

Revised Syllabus of B.A./B.Sc. (U.G. Geography program) as per NEP-2020

Approved in BoS Dated 30.05.2024

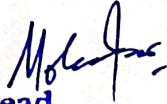
Applicable to B.A/ B.Sc. V Semester and VI Semester Session 2024-25

Semester	Major Subject	Revised Course Name (BoS 30/05/2024)	Credit
New Syllabus of B. A/B.Sc. 5th & 6th Sem. according to NEP 2020			
V	Core Subject -1 (CS-1)	Economic Geography	4
	Core Subject -1 Practical	Practical Geography-V (Field Visit, Survey Methods and Report Writing)	2
	Core Subject -2 (CS-2)	Any other subject	4
	Core Subject -2 Practical	Any other subject	2
	Vocational course/field visit/Entrepreneurship skills	I. Fundamental of Remote Sensing & GIS	4
		II. Vibrant and Smart Village	4
		III. Mountain Farming	4
		IV. Watershed and Spring Management	4
		V. Community Health Management	4
		VI. Disaster Risk Reduction	4
		VII. Waste Management	4
	Note: (including action research-based report/short term entrepreneurship skill training) * Any one related to either CS-1 or CS-2 OR Field/ Industrial visit as per requirement of core course (Student will submit a brief report on visit at the end of the semester).		
	Extracurricular courses/Compulsory courses	Culture, traditions and moral values	2
	Languages-I	Indian, Modern Regional language-1	2
	Total		20
VI	Core Subject -1 (CS-1)	Environmental Geography	4
	Core Subject -1 Practical	Practical Geography-VI (Field Surveying Techniques)	2
	Core Subject -2 (CS-2)	Any other subject	4
	Core Subject -2 Practical	Any other subject	2
	Vocational course/field visit/Entrepreneurship skills	I. Fundamental of Remote Sensing & GIS	4
		II. Vibrant and Smart Village	4
		III. Mountain Farming	4
		IV. Watershed and Spring Management	4
		V. Community Health Management	4
		VI. Disaster Risk Reduction	4
		VII. Waste Management	4
	Note: (including action research-based report/short term entrepreneurship skill training) * Any one related to either CS-1 or CS-2 OR Field/ Industrial visit as per requirement of core course (Student will submit a brief report on visit at the end of the semester).		
	Communication skills Based on either CS-1 or CS-2	Communication skills (Based on developing soft skills)	2
	Languages-II	Indian, Modern Regional language- I	2
	Total		20

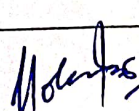
Mohd. J. S.

Head
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School of Earth Science
H.N.B. Garhwal University


<u>Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year</u> <u>Course- Core Subject -5</u> <u>(Theory)</u>		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth
Subject: Geography		
Course Code: UG/C C005	Course Title : ECONOMIC GEOGRAPHY	
Course Objective: <i>After completing the course, students will be able to-</i> 1. To understand the concept and spatial distribution of economic activities in the world. 2. To analyse the factors affecting the economics activity focusing on Von Thunen and Weber theory. 3. To describe in the details the regionalization of different economic activities.		
Course Outcomes: <i>Students will be able to understand-</i> 1. Distinguish to different types of economic activities and their utilities. 2. Appreciate the factors responsible for the location and distribution of activities. 3. Examine the significance and relevance of theories in relation to the location of different economic activities		
<i>Credits : 4</i>	<i>Core Compulsory</i>	
<i>Max. Marks: 30+70</i>	<i>Min. Passing Marks: 35</i>	
<i>Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-4/W</i>		
Unit	Topics	
UNIT-I	Definition, approaches and fundamental concepts of Economic Geography; Patterns of development.	
UNIT-II	Locational Theories-Agriculture (Von Thunen) and Industrial (Weber).	
UNIT-III	Primary Activities - Intensive subsistence farming: Commercial grain farming, Plantation; Commercial dairy farming: Commercial Fishing, and Mining (iron ore, coal and petroleum). Secondary Activities-Cotton textile Industry, Petro-Chemical Industry; Major Manufacturing Regions.	
UNIT-IV	Tertiary and Quaternary Activities Modes of transportation: Patterns of international trade; Information and Communication Technology Industry.	
Suggested Readings: 1. Alexander J. W., 1963: Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey. 2. 2. Bagchi-Sen S. and Smith H. L., 2006: Economic Geography: Past, Present and Future, Taylor and Francis. 3. Coe N. M., Kelly P. F. and Yeung H. W., 2007: Economic Geography: A Contemporary Introduction, Wiley-Blackwell. 4. Combes P., Mayer T. and Thisse J. F., 2008: Economic Geography: The Integration of Regions and Nations, Princeton University Press. 5. Durand L., 1961: Economic Geography, Crowell. 6. Hodder B. W. and Lee R., 1974: Economic Geography, Taylor and Francis. 7. Wheeler J. O., 1998: Economic Geography, Wiley. 8. Willington D. E., 2008: Economic Geography, Husband Press.		
This course can be opted as an elective by the students of following subjects: Open to all.		
Suggested Continuous Evaluation Methods: Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)		
Marks distribution of theory examination : 30 marks by internal assessment and 70 marks by external assessment.		


