BACHELOR'S DEGREE PROGRAMME (SYLLABUS OF FIRST 4 SEMESTER)

First Year-Semester-I

Semester-I				
Major Subjects	Credits		Syllabus	
Total credits of Major Papers	6	Major Paper-I (Ph	ysical 1. Physical Geography (Core, 4 Credits)	
= 12 credits		Geography)		
			Unit I Meaning Nature and Scope of Physical Ge Approaches to study Physical Geography	eography,
			Unit II Origin of the Earth; Components of Earth Interior of the Earth; Plate Tectonics, Rocks. We Work of river, wind, glacier and underground vits associated features. Cycle of Erosion – Dependent Penck	eathering; water and
			Unit III Atmosphere – Heat Balance; Wind types pressure; Cyclone; Monsoon- jet streams; Climatic Classification (Koppen).	
			Unit IV Hydrosphere –Hydrological Cycle; Ocea Relief Features; Tides; Currents and Salinity, Cor	
			Recommended Books	
			1. Conserve H. T., 2004: Illustrated Dictionary of	f Physical
			Geography, Author House, USA.	-
			2. Gabbler R. E., Petersen J. F. and Trapasso, L. I	
			Essentials of Physical Geography (8th	Edition),
			Thompson, Brooks/Cole, USA.	0.6.1
			3. Garrett N., 2000: Advanced Geography,	, Oxford

University Press. 4. Goudie, A., 1984: The Nature of the Environment: An Advanced Physical Geography, Basil Blackwell Publishers, Oxford. 5. Hamblin, W. K., 1995: Earth's Dynamic System, Prentice Hall, N.J. 6. Husain M., 2002: Fundamentals of Physical Geography, Rawat Publications, Jaipur. 7. Monkhouse, F. J. 2009: Principles of Physical Geography, Platinum Publishers, Kolkata. 8. Strahler A. N. and Strahler A. H., 2008: Modern Physical Geography, John Wiley &Sons, New York. 9. Savindra Singh: Physical Geography (Hindi, English)
9. Savindra Singh: Physical Geography (Hindi, English)

	Major Paper-I	2. Practical Geography
6	Major Paper-I (Practical Geography)	 2. Practical Geography a. Scale: Simple, comparative and diagonal scale. b.Toposheets: introduction, indexing, interpretation and conventional signs. c. Landform features based on contours. d. General introduction and interpretation of Aerial Photographs. Recommended Books 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. Robinson A., 1953: Elements of Cartography, John Wiley. 5. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers. 6. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers 7. Singh R. L., 1998: Prayogic Bhoogol Rooprekha, Kalyani Publications.
		8. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London.

Additional/Multidisciplinary	4	Additional Course-I (multidisciplinary)	Unit I Population distribution and factors affecting population distribution; Population growth; Races and tribes Unit II Major Agriculture crops' agricultural regions; Forestry; Sheep Rearing and Fishing. Unit III Minerals; Energy and Water resources; Unit IV Industries and Trade: Iron &Steel, Textiles, Petrochemicals, Automobiles and Major trade Blocks of the World Recommended Books 1. Agyeman, Julian, Robert D. Bullard and Bob Evans (Eds.) (2003) Just Sustainabilities: Development in an Unequal World. London: Earthscan. (Introduction and conclusion.). 2. Ayers, Jessica and David Dodman (2010) "Climate change adaptation and development I: the state of the debate". Progress in Development Studies 10
			 Agyeman, Julian, Robert D. Bullard and Bob Evans (Eds.) (2003) Just Sustainabilities: Development in an Unequal World. London: Earthscan. (Introduction and conclusion.). Ayers, Jessica and David Dodman (2010) "Climate change adaptation and development I: the state of the debate". Progress in Development Studies 10 (2): 161-168. Baker, Susan (2006) Sustainable Development. Milton Park, Abingdon, Oxon; New York, N.Y.: Routledge. (Chapter 2, "The concept of sustainable development"). Brosius, Peter (1997) "Endangered forest, endangered
			people: Environmentalist representations of indigenous knowledge", Human Ecology 25: 47-69. 5. Lohman, Larry (2003) "Re-imagining the population debate". Corner House Briefing 28.

