

॥ सा विद्या या विमुक्तये ॥



स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

“ज्ञानतीर्थ” परिसर, विष्णुपुरी, नांदेड - ४३१६०६ (महाराष्ट्र)

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

“Dnyanteerth”, Vishnupuri, Nanded - 431606 Maharashtra State (INDIA)

Established on 17th September 1994 – Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'A' Grade

ACADEMIC (1-BOARD OF STUDIES) SECTION

Phone: (02462) 229542

Website: www.srtmun.ac.in

E-mail: bos.srtmun@gmail.com

Fax : (02462) 229574

संलग्नित महाविद्यालयांतील मानवविज्ञान विद्याशाखेतील पदवी स्तरावरील तृतीय वर्षाचे CBCS Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०२१-२२ पासून लागू करण्याबाबत.

प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, मा. विद्याशाखेने दिनांक २२ मे २०२१ रोजीच्या बैठकीतील केलेल्या शिफारशीप्रमाणे व दिनांक १२ जून २०२१ रोजी संपन्न झालेल्या ५१ व्या मा. विद्या परिषद बैठकीतील विषय क्र. १५/५१-२०२१च्या ठरावानुसार प्रस्तुत विद्यापीठाच्या संलग्नित महाविद्यालयांतील मानवविज्ञान विद्याशाखेतील पदवी स्तरावरील तृतीय वर्षाचे खालील विषयांचे C.B.C.S. (Choice Based Credit System) Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०२१-२२ पासून लागू करण्यात येत आहेत.

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|--|--|
| 01. B. A. -III Year- Marathi | 02. B. A. - III Year- Hindi |
| 03. B. A. - III Year- English | 04. B. A. -III Year- Urdu |
| 05. B. A. - III Year- Sanskrit | 06. B. A. -III Year- Pali |
| 07. B. A. - III Year- Kannada | 08. B. A. - III Year- Economics |
| 09. B. A. - III Year- Policial Science | 10. B. A. - III Year- Sociology |
| 11. B. A. - III Year- Philosophy | 12. B. A. - III Year- Geography |
| 13. B. A. -III Year – Psychology | 14. B. A. - III Year History |
| 15. B. A. -III Year- Public Administration | 16. B. A. - III Year- Military Science |
| 17. B. A. -III Year- Administrative Services | |

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी, ही विनंती.

‘ज्ञानतीर्थ’ परिसर,
विष्णुपुरी, नांदेड - ४३१ ६०६.
जा.क्र.:शैक्षणिक-१/परिपत्रक बी.ए./पदवी-सीबीसीएस अभ्यासक्रम/
२०२१-२२/८७

दिनांक : २४.०७.२०२१.

प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. प्र. अधिष्ठाता, मानवविज्ञान विद्याशाखा, प्रस्तुत विद्यापीठ
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ४) साहाय्यक कुलसचिव, पदव्युत्तर विभाग, प्रस्तुत विद्यापीठ.
- ५) उपकुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ.
- ७) अधीक्षक, परीक्षा विभाग मानवविज्ञान विद्याशाखा प्रस्तुत विद्यापीठ.

स्वाक्षरित

सहा.कुलसचिव

शैक्षणिक (१-अभ्यासमंडळ) विभाग

**SWAMI RAMANAND TEERTH MARATHWADA
UNIVERSITY, NANDED**

SYLLABUS

GEOGRAPHY

B.A. THIRD YEAR

**SEMESTER PATTERN
(Choice Based Credit System)**

With Effect From: June, 2021

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED
Choice Based Credit System (CBCS) Course Structure
Subject-Geography
B.A. Third Year (New Pattern)
With effect from: June, 2021

Semester	Core Course	Paper No.	Name of the Paper	Lectures/ Week	Total No. of Lect.	CA	ESE	Total Marks	Credits
V	DSE GEOG	XIII	Evolution of Geographical Thought OR Social and Cultural Geography	04	60	10	40	50	02
	GE GEOG	XIV	Geography of India	04	60	10	40	50	02
V&VI	DSE GEOG	XV & XVIII	Practical Geography XV-Projections and Statistical Methods XVIII-Surveying, Use of Computer and Village Survey	3+3 (Per Batch)	90 (45+45)	10	40	50	02
V	SEC-III	--	An Introduction to Research Methodology OR Watershed Management	03	45	25	25	50	02
Semester - V Total				17	255	55	145	200	08
VI	DSE GEOG	XVI	Environmental Geography OR Health Geography	04	60	10	40	50	02
	GE GEOG	XVII	Geography of Maharashtra	04	60	10	40	50	02
V&VI	DSE GEOG	XV & XVIII	Practical Geography XV-Projections and Statistical Methods XVIII-Surveying, Use of Computer and Village Survey	3+3 (Per Batch)	90 (45+45)	10	40	50	02
VI	SEC-IV	--	Disaster Management OR Interpretation of Aerial Photography and Satellite Imagery	03	45	25	25	50	02
Semester - VI Total				17	255	55	145	200	08

(CC= Core Course, CA= Continuous Assessment (Internal), ESE= End Semester Examination).