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Uttarakhand

Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year		
Course- Core Subject -5		
(Practical-V)		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth
Subject: Geography		
Course Code: UG/C C005 (P)	Course Title : FIELD VISIT, SURVEY METHODS AND REPORT WRITING	
Course Objective: <i>After completing the course, students will be able to-</i> 1. To develop proficiency in Report Writing and organizing a report. 2. Enhance Writing and Communication Skills.		
Course Outcomes: <i>Students will be able to understand-</i> 1. Ability to design and execute geographical field survey and projects, from data collection to analysis and reporting. 2. Understanding the field ethics and different tools of field study. 3. Students will have enough ability to comprehensive Report Writing skills		
Credits : 2	Core Compulsory	
Max. Marks: 30+70	Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-2/W		
Unit	Topics	
UNIT-I	Introduction to Field Survey Methods: Importance of field survey in Geography; Planning and preparation for field survey, Field survey Techniques: Sampling, Selection of Study Area	
UNIT-II	Developing Data collection tools: preparation of survey questionnaire, Other field survey techniques- observation, Interviews and survey tools (Kobo Toolbox ODK - Collect data anywhere, Google Maps, GPS Essentials, Qfield).	
UNIT-III	Report Writing and Presentation: Introduction to Report Writing- types and purpose, Different components of field report, Structure and Organization of a Report; Writing Style and Language, Editing and Proofreading	
UNIT-IV	Citations and Referencing; Ethical Considerations; Presenting findings using maps, digital cartographical mapping software (ArcGIS, QGIS, Erdas, Google Earth Engine etc.), charts, and visual aids, Zotero, Mendeley, Citavi, Word's References tool (anyone).	
Field Work/ Tour Report <ul style="list-style-type: none">• Each student will prepare an individual report based on primary and secondary data collected during field work.• The duration of the field work should not exceed 10 days.• The word count of the report should be about 8000 to 12,000 excluding figures, tables, photographs, maps, references and appendices.• One copy of the report on A4 size paper should be submitted in soft binding.		
Suggested Readings: <ol style="list-style-type: none">1. Mahmood Aslam (2008): Statistical Methods in Geographical Studies, New Delhi: Rajesh Publications2. Singh, R.L. & Singh, Rana P.B. (2008): Elements of Practical Geography, New Delhi, Kalyani Publishers3. Das, N.G. (2017): Statistical Methods (Combined edition volume 1 & 2), Mc Graw Hill4. Kothari, C.R. (2008). Research Methodology -Methods and Techniques, New Delhi, New Age International (P) Limited Publishers5. V.P. Michael, Research Methodology in Management, Himalaya Publishing House, Bombay.6. O.R. Krishna Swamy, Methodology of Research in Social Sciences, Himalaya Publishing House, Mumbai.7. Berenson, Conrad and Raymond Cotton, Research and Report Writing for Business and Economics, Random House, New York.		
Weblinks <ol style="list-style-type: none">1. https://www.zotero.org/support/quick_start_guide2. https://gradcoach.com/how-to-use-mendeley/3. https://www.citavi.com/en/support/first-steps4. https://libguides.reading.ac.uk/managing-references/word		


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This course can be opted as an elective by the students of following subjects: Open to all.
Suggested Continuous Evaluation Methods: Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)
Marks distribution of theory examination : 30 marks by Internal assessment and 70 marks by external assessment.
Note: *In final practical examination students shall be examined by external and internal examiners. **Marks distribution: 50 marks written exam, 10 marks practical file, records and 10 marks viva (Total marks 70).


