Estd. 1962
"A++" Accredited by NAAC (2021)
With CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR - 416004, MAHARASHTRA
PHONE:EPABX-2609000, www.unishivaji.ac.in, bos@unishivaji.ac.in
शिवाजी विद्यापीठ, कोल्हापूर -४१६००४,महाराष्ट्र
दूरध्वनी-ईपीएबीएक्स -२६०९०००, अभ्यासमंडळे विभाग दुरध्वनी ०२३१—२६०९०९४
०२३१—२६०९४८७

Ref.No.SU/BOS/Science/434 **Date: 15/07/2025**

To,

The Principal,
All Concerned Affiliated Colleges/Institutions
Shivaji University, Kolhapur.

Subject: Regarding revised syllabi of B.Sc. Part-II (Sem.III & IV) degree programme under the Faculty of Science and Technology as per NEP-2020 (2.0)

Ref: No.SU/BOS/Science/270 & 271 Date: 03/05/2025 Letter.

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the university authorities have accepted and granted approval to the syllabi, nature of question paper of B.Sc. Part-II (Sem.III & IV) degree programme under the Faculty of Science and Technology as per NEP-2020 (2.0).

B.Sc.Part-II (Sem. III & IV) as per NEP-2020 (2.0)			
1.	Botany	8.	Geology
2.	Statistics	9.	Zoology
3.	Mathematics	10.	Chemistry
4.	Microbiology	11.	Electronics
5.	Plant Protection	12.	Industrial Microbiology
6.	B.A./B.A.B.Ed. Geography	13.	Biotechnology(Voc/Opt)
7.	Biotechnology(Entire)		

This syllabus, nature of question and equivalence shall be implemented from the academic year 2025-2026 onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website www.unishivaji.ac.in NEP-2020@suk(Online Syllabus)

The question papers on the pre-revised syllabi of above-mentioned course will be set for the examinations to be held in October /November 2025 & March/April 2026. These chances are available for repeater students, if any.

You are, therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Dy Registrar
Dr. S. M. Kubal

Encl: As above

for Information and necessary action

Copy to:

1	Dean, Faculty of Science & Technology	6	Appointment Section A & B
2	Director, Board of Examinations and Evaluation	7	I.T.Cell /Computer Centre
3	Chairman, Respective Board of Studies	8	Eligibility Section
4	B.Sc.-M.Sc. Exam Section	9	Affiliation Section (T.1) (T.2)
5	Internal Quality Assurance Cell (IQAC Cell)	10	P.G. Seminar Section

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शिवाजी विद्यापीठ, कोल्हापूर -४१६००४,महाराष्ट्र
दूरध्वनी-ईपीएबीएक्स -२६०९०००, अभ्याससमंडळे विभाग दुरध्वनी ०२३१—२६०९०९४
०२३१—२६०९४८७

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B.Sc.Part-II (Sem. III & IV) as per NEP-2020 (2.0)			
1.	Botany	8.	Geology
2.	Physics	9.	Zoology
3.	Statistics	10.	Chemistry
4.	Mathematics	11.	Electronics
5.	Microbiology	12.	Drug Chemistry
6.	Plant Protection	13.	Industrial Microbiology
7.	Astrophysics and Space Science	14.	Sugar Technology (Entire)

This syllabus, nature of question and equivalence shall be implemented from the academic year 2025-2026 onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website www.unishivaji.ac.in NEP-2020@suk(Online Syllabus)

The question papers on the pre-revised syllabi of above-mentioned course will be set for the examinations to be held in October /November 2025 & March/April 2026. These chances are available for repeater students, if any.

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Thanking you,

Yours faithfully,

By Registrar
Dr. S. M. Kubal

Encl: As above

for Information and necessary action

Copy to:

1	Dean, Faculty of Science & Technology	6	Appointment Section A & B
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4	B.Sc.-M.Sc. Exam Section	9	Affiliation Section (T.1) (T.2)
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SHIVAJI UNIVERSITY, KOLHAPUR

Established: 1962

A++ Accredited by NAAC (2021) With CGPA 3.52

Bachelor of Arts

In

Geography

Under

Faculty of Science and Technology

B. A. / B. A. B. Ed. Part-II (Semester – III and IV)

STRUCTURE AND SYLLABUS IN ACCORDANCE WITH

NATIONAL EDUCATION POLICY – 2020

HAVING CHOICE BASED CREDIT SYSTEM

WITH MULTIPLE ENTRY AND MULTIPLE EXIT OPTIONS

TO BE IMPLEMENTED FROM ACADEMIC YEAR 2025-2026 ONWARDS

Shivaji University, Kolhapur

Second Year Bachelor of Arts (B. A. / B. A. B. Ed. -II) (UG DIPLOMA)

in Geography

Year	B. A. / B. A. B. Ed. - II
Semester	III & IV
Level	5.0
Total Credits	22 + 22 = 44
Degree Awarded	UG DIPLOMA (After 44 Credits in Total)

A-I) B. A. / B. A. B. Ed. – II: Semester-III (Total Credits-22):

Course Category		Course Name	Course Code	Credits
DSC-Major- III	Mandatory	Environmental Geography	BAU0325MML322C03	4
DSC-Major- IV		Basics of Map Making (Practical)	BAU0325MMP322C04	4
DSC-Minor-I		Resource Geography	BAU0325MNL322C01	4
IDC/MDC/ GEC/OE	OE	Geography of Rural Development	BAU0325OEL322C03	2
VSC/SEC	VSC	Soil Analysis (Practical)	BAU0325VSP322C01	2
	SEC	Geo-statistics and Data Visualization (Practical)	BAU0325SEP322C03	2
AEC/VAC/ IKS	AEC	--	--	2
	IKS	Water Management in Ancient India	BAU0325IKL322C01	2
	VAC	--	--	--
	CC	--	--	--
Credits for B. A./ B. A. B. Ed. – II SEM-III				**22**

A-I) B. A. / B. A. B. Ed. – II: Semester-IV (Total Credits-22):

Course Category		Course Name	Course Code	Credits
DSC-Major- V	Mandatory	Physical Geography of Maharashtra	BAU0325MML322D05	4
DSC-Major- VI		Quantitative Techniques in Geography (Practical)	BAU0325MMP322D06	4
DSC-Minor-II		Cultural Geography	BAU0325MNL322D02	4
IDC/MDC/ GEC/OE	OE	Agro-based Rural Development and Planning	BAU0325OEL322D04	2
VSC/SEC	VSC	Water Survey and Mapping (Practical)	BAU0325VSP322D02	2
	SEC	Land Record (Practical)	BAU0325SEP322D04	2
AEC/VEC/ IKS	AEC	--	--	2
	IKS	--	--	--
	VEC	--	--	2
	CC	--	--	--
Credits for B. A./ B. A. B. Ed. – II SEM-IV				**22**

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. II
Geography
Semester III
Major III: Environmental Geography as per NEP 2020

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B.A. / B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	III
Name of Vertical Group	**:**	Major III and Minor I
Course Code	**:**	BAU0325MML322C03
Course Title	**:**	Environmental Geography
Total Credit	**:**	04
Workload	**:**	04 credit X 15 Hours = 60 hours in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	80:20, The pattern of examination will be Semester End Examination with Internal Assessment / Evaluation.

Preamble:

Environmental Geography is an interdisciplinary field that explores the dynamic interactions between humans and the environment, focusing on spatial patterns, processes, and issues related to the natural world. This course seeks to equip students with the knowledge and analytical skills necessary to understand and address contemporary environmental challenges from both a geographical and ecological perspective.

The syllabus provides a comprehensive overview of key environmental concepts, such as environmental pollution, global warming, climate change, ozone depletion, biodiversity hotspots and explore environmental policies, planning and management.

It delves into the complex ways in which physical landscapes and human societies interact, emphasizing the role of geographical factors in shaping environmental outcomes. Students will examine human impact on the environment.

General Objectives of the Course:

1. To familiarize students with the fundamental concepts of Environmental Geography.
2. To explore how human societies impact, adapt to, and modify their environment.
3. To examine pressing global and local environmental issues such as pollution, global

warming, climate change, ozone depletion, biodiversity hotspots etc.

4. To analyze the spatial distribution of environmental problems and how geographical factors, such as location, climate, and landforms, influence these issues.
5. To provide insight into environmental policies, governance, and the role of national, and local organizations in addressing environmental challenges.

Course Outcomes:

By the end of the course, students will be able to:

1. Demonstrate an understanding of key concepts of Environmental Geography.
2. Critically analyze environmental problems at local, national, and global levels, such as pollution, global warming, climate change, ozone depletion, and biodiversity loss.
3. Identify the causes and effects of various environmental issues from a geographical perspective.
4. Gain knowledge of the role of national, and local governments, organizations, and policies in managing environmental resources, environmental planning and management and addressing environmental challenges.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Theory Teaching Hours per week				Examination scheme (Marks)		
		L	T	P	Total	Theory	Term Work	Total (Semester)
1	Environmental Geography - 4	04	04	---	04	80	20	100

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 100 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 80 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 20 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.

- Internal evaluation should be based on Group Activity / Case Study

Modules: Environmental Geography

Module No.	Module Name	Sub-module	No. of hours	Credit
1	Introduction to Environmental Geography	1.1 Definition, Nature and scope of Environmental Geography. 1.2 Types of Environment 1.3 Importance of Environmental Geography 1.4 Approaches to study of Environmental Geography	15	01
2	Environmental Pollution	2.1 Air pollution 2.2 Water pollution 2.3 Soil pollution 2.4 Noise Pollution (Concept, Causes, Effects and Measures)	15	01
3	Environmental Problems	3.1 Global Warming 3.2 Climate Change 3.3 Ozone Depletion 3.4 Biodiversity Hotspots in India	15	01
4	Environmental Policies, Planning and Management	4.1 Environmental Impact Assessment (EIA) 4.2 Environmental organizations in India 4.3 Environmental Policies and Acts in India 4.4 Need of Environmental Planning and Management	15	01

Suggested Readings:

1. Miller G.T., 2004, Environmental Science Working with the Earth, Thomson Books Cole, Singapure
2. Saxena H.M., 2017, Environmental Geography,(III ED) Rawat Publicastions, 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) Diamond Publishing, Pune. (Marathi)

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. II
Geography
Semester III
MAJOR IV: Basics of Map Making (Practical) as per NEP 2020

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B. A. / B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards
Semester	**:**	III
Name of Vertical Group	**:**	Major IV
Course Code	**:**	**BAU0325MMP322C04**
Course Title	**:**	**Basics of Map Making (Practical) - IV**
Total Credit	**:**	04
Workload	**:**	04 credit (4*30= 120 hours) in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	Practical for100 Marks, the pattern of examination will be Semester End Examination with Assessment / Evaluation

Preamble:

The field of cartography has been pivotal in human history, allowing us to navigate, explore, and understand the world around us. In the era of digital technology and geospatial innovations, the art and science of map-making have evolved, yet the foundational principles remain as important as ever. This course, "Basics of Map Making," aims to equip students with the essential skills and knowledge required to master the basics of cartography, from traditional methods to modern digital techniques.

