कार्य वृतः -- दिनांक 03/03/2023 को पूर्वान्ह 12:00 बजे केन्दीय अध्ययन मंडल, भूगोल की बैठक भूगोल अध्ययनशाला, पं. रविशंकर शुक्ल वि.वि., रायपुर में आयोजित हुई जिसमें निम्नानुसार अनुशंसा की गई:-

कार्य सूची — 1 के संदर्भ में सदस्यों द्वारा बी.ए./बी. एस. सी — प्रथम, द्वितीय एवं तृतीय वर्ष, 2023—24 के पाठ्यक्रम के विषय में चर्चा की गई तथा बी.ए./बी. एस. सी. — प्रथम, द्वितीय एवं तृतीय वर्ष, 2022—23 के पाठ्यक्रम में संशोधन कर निम्नलिखित संशोधित पाठ्यक्रम अनुशंसित किया गया —

Brief Summary 3 Year Integrated UG Courses (B.A./B. Sc.) in Geography

B.A. /B.Sc. Part I

The B.A. /B.Sc. Part-I Examination in Geography will be 150 marks. There will be two theory papers and one Practical each of 50 marks as follows:

Paper - I Physical Geography

Paper - II Human Geography

Paper - III Practical Geography

B.A. /B.Sc. Part-II

The B.A./B.Sc. Part-II Examination in Geography will be 150 marks. There will be two theory papers and one Practical each of 50 marks as follows:

Paper-I Economic and Resources Geography

Paper-II Regional Geography of India

Paper-III Practical Geography

B.A. /B.Sc. Part III

The B.A. /B.Sc. Part III Examination in Geography will be 150 marks. There will be two theory papers and one Practical each of 50 marks as follows

Paper – I Remote Sensing and GIS

Paper - II Geography of Chhattisgarh

Paper - III Practical Geography

Dr C.P. NAND & A. BECK)

(The Sheele Shindler)

Prog	ram: B.A./B.Sc. Class: I Year. Session: 2023-24	
	Paper I: Physical Geography (UGeo-0101)	
Course Learning Outcome (CLO)	After the completion of course, the students will have ability to: 1. Understand the internal structure of the earth, rocks that compose it and forces within the earth that act to deform it. 2. Analyze how the natural and anthropogenic operating factors affect the developmen of land forms. 3. Understand about the denudation processes that unceasingly act at the earth's surfact to shape land forms and reduce relief. 4. Assess the role of structure, stage and time in shaping the land forms. 5. Identify the Atmospheric pressure, winds humidity, concept of precipitation, its types and understand the Air Masses and Fronts and the Weather Forecasting. 6. Identify the relief of the ocean bottom, temperature, salinity of ocean water, tide currents coral reef and oceanic resources.	
	Content of the Course	
Unit	Topic	
1.	Origin of the Earth, Geological Time Scale, Earth's Interior, Continental Drift Theory (Wegner), Plate Tectonics, Isostasy.	
2.	Earth movements: Earthquakes and Volcanoes, Rocks, Weathering, Erosion and Normacycle of erosion, Evolution of landscapes: Fluvial, Aeolian (Arid and Semi Arid) Glacial, Karst.	
3.	Elements of Weather and Climate, Composition and Structure of the Atmosphere. World patterns of Atmospheric Temperature, Pressure, and Winds.	
4.	Atmospheric Humidity and Disturbances, Climatic Classification of Koppen, Geographical account of world climate patterns: Equatorial, Monsoon, Desert and Tundra.	
5.	Bottom relief of Ocean, Distribution of Temperature and Salinity of Oceans and Seas, Currents and Tides, Ocean Deposition. Law of the Sea.	
	Learning Resources: Text Books, Reference Books, Other Resources	
Suggester	d Readings:	
 Chorl Daya Gauta 	ed, E.: Coastal Geomorphology of India. ley, R J.: Spatial Analysis in Geomorphology, Methuen, London, 1972. l, P.: A Text book of Geomorphology, R.K. Books, New Delhi. lam, Alka: Geomorphology, Sharda Pustak Bhawan, Allahabad. las, A.: Principles of Physical Geology, Thomas Nelson, London.	

