इ.), नाणकशास्त्र (नाणी), वाङ्मयीन साधने, परकीय प्रवासवर्णने

(क) पुरापाषाण युग, मध्यपाषाण युग, नवाश्म युग आणि ताम्रपाषाणयुगीन संस्कृती : संक्षिप्त आढावा

घटक II: हडप्पा संस्कृती : कांस्ययुगीन सभ्यता

[12]

(अ) भौगोलिक विस्तार, नगररचना, व्यापार आणि धार्मिक रीतीरिवाज

(ब) कला, हस्तकला आणि तांत्रिक ज्ञान : मुदभांडी, मुद्रा, मणी, प्रतिमा, मातीच्या शोभेच्या मूर्ती, धातुकाम, लिपी आणि न्हास

घटक III: वैदिक संस्कृती, धार्मिक विद्रोह : जैन आणि बौद्ध धर्म

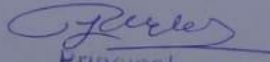
[12]

(अ) वैदिक उत्तर-वैदिक काळातील संस्कृती: मूल स्थान, जमातींची राज्यव्यवस्था, सामाजिक विभागणी, धार्मिक विधी आणि तत्वज्ञान

(ब) जैन आणि बौद्ध धर्म: उदयाची कारणे, शिकवण, योगदान आणि महत्व

घटक IV: महाजनपदांचा उदय आणि मौर्यकाळ

[12]

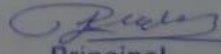

Principal

Art's, Commerce & Science College
Alkute, Tal. Pamer, Dist. Anagar

- (अ) महाजनपदे, मगधच्या साम्राज्याचा उदय आणि विकास
(ब) मौर्य काळ : चंद्रगुप्त मौर्य, सम्राट अशोक आणि त्याचे धर्मविषयक धोरण
(क) मौर्यांचे प्रशासन, अर्थव्यवस्था, त्नाम आणि महत्त्व

Reference Books: English

1. Thapar Romila, 'A History of India' Vol. I , Penguin Books, New Delhi, 1990
2. Jha D. N., 'Early India: A Concise History' Manohar Publication, New Delhi, 2010
3. Sharma R. S., 'Rethinking India's Past', Oxford University Press, New Delhi, 2009
4. Thapar Romila, 'Early India: From The Origins To A.D. 1300', Penguin Books, 2002
5. Raychaudhari Hemchandra, 'Political History of Ancient India', University of Calcutta, Calcutta, 1923.
6. Kosambi D. D. 'The Culture And Civilization of Ancient India in Historical Outline' Vikas Publication, New Delhi 1993.
7. Thapar Romila, 'Asoka and the Decline of the Mauryas', Oxford University Press, USA, 1998
8. Mahajan V. D., Ancient India, S. Chand & Company Ltd, New Delhi. Reprinted 2019.
9. Basham A. L. 'The Wonder That Was India, Picador- Pan MacMillan, Reprinted, 2004.
10. Dasgupta Uma, 'History of Science, Philosophy and Culture in Indian Civilization', Longman Pearson, New Delhi, 2011
11. Altekar A. S. 'State and Government in Ancient India', Motilal Banarasidas Publishers, Varanasi, 1949.
12. Mujumdar R. C. 'Ancient India', Motilal Banarasidas Publishers, Varanasi, 1952.
13. Daud Ali, 'Passport to the Past Ancient India', Rosen Central Publication, New York, 2009
14. K.A. Nilakanta Sastri, 'History of South India' Oxford University Press, London, 1958


Principal

Art's, Commerce & Science College

Savitribai Phule Pune University, Pune
Proposed Syllabus in History for S.Y.B.A. (Credit System) from the academic Year 2020-21
Under the Faculty of Humanities
Discipline Specific Elective Course (DSE-1A)
Semester -III-Medieval India - Sultanate Period



Course objectives:

1. Demonstrate thinking skills by analyzing, synthesizing, and evaluating historical information from multiple sources.
2. Develop the ability to distinguish between fact and fiction while understanding that there is no one historical truth.
3. To Learn foundation of Delhi Sultanate and Sultanate Administration.
4. To understand the socio, economic condition of Delhi Sultanate

Course outcome:

1. Provides examples of sources used to study various periods in history.
2. Relates key historical developments during medieval period occurring in one place with another.
3. Analyses socio - political and economic changes during medieval period
4. Estimate the foreign invasion and the achievement of rulers

Pedagogy: Lectures/Visual presentation/ Role play/ Critical analysis/Assignments/
Tests/Quiz/Maps./Field visit/ Group Discussion/ Seminar /use of e-learning

Unit I: Foundation of the Delhi Sultanate **12**

- a) Sources of Historiography of Sultanate Period
- b) Invasions of Muhammad Ghori
- c) Foundation of Delhi Sultanate: Qutbuddin Aibak

Unit II: The early Sultans of Delhi and their contributions **10**

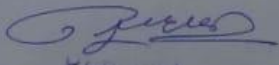
- a) Iltutmish
- b) Raziyya
- c) Balban

Unit III: Expansion of Sultanate **16**

- a) Alauddin Khalji: Expansion and Administrative Reforms
- b) Experiments of Muhammad-Bin-Tughlaq, Firuz Tughlaq: Administrative Reforms.
- c) The Saiyyids, the Lodis and the decline of the sultanate.

Unit IV: Kingdoms of Vijayanagar and Bahamani **10**

- a) Rise of Vijayanagar Empire: Harihar, Bukka, Krishnadevray


Principal
Art's, Commerce & Science College

- b) The Emergence and expansion of the Bahamani Kingdom: Contribution of MuhmudGawan
 c) Disintegration of Bahamani Kingdom