General Objectives of the Course:

1. To understand the fundamental principles, definitions, and scope of cartography
2. To learn about different types of map scales and their practical applications
3. To gain a comprehensive understanding of various map projections
4. To learn the principles of effective map design and layout, create thematic maps, and use modern mapping technologies

Course Outcomes:

By the end of the syllabus, students will be able to:

1. Explain the fundamental concepts, historical development, and different types of maps
2. Identify, utilize, and convert various map scales accurately in practical applications
3. Understand, classify, and accurately draw different map projections based on their properties
4. Design balanced and visually appealing map layouts, create thematic maps, and employ modern mobile mapping tools for data collection and analysis

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned.

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Practical Hours per week				Examination scheme (Marks)		
1	Basics of Map Making - 4	L	T	P	Total	Practical	Term Work	Total (Semester)
		08	---	08	08	100	---	100

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The Practical paper shall carry 100 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of semester practical examination of 100 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper and Scheme of Marking:

(As per rules & regulation of Shivaji University)

Course Title: Basics of Map Making (Practical)-IV				
Module No.	**Module Name**	**Sub Module**	**No. of hours & Marks**	**Credit**
I	**Introduction to Cartography**	1.1 Definition, Nature and Scope of Cartography 1.2 History of cartography 1.3 Elements of Maps 1.4 Types of Maps **Practical Exercises:** a. Identification and comparison of different types of maps b. Annotating map elements c. Draw a sketch of local area with key elements labelled	30 (20)	1
II	**Understanding Map Scales**	2.1 Types of Map Scales: Verbal, Representative Fraction (RF) and Graphical 2.2 Conversion of Scales: RF to Verbal, Graphical Scale and Vice Versa 2.3 Types of Graphical Scales 2.4 Application of Map Scales in Real-World Scenarios **Practical Exercises:** a. Identifying map scales on various maps b. Drawing and converting different types of map scales c. Measuring distances on a map using different scales. d. Creating a scale conversion table e. Drawing simple linear, Time and Distance scales for different RF values	30 (20)	1

III	**Exploring Map Projections**	3.1 Principles of Map Projection 3.2 Classification of Map Projections: Cylindrical, Conical, Azimuthal, and Conventional 3.3 Applications and Limitations of Different Map Projections 3.4 Commonly Used Digital Projections in GIS Software **Practical Exercises:** a. Identifying map projections used in different maps. b. Drawing at least 3 projections, with emphasis on their properties and uses. (Zenithal Polar Gnomonic Projection, Cylindrical equal area projection, Simple Conical Projection with one Standard Parallel, Universal Transverse Mercator (UTM) Projection) c. Creating a map using a selected projection	30 (20)	1
IV	**Map Design & Mobile Mapping**	4.1 Principles of Map Design and Layout 4.2 Creating Thematic Maps 4.3 Mobile Navigation A-GPS 4.4 Mobile Mapping Apps **Practical Exercises:** a. Applying color schemes and symbols b. Designing a dot density map c. Create a map of a local area using Google Earth d. Collecting and plotting field data using Locus Map, Mappt and GPS Waypoints	30 (20)	1
V	Journal and Viva Voce		(20)	

Note:

1. Figures in the bracket indicate weightage of marks to concern module.
2. Use of stencils, log tables, computer and calculator are allowed.
3. Journal should be completed and duly certified by practical in-charge and Head of the Department.

Suggested Readings

1. Aher, A. B., Chodhari, A. P., & Bharambe, S. N. (2015). Techniques of spatial analysis. Prashant Publication, Jalgaon.
2. Bygott, J. (1964). An introduction to mapwork and practical geography. University Tutorial Press.
3. Khan, M. Z. A. (1998). Textbook of practical geography. Concept Publishing Company, New Delhi.
4. Khullar. Essentials of practical geography. New Academic Publishing Co, India.
5. Mishra, R. P., & Ramesh, A. (2000). Fundamentals of cartography. Concept Publishing Company, New Delhi.
6. Monkhouse, F. J., & Wilkinson, H. R. (1971). Maps and diagrams: Their compilation and construction. Methuen & Co. Ltd., London.
7. Negi, B. S. Practical geography. Kedar Nath Ram Nath, Meerut, Delhi.
8. Raisz, E. (1962). Principles of cartography. McGraw Hill Book Company, Inc., New York.
9. Robinson, A. H. (2010). Elements of cartography (6th ed.). John Wiley & Sons.
10. Saha, P. K., & Basu, P. (2010). Advanced practical geography: A laboratory manual. Books and Allied (P) Ltd, Kolkata.
11. Sarkar, A. (1997). Practical geography: A systematic approach. Orient Longman Limited, Calcutta.
12. Singh, G. (1996). Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi.
13. Singh, L. R. (2011). Fundamentals of practical geography. Sharda Pustak Bhawan.
14. Singh, R., & Kanaujia, L. R. S. Map work and practical geography. Central Book Depot, Allahabad.
15. Yeats, M. (1974). An introduction to quantitative analysis in human geography. McGraw Hill, New York.
16. National Atlas & Thematic Mapping Organization. NATMO Atlas. National Atlas & Thematic Mapping Organization. Retrieved from https://portal.natmo.gov.in/en/

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. Part-II
Semester - III
Minor I: Resource Geography (Geography) as per NEP 2020

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B.A.-II/ B. A. B. Ed.-II
Semester	**:**	III
Name of Vertical Group	**:**	Minor I
Course Code	**:**	BAU0325MNL322C01
Course Title	**:**	Resource Geography
Total Credit	**:**	04
Workload	**:**	04 credit X 15 Hours = 60 hours in semester
Duration	**:**	Semester
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination of Pattern	**:**	80:20, The pattern of examination will be Semester End Examination with Internal Assessment / Evaluation.
Nature of Question Paper	**:**	As per Shivaji University rules and regulations

Preamble:

Resource Geography is one of the important branches of human-environment interaction studies. It focuses on the spatial distribution, utilization, and management of natural and human resources. At present the world is facing unprecedented environmental and developmental challenges. In order to ensure sustainability and equity it is very essential to understand resource dynamics.

This syllabus is designed to introduce students to the fundamental concepts and scope of Resource Geography. It offers a solid foundation in the classification, significance, and geographic approach to studying resources. This syllabus explores major resource types through highlighting their spatial patterns, utilization, and associated challenges.

Recognizing the urgent need for sustainability, this syllabus equips students with knowledge of conservation techniques and the principles of balanced resource use. It emphasizes practical strategies such as rainwater harvesting, afforestation, and community-based management systems like Joint Forest Management. To bridge theory with practice, this syllabus focuses on resource planning in the Indian context, highlighting national strategies and successful grassroots initiatives. By exploring programs such as Jal Shakti Abhiyan, PM-KUSUM, and the Soil Health Card Scheme.

The course aims to foster analytical thinking, environmental responsibility, and policy awareness among students, preparing them to contribute to sustainable development and resource governance.

General Objectives of the Course:

1. To impart foundational knowledge of Resource Geography by explaining its meaning, nature, classification, and importance. (Remembering & Understanding)
2. To develop analytical skills for understanding the distribution, utilization, and associated problems of key resources such as water, forest, land, and human. (Analyzing)
3. To promote awareness and critical thinking about sustainable resource development and conservation techniques, including practical approaches like watershed management and afforestation. (Evaluating)
4. To encourage students to plan and suggest innovative strategies for resource planning in India by studying government programs and community-based models like Hiware Bazar and ZBNF. (Creating)

Course Outcomes:

After completing this course, students will be able to:

1. CO1 (Remembering & Understanding): Define Resource Geography and explain its scope, classification, and importance.

2. CO2 (Applying): Illustrate and interpret the patterns of distribution, utilization, and issues associated with water, forest, land, and human resources.

3. CO3 (Analysing & Evaluating): Analyse conservation techniques and assess the effectiveness of sustainable development practices like JFM, rainwater harvesting, and ZBNF.