Note:

1. *Total working days in a semester are 90*
2. *Total working weeks in a semester are 15*
3. *Continues Assessment for each paper = 10 Marks*
4. *End Semester Examination for each paper = 40 Marks*

INSTRUCTIONS:

1. Teaching workload shall be of four periods per week for each theory paper.
2. Teaching workload shall be of six periods (03+03) per week for practical paper.
3. Total periods for each theory paper of 50 marks shall be 60 per semester.
4. Total periods for each practical paper of 50 marks shall be 90 per year per batch.
5. Strength of students for each practical batch shall not be more than 15 (fifteen).
6. Students shall not be allowed for practical examination without certified journal (Practical Book).
7. Practical examination will be held at the end of the academic year (May be in February/March for both paper i.e. paper no. XV and XVIII).
8. CA (Continuous Assessment) Pattern for each paper (including practical paper) - one test and one home assignment of 5 marks each.
9. CA for SEC One Seminar of 15 marks and two Tests of 5 marks each

Question Paper Model and Scheme of Marking
BATY Geography
End Semester Examination (ESE)
Theory
Semester (V & VI) Paper (XIII, XIV & XVI, XVII)
(w. e. f. June 2021)

Marks: 40

Q.1 Descriptive Question Or Descriptive Question	15Marks
Q.2 Descriptive Question Or Descriptive Question	15Marks
Q.3 Write short note on any two of the following i. Short note ii. Short note iii. Short note iv. Short note	10Marks

Question Paper Model and Scheme of Marking
BATY Geography
End Semester Examination (ESE)
Skill Enhancement Course (SEC)
(Sem. V&VI) Paper SEC (III&VI)
(w. e. f. June 2021)

Marks: 25

Q.1 Skill Work Report (Project)	10 Marks
Q.2 Overall Skill Judgment (Written Exam)	10Marks
Q.3 Skill Work Presentation (Viva-Voce)	05 Marks

Question Paper Model and Scheme of Marking
BATY Geography
End Semester Examination (ESE)
Practical
Semester (V) Paper (XV)
(w. e. f. June 2021)

Marks: 40

Q.1	A) Properties and Uses of Projection (Any One)	04 Marks
	B) Construction of Projection (Any One)	08Marks
	C) Construction of Projection (Any One)	08 Marks
Q.2	A) Measurement of Central Tendencies (Any One)	04Marks
	B) Measurement of Deviation (Any One)	06Marks
Q.3	Journal and Viva Voce	10Marks

Question Paper Model and Scheme of Marking
BATY Geography
End Semester Examination (ESE)
Practical
Semester (VI) Paper (XVIII)
(w. e. f. June 2021)

Marks: 40

Q.	A) Surveying- Chain and Compass/ Plane Table/ Prismatic Compass (Any One)	10 Marks
	B) Correction of Bearing Using Bowditch's Method	06 Marks
	C) Conversion of Bearings	02 Marks
Q.2	A) Use of Computer, RS and GIS in the study of Geography	02Marks
Q.3	A) Viva-Voce on Excursion/Village Survey	10Marks
Q.4	Journal and Viva Voce	10Marks

B. A. Third Year
Semester-V
DSE GEOG-XIII
Evolution of Geographical Thoughts

Marks: 50

Credits: 02

Periods: 60

Salient Features

1. The aim of this course is to introduce the students with development of geographical thoughts from ancient to modern times. To know the development of various branches of human and physical geography

Utility

1. To help students to know the evolution of geographical knowledge which helps them in analyzing, planning and prediction of various geographical aspects

Learning Objectives

1. To develop the skills among the students to imbibe the classical knowledge and its applicability in the present world
2. To know the contribution of geographers across the globe to the development of geography

Pre-requisites

1. Books, Maps, Globe, Models
 2. ICT
-

Unit I Contribution of Ancient and Medieval Geographers **15 periods**

- 1) Greek: Eratosthenes and Aristotle
- 2) Roman: Strabo and Ptolemy
- 3) Arab: Al Biruni and Al Idrisi
- 4) India: Aryabhatta and Bhaskaracharya

Unit II Contribution of Modern Geographers **15 periods**

- 1) German: Alexander von Humboldt
- 2) French: Vidal De La Blache
- 3) British: Halford John Mackinder
- 4) American: Richard Hartshorne

Unit III Concepts in Geography **10 periods**

- 1) Region: Definition characteristics and classification

Unit IV Models in Geography **10 periods**

- 1) Models: Definition, Features, Needs and Significance

Unit V Approaches in Geography **10 Periods**

- 1) Systematic Approach
- 2) Quantitative Approach

Suggested Reading:

- 1) Adhikari Sudeepta : Fundamentals of Geographic Thought- Chaitanya Publishing House, Allahabad (1972)
- 2) Hussain, Majid : Development of Geographical Thought, Rawat Publication
- 3) Dickinson, R.E. : The Makers of Modern Geography Routledge & Keganpaul, London (1969)
- 4) Dixit R.D. (1999) : Development of Geographic Thought Longmans India Limited. 1999.
- 5) Free Man. T.W. : Geography as Social Science, Harper International Edition, Harper & Row Publishers, New York (1965).
- 6) Lawrence, G.R.P. : Cartographic Methods, Methuen London, 1968.
- 7) Monkhouse, F.H. & Winkinson, H.r. : Maps and diagrams Methuen London, 1994.
- 8) Rabinson, A.H. : Elements of Cartography-John Wiley and Sons U.S.A. 1995.
- 9) Archer, J.E. & Dalton, T.H. : The Fieldwork in Geography Batsford Limited London, 1968.
- 10) Steers, J.A. : Maps Projections, University of London Press, London.
- 11) Mali, N.G., Ashture, S.B. : Conceptional Development of Geographical Thought. Aruna Bhure R. S Prakashan, Latur

B. A. Third Year
Semester-V
DSE GEOG-XIII
Social and Cultural Geography (Or Paper)

Marks: 50

Credits: 02

Periods: 60

Salient Features

1. The aim of this course is to introduce the students with the fundamentals of social and cultural geography.

Utility

1. To help students to know the social and cultural fabrics.
2. To work for social justice and fair society.

Learning Objectives

1. To provide in depth knowledge about social and cultural geography.
2. To prepare students for various competitive examinations.
3. To create scientific attitude in students regarding socio-cultural factors.

Pre-requisites

1. Books, Maps, Globe, Models
 2. ICT, Field Visit.
-

Unit I: Introduction

12 Periods

- 1) Definition, nature, and scope of social and cultural geography.
- 2) Significance of Social and Cultural Geography.

Unit II: Social Aspects

12 Periods

- 1) Social differentiation and region formation
- 2) Role of ethnicity, caste, tribe, language and religion in social diversity in India.

Unit III: Cultural Aspects

12 Periods

- 1) Concept of culture and culture regions.
- 2) Cultural hearths and cultural diffusion.

Unit IV: Concept and Theory of Race

12 Periods

- 1) Concept of race and Griffith Taylor's Theory of Race
- 2) Races of India.

Unit V: Indicators of Social Development

12 Periods

- 1) Concept of social justice, equality and welfare and fair society.
- 2) Social development and indicators of well being in India.

Suggested Reading:

1. Ahmad, Aijazuddin (1999): *Social Geography*, Rawat Publications, Jaipur.
2. Blij, H.J. (1995): *The earth-An introduction to its Physical and Human Geography*, John Wiley & Sons,inc; New York.
3. Broad, Jan O.M.& webb,John W(1973): *A Geography of mankind*, McGraw Hill Book Co. New York.
4. Cater, Hohn & Jones, Trevor (1989): *Social Geography-An Introduction to Contemporary Issues*, Arnold Publishers, New Delhi.
5. Crang, Milke : *Cultural Geography*, Roultdge publication, London,1998.
6. Dubey S.C. : *Indian Society*, National Book Trust, New Delhi, 1991.
5. Jackson, Peter (1989): *Maps of meaning- An Introduction to cultural Geography*, Unwin Hyman, and London.
7. Jackson, Richard H. & Loyd E.Hudman (1990): *Cultural Geography-People, Places and Environment* West publishing co., New York.
8. Jones, Emrys & Eyles, John (1977): *An Introduction to social Geography*, Oxford University Press, Oxford.
9. Jorden, Terry G. & Rowntree, Lester (1976): *The Human Mosaic-A Thematic Introduction to Cultural Geography*, Canfield press, sen Francis Co., Harper & Row Publisher, New York.
10. Smith, David M. (1977): *Human Geography- A Welfare approach*, Arnold-Hinmann, London.
11. Hussain, Majid (1994): *Human Geography*, Rawat Publications, Jaipur.
12. Soffer, David E. (ed.) (1980): *An Exploration of India: Geographical Perspectives on Society and Culture*, Cornell Uni. Press, New York.

**B. A. Third Year
Semester-V
GE GEOG-XIV
Geography of India**

Marks: 50

Credits: 02

Periods: 60

Salient Features

1. The aim of this course is to introduce the students with location and physical settings of India and to understand the significance of unity in the diversity
2. To acquaint the students with regional knowledge of India

Utility

1. To appreciate the regional diversity and to develop acclimatizing temperament among the students

Learning Objectives

1. To know the physical regions, climatic regions and natural resources of India
2. To bring awareness among the students for judicious and optimum use of natural resources and adherence to sustainable development

Pre-requisites

1. Books, Maps, Charts, Models
 2. Field visits
 3. ICT
-

Unit I Location, Physical Regions and Drainage **15 Periods**

1. Location of India. India in the context of South and South East Asia
2. Physical regions and Drainage systems of India

Unit II Climate **10 Periods**

1. Regional and seasonal variations of climate
2. The monsoon, western disturbance and nor-westers

Unit III Natural Resources **15 Periods**

1. Soil and Forests: types, characteristics and distribution
2. Minerals resource-iron and aluminum
3. Power resources-coal and petroleum their use and need for conservation.