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Srinagar (Uttarakhand)

Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year
Course- Vocational course/field visit/Entrepreneurship skills
(Theory/ Practical)

Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth/ Sixth
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Subject: Geography

Course Code: **UG/VC-001**

Course Title : **FUNDAMENTAL OF REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEM (GIS)**

Course Objective: After completing the course, students will be able to-

1. Understand the basic concept and application of remote sensing techniques and Geographical Information Systems.
2. Comprehensive awareness of the potential of remote sensing, GIS, and GPS.
3. Understanding visual interpretation.
4. Understanding of GIS analytical workflow and integrated applications in various geographical domains.

Course Learning Outcomes:

1. Students will understand the concept and function of remote sensing
2. Students will be able to comprehend the use and significance of Remote Sensing and GIS in the field of geographical data analysis and presentation.

Credits : **4**

Core Compulsory

Max. Marks: **30+70**

Min. Passing Marks: **35**

Total No. of Lectures- Tutorials - Practical (in hours per week): **L-T-4/W**

Unit

Topics

UNIT-I	Remote Sensing: Definition, Type, Scope and Historical Development. Types of Satellites. Electro-magnetic radiation: Characteristics, spectral regions and bands. Stages or Process of Remote Sensing.
UNIT-II	Remote sensing satellites: Platform and sensors. Resolution: Spatial, Spectral, Temporal, Radiometric Resolution. Remote Sensing data processing and applications: Visual and digital image processing techniques.
UNIT-III	Remote Sensing applications in watershed management, Glacial studies, Land use/Land cover Mapping, Disaster Management, Dasymeric mapping.
UNIT-IV	Introduction to GIS: Definition, concept and history of GIS. Computer fundamentals for GIS, GIS Packages like ARC GIS, ERDAS, QGIS etc. Coordinate system, Datum, Raster and vector data. Hands one excursive on the software's handling.

Suggested Readings:

1. Choniya, D D, (2016) Sudur Samvadenevam Bhogolic Suchna Pranalikesighant, Sharda Pustak Bhavan, Allahabad.
2. Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. 4th edition. John Wiley and Sons, New York.
3. Campbell, J.B. (2002): Introduction to Remote Sensing. 5th edition, Taylor and Francis, London.
4. Bhatta, B. (2010): Remote Sensing and GIS, Oxford University Press, New Delhi.
5. Nag Prithvish and Kudrat M. (1998): Digital Remote Sensing, Concept Publishing Company, New Delhi
- Curran, P.J. (1985): Principles of Remote Sensing, Longman, London.

Web References:

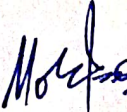
- 1 https://onlinecourses.swayam2.ac.in/aic20_ge05/preview

This course can be opted as an elective by the students of following subjects: **Open to all.**

Suggested Continuous Evaluation Methods: **Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)**

Marks distribution of theory examination : **30 marks by Internal assessment and 70 marks by external assessment.**

Note: The paper consists of four units. Two questions will be set from each unit. The candidate will be required to attempt four questions in all. Answer should be precise. All questions carry equal marks.


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(Theory/ Practical)

Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth/ Sixth
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Subject: **Geography**

Course Code: **UG/VC-002**

Course Title : **WASTE MANAGEMENT**

Course Objective: After completing the course, students will be able to-

1. To examine the various types of solid waste and methods to categorise it.
2. To find out methods to reduce solid waste at the source.
3. To carry out analysis and audit of waste.
4. To understand people's responsibility in reducing and managing waste

Course Learning Outcomes: Students will be able to understand-

Credits : **4**

Core Compulsory

Max. Marks: **30+70**

Min. Passing Marks: **35**

Total No. of Lectures- Tutorials - Practical (in hours per week): **L-T-4/W**

Unit	Topics
UNIT-I	Problem of Wastes, Types of Solid Waste, Categories of solid waste, Effects of Excess Waste Generation.
UNIT-II	Solid Waste Reduction, Waste reduction strategies - How to Start a Waste Reduction Program Guideline, Economic benefits of Waste Reduction, Operation on a daily basis.
UNIT-III	Introduction to Terminology of Waste, Waste Analysis, Introduction to Waste Audit, Checklist for performance audit in Waste Collection, Segregation, Transport, Treatment, Responsibility of Waste Management, Polluter Pays Principle (PPP),
UNIT-IV	Report on the Case study of Waste Management during the Course.