4. CO4 (Creating): Propose integrated resource planning solutions based on Indian models (e.g., Hiware Bazar) to achieve sustainable development goals

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Teaching (Theory) Hours per week				Examination scheme (Marks)		
1	Resource Geography - 4	L	T	P	Total	Theory	Term Work	Total (Semester)
		04	04	---	04	80	20	100

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 100 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 80 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 20 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

- The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.
- Internal evaluation should be based on Group Activity / Case Study

Modules: Resource Geography				
Module No.	**Module Name**	**Sub-Module**	**No. of Hours**	**Credits**
1	**Introduction to Resource Geography**	1.1 Meaning and Definition of Resource Geography 1.2 Nature and Scope of Resource Geography 1.3 Classification of Resources 1.4 Importance of Resource Geography	15	01
2	**Major Resources**	2.1 Water: Distribution, Utilization and Problems 2.2 Forest: Types, Utilization and Problems 2.3 Land Resources – Land Cover and Land Use Patterns and Degradation 2.4 Human: Distribution and Problems	15	01
3	**Sustainable Resource Development**	3.1 Concept of Sustainable Resource Development 3.2 Water Conservation Techniques – Rainwater Harvesting & Watershed Management 3.3 Forest Conservation Strategies – Afforestation & Joint Forest Management (JFM) 3.4 Sustainable Human Resource Development	15	01
4	**Resource Planning in India**	4.1 Need for Sustainable Resource Planning in India 4.2 Strategies – Jal Shakti Abhiyan, National Afforestation Programme & PM-KUSUM 4.3 Practices – Water Budgeting (Hiware Bazar Model) & Social Forestry,	15	01

		4.4 Agricultural and Natural Resource Management: Organic Farming, Zero-Budget Natural Farming (ZBNF) & Soil Health Card Programme		

Suggested Readings

1. **Guha, J.L. & Chattarjee, P.** (2001). *Economic and Resource Geography*. Calcutta: MacDonald & Co.
2. **Zimmermann, E.W.** (1951). *World Resources and Industries*. Harper & Row Publishers.
3. **Cutter, S.L. et al.** (2002). *Explaining Differences in Vulnerability to Environmental Hazards*. Social Science Quarterly.
4. **Miller, G.T.** (2004). *Sustaining the Earth: An Integrated Approach*. Thomson Brooks/Cole.
5. **Singh, R.L.** (1976). *Readings in Resource Geography*. Varanasi: Kalyani Publishers.
6. **Blaikie, P., & Brookfield, H.** (1987). *Land Degradation and Society*. Methuen.
7. **United Nations Development Programme (UNDP)** – *Reports on Sustainable Development Goals (SDGs)*.
8. **Government of India Publications** – *Reports from Ministry of Environment, Forest and Climate Change (MoEFCC)* and *NITI Aayog*.
9. **Majid Husain** (2012). *Environment and Ecology: Biodiversity, Climate Change and Disaster Management*. McGraw Hill.
10. **Savindra Singh** – *Environmental Geography*. Prayag Pustak Bhawan.
11. **डॉ. विठ्ठल घारपुरे** – साधन*संपत्ती भूगोल*, पिंपाळपुरे अँड कं. पब्लिशर्स, नागपूर.
12. **डॉ. शशिकांत गोरे** – *संपत्ती भूगोल*, नंदिनी पब्लिकेशन, पुणे.
13. **प्रा. भालचंद्र देशमुख** – *संपत्ती व पर्यावरण भूगोल*, विजय पब्लिकेशन, औरंगाबाद.
14. **प्रा. वसंत नलावडे** – *संपत्ती भूगोलाचे मूलतत्त्व*, डायमंड पब्लिकेशन, पुणे.
15. **प्रा. रमेश जाधव** – *मानव व नैसर्गिक संपत्ती भूगोल*, पॉप्युलर प्रकाशन, मुंबई.
16. **प्रा. विजय पाटील** – *संपत्ती व पर्यावरणीय नियोजन*, जे. जे. पब्लिकेशन, कोल्हापूर.
17. **भारत सरकार** – *जलशक्ती अभियान, वनीकरण योजना, मृदा आरोग्य पत्रिका यासंबंधी अहवाल* (सरकारी प्रकाशने व संकेतस्थळे).

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. II
Geography
Semester IV
Major V: Physical Geography of Maharashtra as per NEP 2020 (2.0)

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B. A. / B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	IV
Name of Vertical Group	**:**	Major V and Minor-II
Course Code	**:**	**BAU0325MML322D05**
Course Title	**:**	**Physical Geography of Maharashtra**
Total Credit	**:**	04
Workload	**:**	04 credit (4 X 15 Hours) 60 hours in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	80:20, The pattern of examination will be Semester End Examination with Internal Assessment / Evaluation.

Preamble

This course on "Physical Geography of Maharashtra" provides a comprehensive understanding of Maharashtra's physiography, including its physical structure, climate, soil, forests, rivers, and mineral resources. The course aims to foster an appreciation of Maharashtra's unique geographical features and the challenges it faces in managing its natural resources sustainably. It also emphasizes the interrelationship between geography, natural resources, and human activities to encourage informed decision-making for regional development.

Objectives

1. To introduce the geographical, political, and administrative context of Maharashtra, highlighting its formation and development.
2. To analyse the physiography, climate, and seasonal variations in Maharashtra, emphasizing their impact on human life and activities.
3. To study the river systems and water bodies in Maharashtra, focusing on sustainable utilization.

4. To explore the types, distribution, and conservation of soil, forests, and biodiversity in Maharashtra.

Course Outcomes

1. **Knowledge of Maharashtra's Geography**: Students will gain a detailed understanding of Maharashtra's location, its formation, physiographic division, and climatic conditions.
2. **Application of Geographical Knowledge**: Students will be able to analyse and propose solutions to regional challenges such as floods, droughts, and energy shortages, contributing to sustainable development.
3. **Water Resource Management Skills**: Students will understand the geographical distribution and management of river and water bodies for proper utilization of water in Maharashtra.
4. **Sustainability Awareness**: Students will develop insights into issues like soil degradation, deforestation, biodiversity and its loss, along with strategies for their mitigation.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Teaching (Theory) Hours per week				Examination scheme (Marks)		
1	Physical Geography of Maharashtra - 4	L	T	P	Total	Theory	Term Work	Total (Semester)
		04	04	---	04	80	20	100

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 100 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 80 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 20 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.

- Internal evaluation should be based on Oral

Modules: Physical Geography of Maharashtra				
Module No.	**Module Name**	**Sub-module**	**No. of hours**	**Credit**
1	Introduction to Maharashtra	1.1 Origin of the word "Maharashtra" 1.2 Changing map of Maharashtra 1.3 Location and extent of Maharashtra 1.4 Administrative divisions of Maharashtra	15	01
2	Physiography and Climate of Maharashtra	2.1 Theories of physiographic formation of Maharashtra 2.2 Physiographic division: Konkan, Western Ghats, Maharashtra Plateau 2.3 Seasons of Maharashtra: Types and characteristics 2.4 Trewartha's Climatic regions of Maharashtra	15	01
3	River Systems and water bodies in Maharashtra	3.1 East Flowing river system in Maharashtra 3.2 West Flowing river system in Maharashtra 3.3 Flood issues in Maharashtra 3.4 Dams and Reservoirs in Maharashtra		
4	Soil and Forest in Maharashtra	4.1 Types and Distribution of soil in Maharashtra 4.2 Soil degradation and reclamation measures in Maharashtra 4.3 Types and distribution of forest in Maharashtra 4.4 Deforestation and conservation in Maharashtra	15	01

Suggested Readings

1. महाराष्ट्राचा भूगोल, सुभाष पाटील, डायमंड पब्लिकेशन, 2020.
2. पर्यावरण भूगोल आणि जैवविविधता, डॉ. सुभाष कदम, सुभाष पब्लिकेशन, 2019.
3. नद्या आणि जलसंपत्ती व्यवस्थापन, दिलीप गायकवाड, डायमंड पब्लिकेशन, 2021.
4. महाराष्ट्राचा भूगोल, के. ए. खतीब, के. सागर, 2022.
5. महाराष्ट्राचा भूगोल, संजय पगार व इतर, निराली प्रकाशन, 2018.
6. महाराष्ट्राचा भूगोल, ए. बी. सवदी, निराली प्रकाशन, 2018.
7. महाराष्ट्राचा भूगोल, श्रिकांत कार्लेकर, डायमंड प्रकाशन, 2014.
8. Geography of Maharashtra, S.N. Patil, Himalaya Publishing House, 2019.
9. Physical Geography of Maharashtra, A.V. Deshpande, Popular Prakashan, 2018.
10. Environmental Geography and Biodiversity of Maharashtra, R.P. Kulkarni, Oxford University Press, 2020.
11. Water Resource Management in Maharashtra, N.B. Jadhav, Sage Publications, 2021.
12. Geography of Maharashtra, Jaymala Diddee, S. R. Jog, Rawat Publications, 2002.

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. II
Geography
Semester IV
Major VI: Quantitative Techniques in Geography (Practical) as per NEP 2020 (2.0)

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B. A.-I/ B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	IV
Name of Vertical Group	**:**	Major VI
Course Code	**:**	**BAU0325MMP322D06**
Course Title	**:**	**Quantitative Techniques in Geography**
Total Credit	**:**	04
Workload	**:**	04 credits Practical (4 X 30 Hours) 120 hours in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	Practical for100 Marks, The pattern of examination will be Semester End Examination with Assessment/Evaluation.

Preamble:

The paper "Quantitative Techniques in Geography" offers students a practical knowledge in quantitative techniques. This practical knowledge aims to students acquaint themselves with the distinctiveness of quantitative techniques in geography. In the process of development of science and technology, the changing nature of subject of geography will make aware to the students about use of various quantitative techniques. By the end of this paper, students will have a understanding of the various quantitative techniques in population, transportation, agriculture etc.

General Objectives of the Course:

1. To familiarize the students with the different quantitative techniques and methods.
2. To prepare students to analysis of population dynamics with help of quantitative techniques.
3. To understand the different quantitative techniques in network analysis.

4. To give composed knowledge of agricultural regionalization and settlement characteristics.

Course Outcomes:

By the end of the course, students would be able to:

1. The students would familiar with the different quantitative techniques and methods.
2. The students would prepared for analysis of population dynamics with help of quantitative techniques.
3. The students would understand the different quantitative techniques in network analysis.
4. The students would apply composed knowledge of agricultural regionalization and settlement characteristics.

Scheme of Teaching and Examination:

(The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Practical Hours per Week				Examination scheme (Marks)		
1	Quantitative Techniques in Geography - 4	L	T	P	Total	Practical	Term Work	Total (Semester)
		08	---	08	08	100	---	100

Scheme of Examination:

- The examination shall be conducted at the end of each academic year.
- The Practical paper shall carry 100 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of annual practical examination of 100 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / program)

Nature of Question Paper and Scheme of Marking:

(As per rules & regulation of Shivaji University)

Modules: Quantitative Techniques in Geography (Practical)				
Module No.	**Module Name**	**Sub-module**	**No. of hours & Marks**	**Credit**
1	Population Dynamics	1.1 Population Dynamics: Aspects of Population its Importance in Regional Development **Practical Exercise:** a) Measurement of Sex Ratio b) Measurement of Literacy Rate c) Measurement of Population Growth by Gibb's Method d) Measurement of Decadal Population Growth	30 (20)	01
2	Network Analysis	2.1 Concept of Network 2.2 Importance of Road Network **Practical Exercise:** a) Prithar's Method of Degree Connectivity b) Measurement of Road Accessibility (D-Matrix) c) Routeway Analysis d) Traffic Flow Analysis	30 (20)	01
3	Agricultural Regionalization	3.1 Agricultural Regionalization Methods 3.2 Importance of Agricultural Regionalization **Practical Exercise:** a) Kendall's Method of Agricultural productivity b) Weaver's Method of Crop Combination c) Bhatia's Method of Crop Concentration d) Gibbs and Martin's Method of Crop Diversification	30 (20)	01
4	Settlement Characteristics	4.1: Concept of Settlement 4.2 Types and Characteristics of Settlements **Practical Exercise:** a) H. J. Nelson's Method of Classification of Town b) Nearest Neighbor Analysis c) Demongeons Co-effiicent of Dispersion d) Reciprocal Method	30 (20)	01
5	Journal and Viva Voce		(20)	

Note :

1. Figures in the bracket indicate weightage of marks to concern module.
2. Use of stencils, log tables, computer and calculator is allowed.
2. Journal should be completed and duly certified by practical in-charge and Head of the Department.