Books for Study: English

1. Banerjee A.C., New History of Medieval India, New Delhi, S.Chand & Co., New Delhi, 1990.
2. Chitnis K.N., Glimpses of Medieval Indian and Institutions, Poona, 1981.
3. Chitnis K.N., Socio-Economic History of Medieval India, Atlantic Publishers and Distributors, New Delhi, 1990.
4. Chopra P.N., Puri B.N., Das M.N.-A Social, Cultural and Economic History of India, Vol II. Macmillan India, Delhi, 1974.
5. Lane Poole Stanley, Medieval India, London, 1910
6. Majumdar R.C (ed), The History and Culture of the Indian People, Vol VI: The Delhi Sultanate, Bombay, 1967, Vol VII: The Moghul Empire, Bombay, 1974.
7. Mehta J.L., Advanced Study in the History of Medieval India Vol II, New Delhi sterling Publishers, 1983.
8. Pandya A.B., Early Medieval India, Central Book Depot, Allahabad, 1970
9. Prasad Ishwari, History of Medieval India, Allahabad, 1952.
10. Raychaudhuri T, Irfan Habib (ed) The Cambridge Economic History of India, London, 1982.
11. Rizvi S.A., The Wonder that Was India, South Asia Books, 1996.
12. Salma Ahmed Farooqui, A Comprehensive History of Medieval India, Pearson, New Dehli, 2011
13. Satish Chandra, History of Medieval India, orient BlackSwan, 2007.
14. Sherwani H. K. and Joshi P.H.(ed) - History of Medieval Deccan (1295 - 1724 AD) VOL I, Hyderabad, 1973, Vol II, Hyderabad, 1974.
15. Srivastava A. L The Sultanate of Delhi (711 – 1526 AD), Agra, 1974.
16. Mehta J.L., Advanced study in the history of medieval India, sterling Publishers Pvt.Ltd.
17. Singh Meera, Medieval History of India, Vikas Publishing House Pvt.Ltd.
18. Mukhia Harbans, Perspectives on medieval history, Vikas Publishing House Pvt.Ltd.
19. Tarachand, Influence of Islam on Indian Culture, Delhi.
20. Mahajan V.D. History of India, Madras
21. Irfan Habib, Delhi Sultanate
22. Percy Brown - Art & Architecture, Islamic Architecture
23. Farooqui, A Compressive History of Medieval India, Pearson, Delhi.



7

[Signature]
Principal
 Art's, Commerce & Science College
 Alkuli, Tal.Parner, Dist.A'nagar

3 क्रेडिट (Credit)

1. छात्रों को व्यंग्य पाठ से परिचित कराना।
2. छात्रों को कहानी व्यंग्य पाठ का बोध कराना।
3. साक्षात्कार कला से अवगत कराना।
4. भाषा का मोबाइल तंत्र समझाना।
5. पल्लवन कला से अवगत करना।

इकाई	पाठ्यविषय	तासिकाएँ
इकाई-I	काव्य पाठ (व्यंग्य) : 1) तीनों बंदर बापू के - नागार्जुन 2) बात बतंगड - काका हाथरसी 3) विद्वान लोग - उदय प्रकाश 4) कितनी रोटी - अशोक चक्रधर 5) देश के लिए नेता - शैल चतुर्वेदी। उक्त रचनाओं का, कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाएँ
इकाई-II	कहानी पाठ (व्यंग्य) : 1) प्रेम की बिरादरी - हरिशंकर परसाई 2) अफसर - शरद जोशी 3) सावधान! हम इमानदार हैं - लतिफ़ाँधी 4) मुख्यमंत्री का डंडा - सुदर्शन मजीठिया 5) झोले - सुभाष काबरा उक्त रचनाओं का, कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाएँ
इकाई-III	साहित्येतर पाठ्यक्रम : 1) साक्षात्कार।	15 तासिकाएँ


Principal

बी. ए. द्वितीय वर्ष कला (शैक्षिक वर्ष 2020-2021 से)

तृतीय अयन (Third Semester)

पाठ्यधर्या : CC-1C (G-2) आधुनिक काव्य, कहानी तथा व्यावहारिक हिंदी

3 कर्मांक (Credit)

उद्देश्य :

1. छात्रों को काव्य साहित्य से परिचित कराना।
2. छात्रों को कहानी साहित्य से परिचित कराना।
3. छात्रों को हिंदी कारक-व्यवस्था समझाना।
4. शब्द युग्म का अर्थ लिखकर प्रत्यक्ष वाक्य में प्रयोग समझाना।
5. संक्षेपण लेखन का प्रत्यक्ष बोध कराना।
6. सर्जनात्मकता का विकास कराना।

इकाई	पाठ्यविषय	तासिकाएँ
इकाई-I	काव्य साहित्य : 1) नाच - अज्ञेय 2) देश कागज पर बना नक्शा नहीं होता - सर्वेश्वरदयाल सक्सेना 3) एकलव्य से संवाद - अनुज लुगुन 4) होंकी खेलती लड़कियाँ - कात्यायनी 5) कूड़ा बीनते बच्चे- अनामिका। उक्त रचनाओं का कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाएँ
इकाई-II	कहानी साहित्य : 1) धरती अब भी घूम रही है-विष्णु प्रभाकर 2) दूसरे - कमलेश्वर 3) सजा - मन्मू मंडारी 4) सलाम - ओमप्रकाश वाल्मीकि 5) छावनी में बेघर- अल्पना मिश्र उक्त रचनाओं का कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाएँ
इकाई-III	साहित्येतर पाठ्यक्रम : 1) हिंदी कारक व्यवस्था। 2) शब्द युग्म (50) अर्थ लिखकर वाक्य में प्रयोग। 3) संक्षेपण।	15 तासिकाएँ



(Signature)

Principal

Art's, Commerce & Science College
Alirajpur, Tal. Panna, Dist. Alirajpur

बी. ए. द्वितीय वर्ष कला (शैक्षिक वर्ष 2020-2021 से)

चतुर्थ अयन (Fourth Semester) : वैकल्पिक

पाठ्यचर्चा : CC-1D (G 2) जनसंचार माध्यम और हिंदी

अक्रेडिट (Credit)



उद्देश्य :

1. छात्रों को जनसंचार माध्यमों से परिचित कराना।
2. सृजनात्मक लेखन कौशल विकसित कराना।
3. माध्यम लेखन से अवगत कराना।
4. श्रव्य-दृश्य माध्यमों की भाषा से अवगत कराना।

इकाई	पाठ्यविषय	तासिकाएँ
इकाई-I	जनसंचार माध्यम : अक्षरणा एवं विभिन्न प्रकार जनसंचार माध्यमों की भाषा, मुद्रित माध्यमों की भाषा, श्रव्य माध्यमों की भाषा, दृश्य माध्यमों की भाषा।	15 तासिकाएँ
इकाई-II	सृजनात्मक लेखन : लेखाआलेख लेखन, कविता लेखन, कहानी लेखन, नाटक लेखन।	15 तासिकाएँ
इकाई-III	माध्यम लेखन : फीचर लेखन, घटकथा लेखन, डॉक्यूड्रामा, रेडियो वार्ता लेखन, रेडियो सवाद लेखन, मुद्रित विज्ञापन की भाषा।	15 तासिकाएँ

अंक विभाजन - पूर्णांक : 75

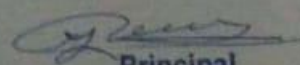
आंतरिक मूल्यांकन - 23 (लघुतरी परीक्षा- 13 अंक, शोध परियोजना/समूह परियोजना/मौखिक प्रस्तुति/क्षेत्रीय

अध्ययन- 10 अंक)



Syllabus/2020-Hindi/BOS Chairman/IBG: Doc

Page 9


Principal

बी. ए. द्वितीय वर्ष कला (शैक्षिक वर्ष 2020-2021 से)

तृतीय अयन (Third Semester)

पाठ्यचर्या : SEC-2A अनुवाद स्वरूप एवं व्यवहार

2क्रेडिट (Credit)