- Holms, A.: Principles of Physical Geology, Thomas Nelson, London
- 6. Jha, V.C.: Geomorphology, Vasundhara Publication, Gorakhpur.
- 7. Sparks, B.W. Geomorphology, Longman, London, 1960.
- 8. Sharma, H.S. (cd.): Perspective in Geomorphology, Concept, New Delhi, 1980.
- 9. Singh, S: Geomorphology, Prayag Publication, Allahabad, 1998.
- 10. Steers, J.A.: The Unstable Earth Methuen, London.
- 11. Thornbury, W.I.). Principles of Geomorphology, John Wiloy, New York, 1960.
- 12. Strahler, A.N.: Physical Geography, Willey, New York.
- 13. सिंह.एम.बी.(2001) : भौतिक भूगोल, तारा बुक ऐजेन्सी, वारणासी।
- 14. सिंह, सविन्द्र (2016) : भौतिक भूगोल, प्रयाग पुस्तक भवन, इलाहाबाद।
- 15. दयाल, परमे वर (2012) : भौतिक भूगोल, पंच ील प्रका ान, जयपुर।
- 16. हुसैन, माजिद (2008) : भौतिक भूगोल, रावत पब्लिके ान, जयपुर।

Suggested equivalent online course: 1. epgp.inflibnet.ac.in 2. virtual lectures available on youtube

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Soplie

(John)

Program:	B.A./B.Sc.	Class: I Year.	Session: 2023-24
	Pape	r II: Human Geography (UGco-	0102)
Course	After the completion	of course, the students will have a	ability to:
Learning	1 Discuss and dose	ribe the major concepts and key p	44 N. (1997)
Outcome		e, scale and landscape.	inciples of Human Geography
(CLO)		ersity of the cultural backgrounds	and places
		rom a geographic perspective by u	
	plays.	a geograpme perspective by a	inderstanding the fole location
		Content of the Course	
Unit		Topic	
	Meaning, Definition,	Nature and Scope of Human	Geography, Man - environmen
1.	relationship: Determin	ism, Possibilism, Determinism, N	co-Determinism and Probabilism
	Human Development	ndex (HDI).	
2.	Human Races: Forma	tion and Evolution, Characteristic	s, Classification and Distribution
	Human adaptation to e	nvironment: Eskimos, Bushman, I	Pigmy and Masai.
3.	Growth, Density and	Distribution of World Population	n and factors influencing spatial
1	Rural Settlements: Cl	der, and Optimum Population; Mig	gration of Population.
4.	Urban Settlement- Ty	naracteristics, Types and Regiona	i Pattern, Rurai Houses in India,
	Environmental Issues	: Global Warming, Climate Ch	ange, Acid rain, Deforestation.
5.	Desertification, Air, V	Vater and Soil Pollution.	,,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,
	1.00	The state of the s	and the state of the Vision
No. 1) - ti	Learning Resour	es :Text Books, Reference Books	, Other Resources
Suggeste	ed Readings:	THE THE WORLD DECEMBER 12 A.	SME or Fundamental
1. Chis	holm, M. (1985): Humai	Geography, 2nd edition, Penguin	Books, London.
2. De E	Blij, H.J.(1996): Human	Geography: Culture, Society and	Space,. 2nd edition. John Wiley
	Sons, New York,	Indith C. Hanking I and Dan	S (2007). II C1
1		Judith, G., Hopkins, J. and Dan	불 기 기 기 기 기 기 기 기 기 기 기 기 기 기 기 기 기 기 기
A Hage	scapes of Human Activity	ties. McGraw-Hill, New York. 10"	edition.
5 Huge	gett, F. (2004). Geograph	y: A Modern Synthesis. 8th edition mentals of Biogeography, Routledg	n, Harper and Row, New York.
6. Huss	ain. M. (1994): Human	Geography, Rawat Publications, Jai	inur
7. John	ston, R. J., Gregory,	D., Pratt, G. and Watts, M. (20	09): The Dictionary of Human
		Blackwell Publishers, Oxford.	ory. The Prononing of Human
8. Nort	on, W. (2008): Human (Geography, Oxford University Press	, New York. 5 th ed.
		001): Manav Bhugol. Gyanodaya P.	
		entals of Human Geography, Sharda	
		Geography- A Welfare Approach,	Edward Arnold (Publishers) Ltd.,
Lond			
	d equivalent online cour		
epgp.infl	ibnet.ac.in 2. virtua	I lectures available on YouTube	

head Soon Stophio (Dr. Charles Linden)