Suggested Readings:

1. CPHEEO Manual of Solid Waste Management, GOI Publication, 2001.
2. Manuals, Rules and regulations in India for Municipal Solid Waste, Biomedical waste, flyash, nuclear waste, hazardous waste and E-waste, Government of India.
3. Gitanjali Nain Gill, 2011, SAGE Publications's Green Technology: An A-Z Guide (2011) whose work for that encyclopedia formed the basis of her contributions to Britannica.
4. Hester, R. E. and R. M. Harrison, (2002). Environmental and health impact of solid waste management activities. Cambridge: The Royal Society of Chemistry.
<https://www.downtoearth.org.in/coverage/costs-and-benefits-of-india-s-waste-disposal-options-5623>.
5. <https://swachhindia.ndtv.com/national-aluminium-company-limited-advocates-for-use-of-aluminium-foil-as-alternative-to-plastic-26056/>
6. <https://www.downtoearth.org.in/blog/india-s-challenges-in-waste-management-56753> 6.
7. <http://rsos.royalsocietypublishing.org/content/4/3/160764#sec-17>
8. <https://www.downtoearth.org.in/coverage/waste-smart-cities-54119>
9. Johnson, Michael R.; McCarthy, Ian P. (2014-10-01). "Product recovery decisions within the context of Extended Producer Responsibility". Journal of Engineering and Technology Management. Engineering and Technology Management for Sustainable Business Development, 34 (9) doi:10.1016/j.jengtecman.2013.11.002
10. Rees, J.F., (1980). The fate of carbon compounds in the landfill disposal of organic matter. J. Chem. Tech. Biotechnol, Vol.30, pp.161-175.
11. Misi, S. N and Forster, C.F (2002). "Semi-Continuous Anaerobic Co Digestion of Agro-Waste," Environmental Technology, Vol. 23, No. 1, 2002, pp. 445-451.
12. Srilatha, H.R., Krishna, N., Sudhakar Bada, K. and Madhukara, K. 1995. Fungal pretreatment of orange processing waste by solid state fermentation for improved production of methane. Process Biochem. 30 : 327-331.
13. Tchobanoglous, G, Theisen, H, and Eliassen, R (1977). Solid Waste Engineering. Principles and Management Issues McGraw Hill Book Company, New York.
14. Waste Management, IANS (2016), <https://swachhindia.ndtv.com/vegetable-markets-get-rs-10-lakh-setting-waste-management-plants-3722/>

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15. Wastes to Resource : Waste Management Handbook.
http://cbs.teriin.org/pdf/Waste_Management_Handbook.pdf
16. Performance audit on "management of Waste in India" <https://swachcoop.com/pdf/CAG%20Audit.pdf>
17. Technical EIA guidance manual for common hazardous waste treatment, storage and disposal facilities

Further Readings

1. Internal Waste Audit: A Best Practices Guide.
<https://www.partnersinprojectgreen.com/resources/internal-waste-audit-a-best-practices-guide/> Video Links 1. Using Waste Audits to Improve Recycling & Recovery Programs.
<https://www.youtube.com/watch?v=DVbB7mVY42Y>
2. EIA waste sector lecture <https://www.youtube.com/watch?v=BbKlKl9qsAM>
3. Manual on Sampling, Analysis and Characterization of Hazardous Wastes.
http://cpcb.nic.in/cpcb/old/upload/Publications/Publication_323_sec6_16.pdf

This course can be opted as an elective by the students of following subjects: **Open to all.**

Suggested Continuous Evaluation Methods: **Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations** (any two methods)

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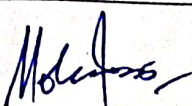
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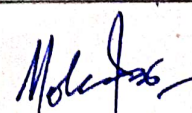
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Srinagar (Uttarakhand)

Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year
Course- Vocational course/field visit/Entrepreneurship skills
(Theory/ Practical)