			6 Martines Alian Japan et al (2010) "Ct-!1.1- 1-
			6. Martínez-Alier, Joan et al (2010) "Sustainable de-
			growth: Mapping the context, criticisms and future
			prospects of an emergent paradigm" Ecological
			Economics 69: 1741-1747.
			7. Merchant, Carolyn (Ed.) (1994) Ecology. Atlantic
			Highlands, N.J: Humanities Press.
			(Introduction, pp 1-25.)
			8. Osorio, Leonardo et al (2005) "Debates on sustainable
			development: towards a holistic view
			of reality". Environment, Development and Sustainability
			7: 501-518.
			9, Robbins, Paul (2004) Political Ecology: A Critical
			Introduction. Blackwell Publishing
			introduction. Blackwen I donoming
Extracurricular Courses/CC	2	1- Understanding and	University will prepare a course with focus on
Extracurricular Courses/CC	2	G	·
		connecting with	connecting student with environment. To make
		Environment	student more environment sensitive.
Communication skills/CC	2	1-Communication skill Course	University will prepare communication courses in
		(Based on developing soft skills)	Modern/Indian languages from which student will
			select one language course. The course will be more
			on applied side with giving students a chance to
			develop their soft skills.
Total	20 credits		•

Note: Each additional/multidisciplinary course will only be of two semesters. The course opted by a student in first semester will be continued in the second semester. The student will have the choice to select another Multidisciplinary course in third semester which will again be continued in fourth semester.

First Year-Semester-II

Semester-II		
Major Subjects	Credits	

6	Major Paper-I (Human Geography)	Human Geography
		Unit I Definition, nature, scope, branches and contemporary relevance.
		Unit II Cultural Regions; Race; Religion and Languages Population: Population Growth; Migration- Definition and types.
		Unit III World Population Distribution and Composition. Settlements: Types and Patterns of Rural Settlements; Classification of Urban Settlements; Trends and Patterns of World Urbanization
		Unit IV Tribes of India: Bheel, Gond, Santhal and Naga.
		Recommended Books 1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher. 2. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London. 3. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication. 4. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.

		 Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad. Ghosh, S. (2015) Introduction to settlement geography. Orient Black Swan Private Ltd., Kolkata 8. Hussain, Majid (2012) Manav Bhugol. Rawat Publications, Jaipur
6	Major Paper-I (Practical Geography)	Practical Unit I
		Map Projection: Classification; Conical Projection with one and two standard parallel,
		Unit II Bonne's; Cylindrical Equal Area; Mercator's; and Polar Zenithal Equal Area map projection
		Unit III Use and handling of meteorological instruments and interpretation of Indian Daily Weather Reports
		Unit IV Distribution Map: Isopleth, Choropleth, and Dot method
		Recommended Books
		 Dent B. D., 1999: Cartography: Thematic Map Design, (Vol. 1), McGraw Hill. 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. Robinson A., 1953: Elements of Cartography, John Wiley. 5. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers. 6. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers 7. Singh R. L., 1998: Prayogic Bhoogol Rooprekha, Kalyani Publications. 8. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London
4	Additional Course- (multidisciplinary)	Unit I Concepts, bases and characteristics of developed and developing countries; Indicators and Levels of development: Developed, Developing, Under-developed, and Least-developed worlds. Unit II Physical resource base: landforms, climate, soils, vegetation, power, mineral and water resources Unit III World population: growth, causes and consequences; Urbanization: trends and pattern Unit IV Concept and methods of industrial regionalization; Major industrial regions of the world; Mid -Atlantic coastal region of USA, Rühr Industrial region, Mumbai -Ahmedabad industrial