उद्देश्य :

1. अनुवाद कौशल से छात्रों को अवगत कराना।
2. अनुवाद का स्वरूप समझाना।
3. अनुवाद क्षेत्र से परिचय कराना।
4. हिंदी से मराठी में प्रत्यक्ष अनुवाद कार्य कराना।
5. अंग्रेजी से हिंदी, मराठी में अनुवाद कौशल का विकास कराना।

इकाई	पाठ्यविषय	तासिकाई
इकाई-I	1. अनुवाद : परिभाषा एवं स्वरूप 2. अनुवाद : प्रक्रिया के सोपान 3. अनुवाद : सहायक सामग्री 4. अनुवाद : अनुवादक के गुण	15 तासिकाई
इकाई-II	1. अनुवाद : प्रत्यक्ष व्यवहार 2. मराठी वाक्यों का हिंदी अनुवाद। 3. अंग्रेजी वाक्यों का हिंदी अनुवाद। 4. मराठी परिच्छेद का हिंदी अनुवाद। 5. अंग्रेजी परिच्छेद का हिंदी अनुवाद।	15 तासिकाई

पूर्णांक : 50

आंतरिक मूल्यांकन : 15 अंक (लघुत्तरी परीक्षा- 10 अंक, शोध परियोजना/समूह परियोजना/मौखिक प्रस्तुति/क्षेत्रीय अध्ययन- 5 अंक)

सत्रांत परीक्षा- 35 अंक

प्रश्नपत्र का स्वरूप

समय : 3 घंटे

अंक 35

प्रश्न 1. प्रथम इकाई पर चार में से दो प्रश्न।

14 अंक

प्रश्न 2. अ. मराठी वाक्यों का हिंदी में अनुवाद। (दस में से सात)

07 अंक

आ. अंग्रेजी वाक्यों का हिंदी में अनुवाद। (दस में से सात)

07 अंक

प्रश्न 3. हिंदी परिच्छेद का मराठी/अंग्रेजी में अनुवाद।

07 अंक

S.Y.B.A./S.Y.B.Sc. Syllabus/2020/Hindi/BO.S Chairman/JBG. Doc

Page 11

Principal
Art's, Commerce & Science College
Tal. Pamer Dist. Anand

बी. ए. द्वितीय वर्ष कला (शैक्षिक वर्ष 2020-2021 से)

चतुर्थ अयन (Fourth Semester)

पाठ्यचर्या : SEC- 2B माध्यम लेखन

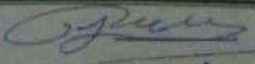
2कर्मांक (Credit)



उद्देश्य :

1. छात्रों को माध्यम लेखन से परिचित कराना।
2. सृजनात्मक लेखन कौशल विकसित कराना।
3. माध्यम लेखन से अवगत कराना।
4. श्रव्य-दृश्य माध्यमों की भाषा से अवगत कराना।

इकाई	पाठ्यविषय	तासिकाई
इकाई-I	माध्यम लेखन – सैद्धांतिक पक्ष 1. माध्यम का स्वरूप 2. अवधारणा 3. महत्व एवं उद्देश्य 4. माध्यम एवं विधा परिचय : i) मुद्रित माध्यम ii) श्रव्य माध्यम iii) दृश्य-श्रव्य माध्यम iv) नव-माध्यम : कंटेंट लेखन, ब्लॉग लेखन।	15 तासिकाई
इकाई-II	माध्यम लेखन : फीचर लेखन 1. फीचर की परिभाषा एवं अवधारणा। 2. सामग्री संकलन स्रोत। 3. फीचर के तत्व – विषय वस्तु, प्रस्तावना, शीर्षक, विवेचन, छायांकन। 4. फीचर लेखन के गुण : i) विश्वसनीयता ii) सरसता एवं सहजता iii) रोचकता एवं संक्षिप्तता iv) प्रासंगिकता v) प्रचलित शब्दावली का प्रयोग। 5. फीचर और अन्य विधा में भेद : समाचार, आलेख। 6. फीचर के विभिन्न प्रकार : समाचार फीचर, घटना परक फीचर, सांस्कृतिक फीचर, चिंतन परक फीचर, साहित्यिक फीचर, फोटो फीचर। 7. रेडियो फीचर, टेलीविजन फीचर।	15 तासिकाई


Principal
Art's, Commerce & Science College
Alkuli, Tal Pamer, Dist. Annapurna

बी. एस्सी. द्वितीय वर्ष विज्ञान (शैक्षिक वर्ष 2020-2021 से)

तृतीय अयन (Third Semester)

पाठ्यचर्या : AECC-2A हिंदी काव्य तथा कहानी साहित्य

2कर्मक (Credit)



उद्देश्य :

1. छात्रों को काव्य साहित्य से अवगत कराना।
2. छात्रों को कहानी साहित्य से अवगत कराना।
3. छात्रों में काव्य लेखन कौशल विकसित करना।
4. छात्रों में कहानी लेखन कौशल विकसित करना।
5. छात्रों में साहित्यालोचन दृष्टि विकसित करना।

इकाई	पाठ्यविषय	तासिकाएँ
इकाई-I	काव्य साहित्य : 1) अकाल और उसके बाद - नागार्जुन 2) कहाँ तो तय था चिरागों हरेक घर के लिए - दुष्यंत कुमार 3) इस को भी अपनाता चल - गोपालदास 'नीरज' 4) पालतू कुत्ता - मालती शर्मा 5) घर - श्रीप्रकाश शुक्ल उक्त रचनाओं का, कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाएँ
इकाई-II	कहानी साहित्य : 1) उसने कहा था - चंद्रधर शर्मा 'गुलेरी' 2) मिखारन - रविंद्रनाथ टागोर 3) ककड़ी की कीमत - चतुरसेन शास्त्री 4) कप्तान - शिवरानी देवी 5) बदबू - सूरजपाल चौहान उक्त रचनाओं का, कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाएँ

बी. एससी. द्वितीय वर्ष विज्ञान (शैक्षिक वर्ष 2020-2021 से)

चतुर्थ अयन (Fourth Semester)

पाठ्यचर्या : AECC- 2B हिंदी काव्य तथा कहानी साहित्य

शुक्रार्क (Credit)



उद्देश्य :

1. छात्रों को काव्य साहित्य से अवगत कराना।
2. छात्रों को कहानी साहित्य से अवगत कराना।
3. छात्रों में काव्य लेखन कौशल विकसित करना।
4. छात्रों में कहानी लेखन कौशल विकसित करना।
5. छात्रों में साहित्यालोचन दृष्टि विकसित करना।