Program: B./	\./B.Sc.	Class: I Year.	Session: 2023-24
	Paper	· III :Practical Geography (UC	Geo-0103)
Course	After the completio	n of course, the students will ha	ive ability to:
Learning	1. Develop hand	s on skills in diagrammatic re	epresentation of data.
Outcome	2. Comprehend t	hematic mapping techniques,	, its cartographic representation and
(CLO)	interpretation.		
	The state of the s	graphy as a profession.	
		Content of the Course	
Unit		Topic	
	rtography And Stat		MM- 25
1. and	Basic concept of Latitude and Longitude. Identification of tropic of Cancer, Caprico and equator on map, name of country and state. Northern hemisphere and southern hemisphere. Practice on world and India map.		
Sc	ale: Statement Sc		n (R.F.), Linear scale – Simple
3. Ha	Methods of showing relief; Meaning of contour, basic features of Contours line Hachures; Representation of different landforms by Contours; Conical hill, Plateau, V and U shape valley, Waterfall.		
	raphs and Diagram ultiple), Circle Diag		agram (Simple and Composite and
5. St	atistical Technique:	Mean Median, Mode	
Section B: S	urveying		MM-15
		v. Triangulation method. Open	Traverse and Closed Traverse
<u> </u>	Practical Record A		MM-10
Section C: I		rces: Text Books, Reference Bo	
		ices. Text books, Reference Bo	Joks, Other Resources
2. Jone Publ 3. Mon 4. Natr 5. Rais 6. Sark 7. Sing edit 8. Sing 9. Ver 10. षर्मा, 11. मिश्र 12. तिवा 13. मॉव	is, R.E. and Foote, F.: s, P.A.(1968): Field ication, London ikhouse, F. J. and Wil ajan, V. (1976): Adva z, E. (1962): General car, A. K. (1997): Prac ch, R.L. and Singh, R ions). Kalyani Publisl ch, L.R. (2006): Fund ikatramaiah, C. (1997 id. (2001): प्रायोगिन त, आर.एन.एवं पी.के.षर्मा री,आर.सी.एवं सुधाकर वि क हाऊस तथा विकिक् हवाद ग्रंथ अकादमी भोष quivalent online cou	kinson, F.J. (1985): Maps and D unced Surveying, B.I. Publication Cartography. John Wiley and So ctical Geography: A Systematic A ana P.B. (1993): Elements of P hers, New Delhi,. amentals of Practical Geography): A Text Book of Surveying, Un क भूगोल, रस्तोगी पब्लिकेषन, मेटूरं (2019): प्रायोगिक भूगोल, रावत प त्रिपाठी (2009): अभिनव प्रायोगात्मव सन (अनुवाद प्रो. प्रेमचन्द्र अग्रवाल	ns., Mumbai ons, New York. 5 edition. Approach. Orient Longman, Kolkata. ractical Geography. (Hindi and English , Sharda Pustak Bhawan, Allahabad. niversities Press, Hyderabad.
Lea	Snow S	oplie John	(Dr. Cheeleghider)