			region.
			Recommended Books
			 di Blij, H. and Muller, O. (1993): Geography: Regions and Concepts. John Wiley and Sons, New York. Jackson, R. H. and Husman, L. E. (1991): World Regional Geography: Issues for Today. John Wiley and Sons, New York. Jones, P. and Bryan, P. (1954): North America: An Historical, Economic and Regional Geography, Methuen and Company. Ltd, London. Kolb, A. (1971): East Asia, China, Japan, Korea, Vietnam, Methuen, London. Rai, Gayatri (2007): Vishwa Ka Pradeshik Bhugol, Mishra Trading Corporation, Varanasi Sharma, P. R. (ed.) (1991): Perspectives on Third World Development. Rishi Publication, Varanasi. Stamp, L. D. (1976): Asia: A Regional and Economic Geography, Methuen, London.
Extracurricular Courses/Compulsory course	2	1- Culture, traditions and moral values	University will prepare a course with focus on Indian regional culture studies. (This course could be taught in regional language)
Life Skills and personality development /CC	2	1- Life Skills and personality development	University will prepare a bouquet of courses which will focus on developing life skills such as stress management through Yoga, teamwork, cooperation, work ethics etc
Total Note:	20 credits In case of exit after Core.	er completion of first year/second semester,	student will be awarded Certificate on the basis of

Second Year-Semester-III

Semester-III			
Major	Credits		
<u>Subjects</u>	6	Major Paper-I (Geography of India)	Geography of India
			Unit I Physiographic Regions, Geological Structure, Drainage, Climate, Natural Vegetation and Soil.
			Unit II Population – Size and growth since 1901; Population Distribution Density; Literacy; Sex Ratio Rural and Urban Settlements: Types and patterns.
			Unit III Resource Base – Livestock (cattle and fisheries); Power (coal, and hydroelectricity); Minerals (iron ore, petroleum and bauxite).
			Unit IV Economy– Agriculture, Industries, Transportation and Trades
			Recommended Books
			 Hussain M., 1992: Geography of India, Tata McGraw Hill Education. Mamoria C. B., 1980: Economic and Commercial Geography of India, Shiva Lal Agarwala. Miller F. P., Vandome A. F. and McBrewster J., 2009: Geography of India: Indo-Gangetic Plain, Thar Desert, Major Rivers of India, Climate of India, Geology of

		 India, Alpha script Publishing. 4. Nag P. and Sengupta S., 1992: Geography of India, Concept Publishing. 5. Pichamuthu C. S., 1967: Physical Geography of India, National Book Trust. 6. Sharma T. C. and Coutinho O., 1997: Economic and Commercial Geography of India, Vikas Publishing. 7. Singh Gopal, 1976: A Geography of India, Atma Ram. 8. Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
6	Major Paper- (Practical Geography)	Unit I Primary and secondary data and their sources; Methods of primary data collection; Classification of statistical data and tabulation. Unit II Frequency curve, histogram and polygon; Measures of Central Tendency-Mean, Median, Mode. Unit III Measures of dispersion- Quartile, Standard Deviation and Coefficient of Variation. Unit IV Coefficient of Correlation- Karl Pearson's and Spearman's methods, Scatter Diagrams. Introductory knowledge of SPSS. Recommended Books

			 Dent B. D., 1999: Cartography: Thematic Map Design, (Vol. 1), McGraw Hill. Gupta K. K and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing. Robinson A., 1953: Elements of Cartography, John Wiley. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers Singh R. L., 1998: Prayogic Bhoogol Rooprekha, Kalyani Publications. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London.
Additional Course	4	Additional Course (Multidisciplinary)-I	Unit I Physical Setting – Location, Structure and Relief, Drainage, Climate. Unit II Population – Size and Growth since 1901, Population Distribution, Literacy, Sex Ratio. Unit III Settlement System - Rural Settlement Types and Patterns, Urban Pattern Unit IV Resource Base – Livestock (cattle and fisheries), Power (coal, and hydroelectricity) and Minerals (iron ore, coal and petroleum and bauxite). Recommended Books