Unit IV Agriculture **10 Periods**

1. Green revolution and regional disparity in agricultural growth
2. Impact of globalization on Indian agriculture

Unit-V Contemporary Issues **10 Periods**

1. Poverty and food security
2. Gender discrimination and women empowerment

Suggested Readings:

1. Deshpande, C.D. : India : A Regional Interpretation, Northern Book Center, New Delhi 1992.
2. Farmer, B.H. : An introduction to South Asia Methuen, London, 1983.
3. Govt. of India : India-References Annual 2001, Pub.Div., New Delhi, 2001.
4. Govt. of India : National Atlas of India NATMO Publications, Kolkata.
5. Govt. of India : The Gazetteer of India, Vol.1 & 3 Publication Division, New Delhi, 1965.
6. Learmonth, A.T.A. : Man and Land of South Asia, Concept, New Delhi.
7. Mitra, A. : Levels of Regional Development in India-Census of India-Vol.2 (A) (1) & (2) New Delhi,1987.
8. Routray, J.K. : Geography of Regional Disparity, Asian Institute of Technology, Bangkok, 1993.
9. Shafi, M. : Geography of South Asia- Mc Millan & Co. Calcutta, 2000.
10. Singh R.L. : Indian : A Regional Geography : National Geographical Society India, Varanasi, 1971.
11. Spate, OHK & Learmonth A.T.A. : India & Pakistan – Land People & Economy-Methuen & Co.London, 1967
12. Wadia, D.N. : Geography of India- McMillan & Co.London.
13. Sharma T.C. : Economic & Commercial Geography of India – Vikas Publication House, New Delhi
14. Hussain, Majid : Geography of India, McGraw Hill Education (India) Chennai Pvt.Ltd. 2018
15. Swaminathan, M. S. : 50 years of Green Revolution: An Anthology of Research papers , World Scientific Publishing Co. Pvt. Ltd. 2017
16. Bhatt, M. S. : Poverty and Food Security in India: Problems and Policies, Aakar Press, Delhi, 2004
17. डॉ एस टी शेटे, डॉ. के. बी. कनकुरे : भारताचा भूगोल, अभिजित प्रकशन, लातूर
आणि इतर :
18. केचे पंडुरंग :भारताचा चा भूगोल, कैलास प्रकाशन, औरंगाबाद
19. Surekha Pandit and Bapat: भारताचा चा भूगोल

**B. A. Third Year
Semester-V & VI
DSE GEOG-XV & XVIII
Practical Geography**

Marks: 50

Credits: 02

Periods: 90

Salient Features

1. The aim of this course is to introduce the students with knowledge of making of Projections
1. To know the characteristics and uses of different projections

Utility

1. To know the use of particular projection for making particular map

Learning Objectives

1. To know the skills of construction of projection and map making
2. To use different projections for the representation of different parts of the globe

Pre-requisites

1. Books, Maps, Globe
 2. Geometry box, ICT
-

Paper XV- Projections and Statistical Methods

45 Periods

Unit I Introduction

1. Definition, Classification and construction (By Graphical method only) of Projection
2. Properties and uses of Projections.

Unit II Zenithal Projections

1. Zenithal Polar Gnomonic Projection
2. Zenithal Polar Equal area Projection

Unit III Conical Projection

1. Conical Projection with one Standard Parallel.
2. Bonne's Projection

Paper XVIII – Surveying, Use of Computer and Village Survey

45 Periods

Unit I Introduction

1. Nature and Scope of Surveying
2. Chain-tape Survey-open and close traverse.

Unit II Plane Table Survey

1. Plane table survey-intersection method-open and close traverse.

Unit III Prismatic Compass Survey

1. Prismatic compass survey-open and close traverse.

Unit IV Correction and Conversion of Bearing

1. Bowditch's method with correction of bearing.
2. Conversion of bearing. Whole circle bearing to Quadrant bearing & Vice-versa.

Suggested Reading:

- 1) Sing and Singh : Mapwork and Practical Geography
- 2) Singh L. & Dutta P.K. : Elements of Practical Geography-
Kalyani Publishers, New Delhi 1979.
- 3) Hammod & Mc Gullah : Quantitative Techniques in Geography
- 4) Croxton & Cowden : Applied General Statistics
- 5) Sarkar, A. : Practical Geography – A Systematic
Approach – Orient Longman Calcutta,
1997.
- 6) Khan Z.A. : Text Book of Practical Geography
- 7) Lawrence, G.R.P. : Cartographic Methods, Methuen London, 1968.
- 8) Monkhouse, F.H. & Winkinson, H.r. : Maps and diagrams Methuen London, 1994.
- 9) Rabinson, A.H. : Elements of Cartography-John Wiley and Sons U.S.A. 1995.
- 10) Archer, J.E. & Dalton, T.H. : The Fieldwork in Geography Batsford Limited London, 1968.
- 11) Steers, J.A. : Maps Projections, University of London Press, London.
- 12) Kankure K.B. : Practical Geography, Aruna Publication, Latur, 2014
Manakari M.P.
Mugave R.M.