Proc	gram: B.A./B.Sc.		s: II Year.	Session: 2023-24
riog	Paper I :Ec	onomic And Re	esources Geography	(UGeo-0201)
	-	Content	of the Course	
Course	After the completion	of course, the st	udents will have abil	ity to:
Learning	1 Understand about	the Nature and S	Scope of Economic G	ieography.
Outcome	2. Understand the con	ncept and classif	ication of resource as	s well as major mineral resources.
(CLO)	3. Identify the major	crops and their	production and distril	bution.
	4. Understand the fur	damental theori	es in economic geog	raphy.
	5. Understand the typ	es, characteristi	cs different modes of	f transportation at national and
	international level.			
	6. Understand variou	s international b	lock and role of inter	national trade in economic
	development.			
	7. Understand the co	nservation and n	nanagement of resour	rces as well as sustainable
	development.			
		Content	of the Course	
Unit			Topic	Manning and alogaification
1.				rce: Meaning and classification
2.	Mineral resources: iron	ore and bauxite	Power resources: co	oal, petroleum and hydro electricity
	Resource conservation.			
1	Principal Crops: Whea			
3.	Agricultural regions of	the world (D. W	hittlesey); Theory of	agricultural location (Von Thunen)
	Theory of industrial loc	ation (Weber).		NAME OF TAXABLE PARTY.
4.	International trade: patt	erns and trends;	Major trade blocks: S	SAARC, BRICKS, OPEC, LAFTA,
	EEC, ASEAN; Effect of	f globalization o	n developing countrie	es
5.	Meaning, scope and co	ncept of econom	nc geography; Resour	rce: Meaning and classification
1	Learning Reso	urces: Text Boo	ks, Reference Books	, Other Resources
Sugges	sted readings			
	Alexander, J. W. (1988)	Economic Geor	ranhy, Prentice-Hall,	New Delhi,.
2	Bryson, J., Henry, N., K.	eeble, D. and Ma	rtin, R. (eds.) (1999):	: The Economic Geography Reader
	Producing and Consumi	ng Global Capita	lism. John Wiley and	Sons, Inc, New York.
3.	Clark, G. L., Gertler, M.	S. and Feldman,	M. P. (eds.) (2000): 7	The Oxford Handbook of Economic
- 20	Geography. Oxford Univ	versity Press, US	A. Contamporary Intro	duction. Blackwell Publishers, Inc.,
4.	Massachusetts.	ic Geography. A	Contemporary muoi	duction. Diackwen I denomers, men,
5.	Gautam, A. (2006): Aar	hik Bhugol Ke M	Iool Tattava, Sharda	Pustak Bhawan, Allahabad.
6.	Guha, J. S. and Chattora	j, P.R. (2002): A	New Approach to Ec	conomic Geography: A Study of
	Resources. The World F	ress Private Lim	ited, Kolkata.	is Geography: Economy, Policy
7.	Environment. John Wild	rinciples and Ap	New York	ic Geography: Economy, Policy,
	Hartshorne T A and A	lexander I. W. (1988): Economic Geo	ography (3rd revised edition)
	Englewood Cliff . New .	Jersey, Prentice 1	Hal l	
	Hudson, R. (2005): Econ	omic Geographi	es: Circuits, Flows an	d Spaces. Sage Publications,
Suggest	ed equivalent online cou	rse: 1. epgp.infli	bnet.ac.in	
2. virtu	al lectures available on Y	ouTube		
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Program: B.A./B.Sc.		Class: II Year.	Session: 2023-24
	Paper I	I: Regional Geography of India (UG	Geo-0202)
Course	After the completion	on of course, the students will have abi	lity to:
Learning	[] [] [] [] [] [] [] [] [] []	about the physiographic division of Ind	lia and Drainage system of India.
Outcome (CLO)	2. Understand the s	seasonal variation of climate and mons	oon of India.
	3. Understand the	various biotic, conventional and non co	onventional resources and their
	distribution in I	ndia.	
	4. Understand the	growth, density and distribution of Indi	ian population.
	5. Identify the maj	or crops, production and distribution, a	griculture region of India
	6. Understand the	mpact of green revolution on Indian ag	griculture.
	7. Understand the	industrial production and development	in India.
		Content of the Course	
Jnit		Topic	
1.	Physical Features: Str	ucture, Relief, Drainage, Climate and M	Monsoon.
2.	Natural Resources: So	oils - types, their distribution and charac	cteristics. Water Resources (majo
	irrigation and hydro-	power projects); Forests: types and dist	ribution.
3.	Mineral and Power resources: Iron-ore, Bauxite, Coal, Petroleum and Natural gas, Atomic		leum and Natural gas, Atomic
	energy and Non conv	entional sources of energy.	
4.	Cultural Features: Por	pulation - Growth, Density and Distribu	ıtion.
	Agriculture - Major Cereals: Paddy, Wheat. Major Cash crops: Tea, Coffee, Sugarcane.		
	Impact of Green Reve	olution, Agro-climatic region.	
5.	1	n, Development & Production - Iron ar	nd steel, Cotton Textile, Cement,
	Sugar. Transport, Ind	ustrial Region.	Non- della sterio
			Oil B
	Learning Reso	urces: Text Books, Reference Books,	Other Resources

