

**Choice Based Credit System (CBCS): Syllabus in Geography**

**Semester- 4  
(Marks-350, Credit- 26)**

COURSE OPTED	COURSE NAME	CREDIT	IA	ESE	TOTAL	HRS/WEEK
CORE COURSE (CC8)	Regional Planning and Development	6	15	60	75	05-01-2000
CORE COURSE (CC10)	Environmental Geography	4	15	40	75	4-0-0
		2		20		0-0-4
CORE COURSE (CC 9)	Economic Geography	6	15	60	75	5-1-0
SEC 1	COMPUTER BASICS AND APPLICATION	2	10	40	50	0-0-4

❖ **CC8 (Theoretical) : Regional Planning and Development (60 Marks / 6 Credits)**

Unit	S.N.	Topic	Teacher
<b><u>Unit 1: Regional Planning</u></b>	1	Concept and Classification of Regions	RD
	2	Types of Planning; Principles and Techniques of Regional Planning	RD
	3	Need for Regional Planning; Multilevel Planning in India	RD
	4	Metropolitan Concept: Metropolis, Metropolitan Areas, Metropolitan Region	RD
<b><u>Unit II Regional Development</u></b>	1	Development: Meaning, Growth versus Development	BD
	2	Models for Regional Development: Growth Pole (Perroux) and Core Periphery (Hirschman)	BD
	3	Model for Regional Development in India: Growth Foci (R.P.Misra)	BD
	4	Concept of Regional Inequality and Disparity	BD
	5	Human Development: Significance, Indicators and Measurement	BD
	6	Status of Regional Imbalances in India	BD
	7	Strategies for Regional Development in India	BD
	8	NITI Aayog and its Functions	BD

**References**



### BOOKS:

- Berry, B.J.L. and Horton, F.F. (1970): Geographic Perspectives on Urban Systems. Prentice Hall, New Jersey
- Bhat L.S. (1972): Regional Planning In India, Statistical Publishing Society
- Blij H. (1971): Geography: Regions and Concepts, John Wiley and Sons
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- Claval P.L (1998): An Introduction to Regional Geography, Blackwell Publishers, Oxford and Massachusetts
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- Friedmann J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press, Massachusetts
- Glasson John: An Introduction to regional planning, concepts, Theory and Practise
- Gore C. G. (1984): Regions in Question: Space, Development Theory and Regional Policy, Methuen, London
- Gore C. G., Köhler G., Reich U-P. and Ziesemer T., 1996: Questioning Development; Essays on the Theory, Policies and Practice of Development Intervention, Metropolis- Verlag, Marburg
- Hall, P. (1992): Urban and Regional Planning, Routledge, London
- Haynes J. (2008): Development Studies, Polity Short Introduction Series
- Johnson E. A. J. (1970): The Organization of Space in Developing Countries, MIT Press, Massachusetts
- Kapila U, Indian Economy since Independence, 17<sup>th</sup> edition, 2016-2017
- Kulshetra, S.K (2012): Urban and Regional Planning in India: A hand book for Professional Practitioners, Sage Publication, New Delhi
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- Misra, R.P, Sundaram K.V, Prakash Rao, VLS (1974): Regional Development Planning in India, Vikas Publication, New Delhi
- Misra, R.P (1992): Regional Planning: Concepts, techniques, Policies and Case Studies, Concept, New Delhi
- Peet, R. (1999): Theories of Development, The Guilford Press, New York
- William Thomas, Christopher A.J. (2013): Rural development: concept and recent approaches, 2013 (for growth versus development, pp:1-4)

❖ **CC 9 – (Theoretical) : Economic Geography (60 Marks / 6 Credits)**

Unit	S.N.	Topic	Teacher
<b><u>Unit 1: Concepts and Approaches</u></b>	1	Meaning and Approaches to Economic Geography	<b>RH</b>
	2	Concepts in Economic Geography: Goods; Services; Production; Consumption	<b>RH</b>
	3	Factors Influencing Location of Economic Activity and Forces of Agglomeration	<b>RH</b>
	4	Determining Factors of Transport Cost	<b>RH</b>
<b><u>Unit II Economic Activities</u></b>	1	Concept and Classification of Economic Activities	<b>AB</b>
	2	Location Theories: Von Thünen and Alfred Weber	<b>AB</b>
	3	Primary Activities: Subsistence and Commercial Agriculture; Forestry; Fishing	<b>AB</b>
	4	Secondary Activities: Manufacturing (Iron and Steel in India and Japan, Petrochemical in India and USA)	<b>AB</b>
	5	Tertiary Activities: Types of Trade and Services	<b>AB</b>
	6	Agricultural Systems: Tea Plantation in India and Mixed Farming in Europe	<b>AB</b>
	7	Highways: Roles in Economic Development of India since 1990s	<b>AB</b>
	8	International Trade Blocs: WTO and OPEC	<b>AB</b>