Suggested Readings

1. Chandra R. C. (2016). Population Geography, Kalyani Publisher, New Delhi
2. Jean-Paul Rodrigue (2024): Geography of Transport System, A&M University – Galveston, Texas.
3. Majid Husain (1995) Systematic Agricultural Geography, Rawat Publication, Jaipur
4. Maurya S. D. (2017), Population Geography, Provolika Publication, Alahabad.
5. Robert Hammond, (1978): Quantitative Techniques in Geography: An Introduction, Oxford University Press, Mumbai: 02-127, 2nd Floor, Express Towers, Marine Drive, Nariman Point, Mumbai, Maharashtra 400021.
6. अहिररावव करंजखेळे : प्रात्यक्षिक भूगोल, सुदर्शन पब्लिकेशन, नाशिक
7. कुंभार अर्जुन : प्रात्यक्षिक भूगोल, सुमेरू पब्लिकेशन, मुंबई
8. श्रीकांत कार्लेकर : प्रात्यक्षिक भूगोल, डायमंड प्रकाशन, पुणे

Shivaji University,Kolhapur
B. A. / B. A. B. Ed. Part-II
Semester - IV
Minor II: Cultural Geography (Geography) as per NEP 2020

Name of the Programme	**:**	B.A./B.A.B.Ed.(Geography)
Class	**:**	B.A.-II/ B.A. B.Ed.-II
Semester	**:**	IV
Name of Vertical Group	**:**	Minor II
Course Code	**:**	BAU0325MNL322D02
Course Title	**:**	Cultural Geography
Total Credit	**:**	04
Workload	**:**	04 credit X 15Hours = 60 hours in semester
Duration	**:**	Semester
Medium of instruction	**:**	Marathi/English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination of Pattern	**:**	80:20, The pattern of examination will be Semester End Examination with Internal Assessment / Evaluation.
Nature of Question Paper	**:**	As per Shivaji University rules and regulations

Preamble:

Cultural Geography is a key branch of human geography that studies how culture shapes and interacts with geographical spaces. This course introduces the nature, scope, and importance of cultural geography, focusing on elements like language, religion, ethnicity, and race. It explores cultural landscapes, rural-urban patterns, and the diffusion of culture across regions. Special attention is given to India's cultural diversity, heritage, and festivals, highlighting their role in regional identity and tourism. The course encourages students to think critically about the link between culture, space, and the environment.

General Objectives:

1. Understand

To enable students to understand the fundamental concepts, nature, and scope of cultural geography and its relevance in studying human-environment relationships.

2. Analyze

To help students analyze the components of culture such as language, religion, ethnicity, and race, and their spatial expression.

3. Evaluate

To evaluate the processes of cultural diffusion, regionalism, and the impact of culture on rural and urban landscapes globally and in India.

4. Apply

To apply cultural geographic knowledge to interpret India's diverse cultural heritage, religious pluralism, and their influence on tourism and regional identity.

Course Outcomes:

After completing this course, students will be able to:

1. Define and explain the core concepts of cultural geography, including the man-environment relationship and the scope of the field. (Bloom's Level: Remember, Understand)
2. Identify and interpret the spatial distribution and cultural significance of elements like language, religion, ethnicity, and race. (Bloom's Level: Understand, Analyze)
3. Assess cultural diffusion processes and distinguish between various cultural landscapes and regions of the world. (Bloom's Level: Analyze, Evaluate)
4. Examine and reflect on India's cultural diversity, heritage, festivals, and their importance in cultural tourism and national identity. (Bloom's Level: Apply, Evaluate)

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Teaching (Theory) Hours per week				Examination scheme (Marks)		
1	Cultural Geography - 4	L	T	P	Total	Theory	Term Work	Total (Semester)
		04	04	---	04	80	20	100

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 100 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 80 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 20 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

- The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.
- Internal evaluation should be based on Oral

Modules: Cultural Geography				
Module No.	Module Name	Sub-Module	No. of Hours	Credits
1	**Foundations of Cultural Geography**	1.1 Meaning and Definition 1.2 Nature and Scope of Cultural Geography 1.3 Approaches of Cultural Geography 1.4 Relevance and importance of Cultural Geography in globalized world	15	1
2	**Core Components of Culture**	2.1 Language and Dialects: Geographical Distribution and Cultural Role 2.2 Religion: Major Types, Regional Spread and Geographical Impact 2.3 Ethnicity and Ethnic Groups: Concept and Identity 2.4 Race: Concept, Characteristics and Spatial Distribution	15	1
3	**Patterns and Processes of Cultural Landscapes**	3.1 Concept and Evolution of Cultural Landscape 3.2 Rural and Urban cultural Patterns 3.3 Cultural Regions of the world: Typology and Examples 3.4 Cultural Diffusion and Hearths: Theories and Examples	15	1
4	**Regional Cultural Patterns of India**	4.1 Linguistic Regionalism 4.2 Religions Diversity and Communal Harmony 4.3 Tribal Cultural Patterns: Case Studies of Naga and Bhill 4.4 Major Fairs and Festivals: Cultural Significance and Distribution	15	1

Suggested Readings:

1. Jackson, Peter (1989). Maps of Meaning: An Introduction to Cultural Geography. Routledge.
2. Fellmann, J. D., Getis, A., & Getis, J. (2007). Human Geography: Landscapes of Human Activities. McGraw-Hill.
3. Jordan, Terry G., Domosh, Mona, Rowntree, Lester (2006). The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman.

4. Husain, Majid (2021). Human Geography. Rawat Publications, Jaipur. Revised 6th Edition
5. Knox, Paul L., & Marston, Sallie A. (2013). Places and Regions in Global Context: Human Geography. Pearson Education.
6. Norton, William (2008). Human Geography. Oxford University Press.
7. Mitchell, Don (2000). Cultural Geography: A Critical Introduction. Blackwell Publishing.
8. Singh, R. L. (1993). India: A Regional Geography. National Geographical Society of India, Varanasi.
9. De Blij, Harm J., & Murphy, Alexander B. (2003). Human Geography: Culture, Society, and Space. Wiley.
10. Social Geography — Ahmad, Aijazuddin (1999), Rawat Publications
11. Cultural Geography — Fred, E. D. & Lawrence, M. (Date unspecified), Thomas Y. Crowell Co; reprinted by Rawat
12. Cultural Geography — Jackson, P.; David, D.; Atkinson, D., Rawat Publications
13. Models in Geography – Majid Husain(2025)
14. Geography of Settlements – R.Y. Singh
15. Bharat Ka Bhugol (Geography of India) – H.M., Rahul & Pooja Saxena

Shivaji University, Kolhapur

B. A. / B. A. B. Ed. Part – II

Geography

Semester III

VSC I: Soil Analysis (Practical) As Per NEP 2020 (2.0)

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B. A. / B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	III
Name of Vertical Group	**:**	VSC
Course Code	**:**	**BAU0325VSP322C01**
Course Title	**:**	**Soil Analysis (Practical)**
Total Credit	**:**	02
Workload	**:**	Practical 02 credit (02 X 30 = 60 hours in semester)
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	Practical for50 Marks, The pattern of examination will be Semester End Examination with Assessment/Evaluation.

Preamble:

Soil is a fundamental natural resource that plays a crucial role in sustaining life of the Earth. Understanding its composition, structure, and various physical, chemical, and biological properties are essential for effective applications for land use, management and sustainability. Soil analysis is an interdisciplinary field of study that integrates aspects of geography, chemistry, biology, geography, geology, and environmental science. It provides valuable information on soil health, fertility, and suitability for various agricultural and ecological applications.

This syllabus aims to equip students with a comprehensive understanding of the principles and practices involved in soil analysis. Through both theoretical learning and hands-on laboratory experience, students will gain the necessary skills to assess soil quality, preparation and interpret soil testing results, and apply these findings in real-world scenarios such as agriculture, land reclamation, and environmental monitoring.

General Objectives of the Course:

The general objectives of the Soil Analysis course are as to provide students with a solid foundation in soil science, focusing on the principles, techniques, and applications of soil analysis. By the end of the course, students would be able to:

1. To understand the concept of soil and its formation.
2. To acquire the proper techniques for soil sample collection.
3. To gain practical knowledge of soil analysis particularly physical properties of soil.
4. To gain practical knowledge of soil analysis particularly chemical properties of soil.

Course Outcomes:

By the end of the course, students would be able to:

1. The students will possess a comprehensive understanding of Soil Properties and Their Significance.
2. They will demonstrate proficiency in correctly collect soil samples from various areas and prepare them for laboratory analysis.
3. Practically the students will be performing scientific analyzer of soils.
4. The students will be apply soil analysis data to overcome real-world problems related to soil fertility, erosion control, land reclamation, and sustainable agriculture.