- 2. Farmer, B.H. (1983): An Introduction to South Asia. Methuen, London
- 3. Gautam, A. (2006): Advanced Geography of India, Sharda Pustak Bhawan, Allahabad
- 4. Johnson, B.L.C. (1963): Development in South Asia. Penguin Books, Harmondsworth
- 5. Krishnan, M.S. (1982): Geology of India and Burma, CAS Publishers and Distributors, Delhi.
- 6. Khullar, D.R. (2007): India: A Comprehensive Geography, Kalyani Publishers, New Delhi
- 7. Nag, P. and Gupta, S. S. (1992): Geography of India, Concept Publishing Company, New Delhi.
- 8. Rao, B.P. (2007): Bharat kee Bhaugolik Sameeksha, Vasundhara Prakashan, Gorakhpur.
- 9. Singh, J. (2003): India: A Comprehensive Systematic Geography. Gyanodaya Prakashan, Gorakhpur
- 10. Singh, J. (2001): Bharat: Bhougolik Aadhar Avam Ayam, Gyanodaya Prakashan, Gorakhpur.
- Singh, R.L. (ed.) (1971): India: A Regional Geography. National Geographical Society of India, Varanasi.
- 12. Spate, O.H. K., Learmonth A. T. A. and Farmer, B. H. (1996): India, Pakistan and Sri Lanka. Methuen, London, 7 edition.
- Sukhwal, B.L. (1987): India: Economic Resource Base and Contemporary Political Patterns. Sterling Publication, New Delhi
- 14. Tiwari, R.C. (2007): Geography of India, Prayag Pustak Bhawan, Allahabad.

Suggested equivalent online course: 1. epgp.inflibnet.ac.in

2. virtual lectures available on YouTube

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(Dother Delider)