			 Hussain M., 1992: Geography of India, Tata McGraw Hill Education. Mamoria C. B., 1980: Economic and Commercial Geography of India, Shiva Lal Agarwala. Miller F. P., Vandome A. F. and McBrewster J., 2009: Geography of India: Indo- Gangetic Plain, Thar Desert, Major Rivers of India, Climate of India, Geology of India, Alpha script Publishing. Nag P. and Sengupta S., 1992: Geography of India, Concept Publishing. Pichamuthu C. S., 1967: Physical Geography of India, National Book Trust. Sharma T. C. and Coutinho O., 1997: Economic and Commercial Geography of India, Vikas Publishing. Singh Gopal, 1976: A Geography of India, Atma Ram. Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
Skill Course	2	One Skill/Vocational Course-I	Regional Development and Planning with Special Reference to Uttarakhand A. 1 Definition, need and types of regional Planning. 2. Delineation of Planning Region, Planning Regions of Uttarakhand B. Comprehensive Report supported by Maps, Diagrams, Tables and Photographs Recommended Books 1. Blij H. J. De, 1971: Geography: Regions and Concepts, John Wiley and Sons. 2. Claval P.1, 1998: An Introduction to Regional Geography, Blackwell

			Publishers, Oxford and Massachusetts. 3. Friedmann J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press, Massachusetts. 4. Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London. 5. 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. 6. Haynes J., 2008: Development Studies, Polity Short Introduction Series. 7. Johnson E. A. J., 1970: The Organization of Space in Developing Countries, MIT Press, Massachusetts. 8. Peet R., 1999: Theories of Development, The Guilford Press, New York. 9. UNDP 2001-04: Human Development Report, Oxford University Press. 10. World Bank 2001-05: World Development Report, Oxford University Press, New
IKS-1	2	1-Indian Knowledge System (National)-I	Compulsory for all U.G. students
<u>Total</u>	20 credits		

Note: Each multidisciplinary course will only be of two semesters. The course opted by a student in first semester will be continued in the second semester. The student will have the choice to select another Multidisciplinary course in third semester which will again be continued in fourth semester.

Second Year-Semester-IV

Semester-IV	7		
Major	Credits		
Subjects		Major Paper-I	Geographical Thought
	6	(Geographical Thought)	
			Unit-I
			Definition, nature and scope of Geography, Branches and sub branches of Geography;
			Basic concepts of Geography
			Unit-II
			Contribution of Greek and Roman Geographers-Ptolemy and Strabo. Arab Geographers
			Unit-III
			Contribution of Geographical knowledge in ancient, medieval and modern India; Renaissance in Geography, Discoveries and inventions; Contribution of Varenius and
			Immanuel Kant
			Unit-IV
			German and French School of Geography: Humbodlt ,Ritter,Ratzel, Hattner, Hartshorne
			Blache and Brunhes; Anglo-American School of Geography- Davis, EC. Semple,
			Huntington, Isaiah Bowman, Mackinder, Herbertson, and Stamp.
			Recommended Books
			1. Dickenson. R. E. – The Makers of Modern Geography, Rutledge and Kegan London
			2. Freeman . T.W. – A Hundred Years of Geography, London.
			3. Jones and Martin – All Possible World – A History of Geographical Idias. Odessey,
			Indianapolis (USA)
			4. Halt Jensen A. – Geography- Its History and Concepts, Harper and Raw London.
			5. Dixit R.D. – Geographical Thought – A Contextual History of Ideas .Prentice Hall,
			New Delhi
			 Kaushik S.D. – Bhaugolik Vichardharayen (Hindi) – Sahitya Bhawan Pub. Agra. Hussain Majid - Evolution of Geographical Thought (English And Hindi)Rawat
			Publication jaipur.
			8. Taylor. G. Geography in Twentieth Century; London.
1			o. Taylor. G. Geography in I wentieth Century, London.