Scheme of Teaching and Examination:

(The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Practical Hours per week				Examination scheme (Marks)		
		L	T	P	Total	Practical	Term Work	Total (Semester)
1	Soil Analysis - 2	04	---	04	04	50	--	50

Scheme of Examination:

- The examination shall be conducted at the end of each Semester.
- The Practical paper shall carry 50 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of semester practical examination of 50 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / program)

Nature of Question Paper and Scheme of Marking:

(As per rules & regulation of Shivaji University)

Modules: Soil Analysis (Practical)				
Module No.	**Module Name**	**Sub-module**	**No. of hours & Marks**	**Credit**
1	**Physical Analysis of Soil**	**Introduction to soil** 1.1 Definition of soil and importance of soil analysis 1.2 Process of Soil formation 1.3 Physical properties of soils **Practical Exercise:** **Physical Analysis of Soil** a) Soil sampling b) Draw a cross section c) Soil Structure by observation d) Porosity e) Colour f) Temperature	30 (20)	01
2	**Chemical Analysis of Soil**	2.1 Chemical Properties of Soils 2.2 Importance of Chemical Properties of Soils in Relation to Crops **Practical Exercise:** **Chemical Analysis of Soil** a) pH b) Electric conductivity c) Nitrogen (N) d) Phosphorus (P) e) Potassium (K)	30 (20)	01
3	**Journal & Viva Voce**		(10)	

Note :

1. Figures in the bracket indicate weightage of marks to concern module.
2. Use of stencils, log tables, computer and calculator is allowed.

2. Journal should be completed and duly certified by practical in-charge and Head of the Department.

Suggested Readings

1. Backman, H.O and Brady, N.C.(1960.)The Nature and Properties of Soils, Mc Millan NewYork.
2. Bennet, Hugh H.: Soil Conservation, McGraw Hill, New York .
3. Bunting, B.T.(1973) The Geography of Soils, Hutchinson, London.
4.Carter, M.R.(1993): Soil Sampling and Method of Analysis.Ed Canadian Soc. Soil Sci. Lewis Publisher, USA.823
5. Chairas, D. D., Reganold, J. P., and Owen, O. S., (2002): National Resource Conservation and Management for a Sustainable Feture, 8th edition, Prentice Hall, Englewood Cliffs.
6. Clarke G.R.(1957) Study of the Soil in the Field, Oxford University Press, Oxford.
7. Daji, J. A., (1970): A Text Book of Soil Science, Asia Publishing House, Londaon.
8. Foth H.D. and Turk, L.M.(9172) Fundamentals of Soil science, John Wiley, New York.
9. Ghosh, A.B.(1983): Soil and Water Testing Methods, A Laboratory Manual,IARI, New Delhi.
10. Gupta P.K. (2004): Methods in Environmental Analysis Water Soil and Air,Agrobios.
11. GovindaRajan, S.V. and Gopala Rao, H.G.(9178) Studies on Soils of India Vikas, New Delhi.
12. MathurNeeru, (2012): Soils, Rajat Publications, New Delhi-02 (India).
13. Mc. Bride, M.B.(1999)Environmental Chemistry of Soils, Oxford University Press, New York.
14. Morgan, R. P. C., (1995): Soil Erosion and Conservation, 2nd edition, Longman, London.
15. Nye, P.H. and Greene, D.J.(1960)The Soil under Shifting Cultivation Commonwealth Bureau of Soil Science, Technical Communication, No. 51; Harpender, England.
16. Plaster, E. J., (2009): Soil Science and Management, Cengage Learning, Boston.
17. Raychoudhuri, S.P., (1958): Soils of India, ICAR, New Delhi.
18. Russell, Sir Edward J.:(1961) Soil Conditions and Plant Growth, Wiley, New York.

Shivaji University, Kolhapur

B. A. / B. A. B. Ed. Part – II

Geography

Semester III

SEC III: Geo-statistics and Data Visualization (Practical)

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B. A. / B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	III
Name of Vertical Group	**:**	SEC
Course Code	**:**	**BAU0325SEP322C03**
Course Title	**:**	**Geo-statistics and Data Visualization (Practical)-III**
Total Credit	**:**	02
Workload	**:**	Practical 02 credit (02 X 30 = 60 hours in semester)
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	Practical for 50 Marks, The pattern of examination will be Semester End Examination with Assessment/Evaluation.

Preamble:

Geography, as a discipline, encompasses the study of spatial patterns, processes, and phenomena across the Earth's surface. In this context, geo-statistics and data visualization play a pivotal role in analysing, interpreting, and presenting geographical data. This practical course is designed to equip students with essential skills in geo-statistical techniques and data visualization tools, enabling them to address complex geographical questions with precision and clarity. The course emphasizes the integration of statistical methods, graphical techniques, and cartographic principles to analyze spatial and temporal data effectively. Students will gain hands-on experience in collecting and organizing geographical data, applying statistical techniques for analyses the data as well as data visualization methods.

General Objectives of the Course:

The objectives of the course are as following:

1. To train the students in practical applications of geo-statistics and data analysis.
2. To acquire knowledge about various techniques for accurate and reliable data acquisition.

3. To prepare the students for analyzing spatial and non-spatial data.
4. To study and implement techniques for graphical representation and cartographic visualization for effective presentation and interpretation of geographical data.

Course Outcomes:

1. The students would demonstrate the ability to design and implement data collection methods for effective spatial and non-spatial data acquisition.
2. The students will be prepared to make practical applications of geo-statistics for proper inferences.
3. The students would develop the ability to use geo-statistical and visualization tools to address real-world geographical challenges and contribute to decision-making processes.
4. The students would able to integrate statistical analysis with cartographic tools to address complex geographical problems.

Scheme of Teaching and Examination:

(The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. Part –II

Sr. No.	Subjects/Course & Credit	Practical Hours per week				Examination scheme (Marks)		
		L	T	P	Total	Practical	Term Work	Total (Semester)
1	Geo-statistics and Data Visualization - 2	04	---	04	04	50	---	50

Scheme of Examination:

- The examination shall be conducted at the end of each Semester.
- The Practical paper shall carry 50 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of semester practical examination of 50 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / program)

Nature of Question Paper and Scheme of Marking:

(As per rules & regulation of Shivaji University)

Modules: Geo-statistics and Data Visualization (Practical)				
Module No.	**Module Name**	**Sub-module**	**No. of hours & Marks**	**Credit**
1	**Basics of Geo-Statistics and Data Analysis**	**1.1 Introduction to Data:** Meaning, Definition, Types and Importance of Data **1.2 Methods of Data Collection:** Observation, Interview, Schedule & Questionnaire **Practical Exercises:** a) Array the Data b) Frequency Distribution c) Measures of Central Tendency (Mean, Median & Mode) d) Measures of Dispersion (Mean Deviation, Standard Deviation) e) Co-efficient of Correlation (Karl Person's Method)	30 (20)	01
2	**Data Visualization**	2.1 Meaning of Data Visualization 2.2 Methods of Data Visualization **Practical Exercises:** a) Construction of Histograms b) Construction of Polygraph c) Construction of Ogive Curve d) Moving Average (3 & 5 years) e) Construction of Scattered Diagram	30 (20)	01
3	**Journal & Viva Voce**		(10)	

Note :

1. Figures in the bracket indicate weightage of marks to concern module.
2. Use of stencils, log tables, computer and calculator is allowed.
3. Journal should be completed and duly certified by practical in-charge and Head of the Department.

Suggested Readings

1. Bhattacharya, B. (2020). Statistics for beginners. Amazon Digital Services LLC - KDP Print.
2. Hammond, R., & McCullagh, P. (1991). Quantitative Techniques in Geography. Clarendon Press.
3. Heywood, I., Cornelius, S., & Carver, S. (2006). An Introduction to Geographical Information Systems. Pearson.
4. Monkhouse, F.J., & Wilkinson, H.R. (1964). Maps and Diagrams. Methuen.
5. Provost, F., & Fawcett, T. (2013). Data science for business: What you need to know about data mining and data-analytic thinking. O'Reilly Media.
6. Sarkar, A. (2015). Practical Geography: A Systematic Approach. Orient BlackSwan.
7. Singh, R.L. (1979). Elements of Practical Geography. Kalyani Publishers.
8. Walpole, R. E., Myers, R. H., Myers, S. L., & Ye, K. E. (2016). Probability and statistics for engineers and scientists (9th ed.), Pearson.
9. कुंभार अर्जुन (1994) 'प्रात्यक्षिक भूगोल', सुमेरु प्रकाशन, पुणे

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. Part – II
Geography
Semester IV
VSC II: Water Survey and Mapping (Practical)

Name of the Programme	:	B. A. / B. A. B. Ed. (Geography)
Class	:	B. A. / B. A. B. Ed. Part – II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	:	IV
Name of the vertical Group	:	VSC
Course Code	:	**BAU0325VSP322D02**
Course Title	:	**Water Survey and Mapping (Practical)**
Total Credits	:	02
Workload	:	2 credit (2*30 Hours = 60 Hours)
Duration	:	The course shall be a full time course
Medium of Instruction	:	Marathi/English
Eligibility of Admission	:	As per the criteria prescribed by the University
Examination Pattern	**:**	Practical for 50 Marks, The pattern of examination will be Semester End Examination with Assessment/Evaluation.

Preamble

his syllabus on Water Survey and Mapping aims to provide students with an in-depth understanding of water resources, their management, and the challenges associated with water scarcity, pollution, and quality. It covers both theoretical knowledge and practical skills, focusing on water resource assessment, pollution mapping, and effective solutions such as rainwater harvesting. Through practical exercises and case studies, students will gain hands-on experience in water resource management, which will be crucial in addressing the growing global concerns of water sustainability. The course encourages the development of analytical skills required to assess water quality and manage resources in local and regional contexts.

General Objectives of the Course

1. To understand the different types of water resources and their distribution.
2. To explore the causes, effects, and mitigation strategies related to water pollution.
3. To learn practical methods of surveying and mapping water resources and pollution sources.