Programme/ Class: Degree: B.A./B.SC.		Year: Third	Semester: Fifth/ Sixth
Subject: Geography			
Course Code: UG/VC-003		Course Title : DISASTER RISK REDUCTION	
Course Objective: After completing the course, students will be able to- 1. Learn how sustainable development and disaster risk are linked. 2. Understand how to make policies for better disaster management. 2. 3. Explore community strategies to improve disaster preparedness.			
Course Learning Outcomes: Students will be able to understand- Demonstrate skills of identifying linkages between disasters and development and developing disaster risk reduction as a cross-cutting element. Enable to facilitate communities to develop disaster preparedness and recovery plans.			
Credits : 4		Core Compulsory	
Max. Marks: 30+70		Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-4/W			
Unit		Topics	
UNIT-I	Sustainable development and livelihood. Linkages between disasters and development. Disaster-Development continuum. Integrating risk reduction perspective in disaster risk management stages, Mainstreaming disaster risk reduction. Strategies of mainstreaming disaster risk reduction.		
UNIT-II	Policy and planning for disaster management, Mainstreaming DRR in all development activities, Maintenance of public infrastructure.		
UNIT-III	Community Based Approaches to Disaster Risk Management Course Content Community vulnerability management plan. Community risk assessment. Community based disaster management.		
UNIT-IV	Household risk mapping. Community based adaptation. Indigenous knowledge for reducing disaster risks. Facilitating self-help initiatives. Sustaining long-term community-based disaster risk management. Gender responsive approaches.		
Suggested Readings: 1. https://www.bracu.ac.bd/sites/default/files/Course%20Content.pdf 2. https://openlearning.unesco.org/courses/course-v1:UNESCO+UNESCO-03+2021_01/about 3. https://www.shareweb.ch/site/disasterriskreduction/themes-and-resources/DOC_themesresources/Themes-and-resources/Guide_Basic_Course_DRR_Volume_1_2014_SDC_WFP.pdf 4. https://ssp.nidm.gov.in/enrol/index.php?id=148 5. https://openlearning.unesco.org/courses/course-v1:UNESCO+UNESCO-03+2021_01/about 6. https://openlearning.unesco.org/assets/courseware/v1/8409fd36472bc585b50e7545eea97a92/asset-v1:UNESCO+UNESCO-03+2021_01+type@asset+block/Brochure_Resilient_schools_and_DRR_education_.pdf 7. https://unitar.org/courses-learning-events/individual-learners/master-degree-related-qualifications/graduate-certificate-disaster-risk-reduction-drr 8. https://www.newcastle.edu.au/degrees/teach-out/graduate-certificate-disaster-risk-reduction-pre-2024 9. https://www.newcastle.edu.au/degrees/teach-out/graduate-certificate-disaster-risk-reduction-pre-2024 10. https://hpsdma.nic.in/WriteReadData/LINKS/Final%20DRR%20Mainstreaming%20Training%20Modules413f99f4-ddb9-4ca0-affd-0156c7cb7343.pdf			
This course can be opted as an elective by the students of following subjects: Open to all.			
Suggested Continuous Evaluation Methods: Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)			
Marks distribution of theory examination : 30 marks by Internal assessment and 70 marks by external assessment.			
Note: The paper consists of four units. Two questions will be set from each unit. The candidate will be required to attempt four questions in all. Answer should be precise. All questions carry equal marks.			


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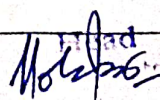
Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year Course- Vocational course/field visit/Entrepreneurship skills (Theory/ Practical)		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth/Sixth
Subject: Geography		
Course Code: UG/VC-004	Course Title : MOUNTAIN FARMING	
Course Objective: <i>After completing the course, students will be able to-</i> 1. To introduce with mountain agricultural systems in fragile ecosystem 2. To work, contribute and show off mountain agricultural processes		
Course Learning Outcomes: <i>Students will be able to understand-</i> 1. Show off/exhibit their contribution to mountain agricultural system in a limited space. 2. Understand deeper importance of mountain agriculture		
Credits : 4	Core Compulsory	
Max. Marks: 30+70	Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-4/W		
Unit 		