इकाई	पाठ्यविषय	तासिकाई
इकाई-I	काव्य साहित्य : 1) झौंसीवाली रानी - सुभद्राकुमारी घोहान 2) मधुशाला - हरिवंशराय बच्चन 3) गीत फरोश - भवानीप्रसाद मिश्र 4) रोटी और संसद - धूमिल 5) मूख - सर्वेश्वरदयाल सकसेना उक्त रचनाओं का, कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाई
इकाई-II	कहानी साहित्य : 1) पत्नी - जैनेंद्र कुमार 2) बेटा - अमृता प्रीतम 3) शर्त-रतनकुमार सांभरिया 4) स्वेटर - अशोकजमनानी 5) ईश्वर का हृद - मनोज रुपडा उक्त रचनाओं का, कथ्यगत एवं शिल्पगत अध्ययन।	15 तासिकाई

Principal

Art's, Commerce & Science College
Alkuli, Tal. Parner, Dist. A' Nagar

प्रथम वर्ष कला (F.Y.B.A.) (सामान्य)
(द्वितीय अयन)

पाठ्यचर्या : वैकल्पिक हिंदी प्रश्नपत्र - 1 B

3 कर्मांक

उद्देश्य :

1. छात्रों को हिंदी काव्य साहित्य का परिचय देना।
2. हिंदी कहानी साहित्य से अवगत कराना।
3. निबंध लेखन कौशल को विकसित करना।
4. छात्रों को विज्ञापन लेखन से अवगत करना।



	द्वितीय सत्र/द्वितीय अयन
इकाई- I	काव्य साहित्य : आदमी को प्यास लगती है - ज्ञानेंद्रपति रोशनी के उस पार - ओमप्रकाश वाल्मीकि उतनी दूर मत ब्याहना बाबा - निर्मला पुत्तुल किताबें झाँकती हैं - गुलज़ार नींव की ईंट हो तुम दीदी - उदयप्रकाश
इकाई -II	गद्य विधा : सरजू मैया - रामवृक्ष बेनीपुरी (रिखाचित्र) भय - आ. रामचंद्र शुक्ल (निबंध) एक वृंद सहसा उछली - अज्ञेय (यात्रा वर्णन) अकबरी लौटा - अन्नपूर्णानंद वर्मा (व्यंग्य) प्रतिशोध - डॉ. रामकुमार वर्मा (एकांकी)
इकाई -III	एकांकी तथा साहित्येतर पाठ्यक्रम : लेखन कौशल : स्ववृत्त लेखन निबंध लेखन विज्ञापन लेखन : (दैनिक पत्र-पत्रिकाओं के लिए) वाक्य शुद्धिकरण (संज्ञा, सर्वनाम, विशेषण क्रिया के संबंध में)

(उपर्युक्त सभी इकाइयों से आलोचनात्मक प्रश्न पूछे जाएँगे। पाँचवा प्रश्न ससंदर्भ व्याख्या का पूछा जाएगा जिसमें प्रथम दो इकाइयों से ससंदर्भ व्याख्या के लिए प्रश्न पूछा जाएगा।)

अंक विभाजन - पूर्णांक : 100

आंतरिक मूल्यांकन - 30 (लघुत्तरी परीक्षा - 15, शोध परियोजना - 10, प्रस्तुतिकरण - 05)

सत्रांत परीक्षा - 70

आलोचनात्मक प्रश्न : 4 x 15 = 60

ससंदर्भ व्याख्या : 2 x 05 = 10

Principal
Art's, Commerce & Science College

प्रथम वर्ष कला (F.Y.B.A.) (सामान्य)
(प्रथम अयन)



पाठ्यचर्या : वैकल्पिक हिंदी प्रश्नपत्र - I A

3 कर्मांक

उद्देश्य :

1. छात्रों को हिंदी काव्य साहित्य का परिचय देना।
2. हिंदी कहानी साहित्य से अवगत कराना।
3. हिंदी भाषा द्वारा संवाद कौशल विकसित करना।
4. मौलिक लेखन की ओर रुझान बढ़ाना।
5. विज्ञापन लेखन कौशल विकसित करना।
6. अनुवाद संबंधी जानकारी देना।
7. हिंदी कंप्यूटिंग का परिचय देना।

	प्रथम सत्र/प्रथम अयन
इकाई - I	कहानी साहित्य : एक टोकरी भर मिट्टी - माधवराव सप्रे ईदगाह - प्रेमचंद जिंदगी और गुलाब के फूल - उषा प्रियंवदा युद्ध - शानी मिसेस डिसूजा के नाम पत्र - अलका सरावगी
इकाई - II	काव्य साहित्य : जुही की कली - निराला मैं नीर भरी दुख की बदली - महादेवी वर्मा कालिदास - नागार्जुन रोटी और संसद - धूमिल धार - अरुण कमल
इकाई - III	साहित्येतर पाठ्यक्रम : संवाद कौशल, सूत्रसंचालन, समूह चर्चा हिंदी कंप्यूटिंग : यूनिकोड (Unicode) की जानकारी। इंटरनेट की सामान्य जानकारी हिंदी सॉफ्टवेयर की जानकारी।

(उपर्युक्त सभी इकाइयों से आलोचनात्मक प्रश्न पूछे जाएँगे। पाँचवा प्रश्न ससंदर्भ व्याख्या का पूछा जाएगा जिसमें प्रथम दो इकाइयों से ससंदर्भ व्याख्या के लिए प्रश्न पूछा जाएगा।)

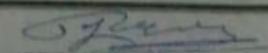
अंक विभाजन - पूर्णांक : 100

आंतरिक मूल्यांकन - 30 (लघुत्तरी परीक्षा - 15, शोध परियोजना - 10, प्रस्तुतिकरण - 05)

सत्रांत परीक्षा - 70

आलोचनात्मक प्रश्न : 4 x 15 = 60

ससंदर्भ व्याख्या : 2 x 05 = 10


Principal
Art's, Commerce & Science College
Akkut, Tal. Pamer, Dist. Ahangal

प्रथम वर्ष वाणिज्य (F.Y.B.com) (सामान्य)
(प्रथम अयन)



पाठ्यचर्चा : वैकल्पिक हिंदी प्रश्नपत्र - I A

3 कर्मांक

उद्देश्य :

1. छात्रों को हिंदी काव्य साहित्य का परिचय देना।
2. हिंदी कहानी साहित्य से अवगत कराना।
3. हिंदी भाषा द्वारा संवाद कौशल विकसित करना।
4. मौलिक लेखन की ओर रुझान बढ़ाना।
5. विज्ञापन लेखन कौशल विकसित करना।
6. हिंदी कंप्यूटिंग का परिचय देना।