4. To study water scarcity, rainwater harvesting techniques, and assess water quality through practical analysis.

Course Outcomes

1. Water Resources Knowledge: Students will describe different types of water resources and their significance locally and globally.
2. Practical Survey Skills: Students will gain hands-on experience in water surveys, mapping sources, and pollution identification using Google Earth and mobile apps.
3. Water Harvesting Techniques: Students will apply their knowledge for rainwater harvesting to overcome on water scarcity.
4. Water Analysis Techniques: The students will get practical knowledge of water

Scheme of Teaching and Examination:

(The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. Part –II

Sr. No.	Subjects/Course & Credit	Practical Hours per week				Examination scheme (Marks)		
		L	T	P	Total	Practical	Term Work	Total (Semester)
1	Water Survey and Mapping - 2	04	---	04	04	50	---	50

Scheme of Examination:

- The examination shall be conducted at the end of each Semester.
- The Practical paper shall carry 50 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of semester practical examination of 50 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / program)

Nature of Question Paper and Scheme of Marking:

(As per rules & regulation of Shivaji University)

Modules: Water Survey and Mapping				
Module No.		**Sub-module**	**No. of hours & Marks**	**No of Credits**
I	**Water Survey and Mapping**	1.1 Introduction and types of water resources 1.2 Local Water Demand: Population, Agriculture and Industry **Practical Exercises:** 1. Public Perception of Water: a) Availability b) Accessibility c) Adequacy d) Quality 2. Water Utilization Survey of Local Area 3. Water source mapping by Google Earth / Mobile 4. Mapping of Water Pollution Sources	**30 (20)**	**01**
II	**Water Resource Management**	2.1 Water Scarcity – Concept, Causes, and effects 2.2 Rainwater harvesting – Concept and its types **Practical Exercises:** 1. Water Recharge: Well and Bore Well 2. Measurement of Rooftop Water Harvesting 3. Water Scarcity Index 4. Water Pollution Index 5. Water Analysis: pH, EC and TDS	**30 (20)**	**01**
III		**Journal & Viva Voce**	**(10)**	

Note :

1. Figures in the bracket indicate weightage of marks to concern module.
2. Use of stencils, log tables, computer and calculator is allowed.

2. Journal should be completed and duly certified by practical in-charge and Head of the Department.

Suggested Reading:

1. Agarwal, V. K. (2014). *Water pollution: Causes, effects and cont)ol* (3rd ed.). APH Publishing.
2. American Water Works Association. (2011). *Water quality and treatment: A handbook on drinking water* (6th ed.). McGraw-Hill.
3. Biswas, A. K., & Mishra, S. K. (2013). *Water quality monitoring and management*. Springer.
4. Bureau of Indian Standards. (2012). *IS 10500: 2012 – Drinking water specification*. Bureau of Indian Standards.
5. Central Pollution Control Board. (2020). *National water quality monitoring program (NWQMP) annual report*. Central Pollution Control Board.
6. Central Pollution Control Board. (2021). *Annual water quality report*. Central Pollution Control Board.
7. Dara, S. S. (2015). Environmental chemistry of water. S. Chand Publishing.
8. Government of India. (1974). *Water (Prevention and Control of Pollution) Act*. Government of India.
9. Ministry of Jal Shakti, Government of India. (2020). *Water quality status in India*. Government of India.
10. World Health Organization. (2017). *Guidelines for drinking-water quality* (4th ed.). World Health Organization.

Shivaji University, Kolhapur
B. A. / B. A. B. Ed Part- II
Geography
Semester IV
SEC IV: Land Records (Practical) as per NEP 2020

Name of the programme	:	B. A. / B. A. B. Ed. (Geography)
Class	:	B. A. / B. A. B. Ed. II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	:	IV
Name of Vertical Group	:	SEC
Course Code	:	**BAU0325SEP322D04**
Course Title	:	**Land Records (Practical)**
Total Credit	:	02
Workload	:	02 Credit (2 X 30 Hours = 60 hours) in semester
Duration	:	The course shall be a full time course
Medium of instruction	:	Marathi / English
Eligibility od Admission	:	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	Practical for 50 Marks, The pattern of examination will be Semester End Examination with Assessment / Evaluation.

Preamble:

The study of land records and land mapping is crucial for effective land resource management and administration. Accurate land records underpin property management, legal clarity and dispute resolution. This study explores the fundamental concepts and significance of maintaining accurate land records and utility of essential documents like the 7/12 extract and property card. It examines the implications of land occupancy highlighting the rights and responsibilities of different land occupants. Traditional manual survey techniques employed by the Revenue Department are reviewed, noting their accuracy, challenges and limitations. The study also delves into digital advancements in land records management, assessing the process and benefits of obtaining 7/12 extracts online, the effectiveness of digital tools in agricultural land and Non Agricultural Land (NA) management and the practical applications of GPS-based area calculations. Additionally, it investigates the features and functionalities of the Maha Bhulekh Mahabhumi land record app and Apli Chawdi app which enhances public access to land information and streamlines administrative processes.

General Objectives of the Course:

1. To comprehend the fundamental concepts and significance accurate land records.

2. To understand proper interpretation of different land record.
3. To study the open sources various softwares and portals related to land record.
4. To extract online land record from different online sources.

Course Outcomes:

1. The students will attentive about fundamental concepts and significance accurate land records.
2. The students will capable for proper interpretation of different land record.
3. The student got detailed knowledge of the open sources various softwares and portals related to land record.
4. The students will be extract online land record from different online sources.

Scheme of Teaching and Examination:

(The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. Part –II

Sr. No.	Subjects/Course & Credit	Practical Hours per week				Examination scheme (Marks)		
1	Land Record and Mobile Mapping - 2	L	T	P	Total	Practical	Term Work	Total (Semester)
		04	---	04	04	50	---	50

Scheme of Examination:

- The examination shall be conducted at the end of each Semester.
- The Practical paper shall carry 50 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of semester practical examination of 50 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / program)

Nature of Question Paper and Scheme of Marking:

(As per rules & regulation of Shivaji University)

Modules: Land Records (Practical)				
Module No	**Module Name**	**Sub- module**	**No. of hours & Marks**	**Credit**
1	Concept, development and Interpretation of Land Record	1.1 Concept of Land Record 1.2 Needs & importance of Land Record 1.3 Historical development of Land Record 1.4 Types of Records **Practical Exercise:** a) 7/12 & Khate Utara b) Pherphar Utara c) Phalani Nakasha & Tippani Nakasha d) Jamabandi Nakasha (Interpretation of above Land Record)	**30 (20)**	**01**
2	Digital Procurement and Mobile Mapping	1.1 Online Extraction of Land Record and Introduction of Softwares **Practical Exercise:** 1. Registration of Crops in E- Peek Pahani 2. Portal for Land Record Services: a. 7/12 b. 8 A c. Pherphar d. Property Card and E-records e. Mahabhunakasha f. E- Chawadi / Apali Chawadi g. E-Mojani	**15 (20)**	**01**
3	Journal & Viva Voce		**(10)**	

Note :

1. Figures in the bracket indicate weightage of marks to concern module.
2. Use of stencils, log tables, computer and calculator is allowed.
2. Journal should be completed and duly certified by practical in-charge and Head of the Department.

Suggested Readings:

1. Bhandarkar S. and Lakhani S. (2024): Land Laws in Maharashtra, Legal Mind Publication, Nagpur, Maharashtra.
2. Kraak M. and Ormeling F. (2003): Cartography: Visualization of Geospatial Data, CRC Press, New York

3. R Subramanian (2018): Surveying And Levelling, Chaukhamba Auriyantaliya Publisher, Darya Ganj, Delhi
4. Shukla N. (2024): Landlord and Tenant Paperback, Kamal Publisher, New Delhi. The Maharashtra Land Revenue Manual, Volume 1 (1973): Maharashtra (India). Committee for Unification of Revenue Accounts, Procedure, Manual, etc
5. https://globalgpssystems.com/gnss/how-to-survey-your-own-property-with-gps-a-step-by-step-guide/
6. https://bhulekhmahabhumi.com/aapli-chawadi/
7. https://cdn.s3waas.gov.in/s3642e92efb79421734881b53e1e1b18b6/uploads/2021/09/2021090277.pdf
8. https://bhulekh.mahabhumi.gov.in/
9. https://digitalsatbara.mahabhumi.gov.in/aaplichawdi

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. II
Geography
Semester III
IKS: Water Management Systems in Ancient India as per NEP 2020 (2.0)

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B. A. / B. A. B. Ed.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	III
Name of Vertical Group	**:**	IKS
Course Code	**:**	**BAU0325IKL322C01**
Course Title	**:**	**Water Management Systems in Ancient India**
Total Credit	**:**	02
Workload	**:**	02 credit X 15 Hours = 30 hours in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination Pattern	**:**	40:10, The pattern of examination will be Semester End Examination with Internal Assessment/Evaluation.

Preamble:

Water management has been a critical aspect of sustainable development since ancient times. India, with its rich heritage, has developed various ingenious water management systems that are still relevant today. This course delves into the traditional water management practices in India, highlighting the importance of indigenous knowledge systems (IKS) and their contributions to sustainable water management. By exploring both historical and contemporary perspectives, students will gain a comprehensive understanding of how traditional practices can inform and enhance modern water management strategies.

Course Objectives:

1. To explore the concept, historical context, and importance of traditional water management systems in ancient India.
2. To understand and analyze various traditional water harvesting and irrigation techniques, and their cultural and environmental significance.

Course Outcomes:

By the end of the syllabus, Students will be able to:

1. Explain the historical context and significance of traditional water management systems in ancient India, recognizing the value of indigenous knowledge.
2. Identify and describe traditional water harvesting and irrigation techniques, and assess their cultural and environmental significance through case studies.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Theory Teaching Hours per week				Examination scheme (Marks)		
1	Water Management Systems in Ancient India - 2	L	T	P	Total	Theory	Term Work	Total (Semester)
		02	02	---	02	40	10	50

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 50 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 40marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 10 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.