B. A. Third Year

Semester-V

SEC-III

An Introduction to Research Methodology

Marks: 50

Credits: 02

Periods: 45

Salient Features

1. The aim of this course is to introduce the students with basic nature of research methodology
2. To develop skills of research report writing

Utility

1. To enable students with the basic idea of data collection, analysis and interpretation skills

Learning Objectives

1. To develop the temperament among the students to study the subjects in a systematic and scientific way

Pre-requisites

1. Books, Maps, Charts
 2. Field survey and ICT
-

Unit-I Introduction

15 Periods

1. Definition, Nature, Scope and Significance of Research and Types of Research
2. Geographical Enquiry

Unit-II Data Collection

15 Periods

1. Importance of data in research. Types and Sources of Data
2. Methods of Collection of Data: Primary and Secondary
3. Data Analysis and Data Representation Techniques: Statistical and Cartographic Techniques

Unit- III Structure and Preparation of Research Report

15 Periods

1. Selection of Topic, Statement of Problem, Review of Literature, Objectives, Methodology,
2. Data Collection and Analysis, Conclusion and Suggestions
3. Reference, Bibliography, Annexure

Suggested Reading:

1. Ghosh B. N. "Scientific Method and Social Research", Sterling Publishers Pvt. Ltd. 1987
2. Kothari, R C., "Research Methodology, Methods and Techniques", New Delhi: New Age International Publishers, 2012
3. William J. Goode and Paul K. Hatt., "Methods in Social Research" McGrawHill Book Company, 1981
4. डॉ. प्रदीप आगलावे, संशोधन पद्धतीशास्त्र व तंत्रे
5. डॉ नीलम धुरी, संशोधन पद्धती, फडके प्रकाशन, कोल्हापूर 2008
6. सदा कऱ्हाडे, संशोधन सिद्धांत आणि पद्धती

B. A. Third Year
Semester-V
SEC-III
Watershed Management (Or Paper)

Marks: 50

Credits: 02

Periods: 45

Salient features

1. Watershed management is need of the time. It is useful to conserve soil moisture, to recharge the aquifers, to control soil erosion, it acts as a drainage channel during heavy rains and allows percolation

Utility

1. It will help to increase agriculture land and agriculture produce, to conserve the wild life, grassland, forestry, to maintain environmental balance and to eradicate draught prone areas

Objectives

1. To manage and utilize the runoff water, to protect, conserve and improve the land of watershed, to moderate the floods peaks at down stream area, to rehabilitate the water supply schemes in rural areas and to create water balance sheet for rural area

Pre-requisites

1. Books
 2. Maps, Models,
 3. Field Visit and ICT
-

Unit I Introduction and Concept of Watershed Management

10 Periods

1. Definition, aims and objectives of watershed management
2. Need for watershed management.
3. Principles of watershed management.
4. Types and properties of watershed
5. Factors affecting on watershed management

Unit II Soil Erosion and Control Measures

10 Periods

1. Types and Factors affecting on soil erosion
2. Measures to control erosion
 - a) Agronomical control erosion
 - b) Engineering control erosion

Unit III Techniques in Watershed Management

10 Periods

1. Grassland development
2. Gully plugs
3. Tree plantation
4. Contour bunding
5. Land leveling
6. Water conservation structures
7. Jalyukt shivar

Unit IV Water Harvesting, Water budgeting, Model Village and Schemes 15 Periods

1. Importance, significance and methods of Rainwater Harvesting
2. Importance, significance and methods of Ground water harvesting
3. Model Village
4. Water budgeting and funding
5. Schemes of central and state Government for watershed management
6. Visit- To watershed projects Rain water harvesting projects, Jalyukta shivar

Suggested Reading:

1. Allam, Gamal Ibrahim Y., Decision Support System for Integrated Watershed Management, Colorado State university, 1994.
2. American Society. Of Civil Engr., Watershed Management, American Soc. Of Civil Engineers, New York, 1975.
3. Black Peter E., Watershed Hydrology. Prentice Hall, London, 1991.
4. Michael A.M. Irrigation Engineering, Vikas Publishing House, 1992.
5. Murty, J.V.S. "Watershed Management", New Age Intl., New Delhi 1998.
6. Murthy, J.V.S., Watershed Management in India, Wiley Eastern, New Delhi, 1994.
7. Purandare, A.P., Jaiswal A.K., Watershed Development in India, NIRD, Hyderabad, 1995.
8. Vir Singh, Raj, Watershed Planning and Management, Yash Publishing House, Bikaner, 2000.
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**B. A. Third Year
Semester-VI
DSE GEOG-XVI
Environmental Geography**

Marks: 50

Credits: 02

Periods: 60

Salient Features

1. The aim of this course is to introduce the students with the fundamentals of Environment.

Utility

1. To help students to know the significance of study of environment.

Learning Objectives

1. To provide in depth knowledge about environment.
2. To prepare students for various competitive examinations.
3. To nurture scientific and research approach among the students.

