Vallabh Vidyanagar. Programme & Subject : B.A. Geography (CBCS) **SEMESTER-IV**

le: UA04CGEO21	Total Credit:3
per : Oceanography.	
Description in Detail	Weightage (%)
 1.1 Meaning of Oceanography, 1.2 Concept of Hydrological Cycle Distribution of Land and Water. 1.3 Tetrahedral theory, Sea floor Spreading theory. 	25%
 2.1 Hypsographic Curve and Ocean Floor Topography 2.2 Surface Bottom Relief 2.4 Pacific Ocean, Atlantic Ocean, Arctic Ocean & Indian Ocean. 	25%
 3.1 Coral reefs and atolls 3.2 Theories of Origin of Coral reefs 3.3 Physical & Chemical Properties of Sea Water 3.4 Ocean Salinity and Temperature – Distribution and Determinants. 	25%
 4.1 Ocean Current: Cause, Types, Currents of Pacific, Atlantic & Indian Ocean 4.2 Effects of Ocean Currents. 4.3 Ocean Deposits: Types & Distribution. 4.4 Ocean Resources - biotic and minerals. 	25%
Andrew. D. ward and Stanley, Trimble (2004): Environmental Hydrology, 2nd edition, LewisPublishers, CRC Press. Karanth, K.R., 1988: Ground Water: Exploration, Assessment and Development, Tata-McGrawHill, New Delhi. Ramaswamy, C. (1985): Review of floods in India during the past 75 years: A Perspective. IndianNational Science Academy, New Delhi. Rao, K.L., 1982: India's Water Wealth 2nd edition, Orient Longman, Delhi,. Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Academic Publications, TheNetherlands. Anikouchine W. A. and Sternberg R. W., 1973: The World Oceans: An Introduction toOceanography, Prentice-Hall. Garrison T., 1998: Oceanography, Wordsworth Company, Belmont. Kershaw S., 2000: Oceanography: An Earth Science Perspective, Stanley Thornes, UK. Pinet P. R., 2008: Invitation to Oceanography (Fifth Edition), Jones and Barlett Publishers, USA, UKand Canada. Mahendra Shah & K. N. Jasani" Physical Geography" Uni. Granthnirman Board, Ahmedabad (Gujarati)	
	Description in Detail 1.1 Meaning of Oceanography, 1.2 Concept of Hydrological Cycle Distribution of Land and Water. 1.3 Tetrahedral theory, Sea floor Spreading theory. 2.1 Hypsographic Curve and Ocean Floor Topography 2.2 Surface Bottom Relief 2.4 Pacific Ocean, Atlantic Ocean, Arctic Ocean & Indian Ocean. 3.1 Coral reefs and atolls 3.2 Theories of Origin of Coral reefs 3.3 Physical & Chemical Properties of Sea Water 3.4 Ocean Salinity and Temperature – Distribution and Determinants. 4.1 Ocean Current: Cause, Types, Currents of Pacific, Atlantic & Indian Ocean 4.2 Effects of Ocean Currents. 4.3 Ocean Deposits: Types & Distribution. 4.4 Ocean Resources - biotic and minerals. 1. Andrew. D. ward and Stanley, Trimble (2004): Environmental Hyd LewisPublishers, CRC Press. 2. Karanth, K.R., 1988: Ground Water: Exploration, Assessment and McGrawHill, New Delhi. 3. Ramaswamy, C. (1985): Review of floods in India during the pas IndianNational Science Academy, New Delhi. 4. Rao, K.L., 1982: India's Water Wealth 2nd edition, Orient Longma Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Acaden TheNetherlands. 6. Anikouchine W. A. and Sternberg R. W., 1973: The World Oceans toOceanography, Prentice-Hall. 7. Garrison T., 1998: Oceanography, Wordsworth Company, Belmon Kershaw S., 2000: Oceanography: An Earth Science Perspective, \$ Pinet P. R., 2008: Invitation to Oceanography (Fifth Edition), Jone USA, UKand Canada. 10. Mahendra Shah & K. N. Jasani" Physical Geography" Uni. Granth