**References**



**BOOKS:**

- ❑ Alexander J. W., 1963: Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey
- ❑ Coe N. M., Kelly P. F. and Yeung H. W., 2007: Economic Geography: A Contemporary Introduction, Wiley-Blackwell
- ❑ Hodder B. W. and Lee Roger, 1974: Economic Geography, Taylor and Francis Combes P., Mayer T. and Thisse J. F., 2008: Economic Geography: The Integration of Regions and Nations, Princeton University Press
- ❑ Wheeler J. O., 1998: Economic Geography, Wiley
- ❑ Anish Chottopadhaya (Bengali Book)

❖ **CC 10 – Environmental Geography (40 Marks / 4 Credits)**

Unit	S.N.	Topic	Teacher
<b>Environmental Issues</b>	1	Geographers' Approach to Environmental Studies	<b>RD</b>
	2	Changes in Perception of Environment in different stages of Human Civilization	<b>RD</b>
	3	Ecosystem: Concept, Structure and Functions	<b>BD</b>
	4	Environmental Degradation and Pollution: Water and Air	<b>BD</b>
	5	Environmental Issues related to Agriculture	<b>AB</b>
	6	Urban Environmental issues related to Waste Management	<b>AB</b>
	7	Concept and Issues related to Bio-diversity	<b>RH</b>
	8	Environmental Programs and Policies on Forest and Wetland: National and Global	<b>RH</b>

❖ **CC 10 – Environmental Geography Practical (20 Marks / 2 Credits)**

S.N.	Topic	Teacher
1	Preparation of questionnaire for perception survey on environmental problems	<b>RH</b>
2	Environmental Impact Assessment: Leopold Matrix	<b>BD</b>
3	Quality assessment of soil using field kit: pH and NPK	<b>RD</b>
4	Interpretation of air quality using CPCB / WBPCB data	<b>AB</b>
*A Project File, comprising one exercise each is to be submitted		

**References**



**BOOKS:**

1. Chandna R. C., 2002. Environmental Geography. Kalyani, Ludhiana.
2. Cunningham W. P. and Cunningham M. A., 2004. Principals of

environmental science: Inquiry and Applications. Tata Macgraw Hill, New Delhi.

3. Goudie A. 2001. The Nature of the Environment. Blackwell, Oxford.
4. Kormondy, Edward J. 2012. Concepts of Ecology. PHI Learning Pvt. Ltd., New Delhi.
5. MoEF, 2006. National Environmental Policy-2006. Ministry of Environment and Forests, Government of India.
6. Odum, E. P. et al. 2005. Fundamentals of Ecology. Cengage Learning, India.
7. Sharma, P.D. 2015. Ecology and Environment. Rastogi Publications, Meerut.
8. Singh, R.B. (Eds.) (2009) Biogeography and Biodiversity. Rawat Publication, Jaipur.
9. Singh, R.B. and Hietala, R. (Eds.) (2014) Livelihood security in Northwestern Himalaya: Case studies from changing socio-economic environments in Himachal Pradesh, India. Advances in Geographical and Environmental Studies. Springer.
10. Singh, S. 1997. Environmental Geography. Prayag Pustak Bhawan. Allahabad.
11. Singh, R.B. 1998. Ecological Techniques and Approaches to Vulnerable Environment. Oxford & IBH Pub, New Delhi.
12. UNEP, 2007. Global Environment Outlook: GEO4: Environment For Development. United Nations Environment Programme.
13. Basu, R. and Bhaduri, S. (Eds.). 2007. Contemporary Issues and Techniques in Geography. Progressive Publishers, Kolkata.
14. Shankar Adhikary (Bengali Book)
15. Yudhistir Hazra (Bengali Book)

❖ **SEC 2 – (Practical) : ADVANCED SPATIAL STATISTICAL TECHNIQUES**      **Credit: 2**      **Total**  
**Marks: 50 (30+ 10+10(5+5))**

- 3 questions to be answered, each question carries 10 Marks, Total 30 Marks;
- Evaluation of Laboratory Note Book 5 Marks
- Viva-Voce 5 Marks
  
- Internal Assessment: 10 (Assessment 05 + 05) Marks

<b>S.N.</b>	<b>Topic</b>	<b>Teacher</b>
1	Concept of Probability and Normal Distribution and their Geographical Applications, Skewness (Pearson's Method)	<b>BD</b>
2	Differences between Spatial and non-Spatial data, Nearest Neighbour Analysis	<b>RD, RH</b>
3	Correlation and Regression Analysis, t-test, Spearman's Rank Correlation Product Moment Correlation; Linear Regression	<b>RD, RH</b>
4	Time Series Analysis; Smoothing time series by Least Square and/or Moving Average Method	<b>AB</b>
<p>*Analysis using MS Excel not earlier than 2007 Version, is to be practiced for Unit 3 and Unit 4</p> <p>*A Project File Consisting of Four Exercises on the above Themes is to be Submitted</p>		