Pre-requisites

1. Books, Maps, Globe, Models.
 2. ICT, Field Visit.
-

Unit I Introduction

10 Periods

- 1) Definition, nature and scope of environmental geography
- 2) Importance of study of environmental geography

Unit II Ecosystem and Biodiversity

12 Periods

- 1) Ecosystem- Definition, types and functions
- 2) Biodiversity- Concept, types and conservation

Unit III Natural Resources

10 Periods

- 1) Renewable and non-renewable natural resources
- 2) Conservation of natural resources and sustainable development

Unit IV Environmental Pollution

14 Periods

- 1) Air pollution- causes ,effects and consequences
- 2) Water pollution- causes, effects and consequences
- 3) Noise pollution- causes, effects and consequences

Unit V Environmental Issues

14 Periods

- 1) Drought – causes, effects and remedies
- 2) Global Warming and Ozone depletion Causes and effects and remedies

Suggested Reading:

- 1 Introduction to Environment – M. N. Sastri, Himalaya Publishing House, New Delhi.
- 2 Environmental Studies – H. Kaur, Pragati Prakashan, Meerut
- 3 Environmental Studies – Erach Bharucha, University press Pvt. Ltd., Hyderabad
- 4 Environmental Studies – S. V. S. Rana, Rastogi Publication, Meerut
- 5 Environmental Studies – C. P. Kaushik, New age international Ltd. New Delhi
- 6 Environmental Studies – Arumugam, Saras Publication Kanyakum
- 7 Paryavaran Bhugol- Dr.Phule S.J Vidyabharati Prakashan
- 8 पर्यावरण विज्ञान प्रा.बा.र.अहिरराव निराली प्रकाशन, पुणे
- 9 पर्यावरण परिचय डॉ.जयकुमार मगर विद्या प्रकाशन, नागपुर
- 10 नैसर्गिक आपत्ती आणि व्यवस्थापन डॉ.आर.जी.पाटीलओम साई एंटरप्राइजेस पुणे.

B. A. Third Year
Semester-VI
DSE GEOG-XVI
Health Geography (Or Paper)

Marks: 50

Credits: 02

Periods: 60

Salient Features

1. The aim of this course is to introduce the students with knowledge of health geography, recent development and its significance in present scenario

Utility

1. To enable students to study, understand the prevalence of major diseases in India

Learning Objectives

1. To make students acquaint with the concepts like health, disease, preventive and curative medicine
2. To know the factors affecting on health and health policies and programmes in India

Pre-requisites

1. Books, Maps, Globe,
 2. ICT
-

Unit I: Introduction

12 Periods

1. Definition, nature and scope of Health Geography.
2. Development of Health Geography.
3. Significance of study of Health Geography, and challenges of Health Geography

Unit II: Factors Affecting on Human Health and Diseases

14 Periods

1. Physical factors –Relief, Climate, Soil and Vegetation.
2. Social and economical factors – Population Density, Literacy, Social customs, Poverty, food and nutrition , standard of living.
3. Environmental factors – Urbanization, Congestion, Pollution and Solid waste.

Unit III: Classification of Diseases

10 Periods

1. Genetic, Communicable , and Non- Communicable diseases
2. Occupational and Deficiency Diseases

Unit IV: Major Diseases

14 Periods

1. Causes, Ecology, Etiology and Transmission
2. Vector Borne- Malaria, Dengue
3. Viral Diseases- HIV, Covid-19,
4. Bacterial diseases- Tuberculosis, Leprosy

Unit-V Health care Planning in India

10 Periods

1. Health care planning and policies in India.

Suggested Reading:

- 1) Majid Husain: Medical Geography, Anmol Publication, New Delhi.
- 2) R. C. Agnihotri : Geo-Medical Environment and Health Care , Rawat Publication ,Jaipur.
- 3) Michael Emch, Elisabeth Dowling Root, Margaret Carrel: Health and Medical Geography, Guilford press, Newyork
- 4) जी. सी. सिंघई, चिकित्सा भूगोल, वसुंधरा प्रकाशन, गोरखपुर.
- 5) आर.पी. मिश्रा, वैद्यकीय भूगोल, नॅशनल बुक, नई दिल्ली.
- 6) दीक्षित जगन्नाथ, सामाजिक आरोग्य परिचर्या, सूर्य ऑफसेट, नागपूर.
- 7) बापट रवी, स्वास्थ्यवेध आरोग्य विषयक समज-गैरसमज, सुमंगल प्रेस अंधेरी, मुंबई.
- 8) <https://www.ij-healthgeographics.bionedcentral.com>
- 9) <https://www.esri.com>
- 10) <https://www.helthgeography.org>
- 11) <https://www.aag.org>
- 12) <https://www.en.m.wikipedia.org>
- 13) <https://www.mohfw.in>
- 14) <https://www.arogya.maharashtra.gov.in>
- 15) <https://www.endmalaria.org>
- 16) <https://www.researchgate.net>
- 17) <https://www.depts.ttu.edu>
- 18) <https://www.nhp.gov.in>
- 19) <https://www.nhm.gov.in>

B. A. Third Year
Semester-VI
GE GEOG-XVIII
Geography of Maharashtra

Marks: 50

Credits: 02

Periods: 60

Salient Features

1. The aim of this course is to introduce the students with location and physical setting of Maharashtra.
2. To acquaint the students with regional knowledge of Maharashtra.