Vallabh Vidyanagar. Programme & Subject : B.A. Geography (CBCS) SEMESTER-IV

Paper Cod	le: UA04CGEO22	Total Credit:3
Title of Pa	per : Economic Geography of Gujarat.	
Unit	Description in Detail	Weight age(%)
1.	1.1 Types of irrigation, Major irrigation sources	25%
	1.2 Significance of multi-purpose and major irrigation projects	
	1.3 Characteristic of agriculture and major crops of Gujarat	
	1.4 Agricultural problems and their remedies.	
2.	2.1 Factors affecting to localization of industries	25%
	2.2 Major Industries of Gujarat	
	2.3 Various industrial zones of Gujarat	
	2.4 Government policies and Industrial Development	
3.	3.1 Types of Transportation	25%
	3.2 Role of transportation in economical development of Gujarat	
	3.3 Main ports of Gujarat	
	3.4 National and International Trades of Gujarat	
4.	4.1 Composition of Population of Gujarat Age group, sex ratio, religious	25%
	Group, occupational structure.	
	4.2 Regional Distribution of Population in Gujarat and Factors affecting	
	The Density of population.	
	4.3 Urbanizations Migrations and related Issues.	
	4.4 Population growth and Environmental issues	
Readings	1. Dikshit, K.R.: Geography of Gujarat, National Book Trust, New Delhi.	
	2. Dave, Manjula, B.: Regional & Economic Geography of Gujarat, University GranthNirman Board,	
	Ahmedanad. (Gujarati) 3. Census of India: Gujarat Nakshama, University GranthNirman Board, Ahmedab	ad
	4. Gujarat Vishwakosh Trust: Gujarat (in Gujarati), Gujarat Vishwakosh Trust, Ahmedabad, 2000.	
	5. Census of India: Gujarat Part II – A & B, General Census Tables.	

Vallabh Vidyanagar. Programme & Subject : B.A. Geography (CBCS) SEMESTER-IV

Paper Co	ode: UA04CGEO23	Total
Title of P	Paper : Thematic Geography (Practical)	Credit:3
Unit	Description in Detail	Weightage
		(%)
1.	Conversion of Scale: R.F. To verbal and Verbal to R.F. Construction	10%
	of scale Simple, Time and Distance scale	
2.	Representation of different landforms by contours	20%
	Slopes, Conical hill, Plateau, Ridge, Pass, Cliff, 'U' shaped valley,	
	'V' shaped valley and ether Types.	
3.	Construction of climatic diagrams	20%
	1. Line graph & polygraph	
	2. Simple and compound bar diagram	
	3. Wind Rose diagrams	
	4. Hythergraph	
	5. Climograph and ether	
4.	Study and interpretation of January and July <i>Indian weather</i> maps	20%
	in respect of temperature, pressure , wind direction , velocity ,	
	Cloud cover and precipitation.	
	Study of Weather Instruments.	
5.	Enlargement and Reduction of Maps.	30%
	Field Visit and Preparation of Report.	
	Students to be taken on a field visit for one day to nearby areas.	
	Main objectives of field visit are:	
	To prepare contour plan by using Dumpy level.	
	To measure height by using Abney level Indian clinometers	
	To identify the landforms on the surface,- while in the field. Also	
	Note the agents, of erosion, transportation and deposition associated	
	With the landforms.	
Reading	1. Gopal Singh, (1996) Map Work and Practical Geography, Vikas Publishing House	
	 Singh, RL. and Dutt, P.K. (1968) Elements of Practical Geography, Students Frie Negi, B. S. (1998) Practical Geography, Kedarnath and Ramnath, Meerut. 	enus, Alianabad
	 Negi, B. S. (1998) Practical Geography, Kedarnath and Ramnath, Meerut. Singh L. R.(2009) Fundamentals of Practical Geography, ShardaPustakBhavan, Allahabad 	
	5. Creswell J., 1994: Research Design: Qualitative and Quantitative Appro	
	Publications	and suge
	6. Dr. N.G. Dixit (2004), Practical Geography. Arunoday Prakan, Ahmedal	oad (Gujarati)

Note;

- 1. Paper C-203- Principals of Cartography (Theory) & Paper C-213Thematic Cartography (Practical) both are theory and a practical paper. Each one of the five units mentioned in the syllabus has a theoretical component and related practical sections.
- 2. The theory Component shall have 100 marks weightage (70 mark: external and 30 marks internal) in the final examination worth the duration of three hours. The practical component shall have 100 marks weightage (70 marks external including journal assessment (10 marks) and viva-voce examination (10 marks) and 30 marks internal) in final practical examination having 5 hours duration.
- 3. Number of students in a batch for a practical examination shall not have more than 15 under normal circumstance.
- 4. Students are required to keep a record of practical work in journal form, duly signed by the teacher in-change on all exercises and certified by Head of the department and principal of the college.
- 5. Candidates who have not completed their journal work shall not be allowed to appear in the practical examination.
 - 6. Students to be taken on a field visit for minimum one day to nearby- areas and have to submit field report.