Program:		
	B.A./B.Sc. Class: II Year. Session	: 2023-24
	Paper-III Practical Geography (UGeo-0203)	
Course	After the completion of course, the students will have ability to:	
Learning Outcome	1. Understand the map design and map layout through various Ca	irtographic symbols
(CLO)	and techniques.	C
(CLO)	2. Understand the Meaning, concept, classification and important	ce of map
	projections.	
	3. To get a knowledge of Weather Maps and the use of Meteorolo	
	4. To get knowledge about Prismatic Compass Survey and Whole	e Circle Bearing
	and Reduced Bearing.	1 4.4
	5. Students are understood about how to represent of geographica	
	different types of cartographic technique and Statistical Methods	through practical
	workbook.	
	Content of the Course	
Unit	Topic	
Section A:	: Map Interpretation, Projections And Statistical Methods	MM- 25
	Principle of map design, elements of maps layout, Types of cartographic	
1.	area and their application. Maps: definition and their application- Dot Ma	p, Sphere map,
	Choropleth Map, chorochromatic and Isopleth Map.	Culindrical
2.	Map Projections: Meaning, Definition, classification and impo Equidistance, Equal area and Mercator projection.	mance; Cylindrical:
3.	Conical: One standard and two standard parallel, Polar Zenithal: Orthogramomoric Projection.	apnic, Stereograpnic,
	-	0 17 5 11
4.	Statistical Methods: Quartile: Mean Deviation, Standard Deviation and Relative Variability and Co-efficient of Variation.	Quartile, Deviation;
Section P	B: Surveying	MM- 15
Seedon D	Surveying: Prismatic Compass Survey, Whole Circle Bearing and	
5.	correction of bearing. Open traverse and close traverse.	Reduced Bearing,
Castina (74.74.10
Section	C Practical Record And Viva Voce	M.M- 10
	Learning Resources: Text Books, Reference Books, Other Resou	92.02
		rces
Suggeste	ed Readings:	rces
1. D	Davis, R.E. and Foote, F.S. (1953): Surveying, 4*edition, McGraw Hill Publi	cation, New York
1. D 2. M	Davis, R.E. and Foote, F.S. (1953): Surveying, 4*edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen,	cation, New York
1. D 2. M 3. N	Davis, R.E. and Foote, F.S. (1953): Surveying, 4*edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai	cation, New York London
1. D 2. M 3. N 4. R	Davis, R.E. and Foote, F.S. (1953): Surveying, 4*edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5*e	cation, New York London dition.
1. D 2. M 3. N 4. R 5. S	Davis, R.E. and Foote, F.S. (1953): Surveying, 4*edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5*e Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Letter 1985.	cation, New York London dition. ongman, Kolkata.
1. D 2. M 3. N 4. R 5. S 6. S	Davis, R.E. and Foote, F.S. (1953): Surveying, 4 ^a edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5 ^a e Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Lesingh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography.	cation, New York London dition. ongman, Kolkata.
1. D 2. M 3. N 4. R 5. S 6. S	Davis, R.E. and Foote, F.S. (1953): Surveying, 4 [*] edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5 [*] e Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Le Singh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad.	cation, New York London dition. ongman, Kolkata. (Singh, L.R. (2006):
1. D 2. M 3. N 4. R 5. S 6. S F 7. V	Davis, R.E. and Foote, F.S. (1953): Surveying, 4 [*] edition, McGraw Hill Publi Monkhouse, F. J. and Wilkinson, F.J. (1985): Maps and Diagrams. Methuen, Natrajan, V. (1976): Advanced Surveying, B.I. Publications., Mumbai Raisz, E. (1962): General Cartography. John Wiley and Sons, New York. 5 [*] e Sarkar, A. K. (1997): Practical Geography: A Systematic Approach. Orient Losingh, R.L. and Singh, Rana P.B. (1993): Elements of Practical Geography. Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad. Venkatramaiah, C. (1997): A Text Book of Surveying, Universities Press, Hydroxida.	cation, New York London dition. ongman, Kolkata. (Singh, L.R. (2006):
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Program	n: B.A./B.Sc. Class: III Year. Session: 2023-24
	Paper I: Remote Sensing And GIS (UGeo-0301)
Course	After the completion of course, the students will have ability to:
Learnin	
Outcom	
(CLO)	sensing.
	3. To get a knowledge about satellite sensor and types of sensors, and their
	functions and Characteristics.
	4. Understand the data product, types of data product and its applications and uses
	in remote Sensing.
	Content of the Course
Unit	Topic
1.	Basics of Remote Sensing: definition, history, and Scope; Electro-magnetic Radiation: Characteristics, Spectral regions and Bands; Interaction with earth surface features and
	atmosphere; Spectral Signature Types of Remote Sensing: Air borne and Space borne; Aerial photos: Types and
	Characteristics; Remote Sensing satellites: Platforms and sensors: active and passive, Sensor
2.	characteristics: spatial resolution, spectral resolution, radiometric resolution, temporal
	resolution.
	Visual and Digital image processing techniques; Remote Sensing application in resource
3.	mapping and environmental monitoring, remote sensing in India: development and Growth.
	Indian Satellites, Space Organizations and data products.
	Introduction of GIS: Definition of Geoinformatics, Scope and Importance of Geoinformatics,
4.	History of GIS, Components of GIS, Functions of GIS, GIS tasks-Input, Manipulation, Management, Query analysis, Visualization, Topographical sheets, Surveying, Aerial
	photographs, Satellite data and images, Data types-Spatial and Non spatial.