			9. Jagdish Singh - Bhaugolik Chintan ka Kram vikas (Hindi) Gyanodaya, Gorakhpur
	6	Major Paper-I (Practical Geography)	a. Statistical Diagrams- Compound and Multiple Bar Diagram; Ring or Circle diagram; Simple and Polyline graph, Hyther - graph and Climograph. b. Geological Map :Identification of rock outcrops, bedding panes, determinants of dip and thickness- simple and folded. Recommended Books 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, NewDelhi. 3. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing. 4. Robinson A., 1953: Elements of Cartography, John Wiley. 5. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers. 6. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers 7. Singh R. L., 1998: Prayogic Bhoogol Rooprekha, Kalyani Publications. 8. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London.
Additional Course	4	Additional Course (Multidisciplinary)-II	Geography of India Unit I Minerals and power resources (iron ore, and coal); Multipurpose projects: Damodar Valley, and Bhakhra Nangal; Irrigation; Major industries (iron and steel, cotton textile, and sugar). Unit II Meso-regions of India (Karnataka plateau, and chhota Nagpur plateau) and their characteristics;

			Transport and communication; Trade: composition and recent changes. Unit III Economy – Agriculture (Rice, Wheat, Sugarcane, Tea, Cotton); Industries (Cotton Textile, Iron-Steel, Automobile); Modes of Transportation Unit IV Uttarakhad Geographical Setting-Physical Setting(Relief, Drainage, Population Structure, Resource, Uttarakhand - Forest, Minerals), Economy. Recommended Books 1. Hussain M., 1992: Geography of India, Tata McGraw Hill Education. 2. Mamoria C. B., 1980: Economic and Commercial Geography of India, Shiva Lal Agarwala. 3. Miller F. P., Vandome A. F. and McBrewster J., 2009: Geography of India: Indo-Gangetic Plain, Thar Desert, Major Rivers of India, Climate of India, Geology of India, Alpha script Publishing. 4. Nag P. and Sengupta S., 1992: Geography of India, Concept Publishing. 5. Pichamuthu C. S., 1967: Physical Geography of India, National Book Trust. 6. Sharma T. C. and Coutinho O., 1997: Economic and Commercial Geography of India, Vikas Publishing. 7. Singh Gopal, 1976: A Geography of India, Atma Ram. 8. Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
Skill Course	2	One Skill/Vocational Course-II	Regional Development and Planning with Special Reference to Uttarakhand A. 1 Definition, need and types of regional Planning. 2. Delineation of Planning Region, Planning Regions of Uttarakhand B. Participatory, Micro Planning Survey Techniques and field study project report (Report

			of 30 Pages should have at least 5 Maps, 10 Photographs and 5 Tables)
			Recommended Books 1. Blij H. J. De, 1971: Geography: Regions and Concepts, John Wiley and Sons. 2. Claval P.l, 1998: An Introduction to Regional Geography, Blackwell Publishers, Oxford and Massachusetts. 3. Friedmann J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press, Massachusetts. 4. Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London. 5. 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. 6. Haynes J., 2008: Development Studies, Polity Short Introduction Series. 7. Johnson E. A. J., 1970: The Organization of Space in Developing Countries, MIT Press, Massachusetts. 8. Peet R., 1999: Theories of Development, The Guilford Press, New York. 9. UNDP 2001-04: Human Development Report, Oxford University Press.
IVC 1	2	1 Indian Vacantadas	10. World Bank 2001-05: World Development Report, Oxford University Press, New
IKS-1	2	1-Indian Knowledge System (National)-II	Compulsory for all U.G. students
Total	20	,	
Tutai	credits		