Vallabh Vidyanagar. Programme & Subject : B.A. Geography (CBCS) **SEMESTER-IV**

Paper Code: UA04GGEO21		Total Credit:3	
Title of Pa	aper : Oceanography.		
Unit	Description in Detail	Weightage (%)	
1.	 1.1 Meaning of Oceanography, 1.2 Concept of Hydrological Cycle Distribution of Land and Water. 1.3 Tetrahedral theory, Sea floor Spreading theory. 	25%	
2.	 2.1 Hypsographic Curve and Ocean Floor Topography 2.2 Surface Bottom Relief 2.4 Pacific Ocean, Atlantic Ocean, Arctic Ocean & Indian Ocean. 	25%	
3.	 3.1 Coral reefs and atolls 3.2 Theories of Origin of Coral reefs 3.3 Physical & Chemical Properties of Sea Water 3.4 Ocean Salinity and Temperature – Distribution and Determinants. 	25%	
4.	 4.1 Ocean Current: Cause, Types, Currents of Pacific, Atlantic & Indian Ocean 4.2 Effects of Ocean Currents. 4.3 Ocean Deposits: Types & Distribution. 4.4 Ocean Resources - biotic and minerals. 	25%	
Reading	 Andrew. D. ward and Stanley, Trimble (2004): Environmental Hyd LewisPublishers, CRC Press. Karanth, K.R., 1988: Ground Water: Exploration, Assessment and McGrawHill, New Delhi. Ramaswamy, C. (1985): Review of floods in India during the pas IndianNational Science Academy, New Delhi. Rao, K.L., 1982: India's Water Wealth 2nd edition, Orient Longm. Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Acader TheNetherlands. Anikouchine W. A. and Sternberg R. W., 1973: The World Oceans toOceanography, Prentice-Hall. Garrison T., 1998: Oceanography, Wordsworth Company, Belmor Kershaw S., 2000: Oceanography: An Earth Science Perspective, S. Pinet P. R., 2008: Invitation to Oceanography (Fifth Edition), Jone USA, UKand Canada. Mahendra Shah & K. N. Jasani" Physical Geography" Uni. Granth Ahmedabad (Gujarati) 	d Development, Tata- st 75 years: A Perspective. nan, Delhi,. mic Publications, s: An Introduction nt. Stanley Thornes, UK. es and Barlett Publishers,	

Vallabh Vidyanagar. Programme & Subject : B.A. Geography (CBCS) **SEMESTER-IV**

Paper Cod	le: UA04GGEO22	Total Credit:3
Title of Pa	per : Economic Geography of Gujarat.	
Unit	Description in Detail	Weight age(%)
1.	1.1 Types of irrigation, Major irrigation sources	25%
	1.2 Significance of multi-purpose and major irrigation projects	
	1.3 Characteristic of agriculture and major crops of Gujarat	
	1.4 Agricultural problems and their remedies.	
2.	2.1 Factors affecting to localization of industries	25%
	2.2 Major Industries of Gujarat	
	2.3 Various industrial zones of Gujarat	
	2.4 Government policies and Industrial Development	
3.	3.1 Types of Transportation	25%
	3.2 Role of transportation in economical development of Gujarat	
	3.3 Main ports of Gujarat	
	3.4 National and International Trades of Gujarat	
4.	4.1 Composition of Population of Gujarat Age group, sex ratio, religious	25%
	Group, occupational structure.	
	4.2 Regional Distribution of Population in Gujarat and Factors affecting	
	The Density of population.	
	4.3 Urbanizations Migrations and related Issues.	
	4.4 Population growth and Environmental issues	
Readings	1. Dikshit, K.R.: Geography of Gujarat, National Book Trust, New Delhi.	
	2. Dave, Manjula, B.: Regional & Economic Geography of Gujarat, University Gra	nthNirman Board,
	Ahmedanad. (Gujarati) 3. Census of India: Gujarat Nakshama, University GranthNirman Board, Ahmedab	ad
	4. Gujarat Vishwakosh Trust: Gujarat (in Gujarati), Gujarat Vishwakosh Trust, Ahmedabad, 2000.	
	5. Census of India: Gujarat Part II – A & B, General Census Tables.	