	प्रथम सत्र/प्रथम अयन
इकाई - I	काव्य साहित्य : स्वदेश के प्रति - सुमद्राकुमारी चौहान हो गई पीर - दुष्यंत कुमार पिता के जूते - अशोक वाजपेयी पेड़ की पुकार - शंभुनाथ सिंह उदास तुम - धर्मवीर भारती
इकाई - II	कहानी साहित्य : मोलराम का जीव - हरिशंकर परसाई उसने कहा था - चंद्रधर शर्मा गुलेरी व्यथा का सरगम - अमृतराय जंगल दाह - स्वयंप्रकाश सबसे कठिन काम - मधु कांकरिया
इकाई - III	साहित्येतर पाठ्यक्रम : अंक तथा गणितीय चिह्नों का देवनागरी में लेखन हिंदी कंप्यूटिंग : यूनिकोड (Unicode) की जानकारी। इंटरनेट की सामान्य जानकारी हिंदी सॉफ्टवेयर की जानकारी।

(उपर्युक्त सभी इकाइयों से आलोचनात्मक प्रश्न पूछे जाएंगे। पाँचवा प्रश्न ससंदर्भ व्याख्या का पूछा जाएगा जिसमें प्रथम दो इकाइयों से ससंदर्भ व्याख्या के लिए प्रश्न पूछा जाएगा।)

अंक विभाजन - पूर्णांक : 100

आंतरिक मूल्यांकन - 30 (लघुत्तरी परीक्षा - 15, शोध परियोजना - 10, प्रस्तुतिकरण - 05)

सत्रांत परीक्षा - 70

आलोचनात्मक प्रश्न : 4 x 15 = 60

ससंदर्भ व्याख्या : 2 x 05 = 10

प्रथम वर्ष वाणिज्य (F.Y.B.com) (सामान्य)
(द्वितीय अयन)

पाठ्यचर्या : वैकल्पिक हिंदी प्रश्नपत्र – 1 B

3 कर्मांक

1. छात्रों को हिंदी काव्य साहित्य का परिचय देना।
2. हिंदी कहानी साहित्य से अवगत कराना।
3. हिंदी भाषा द्वारा संवाद कौशल विकसित करना।
4. विज्ञापन लेखन के प्रकारों को अवगत करना।
5. अनुवाद का स्वरूप से अवगत करना।
6. पारिभाषिक शब्दावली से अवगत कराना।



	द्वितीय सत्र/द्वितीय अयन
इकाई – I	काव्य साहित्य : अब की लौटा तो – कुंवरनारायण कलगी बाजरे की – अज्ञेय माँझी का पूल – केदारनाथ सिंह बापू के प्रति – सुमित्रानंदन पंत माँ के लिए एक कविता – कात्यायनी
इकाई – II	कहानी साहित्य : पहलवान की ढोलक – फणीश्वरनाथ रेणु सलाम – ओमप्रकाश वाल्मीकि बच्चे का सपना – शेखर जोशी बोलनेवाली औरत – ममता कालिया घिट्टी – अखिलेश
इकाई – III	साहित्येतर पाठ्यक्रम : संवाद कौशल अनुवाद: स्वरूप, परिभाषा, व्यावहारिक पक्ष पारिभाषिक (कार्यालयीन) 100 शब्दावली।

(उपर्युक्त सभी इकाइयों से आलोचनात्मक प्रश्न पूछे जाएँगे। पाँचवा प्रश्न ससंदर्भ व्याख्या का पूछा जाएगा जिसमें प्रथम दो इकाइयों से ससंदर्भ व्याख्या के लिए प्रश्न पूछा जाएगा।)

अंक विभाजन – पूर्णांक : 100

आंतरिक मूल्यांकन – 30 (लघुत्तरी परीक्षा – 15, शोध परियोजना – 10, प्रस्तुतिकरण – 05)

सत्रांत परीक्षा – 70

आलोचनात्मक प्रश्न : 4 x 15 = 60

ससंदर्भ व्याख्या : 2 x 05 = 10

**S.Y.B.Sc. Botany CBCS Pattern
(Semester III, Paper I) 2020-2021**

BO 231: Taxonomy of Angiosperms and Plant Ecology - 2 Credits (30 Lectures)

Sr. No.	Topic Details	No. of Lectures
	Credit-I	15
1.	Introduction to Angiosperms Taxonomy Definition, scope, objectives and importance of taxonomy Exploration, Description, Identification, Nomenclature and classification Concept of Systematics with brief historical background	02
2.	Systems of classification Comparative account of various systems of classification Artificial system- Carl Linnaeus Natural system- Bentham and Hooker Phylogenetic system- Engler and Prantl APG system- A brief review	05
3.	Study of Plant Families Study of following families with reference to systematic position (As per Bentham and Hooker's system of classification), salient features, floral formula, floral diagram and any five examples with their economic importance – Amnaceae, Brassicaceae, Myrtaceae, Rubiaceae, Solanaceae, Apocynaceae, Nyctaginaceae and Amaryllidaceae	08
	Credit-II	15
4.	Botanical Nomenclature Concept of nomenclature, brief history, Binomial nomenclature International Code for Nomenclature of Algae, Fungi and Plants (ICN)- Principles, Rules and Recommendations; 'Type' specimen and its types (Holotype, Paratype, Isotype, Lectotype, Neotype). Concept of Typification. Ranks and endings of taxa names, Coming of Genus and Species names Single, double and multiple authority citations	05
5.	Introduction to ecology Definition, concept, scope, and interdisciplinary approach, autecology and synecology. Species diversity: definition, concept, scope, and types: Alpha, Beta and Gamma diversity. Methods of vegetation sampling: quadrat method, transect method, plot less method Genetic Diversity: definition, nature and origin of genetic variations Species Diversity: definition, origin of species diversity, diversity indices, species abundance Ecosystem Diversity: definition, major ecosystem types of the world, Hotspots in India – concept and basis of 'hotspot' identification.	06
6.	Ecological grouping of the plants Ecological grouping of the plants with reference to their significance of adaptive external and internal features: a) Hydrophytes, b) Mesophytes c) Xerophytes d) Halophytes with examples.	04

REFERENCES:

1. Ainsworth, Sussman and Sparrow (1973). The Fungi. Vol. IV-A and IV-B. Academic Press.
2. Bilgrami, K.S. and Saha, L.C. (1992) A Textbook of Algae. CBS Publishers and Distributors, Delhi.
3. Gangulee, Das and Dutta (2002). College Botany. Vol. I, New Central Book Agency (P) Ltd.
4. Dube, H.C. (1990). An Introduction to Fungi. Vikas Publishing House Pvt. Ltd., Delhi.
5. Krishnamurthy, V. (2000). Algae of India and neighboring countries, Chlorophyta, Oxford and IBH, New Delhi.
6. Parihar, N.S. (1980). Bryophyta, An Introduction of Embryophyta. Vol. I. Central Book Distributors, Allahabad.
7. Puri, P. (1980). Bryophyta: Broad prospective. Atma Ram & Sons, Delhi.
8. Smith, G.M. (1971). Cryptogamic Botany. Vol. I: Algae & Fungi. Tata McGraw Hill Publishing Co., New Delhi.
9. Smith, G.M. (1971). Cryptogamic Botany. Vol. II: Bryophytes & Pteridophytes. Tata McGraw Hill Publishing Co., New Delhi.
10. Vashista, B.R., Sinha, A.K. and Singh, V.B. (2005). Botany for degree students- Algae, S. Chand Publication.
11. Vashista, B.R., Sinha, A.K. and Singh, V.B. (2005). Botany for degree students- Fungi, S. Chand Publication.
12. Vashista, B.R., Sinha, A.K. and Singh, V.B. (2005). Botany for degree students- Bryophytes, S. Chand Publication.