Internal evaluation should be based on Group Activity / Case Study

Modules: Water Management Systems in Ancient India				
Module No.	**Module Name**	**Sub-module**	**No. of hours**	**Credit**
I	Introduction to Water Management Systems in Ancient India	1.1 Meaning of water management 1.2. Historical Context of Water Management 1.3. Water Sources in Ancient India 1.4 Importance of traditional knowledge in sustainable water management	15	01
II	Traditional Water Harvesting Methods and Irrigation Systems	2.1. Traditional water harvesting techniques (e.g., Johads, Baolis, Tankas) 2.2 Traditional irrigation Systems 2.3 Cultural and environmental significance of these systems 2.4 Case studies of traditional water systems	15	01

Suggested Readings:

1. Danino, M. (n.d.). Water management in ancient India. INFLIBNET Centre. Retrieved from https://ebooks.inflibnet.ac.in/icp02/chapter/water-management-in-ancient-india/
2. Tamrakar, P. C. (2024). Ancient water management planning, tradition and techniques of India: An overview. International Journal of Architectural Heritage, 7(1), 59-63. Retrieved from https://journalspub.com/wp-content/uploads/2024/06/59-63-Ancient_Water_Management_Planning.pdf
3. Kumar Swamy, D. M. (n.d.), Water Management Systems of Ancient Indian Empires, IJRAR, Retrieved form https://ijrar.org/papers/IJRAR19D6145.pdf

Shivaji University, Kolhapur

Other Elective (OE) Course from IDS (Inter Disciplinary Subject)

B. A. / B. A. B. Ed. – II: Semester-III (Total Credits-02):

Course Category		Course Name	Course Code	Credits
IDC/MDC / GEC/OE	OE-III	Emerging Trends in Tourism I		2

B. A. / B. A. B. Ed. – II: Semester-IV (Total Credits-02):

Course Category		Course Name	Course Code	Credits
IDC/MDC / GEC/OE	OE-IV	Tourism Planning and Management II		2

Shivaji University, Kolhapur
B. A./ B. A. B. Ed. Part II, Sem III
IDS (Inter Disciplinary Subject): Emerging Trends in Tourism I

As per NEP 2020 (2.0)

Name of the Programme	:	B. A.
Class	:	B. A. Part II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards
Semester	:	III
Course Code	:	
Course Title	:	**Emerging Trends in Tourism I**
Total Credit	:	02
Workload	:	Theory: 02 credit X 15 hours = 30 hours
Duration	:	The course shall be a full time course
Medium of Instruction	:	Marathi/ English
Eligibility of Pattern	:	As per eligibility criteria by the SUK
Examination of Pattern	:	40:10, The pattern of examination will be Semester End Examination with Internal Assessment/Evaluation.

Preamble:

This course is designed to give students a basic understanding of tourism covering conceptual matter of tourism, components of tourism, Classification of tourism and factors affecting tourism. The new tourism trends are taken for the better knowledge of the new world tourism sector. It includes, Ecotourism and Responsible Tourism, Rural Tourism, Health an Wellness Tourism and Sports and Adventure Tourism.

Objectives:

1. To provide fundamental knowledge of the tourism industry to the students.
2. To make aware about the classification and factors of tourism.
3. To get the knowledge about new trends of Ecotourism and Rural Tourism.
4. To acquire the knowledge about the Health and Wellness Tourism and Sports and Adventure Tourism.

Outcomes

1) **Fundamentals of Tourism Industry**: Students will gain a comprehensive understanding of the core principles, key sectors, and economic significance of the tourism industry. They will be able to identify and describe the main components and stakeholders within the industry.
2) **Tourism Classification and Factors**: Students will develop the ability to classify different types of tourism and understand the various factors influencing tourism

activities. They will be able to analyze the impact of these factors on tourism trends and patterns.

3) **Ecotourism and Rural Tourism Trends**: Students will acquire knowledge about the latest trends in ecotourism and rural tourism, including sustainable practices, conservation efforts, and community-based tourism initiatives. They will be able to evaluate the benefits and challenges associated with these emerging tourism sectors.
4) **Health, Wellness, Sports, and Adventure Tourism**: Students will gain insights into the growing sectors of health and wellness tourism, as well as sports and adventure tourism. They will be able to assess the motivations of tourists seeking these experiences and design tourism products and services that cater to these niche markets.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course	Theory Teaching Hours per week				Examination scheme (Marks)		
1	Emerging Trends in Tourism	L	T	P	Total	Theory	Term Work	Total (Semester)
		02	02	---	02	40	10	50

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 50 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 40 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 10 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the Shivaji University.

- Internal evaluation should be based on Group Activity / The Case Study

MODULES			
Module	Name of the Module	No of hours	Credit
1	**Introduction to Tourism** 1.1 Fundamentals of Tourism: Concept and Definition 1.2 Components of Tourism 1.3 Classification of tourism 1.4 Factors affecting on Tourism	15	1
2	**Understanding Emerging trends of Tourism** 2.1 Ecotourism and Responsible Tourism 2.2 Rural Tourism: Agro-tourism 2.3 Health and Wellness Tourism 2.4 Sports and Adventure Tourism	15	1

References:

1) Bhagnani Amrita (2012): Handbook of Tourism, Abhijit Publications, New Delhi-110002
2) Butler Richard W., 2010, "Tourism: A New Perspective" Routledge.
3) Chawla Romila (2006): Ecotourism Planning and Management, Sonali Pubications, New Delhi- 110002.
4) Dhar, P. N. 2006, International tourism: Emerging challenges and future prospects. New Delhi, India: Kanishka.
5) Goeldner Charles R. and Ritchie J. R. Brent, 2012, "Tourism: Principles, Practices, Philosophies" John Wiley & Sons.
6) Goeldner Charles R. and Ritchie J. R. Brent, 2012, "Tourism: Principles, Practices, Philosophies" John Wiley & Sons.
7) Hall, M., & Stephen, P. 2006, Geography of tourism and recreation – Environment, place and space. London, England: Routledge.
8) Holloway Chris and Cartwright Roger, 2012, "Tourism Management" Pearson Education.
9) International Tourism Highlights Edition 2020 (UNWTO)
10) Kamra, K. K., & Chand, M. 2007, Basics of tourism: Theory, operation and practice. Pune, India: Kanishka Publishers.
11) Lickorish Leonard J. and Jenkins Carson L., 2021, "Introduction to Tourism" SAGE Publications India Pvt, Ltd.
12) Nature Based Tourism » Concept, Categories, Issues (tourismbeast.com)

13) Page, S. J. 2011, Tourism management: An introduction (Chapter 2). Butterworth HeinemannUSA.

14) Raj, R., & Nigel, D. 2007, Morpeth religious tourism and pilgrimage festivals management: An international perspective. Cambridge, USA: CABI. Retrieved from www.cabi.org.

15) Randall Jack (2011): 'Eco-Tourism', Discovery Publishing House Pvt. Ltd. New Delhi-110002.

16) Richard W. Butler, 2010, "Tourism: A New Perspective" Routledge.

17) Ritchie Robert W. Brent and Goeldner Charles R., 2012, "The Tourism System: Principles, Components, and Stakeholders", Pearson Education.

18) Singh, J. 2014, Eco-tourism. New Delhi, India: I.K. International Pvt. Ltd. Retrieved from www.ikbooks.com.

19) Tourism Recreation and Research Journal. Lucknow, India: Center for Tourism Research and Development.

20) खतीब के मेहता ,पर्यटन भूगोल :.ए .पब्लीशिंग हाउस.कोल्हापूर ,

21) शिंदे एसपर्यटन भूगोल :.बी .

22) निसर्ग पर्यटन) विकिपीडिया -wikipedia.org)

Shivaji University, Kolhapur
B. A. / B. A. B. Ed. Part II, Sem III
IDS (Inter Disciplinary Subject) - Tourism Planning and Management II
As per NEP 2020 (2.0)

Name of the Programme	:	B. A.
Class	:	B. A. Part II
Year of Implementation	:	Revised Syllabus will be implemented from June, 2025 onwards
Semester	:	IV
Course Code	:	
Course Title	:	**Tourism Planning and Management II**
Total Credit	:	02
Workload	:	Theory: 02 credit X 15 hours = 30 hours
Duration	:	The course shall be a full time course
Medium of Instruction	:	Marathi/ English
Eligibility of Pattern	:	As per eligibility criteria by the SUK
Examination of Pattern	:	40:10, The pattern of examination will be Semester End Examination with Internal Assessment/Evaluation.

Preamble

This course is designed to give students a basic understanding of tourism planning and management its covering concept of tourism, NGO and Government planning at national and state level. It also includes tourism management, applied digital platforms and role of GIS in planning as well as management for the tourism activity.

Objectives

1. To provide students with fundamental knowledge of the tourism industry.
2. To aware about the planning and management process of sustainability tourism.
3. To aware of sustainable tourism and proper responsibilities in managing tourism.
4. To acquire knowledge about the application of tourism planning.

Outcomes

1. Students will be prepared to take on roles in tourism planning and management.
2. Students will demonstrate skill in tourism marketing using technological tools.
3. Students will be capable of designing sustainable tourism.
4. Students will own the skills to develop entrepreneurial ventures.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course	Theory Teaching Hours per week				Examination scheme (Marks)		
1	Tourism Planning and Management	L	T	P	Total	Theory	Term Work	Total (Semester)
		02	02	---	02	40	10	50

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 50 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 40 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 10 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the ShivajiUniversity, Kolhapur.

Internal evaluation should be based on Oral

Tourism Planning and Management II

MODULES			
Module	Name of the Module	No of hours	Credit
1	**Tourism Planning** 1.1 Planning of tourism: Concept and types of tourism planning. 1.2 Govt and Tourism Planning 1.3 NGO's and Tourism Planning 1.4 Tour Plan	15	1
2	**Tourism Management** 2.1 Principle of Management 2.2 Basics of Hospitality Management 2.3 Digital Platforms in Tourism Management 2.4 GIS and Tourism Planning & Management	15	1

References:

1. A. K. Bhatia., (2001). International Tourism Management, Sterling Publisher Pvt.
2. P. N. Sethi., (1986). Successful Tourism Management, Stosius Inc/Advant Books division
3. Dr. Shubhada Marathe., Tourism Management
4. John R. Walker., (2003). Introduction to Hospitality, Pearson Education India
5. Sudhir Andrews., (2017) Hotek front office Management Mc Graw-Hill, New Delhi.
6. Jain S. P. and Narang K. L., Financial Accounting, Kalyani Publisher, New Delhi.
7. Edgell David L. and others (2018): Tourism Policy and Planning: Yesterday, Today, and Tomorrow, CABI.
8. Gunn Clare A. and Var Turgut (2002): Tourism Planning: Basics, Concepts, Cases, Routledge, New York and London.