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Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year		
Course- Vocational course/field visit/Entrepreneurship skills		
(Theory/ Practical)		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth/ Sixth
Subject: Geography		
Course Code: UG/VC-006	Course Title : VIBRANT AND SMART VILLAGE	
Course Objective: <i>After completing the course, students will be able to-</i> 1. To understand the concept of Vibrant and Smart Villages 2. To analyse the role of technology in Rural Development 3. To examine the socio-economic empowerment strategies 4. To evaluate the government initiative programme and applied field knowledge.		
Course Learning Outcomes: <i>Students will be able to understand-</i> 1. Significance of Vibrant and Smart Villages 2. Integrated technological aspects in Rural Development 3. Designing strategies for the socio-economic empowerment 4. Role of Government policy framework		
Credits : 4	Core Compulsory	
Max. Marks: 30+70	Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-4/W		
Unit Topics		
UNIT-I	Introduction to Vibrant and Smart Villages: Concept, definition, scope and approach and importance of rural development.	
UNIT-II	Integration of technology in Vibrant and Smart villages: Concept of ICT, Digital Infrastructure, digital literacy, smart agriculture and water management.	
UNIT-III	Social and Economic empowerment: Inclusive development, rural entrepreneurship and skill development, rural livelihood.	
UNIT-IV	Policy Framework and Future Prospects: Government policies and programs, and a detailed Report on the Case study of Vibrant and Smart village in India.	
Suggested Readings: 1. Gandhi, M., 1963. Village swaraj. Narajivan Publishing House. 2. Nakka, S.B.R., How to Create Vibrant Smart Villages in the World. SAI BHASKAR REDDY NAKKA. 3. Rajan, Y.S., 2022. Smart Villages–Indian Realities, Opportunities and Way Forward. Smart Villages: Bridging the Global Urban-Rural Divide. 4. Singh, K., 1999. Rural development: Principles, policies and management. Sage. 5. Tripathy, S.N. ed., 2000. Rural Development. Discovery Publishing House. 6. Chambers, R., 2014. Rural development: Putting the last first. Routledge. 7. Azman, W.F.A.C. and Kasim, R.S.R., 2021. Bottom 40 Next Generation Model for Sustainability Entrepreneurship: Post COVID-19 Crisis. Nasrul Aiman Bin Abd Aziz Web designer. 8. Jha, M., 2022. DIGITAL MAPPING OF RURAL DEVELOPMENT WORKS: PURPOSE AND ADVANTAGE. Sustainable Development for Society, Industrial.		
This course can be opted as an elective by the students of following subjects: Open to all.		
Suggested Continuous Evaluation Methods: Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)		
Marks distribution of theory examination : 30 marks by Internal assessment and 70 marks by external assessment.		
Note: The paper consists of four units. Two questions will be set from each unit. The candidate will be required to attempt four questions in all. Answer should be precise. All questions carry equal marks.		

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<u>Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year</u> <u>Course- Vocational course/field visit/Entrepreneurship skills</u> <u>(Theory/ Practical)</u>		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Fifth/ Sixth
Subject: Geography		
Course Code: UG/VC-007	Course Title : COMMUNITY HEALTH MANAGEMENT	
Course Objective: After completing the course, students will be able to- 1. Understand the concept of health, nutrition promotion, diseases and their prevention, 2. Understand the processes of community health management, 3. Participate in health management at the community level and during emergencies,		
Course Learning Outcomes: Students will be able to understand- 1. Will understand the history and development of Community healthcare initiatives in India 2. Understand the concepts of health, nutrition and able to draw the importance of individuals and families in promoting health of the Community. 3. Participate effectively in the management of health at community level. 4. Able to coordinate and collaborate with various agencies operating in the community by using inter sectoral and multi-disciplinary approach.		
Credits : 4	Core Compulsory	
Max. Marks: 30+70	Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-4/W		
Unit	Topics	
UNIT-I	Definition, nature and scope of Community health, Historical development of Community health planning in India, National Policies, plans and programmes- National health policy, National Population policy, Sustainable Developmental Goals (SDGs), National Health Mission, ABDHM.	
UNIT-II	Health, nutrition and diseases: concepts, determinants, measurements, promotion and management of health, Health care delivery system in India: Urban and rural; Levels and hierarchical structure of health care system, IPHS guidelines	
UNIT-III	Information, Education and Communication (IEC)-its importance, principles, strategies and guidelines, types and roles; Tele-medicine, Alternative systems of medicine; Health agencies: roles and functions;	
UNIT-IV	Student Activities (anyone from the list as per convenience and context). Community Health Survey & report writing <ul style="list-style-type: none">• Health education- campaign, exhibition, fold media, preparation of IEC materials (with the help from local health officials) on different issues like ANC visits, menstrual hygiene, child nutrition, STIs,• Identification and interaction with key persons of Village Health, Sanitation and Nutrition committee (VHSNC) under NHM, followed by brief report writing on health management processes• Drill for disaster/emergency preparedness (with the help from local health officials)• Report on the functioning of Anganwadi Centre (AWC) providing nutrition to child and women– Exercise on nutritional assessment• Estimation of vital health statistics using records, reports and registers maintained at SC/PHC/CHC• Field visits to Population Control Office, Office for National Health Mission, SHEB, Ayurveda Hospital, Homeopath Hospital	
Suggested Readings: 1. World Health Organization (2001): Community Health Needs Assessment An introductory guide for the family health nurse in Europe. ISBN 92 890 1194 7		