Choose one out of the two options, A and B.

CH-511 (A) : Environmental Chemistry

Chapter No.	Title of Topic/Chapter	No. of lecture
1	Concepts and Scope of Environmental Chemistry	06
2	Hydrosphere and Water Pollution	10
3	Analytical Techniques in water Analysis	10
4	Water pollution and treatment methods	10
Total		36

1: Concepts and Scope of Environmental Chemistry

(06L)

Introduction, Environmental Pollution and Classification, Units of concentration, Segments of Environment, Biogeochemical cycles of C, N, P, S and O system

Reference: 1, 2, 3

Aims and objectives: -Students should know:

- Importance and conservation of environment.
- Importance of biogeochemical cycles

2: Hydrosphere and Water Pollution

(10L)

Water resources, Hydrological Cycle: stages of hydrological cycle and chemical composition of water bodies, Microbially mediated aquatic reactions, Classification of water pollutants

Organic and Inorganic pollutants, Sewage and Domestic waste, Sediments, Detergents, Pesticides, Eutrophication, Sampling and monitoring water quality parameters: pH, D.O. (Winkler Method), COD, TOC, Total hardness, free chlorine.

Reference: 1 Page no -47-62,

Aims and Objectives:- Students should know:

- Water resources
- Hydrological Cycle
- Organic and inorganic pollutants
- Water quality parameters

3: Analytical Techniques in water Analysis

(10L)

Water quality parameters and standards, domestic water quality parameters, surface water, sampling, preservation, Monitoring techniques and methodology (pH, conductance, DO, ammonia, nitrate and nitrite, Cl, F, CN, Sulfide, sulphate, phosphate, total hardness, boron, metals and metalloids- As, Cd,

**S.Y.B.Sc. Botany CBCS Pattern
(Semester IV, Paper II) 2020-2021
BO 242: Plant Biotechnology (2 Cr- 30 Lectures)**

Credit I:**Chapter 1 Introduction to Plant Biotechnology** 3L

- 1.1 History and definition
- 1.2 Scope and importance of plant biotechnology
- 1.3 Current status of biotechnology in India.

Chapter 2 Plant Tissue Culture 8L

- 2.1 Concept of plant tissue culture and cellular totipotency
- 2.2 Basic techniques: Types of culture, Media preparation, sterilization, inoculation, incubation, hardening
- 2.3 Applications with reference to: Micropropagation, Somaclonal variation, Haploid production, Protoplast fusion & Somatic hybrids, Embryo rescue, Production of secondary metabolites.
- 2.4 Commercial Plant Tissue culture laboratories in Maharashtra and India.

Chapter 3 Single Cell Protein (SCP) 4L

- 3.1 Concept and definition
- 3.2 Importance of proteins in diet
- 3.3 Production of SCP from *Spirulina* and Yeast
- 3.4 Importance & acceptability of SCP

Credit II:**Chapter 4 Plant Genetic Engineering** 5L

- 4.1 Introduction, concept
- 4.2 Tools of genetic engineering (restriction enzymes, ligases, plasmid vectors)
- 4.3 Gene cloning Technique
- 4.4 Applications of plant genetic engineering: insect pest resistance, abiotic stress tolerance, herbicide resistance

Chapter 5 Genomics, Proteomics and Bioinformatics 5L

- 5.1 Genomics- concept, types, methods used for whole genome sequencing
- 5.2 Proteomics-concept, types, methods used in proteome analysis
- 5.3 Bioinformatics-concept, database and its classification, data retrieval tools.

Chapter 6 Bioremediation 2L

- 6.1 Introduction and concept
- 6.2 Microbial remediation
- 6.3 Phytoremediation

Chapter 7 Biofuel technology 3L

- 7.1 Definition, Concept and types of Renewable and nonrenewable energy sources
- 7.2 Definition and concept of Biogas, Bioethanol, Biobutanol, Biodiesel & Biohydrogen

BO 113: PRACTICALS BASED ON BO 111 & BO 112 (1.5 CREDITS)

1. Study of Life Cycle of *Spirogyra*. 1 P
2. Study of Life Cycle of *Agaricus*. 1 P
3. Study of Life Cycle of *Riccia*. 1 P
4. Study of forms of Lichens- Crustose, Foliose and fruticose. 1 P
5. Study of Mushroom Cultivation. 1 P
6. One day visit to study Algae, Fungi, Bryophytes and Lichens. 1 P
7. Study of Inflorescence. 2 P
 - a. Racemose: Raceme, Spike, Spadix, Catkin, Corymb, Umbel and Capitulum
 - b. Cymose: Solitary cyme, Uniparous cyme: helicoid and scorpioid, Biparous cyme and Multiparous cyme.
 - c. Special type: Verticillaster, Hypanthodium and Cyathium.
8. Study of flower with respect to Calyx, Corolla and Perianth, Androecium and Gynoecium. 2 P
9. Study of fruits with suitable examples. 2 P
 - a) Simple fruit: Dry: Achene, Cypsella and Legume; Fleshy: Berry and Drupe.
 - b) Aggregate fruit: Etaerio of follicles and Etaerio of Berries.
 - c) Multiple fruit: Syconus and Sorosis.
10. Study of internal primary structure of dicotyledonous root and stem e.g. Sunflower. 1 P
11. Study of internal primary structure of monocotyledonous root and stem e.g. Maize. 1 P
12. Study of internal primary structure of dicotyledonous and monocotyledonous leaf e.g. Sunflower and Maize. 1 P

SEMESTER-I: PAPER-II**BO-112: PLANT MORPHOLOGY AND ANATOMY (30 Lectures)****CREDIT-I****15 Lectures (15 hours)****1. MORPHOLOGY:****2 L**

1.1: Introduction, definition, descriptive and interpretative morphology.

1.2: Importance in identification, nomenclature, classification, phylogeny and Plant breeding.

2. MORPHOLOGY OF REPRODUCTIVE PARTS:**2.1: INFLORESCENCE:****3 L**

2.1.1 Introduction and definition

2.1.2 Types:

a) Racemose -Raceme, Spike, Spadix, Corymb, Umbel, Catkin and Capitulum.

b) Cymose -Solitary, Monochasial- Helicoid and scorpioid; Dichasial and Polychasial.

c) Special types -Verticillaster, Cyathium and Hypanthodium.