SHIVAJI UNIVERSITY, KOLHAPUR

Established: 1962

A++ Accredited by NAAC (2021) With CGPA 3.52

Semester – III and IV
B. A. / B. A. B. Ed. II

Geography
OTHER ELECTIVE (OE)

Under
Faculty of Science and Technology

STRUCTURE AND SYLLABUS IN ACCORDANCE WITH

NATIONAL EDUCATION POLICY – 2020

HAVING CHOICE BASED CREDIT SYSTEM

WITH MULTIPLE ENTRY AND MULTIPLE EXIT OPTIONS

TO BE IMPLEMENTED FROM ACADEMIC YEAR 2024-2025 ONWARDS

Shivaji University, Kolhapur

Other Elective (OE) Course from Geography

B. A. / B. A. B. Ed. – II: Semester-III (Total Credits-02):

Course Category		Course Name	Course Code	Credits
IDC/MDC / GEC/OE	OE-III	Geography of Rural Development	BAU0325OEL322C03	**2**

B. A. / B. A. B. Ed. – II: Semester-IV (Total Credits-02):

Course Category		Course Name	Course Code	Credits
IDC/MDC / GEC/OE	OE-IV	Agro-based Rural Development and Planning	BAU0325OEL322D04	**2**

Shivaji University, Kolhapur

Geography

Semester III

OE III: Geography of Rural Development as per NEP 2020

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B.Com./ B. A.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards
Semester	**:**	III
Name of Vertical Group	**:**	OE (Open Elective Course)
Course Code	**:**	**BAU0325OEL322C03**
Course Title	**:**	**Geography of Rural Development**
Total Credit	**:**	02
Workload	**:**	02 credits theory X 15 Hours= 30 hours in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination of Pattern	**:**	40:10, The pattern of examination will be Semester End Examination with Internal Assessment/Evaluation.

Preamble:

The "Geography of Rural Development" course aims to provide students with a comprehensive understanding of the multifaceted aspects of rural development. Through this course, students will explore the concept, objectives, and need for rural development, along with theoretical frameworks such as the Growth Pole Theory. Additionally, the course will address various issues impacting rural development, including geographical, social, economic, and political dimensions. By studying these topics, students will gain valuable insights into the challenges and opportunities in rural development, equipping them with the knowledge to contribute effectively to rural progress.

General Objectives of the Course:

1. To understand the concept, objectives, and necessity of rural development, along with the Growth Pole Theory by F. Perroux.
2. To analyze the geographical, social, economic, and political issues affecting rural development.

Course Outcomes:

By the end of the course, students will be able to:

- Explain the fundamental concepts, objectives, and need for rural development, and critically evaluate the Growth Pole Theory by F. Perroux and its relevance to rural development.
- Identify and assess the geographical, social, economic, and political challenges impacting rural development, and propose informed solutions to address these issues.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credit	Theory Teaching Hours per week				Examination scheme (Marks)		
1	Geography of Rural Development - 2	L	T	P	Total	Theory	Term Work	Total (Semester)
		02	02	---	02	40	10	50

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 50 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 40 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 10 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the ShivajiUniversity, Kolhapur.

Internal evaluation should be based on Group Activity / Case Study

OE-III: Geography of Rural Development

Module No.	Module Name	Sub-module	No. of hours	Credit
I	**Rural Development**	1.1 Concept of Rural Development 1.2 Objectives of Rural Development 1.3 Need of Rural Development 1.4 Theory of Rural Development: Growth Pole Theory by F. Perroux	15	01
II	**Issues of Rural Development**	2.1 Geographical Issues 2.2 Social Issues 2.3 Economic Issues 2.4 Political Issues	15	01

Suggested Readings

1. Birthal, P. S. Sustainable Agriculture and Rural Development.
2. Chapman, G. P. Agricultural Geography.
3. Chawla, R. Agri Tourism. Sonali Publication.
4. कटोले, र. समृद्धीचामहामार्गकृषिपर्यटन. गोडवा कृषिप्रकाशन.
5. हाडवळे, म. कृषिपर्यटन एक शेतीपूरक व्यवसाय. सकाळ प्रकाशन.
6. भोसले, के. एस., काटे, के. बी., &दामाजी, बी. एच. कृषिव्यवसाय. फडकेप्रकाशन.
7. मार्कंडेय, न. शाश्वतदुग्धव्यवसायाचेतंत्र. साकेत प्रकाशन.
8. McGranahan, D. G. Geography of Agriculture.
9. भिसे, प. श. (२०२०). कृषिप्रक्रियाउद्योगाचीगरज, महत्वआणिनिवडकपदार्थनिर्मितीचाअभ्यास.
10. अप्रकाशितकृषिविज्ञानपदवीप्रकल्प, य.च.म.मु.वि. नाशिक.
11. सागर, के. कृषिविषयकघटक. के. सागरप्रकाशन.
12. नाडगोंडे गुरूनाथ: ग्रामीण समाजशास्त्र, कॉन्टिनेन्टल प्रकाशन, पुणे.
13. Sinha, H. K. (1998). Challenges in Rural Development. Discovery Publication House.

14. Singh, R. B. Environmental Impact of Agricultural Development.

15. Singh, R. K. Rural Development: Principles, Policies and Management.

Additional General References

1. **Rural Development Department, Government of India (2020).** *Annual Report on Rural Development in India*. Ministry of Rural Development.
2. **International Fund for Agricultural Development (IFAD). (2016).** *Rural Development and the Role of Agriculture*. IFAD
3. **Shaw, R., & Sutherland, L. (2010).** *Rural Development: Theory and Practice*. Routledge.

Shivaji University, Kolhapur

Geography

Semester IV

OE IV: Agro-based Rural Development and Planning per NEP 2020

Name of the Programme	**:**	B. A. / B. A. B. Ed. (Geography)
Class	**:**	B.Com./ B. A.-II
Year of Implementation	**:**	Revised Syllabus will be implemented from June, 2025 onwards.
Semester	**:**	IV
Name of Vertical Group	**:**	OE (Open Elective Course)
Course Code	**:**	**BAU0325OEL322D04**
Course Title	**:**	**Agro-based Rural Development and Planning**
Total Credit	**:**	02
Workload	**:**	02 credits theory X 15 Hours= 30 hours in semester
Duration	**:**	The course shall be a full time course
Medium of instruction	**:**	Marathi / English
Eligibility of Admission	**:**	As per eligibility criteria prescribed by the University
Examination of Pattern	**:**	40:10, The pattern of examination will be Semester End Examination with Internal Assessment/Evaluation.

Preamble:

The "Agro-based Rural Development and Planning" course aims to provide students with a comprehensive understanding of the interconnectedness between agriculture, allied activities, and rural development. Through this course, students will explore the role of agriculture and agro-based industries in rural development, including the importance of sustainable practices, innovation, and technology. The course will also delve into practical aspects of planning and managing agro-based services, with a focus on model villages that exemplify successful rural development. By studying these topics, students will gain valuable insights into the challenges and opportunities in agro-based rural development and planning, equipping them with the knowledge to contribute effectively to rural progress.

General Objectives of the Course:

1. To understand the role of agriculture and allied activities in rural development, including agro-based processing industries and agro-tourism.
2. To analyze the planning and management of agro-based industries, sustainable practices, and rural model villages

Course Outcomes:

By the end of the course, students will be able to:

- Explain the role of agriculture and allied activities in rural development, including the importance of agro-based processing industries and agro-tourism.
- Identify and assess the planning and management strategies for agro-based industries, sustainable development practices, and the application of innovation and technology in agriculture. They will also be able to analyze successful rural model villages and propose informed solutions for similar rural development projects.

Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

B. A. / B. A. B. Ed. part –II

Sr. No.	Subjects/Course & Credits	Theory Teaching Hours per week				Examination scheme (Marks)		
1	Agro-based Rural Development and Planning - 2	L	T	P	Total	Theory	Term Work	Total (Semester)
		02	02	---	02	40	10	50

Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 50 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 40 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 10 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the ShivajiUniversity, Kolhapur.

- Internal evaluation should be based on Home Assignment/Unit Test/Case Study

Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.

Internal evaluation should be based on Oral

OE-IV: Agro-based Rural Development and Planning

Module No.	Module Name	Sub-module	No. of hours	Credit
I	**Agriculture and Rural Development**	1.1 Agriculture and Rural Development 1.2 Agriculture Allied Activities and Rural Development 1.3 Agro-based Processing Industries 1.4 Agro-tourism	15	01
II	**Agro-based Planning and Management**	2.1 Planning for Agro-based Industries 2.2 Sustainable Development Practices in Agro-based Services 2.3 Innovation and Technology in Agriculture 2.4 Rural Model Villages: Ralegansiddhi, Hivarebajar & Karbharwadi	15	01

Suggested Readings

1. Datt & Sundharam's (2016), Indian Economy S. Chand & Company PVT. L.T.D. New Delhi.
2. D. G. McGranahan: "Geography of Agriculture"
3. N. Lalitha & B. S. Nagarajan (2014) Rural Development wisdom press Delhi.
4. Romila Chawla: Agri Tourism, Sonali Publication, Delhi-110002
5. कोळंबे रंजन: भारतीय अर्थव्यवस्था, भागीरथ प्रकाशन, पुणे.
6. प्रा. एन. एल. चव्हाण(2003): भारतीय अर्थव्यवस्थेचा विकास, प्रशांत पब्लिकेशन, जळगाव.
7. कटोले रवींद्र, समृद्धीचा महामार्ग कृषि पर्यटन, गोडवा कृषि प्रकाशन, पुणे-९
8. मनोज हाडवळे: कृषि पर्यटन एक शेतीपूरक व्यवसाय, सकाळ प्रकाशन, पुणे-४११००२
9. प्रा.के. एस. भोसले, प्रा.के. बी. काटे, डॉ. बी. एच. दामाजी: कृषि व्यवसाय , फडके प्रकाशन, कोल्हापूर.

10. डॉ. नितीन मार्कंडेय: शाश्वत दुग्ध व्यवसायाचे तंत्र , साकेत प्रकाशन, कोल्हापूर.

11. भिसे प्रवीण शा.(२०२०): कृषि प्रक्रिया उद्योगाची गरज, महत्व आणि निवडक पदार्थ निर्मितीचा अभ्यास,अप्रकाशित कृषि विज्ञान पदवी प्रकल्प, य.च.म.मु.वि. नाशिक.