 Head of Department of Geography
 B.A./B.Sc. IIIrd Year

2. Neil Brecht (Eds.) (1999): Health promotion at the community level- New Advances (2nd Edition), Sage Publications, New Delhi
3. K Park (2023): Park's Textbook of Preventive and Social Medicine, 27th Edition, Bhanot Publication
4. James F. McKenzie, Robert R. Pinger, Jerome E. Kotecki (2005): An Introduction to Community Health-5th Edition, Jones and Bartlett Publishers
5. GOI-UNDP DRM Programme (2002-08): Guidelines for Hospital Emergency Preparedness Planning, National Disaster Management Division, GOI, MHFW, Retrieved at https://www.undp.org/sites/g/files/zskgke326/files/migration/in/guidelines_hospital_emergency.pdf
6. Indian Public Health Standards (2022): National Health Mission, <https://nhm.gov.in/index1.php?lang=1&level=2&sublinkid=971&lid=154>
7. IGNOU (2017): Information, education and communication, <https://egyankosh.ac.in/bitstream/123456789/31761/1/Unit-3.pdf>
8. Bhalwar, R, Rajesh Vaidya, Rina Tilak, Rajul Gupta, Renuka Kunte (Eds.) (2009): Text Book of Public Health and Community Medicine- 1st Edition, Dept of Community Medicine, AFMC, Pune in collaboration with WHO, India, New Delhi
9. World Health Organization (2001): Information, Education and Communication -Lessons from the past; Perspective for the future, https://iris.who.int/bitstream/handle/10665/67127/WHO_RHR_01.22.pdf
10. MoSPI, GOI (2010): Manual on Vital statistics, Ministry of Statistics and Programme Implementation, Central Statistics Office retrieved from https://mospi.gov.in/sites/default/files/publication_reports/vital_statistics_2010_0.pdf
11. Journal of the Indian Institute of Science Vol 102, No 2 (2022): Public Health, ISSN: 0970-4140, Retrieved at <https://journal.iisc.ac.in/index.php/iisc/issue/view/531>
12. World Health Organization (2019): Health Emergency and Disaster Risk Management Framework, ISBN 978-92-4-151618-1
13. Directorate of Health Services Kashmir (2014): Disaster Management Manual Health Care Emergency Management, <https://www.dhskashmir.org/disaster/Disaster%20Management%20Manual-DHSK.pdf>
14. <https://www.dhskashmir.org/disaster/Disaster%20Management%20Manual-DHSK.pdf>
15. Lahariya C, Roy B, Shukla A, Chatterjee M, De Graeve H, Jhalani M, Bekedam H. (2020): Community action for health in India: evolution, lessons learnt and ways forward to achieve universal health coverage. WHO South-East Asia J Public Health. ;9(1):82–91. doi:10.4103/2224-3151.283002.

This course can be opted as an elective by the students of following subjects: **Open to all.**

Suggested Continuous Evaluation Methods: **Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations** (any two methods)

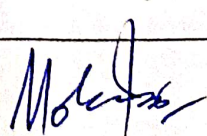
Marks distribution of theory examination : 30 marks by internal assessment and 70 marks by external assessment.

Note: The paper consists of four units. Two questions will be set from each unit. The candidate will be required to attempt four questions in all. Answer should be precise. All questions carry equal marks.

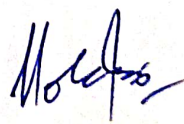

Head

Department of Geography
School of Earth Sciences
H.N.B. Garhwal University
Srinagar (Uttarakhand)

Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year		
Course- Core Subject -6		
(Theory)		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Sixth
Subject: Geography		
Course Code: UG/VC C-006	Course Title : ENVIRONMENTAL GEOGRAPHY	
Course Objective:		
1. Various dimensions of environment and natural resource management.		
2. Detailed analysis of concept, structure and functions.		
3. Understanding of the concept of appraisal and conservation of Environment and Natural Resources.		
Course Outcomes: <i>Students will be able to understand-</i>		
1. Detailed exposure of human-environment relationship.		
2. In-depth knowledge of environmental issues in tropical, temperate and polar ecosystems.		
3. Understanding the environmental programmes and policies at local as well as global level.		
Credits : 4	Core Compulsory	
Max. Marks: 30+70	Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-4/W		
Unit	Topics	
UNIT-I	Environmental Geography: Concepts and approaches, Ecosystem-Concept and structure; Ecosystem functions.	
UNIT-II	Human-Environment Relationship in Equatorial, Desert, Mountain and Coastal Regions.	
UNIT-III	Environmental Problems and Management; Air Pollution; Biodiversity Loss; Solid and Liquid Waste.	
UNIT-IV	Environmental Programs and Policies; Developed and Developing Countries. 5. Protected Areas; National Parks; Biosphere Reserves and Wildlife Sanctuaries in Uttarakhand.	
Suggested Readings:		
1. Casper J.K. (2010) Changing Ecosystems: Effects of Global Warming. InfoBase Pub. New York.		
2. Hudson, T. (2011) Living with Earth: An Introduction to Environmental Geology, PHI Learning Private Limited, New Delhi.		
3. Miller, G.T. (2007) Living in the Environment: Principles, Connections, and Solutions, Brooks/Cole Cengage Learning, Belmont.		
4. Singh, R.B. (1993) Environmental Geography, Heritage Publishers, New Delhi.		
5. UNEP (2007) Global Environment Outlook: GEO		
6. Environment For Development, United Nations Environment Programme. University Press, Cambridge.		
7. Wright R. T. and Boorse, D. F. (2010) Toward a Sustainable Future, PHI Learning Pvt Ltd, New Delhi.		
8. Singh, Savindra 2001. Paryavaran Bhugol, Prayag Pustak Bhawan, Allahabad.		
This course can be opted as an elective by the students of following subjects: Open to all.		
Suggested Continuous Evaluation Methods: Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)		
Marks distribution of theory examination : 30 marks by internal assessment and 70 marks by external assessment.		


Head
Department of Geography
School of Earth Science
P.N.B. Garhwal University
Uttarakhand

Bachelor of Arts/ Science (B.A./B.SC.) IIIrd Year		
Course- Core Subject -6		
(Practical-VI)		
Programme/ Class: Degree: B.A./B.SC.	Year: Third	Semester: Sixth
Subject: Geography		
Course Code: UG/C C006 (P)	Course Title : FIELD SURVEYING TECHNIQUES	
Course Objective: The course aims to equip the students with principles and procedures of surveying techniques and GIS tools.		
Course Outcomes: After completing of this course student will be able to apply the general principles of surveying to conduct survey and preparation of report. A special outcome would be an understanding about GIS tools.		
Credits : 2	Core Compulsory	
Max. Marks: 30+70	Min. Passing Marks: 35	
Total No. of Lectures- Tutorials - Practical (in hours per week): L-T-2/W		
Unit	Topics	
UNIT-I	Plane Table Survey- Radiation and Intersection Methods. Prismatic Compass Survey- Open and closed traverse.	
UNIT-II	Use and handling of Indian Clinometers.	
UNIT-III	Use and manage handheld GPS units, mobile GPS apps like Google Maps, GPS Essentials, Qfield.	
Suggested Readings: 1. Dent B. D., 1999: Cartography: Thematic Map Design, (Vol. 1), McGraw Hill. 2. Gupta K. K and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi. 3. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing. 4. Misra R.N. and Sharma P., 2019, Practical Geography, Rawat Publication, Jawahar Nagar, Jaipur. 5. Robinson A., 1953: Elements of Cartography, John Wiley. 6. Sharma J. P., 2010: Prayogic Blagol, Rastogi Publishers. 7. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers 8. Singh R. L., 1998: Prayogic Bhoogol Rooprekha, Kalyani Publications. 9. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London.		
This course can be opted as an elective by the students of following subjects: Open to all.		
Suggested Continuous Evaluation Methods: Assignment/ Test/ Quiz (MCQ)/ Seminar/ Presentations (any two methods)		
Marks distribution of theory examination: 30 marks by internal assessment and 70 marks by external assessment.		
Note: *In final practical examination students shall be examined by external and internal examiners.		
**Marks distribution: 50 marks written exam, 10 marks practical file, records and 10 marks viva (Total marks 70).		


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