2.1.3 Significance

2.2: FLOWER:**7 L**

2.2.1 Introduction and definition

2.2.2 Parts of a typical flower: Bract, Pedicel, Thalamus- forms, Perianth- Calyx and Corolla, Androecium and Gynoecium.

2.2.3 Symmetry: Actinomorphic and zygomorphic, Sexuality- Unisexual and bisexual, Insertion of floral whorls on thalamus- Hypogyny, Epigyny and perigyny, Merous condition-Trimerous, tetramerous and pentamerous.

2.2.4 Floral whorls:

a) **Calyx:** Nature- Polysepalous, Gamosepalous; Aestivation- types, Modifications of Calyx- Pappus, Petaloid and Spurred.b) **Corolla:** Forms of Corolla-

i) Polypetalous- Cruciform and Papilionaceous.

ii) Gamopetalous- Infundibuliform, Bilabiate, Tubular and Campanulate.

iii) Aestivation- types and significance.

c) **Perianth:** Nature- Polytepalous, Gamotepalous.d) **Androecium:** Structure of typical stamen, Variations- cohesion and adhesion.e) **Gynoecium:** Structure of typical carpel, number, position, cohesion and adhesion; placentation- types and significance.**2.3: FRUITS:****3 L**

2.3.1 Introduction and definition

2.3.2 Types of fruits:

a) **Simple:** Indehiscent - Achene, Cypsela, Nut and Caryopsis.

Dehiscent - Legume, Follicle and Capsule.

b) **Fleshy:** Drupe, Berry, Hesperidium and Pepo.c) **Aggregate:** Etaerio of Berries and Etaerio of Follicles.d) **Multiple fruits:** Syconus and Sorosis.

CREDIT- II**15 Lectures (15 Hours)****3. ANATOMY:****2 L**

3.1 Introduction and definition

3.2 Importance in Taxonomy, Physiology, Ecological interpretations, Pharmacognosy and Wood identification.

4. TYPES OF TISSUES:**8 L**

Outline with brief description, simple and complex tissues.

4.1: **Meristematic tissues:** Meristem, characters and types based on origin, position and plane of division, functions.4.2: **Permanent tissues:** Simple tissues - parenchyma, collenchymas, chlorenchyma and sclerenchyma.4.3: **Complex/Vascular tissues:** Components of xylem and phloem, types of vascular bundles and functions.4.4: **Epidermal tissues:** Epidermis, structure of typical stomata, trichomes, motor cells; functions.**5. INTERNAL ORGANIZATION OF PRIMARY PLANT BODY:****5 L**

5.1: Internal structure of dicotyledon and monocotyledon root.

5.2: Internal structure of dicotyledon and monocotyledon stem.

5.3: Internal structure of dicotyledon and monocotyledon leaf.

REFERENCES:

1. Chandurkar, P.J. (1989). Plant Anatomy. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
2. Dutta, A.C. (2003). Botany for Degree students. Oxford University Press, New Delhi.
3. Eames, J. and Mc. Daniels (1994). An Introduction to Plant Anatomy. Tata McGraw Hill Publishing Comp., New Delhi.
4. Esau, K. (1993). Plant Anatomy. Wiley Eastern Ltd, New Delhi.
5. Esau, K. (2006). Anatomy of seed plants. John Wiley and Sons, New York.
6. Fahn, A. (1974). Plant Anatomy. Pergamum Press Oxford.
7. Gangulee, Das and Dutta (2002). College Botany. Vol. I. New Central Book Agency, Kolkata.
8. Lawrence, G.H.M. (2012). Taxonomy of vascular Plants. Scientific Publishers (India) Jodhpur.
9. Naik, V.N. (1994). Taxonomy of Angiosperms. Tata McGraw Hill Publishing Comp., New Delhi.
10. Pandey, B.P. (2007). Plant Anatomy. S. Chand and Co. Ltd. New Delhi.
11. Pandey, B.P. (2009). A Text Book of Botany- Angiosperms. S. Chand and Co. Ltd. New Delhi.
12. Radford, Albert E. (1986). Fundamentals of Plant Systematics. Publ. Harper and Row, New York.
13. Saxena, A.K. and Sarabhai, R.P. (1968). A Text Book of Botany. Vol. III. Ratan Prakashan mandir, Agra.
14. Sharma, O.P. (1993). Plant Taxonomy. 2nd Edition, McGraw Hill Education, New Delhi.
15. Singh, Gurucharan (2005). Systematics- Theory and Practice. Oxford IBH.
16. Sutaria, R.N.A. Text Book of Systematic Botany.
17. Tayal, M.S. (2012). Plant Anatomy. Rastogi Publications.

दुसरे सत्र
पर्यायी अभ्यासक्रम

विषयाचे नाव : व्यावहारिक व उपयोजित मराठी भाग १ [CC-1 A]

घटक	तपशील	श्रेयांक	तासिका
१	संवाद लेखन : १. विविध माध्यमांसाठी होणारे संवाद. २. सुचविलेल्या प्रसंगावर आधारित संवाद लेखन ३. इ-संवाद (ई-मेल)	१	१५
२	भाषांतर : १. भाषांतर म्हणजे काय ? भाषांतर शास्त्र की कला ? २. भाषांतराची आवश्यकता, भाषांतर करताना येणाऱ्या अडचणी. ३. भाषांतर आणि रूपांतर, लक्ष्यनिष्ठ आणि मूलनिष्ठ भाषांतर. ४. इंग्लिश उताऱ्याचे मराठी अथवा हिंदी भाषांतर.	१	१५
३	उपयोजित मराठीची आविष्कार रूपे : १. टिप्पणी लेखन २. इतिवृत्त लेखन ३. घोषणा पत्रक ४. हस्तपत्रक ५. घडीपत्रक ६. स्मरणपत्र ७. स्मरणिका निर्मितीचा आराखडा ८. आशयलेखन (Content Writing) ९. जाहिरात लेखन.	१	१५

संदर्भ ग्रंथ

तृतीय वर्ष कला (T. Y. B. A.)

नियमित अभ्यासक्रम

पहिले सत्र

विषयाचे नाव

भाषिक कौशल्यविकास आणि आधुनिक मराठी साहित्यप्रकार : प्रवासवर्णन [CC – I E (3)]

अभ्यासक्रमाची उद्दिष्टे :

- मुद्रित माध्यमांसाठी लेखन कौशल्ये आत्मसात करणे.
- प्रवासवर्णन या साहित्यप्रकाराचे स्वरूप, प्रेरणा, प्रयोजने, वैशिष्ट्ये आणि वाटचाल समजून घेणे.
- नेमलेल्या प्रवासवर्णनाचे आकलन, आस्वाद आणि विश्लेषण करणे.