Utility

1. To appreciate the regional diversity and to develop acclimatizing temperament among the students.

Objectives

1. To aware the students about agricultural and demographic problem and make them able to find remedial measures on these problems.
2. To aware the students with available natural resources and need of conservation and protection.
3. To prepare the students for understanding the region as a dynamic entity.

Pre – requisites

1. Books Maps, Charts, Models.
 2. Field visits
 3. ICT
-

Unit-I Location, Physical Regions and Drainage **12Periods**

1. Location and Physical regions of Maharashtra
2. Drainage systems of Maharashtra.

Unit-II Climate and Soil **12Periods**

1. Climate and climatic Regions of Maharashtra.
2. Soil types and their characteristics and distribution in Maharashtra.

Unit- III Forest, Mineral and Power Resource **12Periods**

1. Forest types and their distribution in Maharashtra.
2. Minerals- Manganese
3. Power Resources- Coal

Unit- IV Agriculture, Irrigation and Industries **12Periods**

1. Major Crops – Jowar and Cotton
2. Major sources of Irrigation
3. Major Industries -Cotton textile and Sugar

Unit-V Population Growth and Distribution **12sPeriods**

1. Factors Affecting on Growth of population.
2. Growth and distribution of population

Suggested Reading

- 1) Arunachalam B.- Maharashtra – Bombay 1967.
- 2) Deshpande C.D. – Geography of Maharashtra – National Book Trust- India 1971.
- 3) Das P.K. - The Monsoons – National Book Trust India 1968.
- 4) Govt.of India Census of India, Gazetteers of India.
- 5) Govt. of Maharashtra – District Gazetteers – Economics Review.
- 6) Spate O H K & Learmonth ATA – India and Pakistan, Methuen London 1969.
- 7) Sing R.L. India- A Regional Geography, national Geography society India. Varanasi 1971.
- 8) Wadia D.N. Geology fo India – Macmillan 1957.
- 9) Dr. Keche P.J. Maharashtracha bhugol (Marathi)
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**B. A. Third Year
Semester-VI & V
DSE GEOG-XV & XVIII
Practical Geography**

Marks: 50

Credits: 02

Periods: 90

Salient Features

1. To acquaint students with different methods of surveying and their use measurement and planning of landuse
2. To promote the use of computer and GIS skills in the study geography among the students for surveying and planning

Utility

1. The course will help the students to develop surveying skills, and their application in land measurement and planning

Learning Objectives

1. To make students acquaint with the basic concepts of different survey methods and their use in the field
2. To develop the skills of village survey and report writing

Pre-requisites

1. Books, Maps, Globe,
 2. ICT
 3. Field visit and survey
-

Paper XV – Projections and Statistical Methods

45 Periods

Unit IV Cylindrical Projection

1. Cylindrical Equal area Projection
2. Mercator's Projection

Unit- V Measurement of Central Tendencies

1. Mean in Simple, Discrete and Continuous series
2. Median in Simple, Discrete and Continuous series
3. Mode in Simple, Discrete and Continuous series

Unit-VI Measurement of Deviations

1. Mean deviation in Simple, Discrete and Continuous series
2. Quartile deviation in Simple, Discrete and Continuous series
3. Standard deviation in Simple, Discrete and Continuous series

Paper XVIII – Surveying, Use of Computer and Village Survey

45 Periods

Unit-V Application of Computer in Geography

Unit-VI Glimpse of Remote Sensing and GIS and its uses in geography

Unit VII Excursion or village survey report or part of city or Town survey report

Suggested Reading:

- 1) Sing and Singh : Mapwork and Practical Geography
- 2) Singh L. & Dutta P.K.: Elements of Practical Geography-Kalyani Publishers, New Delhi 1979.
- 3) Hammod & Mc Gullah: Quantitative Techniques in Geography
- 4) Croxton & Cowden : Applied General Statistics
- 5) Sarkar, A. : Practical Geography-A Systematic Approach Orient Longman Calcutta, 1997.
- 7) Khan Z.A. :Text Book of Practical Geography
- 8) Lawrence, G.R.P. : Cartographic Methods, Methuen London,1968.
- 9) Monkhouse, F.H. & Winkinson, H.R. : Maps and diagrams Methuen London,1994.
- 10) Rabinson, A.H. :Elements of Cartography-John Wiley and Sons U.S.A. 1995.
- 11) Archer, J.E. & Dalton, T.H. :The Fieldwork in Geography Bats ford Limited London, 1968.
- 12) Steers, J.A. :Maps Projections, University of London Press, London.
- 13) Kankure K.B. : Practical Geography, Aruna Publication, Latur
Manakari M.P.
Mugave R.M.