-	Data model and data analysis: Raster data and their characteristics, Vector data and their
1 -	characteristics, Raster data analysis- grid cells or Pixels. Vector data analysis- Spatial data,
5.	Generation in Vector Format, Spatial and Non Spatial data Management. Spatial information
	Technology.
	Learning Resources: Text Books, Reference Books, Other Resources
Sugge	sted Readings:
	1. Bhatta, B. (2010): Remote Sensing and GIS, Oxford University Press, New Delhi.
	2. Campbell, J.B. (2002): Introduction to Remote Sensing. 5 th edition, Taylor and Francis, London
	3. Curran, P.J. (1985): Principles of Remote Sensing, Longman, London
1	4. Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. 4th
	edition. John Wiley and Sons, New York 5. Nag Prithvish and Kudrat M. (1998): Digital Remote Sensing, Concept Publishing Company, New Delhi
1	6. Star J, and J. Estes, (1994), Geographic Information Systems: An Introduction, Prentice Hall,
1.4.74	New Jersy.
	7. Williams J. (1995): Geographic information from space, John Wiley and Sons, England,
	8. चौनियाल, देवी दत्त (2004), सुदूर संवेदन एवं भौगोलिक सूचना प्रणाली, शारदा पुस्तक भवन, इलाहाबाद-2
	9. खत्री, हरीष कुमार (2019) : सुदूर संवेदन तकनीक, कैलाष पुस्तकसदन भोपाल, मध्यप्रदेश
Sugge	sted equivalent online course:1. epgp.inflibnet.ac.in 2. virtual lectures available on you tube
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Program	n: B.A./B.Sc	Class: III Year.	Session: 2023-24
Trogram		II: Geography of Chhattisgarh	
Cours		etion of course, the students will h	
Learni	장 않는 그 이 사람들은 아이들은 그리면 아이들은 아이를 다 먹었다.	ne about the physiographic division	
Outco			
(CLC	_	he India Drainage system of Chh	attisgarh Rivers.
M. S. SECTION		the climatic variation in Chhattisg	
	iv Evenine en	understand the types of vegetation	on of
	Chhattisgarh		9h 01
	_	the variation in industrial develop	ment in
	Chhattisgarh	kg jugger - 경영 ka 2 kg ka 18 kg 1	
		I understand the developed and un	nderdeveloped
	States in Chi		
	Diates in Cir	Content of the Course (Credi	t- 6)
Unit		Topic	
1.	Physical Features : G	eological Structure, Relief and Ph	ysiographic Regions, Drainage
	system, Climate		W. Steeley and the second
2.	Natural Resources: S	soils - Types, characteristics and	their Distribution. Water Resources
	(Major Irrigation and	Hydel Power Projects), Forests-ty	ypes, Distribution, and Conservation
1		ources: Iron-ore, Coal, Lime stone	
3.	Agriculture and Popu	ulations - Agriculture: Cereals, Pu	ilses and Millets.
		Distribution, and Density; Tribal P	opulations; and Urban and Rural
	Population.		I 1 1 1 Design of Chlottianah
4.	140		Industrial Regions of Chhattisgarh
5.	Trade and Transpor	t, Tourism, Socio-Economic Devel	opment of Chhattisgarn.
		m + P - L - P - C P -	also Other Decourage
		urces: Text Books, Reference Bo	oks, Other Resources
-	ested Readings:		
1.	일 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	마닷턴 경우의 경향 경향 경향 경향 (Selection of the Control of t	isgarh Samagra, Chhattisgarh Rajya
	Hindi Granth Akadmi,	\$100 PONGO ♣ D 70 P N	Madhan Dadach Hindi
2.): Chhattisgarh Ek Bhugolik Addh	yayan. Madnya Pradesh Hindi
3	Granth Akadmi, Bhop	all (2014): Chhattisgarh Sandarbl	2014 Jansanmpark Vihhao C.G
٥.	Govt., Raipur	an (2014). Ciliattisgam Sandaroi	2017 Jansannipark Violagi, C.C.
4.	Tiwari, Vijay Kumar (2004): Geography of Chhattisgarh	, Himalya Publishing House, Pvt.
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5.		and Pursottam Chandrakar (2001):	Geography of Chhattisgarh,
	Shardaprakashan, Aaz	ad Nagar , Bilaspur.	n d d W r C a ti d r
6.		Geography of Chhattisgarh, Madhy	ra Fradesh Hindi Granth Akadmi,
Sugge	Bhopal.	ourse: 1. epgp.inflibnet.ac.in	
	tual lectures available or		
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rooram	: B.A./B.Sc	Class: III Year.	Session: 2023-24
Togram	Paper	II: Geography of Chhattisga	rh (UGeo-0303)
Course	After the comple	etion of course, the students wi	Il have ability
Learnin	1	he about the physiographic div	ision of
Outcom	e Chhattisgarh		89 - 52000
(CLO)		the India Drainage system of C	
	iii. Understand	the climatic variation in Chhat	tisgarh State.
	iv. Examine and	d understand the types of veget	ation of
	Chhattisgarh		
	v. Understand	the variation in industrial devel	lopment in
	Chhattisgarl	n State.	
		d understand the developed and	d underdeveloped
	States in Ch	hattisgarh.	
		Content of the Cours	e
Unit		Topic	MM-20
Section	A: Map Readings A	and Interpretation	WW-20
1.	Graphical Representa	tion: Band graph	tom (National and International)
2.			tem (National and International)
3.	Satellite Imageries: I	Describing the Marginal Inform	mation
Section	n B: Surveying And	Field Report	MM-20
	Surveying: Plane Tal	ble Survey, Basic Principles of	plane table surveying, Plane table
4.	survey including inte	ersection and resection.	
5.	Field work and field	report: physical, social and eco	onomic survey of a micro - region.
Sectio	n C: Practical Recor	d And Viva Voce	MM-10
	Learning Reso	ources: Text Books, Reference	Books, Other Resources
Sugge	sted Readings:		
		H. (1968): Field Work in Geogra	phy. William Clowes and Sons Ltd.
Lo	ndon and Beccles.		
2. Bo	lton, T. and Newbury, P	A. (1968): Geography through F	ieldwork. Blandford Press, London.
3. Mo	onkhouse, F. J. (1985): N	Maps and Diagrams. Methuen, Lor	ndon.
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IN P		and caregraphy and received	sing. Concept Publishing Company,
	ew Delhi. strajan V. (1976): Advar		
5. Na	trajan, V. (1976): Advar	nced Surveying, B.I. Publications.	, Mumbai.
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