घटक		तपशील	श्रेयांक	तासिका
१	अ	मुद्रित माध्यमांसाठी लेखन कौशल्ये : १ वृत्तलेख : स्वरूप व वैशिष्ट्ये २ अग्रलेख : स्वरूप व वैशिष्ट्ये ३ सदर लेखन : स्वरूप व वैशिष्ट्ये ४ परीक्षण : स्वरूप व वैशिष्ट्ये	१	१५
	ब	प्रवासवर्णन साहित्यप्रकार : स्वरूप, प्रेरणा, प्रयोजने, वाटचाल आणि वैशिष्ट्ये		
२		अभ्यासपुस्तक तीन मुलांचे चार दिवस आदर्श पाटील, विकास वाळके, श्रीकृष्ण शेळके साधना प्रकाशन, पुणे	२	३०

संदर्भ ग्रंथ :

- साहित्य अध्यापन आणि प्रकार, संपादक श्री. पु. भागवत आणि इतर
- मराठी प्रवासवर्णनांची वाटचाल, डॉ. नीला पांडे
- मराठी वाङ्मय इतिहास, खंड ४, महाराष्ट्र साहित्य परिषद, पुणे
- मराठी वाङ्मय इतिहास, खंड ७, भाग १, महाराष्ट्र साहित्य परिषद, पुणे
- आधुनिक मराठी वाङ्मयाचा इतिहास, खंड १ आणि २, अ. ना. देशपांडे
- प्रवासवर्णन एक वाङ्मयप्रकार, वसंत सावंत
- प्रदक्षिणा खंड २, वि. ह. कुलकर्णी
- अग्रलेख, गोविंद तळवलकर, प्रेस्टीज प्रकाशन, पुणे.
- मुद्रित माध्यमांसाठी लेखन कौशल्ये : पुस्तक पहिले व दुसरे, य. च. म. मु. वि. नाशिक
- आधुनिक मराठी वाङ्मय : स्वरूप, आकलन आणि आस्वाद, सांगळे संदीप
- <https://shabdakosh.marathi.gov.in/ananya-glossary>
- <https://shabdakosh.marathi.gov.in/>

पुणे विद्यापीठ
प्रथम वर्ष वाणिज्य

विषय : मराठी - पुनर्रचित अभ्यासक्रम , जून २०१३ पासून पुढे

मराठी : अभ्यासक्रमपत्रिका (1521)

प्रथम सत्र

६० गुण

- अ- निबंध लेखन - वैचारिक, ललित आणि वाणिज्य विषयक
ब- पाठ्यपुस्तक - ' यशोगाथा ' - डॉ. प्र. चिं. शेजवलकर

• दुसरे सत्र

व्यावहारिक आणि उपयोजित मराठी

१ निबंधलेखन

२ प्रशासनिक मराठी

- अ अर्जलेखन
ब कार्यालयीन टिपणीलेखन,
क इतिवृत्त लेखन,
ड घोषणापत्रक
इ निविदा
फ माहितीपत्रक

३ जाहिरात लेखन आणि जाहीर निवेदन

४ वाणिज्यविषयक पारिभाषिक संज्ञा

५ सारांशलेखन

६ भाषांतर (इंग्लिशचे मराठीत)

दुसरे सत्र

विषयाचे नाव - भाषा आणि कौशल्यविकास [११७]
(Ability Enhancement Course)

घटक	तपशील	श्रेयांक	तासिका
१	अर्जलेखन व पत्रलेखन : १. अर्जलेखन : अर्जाचे विविध नमुने - विनंती अर्ज, नोकरीसाठी अर्ज, माहितीच्या अधिकारातील अर्ज, संगणकीय अर्जलेखन-युनिकोडमधून मायक्रोसॉफ्ट वर्डमध्ये अर्ज. २. पत्रलेखन : खासगी पत्रव्यवहार, प्रशासनिक पत्रव्यवहार, व्यावसायिक पत्रव्यवहार, ई-मेल.	१	१५
२	प्रशासनिक मराठी : १. इतिवृत्त लेखन २. माहितीपत्रक ३. जाहीर निवेदन ४. वाणिज्य व माहिती तंत्रज्ञानविषयक पारिभाषिक संज्ञा	१	१५
३	प्रगत भाषिक कौशल्ये : १. सारांशलेखन २. भाषांतर- (इंग्लिश - मराठी) जाहिरातलेखन : १. आकाशवाणी २. वृत्तपत्र ३. दूरचित्रवाणी	१	१५

१. व्यावहारिक मराठी, पुणे विद्यापीठ प्रकाशन, पुणे.
२. व्यावहारिक मराठी, डॉ. कल्याण काळे, डॉ. दत्तात्रय पुंडे, निराली प्रकाशन, पुणे.
३. व्यावहारिक मराठी, डॉ. लीला गोविलकर, डॉ. जयश्री पाटणकर, स्नेहवर्धन प्रकाशन, पुणे.
४. व्यावहारिक मराठी, डॉ. सयाजीराजे मोकाशी, प्रा. रंजना नेमाडे
५. व्यावहारिक मराठी, डॉ. ल. रा. नसिराबादकर, फडके प्रकाशन, कोल्हापूर
६. प्रसारमाध्यमांसाठी लेखन कौशल्ये, य.च.म.मुक्त विद्यापीठ, नाशिक.
७. कहाणी वर्तमानपत्राची, चंचल सरकार अनुवाद, दिनकर गांगल, नॅशनल बुक ट्रस्ट
८. द्विभाषी व्यावहारिक शब्दकोश (इंग्लिश - मराठी) गणेश ओतुरकर
९. प्रसारमाध्यमे आणि मराठी भाषा, संपादक डॉ. भास्कर शेळके.
१०. व्यावहारिक मराठी भाषा, शरदिनी मोहिते
११. भाषांतर मीमांसा, डॉ. कल्याण काळे
१२. व्यावहारिक, उपयोजित मराठी आणि प्रसारमाध्यमे, संपादक डॉ. संदीप सांगळे
१३. व्यावहारिक आणि उपयोजित मराठी, डॉ. मनोहर रोकडे
१४. मराठी भाषा उपयोजन आणि सर्जन, प्रा. सुहासकुमार बोबडे
१५. उपयोजित मराठी, डॉ. केतकी मोडक, प्रा. सुजाता शेणई, संतोष शेणई
१६. व्यावहारिक मराठी, प्रकाश परब
१७. व्यावहारिक मराठी, संपादक डॉ. स्नेहल तावरे, स्नेहवर्धन प्रकाशन, पुणे.
१८. निबंध : शास्त्र व कला, डॉ. प्र. न. जोशी
१९. निबंध व लेखन, निर्मला किराणे.
२०. भाषांतरमीमांसा, संपादक डॉ. रमेश वरखेडे, य. च. म. मुक्त विद्यापीठ, नाशिक.