Vallabh Vidyanagar. Programme & Subject : B.A. Geography (CBCS) **SEMESTER-IV**

SYLLABUS FROM THE ACADEMIC SESSION 2018-19

Skill Enhancement Papers

Paper Coo	de: UA04SGEO21	Total
Title of Pa	per : Resource Geography-II	Credit:3
Unit	Description in Detail	Weightage
		(%)
1.	1.1 Population growth - variation among nations,	25%
	1.2 Population explosion and its impact on environment, Pollution	
	Control Strategies Family Welfare Programme.	
	1.3 Urbanization, Scarcity of Natural Resources;	
	1.4 Water conservation, rain water harvesting, watershed management.	
2.	2.1 Green house effect, Global Warming & their Various Implications	25%
	2.2 Acid Rain & Ozone Depletion	
	2.3 Pollution: Air, Water, Land, Noise	
	2.4 Soil Degradation: Erosion, Desertification & Deforestation.	
3.	3.1 Basic Principles of Environmental Planning.	25%
	3.2 Environmental Perception and Public awareness.	
	3.3 Impact of Pollutions on Human health.	
	3.4 Solid waste Management: Causes, effects and control measures of	
	Urban and industrial Wastes.	
4.	4.1 Control of Environmental degradation	25%
	4.2 Legislation on Water, Air, Noise Pollution with Special Reference	
	to Gujarat.	
	4.3 Environmental Impact Assessment (EIA)	
	4.4 Environmental Protection related Organizations	
Reading	1. Adams, W.M. 1995: Green Development: Environmental Sustainability in the Third	l World,
	Rout ledge, London Alexander D. 1003: Natural Diagrams Research Press, New Delhi	
	 Alexander, D. 1993: <i>Natural Disasters</i>, Research Press, New Delhi. Allaby, M. 1996: <i>Basics of Environmental Science</i>, Routledge, London. 	
	4. Baarrsches, W.H. 1996 :Eco-facts and Eco-fiction: Understanding the Environmental	al Debate,
	Routledge, London.	
	5. Blaikie, P., Cannon, To Davis, I. and Wisener, 1994: At Risk: Natural Hazards, People	ple's
	Vulnerability and Disasters, outledge, London:	
	6. Bryant, E.A. 1991 : <i>Natural Hazards</i> , Cambridge University Press, Cambridge:	

Vallabh Vidyanagar.

Programme & Subject : B.A. Geography (CBCS) SEMESTER-IV

SYLLABUS FROM THE ACADEMIC SESSION 2018-19

Skill Enhancement Papers

Paper Co	de: UA04SGEO22	Total
Title of Pa	aper: RURAL SETTLEMENT GEOGRAPHY	Credit:3
Unit	Description in Detail	Weightage (%)
1.	Settlements Geography: Nature, Scope, relevance and	25%
	development of settlements geography. Approaches to	
	Rural settlements geography. Concept of Settlements	
	Geography, Settlement: meaning, origin and types.	
2.	Types of rural settlements: Dispersed and Agglomerated,	25%
	World Distribution of Village, Rural Morphology, General	
	Morphology of An Indian Villages.	
3.	Size and spacing of rural settlements: size of rural	25%
	settlements, village size in India, Concept of Spacing of rural	
	settlements, spacing of settlements in India.	
4.	Cultural elements of rural settlements in different	25%
	geographical environments with reference to India and	
	Gujarat. House types, origin of Indian villages. Rural	
	Problems and planning in India.	
Reading	1. Alam, S.M.: Settlement System of India, Oxford and IBH Publication Delhi.1982.	Co. New
	2. Chisholm, M: Rural Settlement and Land-use, John Wiley, New York, 1967.	
	3. Grover, N: Rural Settlement-A Cultural Geographical Analysis, Inter-India Publication, Delhi. 1985	
	4. Rao. E. N.: Strategy for Integrated Rural Development, B.R. Publicatio Cor.Delhi.1986.	n
	5. Mitra,A.: Report on House Type and Village Settlement Patterns in India, Publication Division,	
	Government of India, Delhi,1960.	
	6. Srinivas, M. N.: Village india, Asian Publication House, Bombay,1968.	
	7. Wanmali, S.: Service Centres in Rural India, B.R. Publication Cor.Delhi	.1983.