B. A. Third Year
Semester-VI
SEC-IV
Disaster Management

Marks: 50

Credits: 02

Periods: 45

Salient Features

1. The aim of this course is to introduce the students with few basics of Aerial Photography and Remote Sensing
2. To develop skills of interpretation of aerial photographs and satellite imageries

Utility

1. To make use of interpretation skills of aerial photographs and satellite imageries in understanding and analyzing the physical and human world

Learning Objectives

1. To keep students abreast with recent developments in geoinformatics
2. To help students to make use of interpretation skills in decision making and planning for the benefit of society

Pre-requisites

1. Aerial Photographs and Satellite Imageries
 2. Pocket and /or Prism stereoscope
 4. Field visit and ICT
-

Unit I Introduction

10 Periods

1. Meaning, nature, scope and types of disaster
2. Disaster Management Act-2005, Government of India.
3. Yokohama strategy -1994
4. Functions of centre, state and District disaster management departments

Unit II Disaster Management

08 Periods

1. Disaster management plan
 - a. Pre-Disaster management
 - b. During disaster management
 - c. Post disaster management
2. Application of Remote sensing and GIS for disaster management

Unit III Role of Agencies in Disaster Management

10 Periods

The role of various departments in disaster management-ISRO, Police, Revenue, Fire, PWD, Irrigation, School & Colleges, Health, Z.P., Municipal council, Corporation and Village.

Unit IV Training Centers for Disaster Management

09 Periods

Disaster management and training centers: Government Private, N.C.C., N.S.S., NGOs, Police, N.D.R.F., and Paramilitary force, Defense wings (Air force, Army and Navy)

Unit V Role of Media in Disaster Management

08 Periods

The role of Media in disaster management: Social Media, Print Media, Electronic Media, All India Radio and Government GR

Suggested Reading:

1. P. P. Marathe: Practical Disaster Management, Diamond Publication, Pune
2. Dr. Akhilesh K. Pande: Disaster Management, Damini Garg for Murari Lal & Sons, New Delhi.
3. Anu Kapur : Disaster in India: Studies of Grim Reality, Rawat Publication, Jaipur.
4. R. B. Singh: Natural Hazards and Disaster Management (Vulnerability and Mitigation), Rawat Publication, Jaipur.
5. K. C. Samal, S. Meher, N. Panigrahi and S. Mohanty: State, NGOs and Disaster Management, Rawat Publication, Jaipur.
6. Paranjape H. K: The Bhopal's Gas Disaster: A Chronology of Principal Events in the Bhopal Gas Disaster Litigation, Janta.
(Marathi references 10th)

Websites

<https://www.ndma.gov.in>

<https://www.nidm.gov.in>

<http://www.en.m.wikipedia.org>

<http://www.ndmindia.nic.in>

<http://www.aidmi.org>

<http://www.nhp.gov.in>

<https://www.maharashtra.gov.in>

B. A. Third Year

Semester-VI

SEC-IV

Interpretation of Aerial Photographs and Satellite Imagery (Or Paper)

Marks: 50

Credits: 02

Periods: 45

Silent Features

1. The aim of this course is to introduce the students with few basics of Aerial Photography and Remote Sensing
2. To develop skills of interpretation of aerial photographs and satellite imageries

Utility

1. To make use of interpretation skills of aerial photographs and satellite imageries in understanding and analyzing the physical and human world

Learning Objectives

1. To keep students abreast with recent developments in geoinformatics
2. To help students to make use of interpretation skills in decision making and planning for the benefit of society

Pre-requisites

1. Aerial Photographs and Satellite Imageries
2. Pocket and /or Prism stereoscope
3. Geometry box

Unit-I Introduction

15 Periods

1. Definition and Development of Remote Sensing
2. Meaning of Platform and Their Types
3. Electromagnetic Spectrum
4. Sensors

Unit-II Aerial Photographs and Satellite Imageries

15 Periods

1. Concept of Aerial Photographs and Satellite Imageries
2. Scale of Aerial Photograph and Satellite Imagery
3. Types of Aerial Photographs
4. Types of Satellite Imageries

Unit- III Interpretation of Aerial Photographs and Satellite Imageries

15 Periods

1. Basic Principles of Interpretation
2. Elements of Interpretation

Suggested Reading:

1. George Joseph,(2005): Fundamentals of Remote Sensing, University Press Pvt. Ltd. Hyderabad
2. Lillesand , T.M. and Kiefer, R.W. (1994): Remote Sensing and Image Interpretation, Wiley Publication, New York
3. M. Anji Reddy,(2001): Text book of Remote Sensing and Geographical Information System, B.S. Publication, Hyderabad
4. पेशवा वि. वि. (१९९०) : दूरसंवेदन, मराठी विज्ञान परिषद प्रकाशन, पुणे
5. डॉ. श्रीकांत कार्लेकर (२००६): दूरसंवेदन, डायमंड पुब्लिकेशन, पुणे