

S. Y. B.A

(Semester III & IV)

Syllabus of Geography

(Under the Faculty of Science)

Choice Based Credit System (CBCS)

With effect from June-2019

Structure of S.Y.B.A. under CBCS pattern- Geography w.e.f. June-2019

Semester	Discipline Specific Core Courses DSC	Ability Enhancement Compulsory Course AEC	Skill Enhancement Course SEC	Discipline Specific Elective Courses DSE	Generic Grade GE
III Credits: 18 (07 Papers)	Compulsory English (Credits 03) MIL 1 (Credits 03) DSC1 C (Credits 02)** DSC 2 C (Credits 02)**		SEC 1 (Credits 02)	DSE 1 A (Credits 03) DSE 2 A (Credits 03)	
IV Credits: 20 (08 Papers)	Compulsory English (Credits 03) MIL 2 (Credits 03) DSC 1 D (Credits 02)** DSC 2 D (Credits 02)** DSC3 D (Credits 02)*		SEC 2 (Credits 02)	DSE 1 B (Credits 03) DSE 2 B (Credits 03)	

Gg. 231 (DSC) Sem. III General Cartography (DSC1 C)

Gg. 241 (DSC) Sem. IV Human Geography (DSC1 D)

Gg. 232 **(DSE 1 A)** Sem. III Geography of Tourism

Gg. 242 (DSE 1 B) Sem. IV Geography of India

Gg. 233 (DSE 2 A) Sem. III Practical Geography (Scale and Map Projection)

Gg. 243 (DSE 2 B) Sem. IV Practical Geography (Surveying)

Gg. 234 (SEC 1) Sem. III Regional Planning and Development

Gg. 244 (SEC 2) Sem. IV Remote Sensing and GPS Based Project Report

Gg. 245 **(DSC 3 D)** Sem. IV Minor Study Project In semester IV, DSC 3 D will be Minor Study Project of DSE 1 B and 2 B (Papers of Special Subject)

^{*} In Sem. IV, DSC 3D will be Minor Study Project of DSE 1 B & 2 B (Papers of specific subject)

^{**} For all other DSC Papers there will be 01 Credit for Practical. (01 Credits of Practical=02 Hours)

सूचना

- 1. MIL हि अनिवार्य अभ्यासपत्रिका आहे. द्वितीय वर्षात प्रवेशित प्रत्येक विद्यार्थ्यांने मराठी, हिंदी, संस्कृत, पाली, अर्धमागधी यापैकी महाविद्यालयात शिकवल्या जाणाऱ्या इंग्रजी व्यतिरिक्त कोणत्याही एका भाषा विषयाच्या MIL मधील अभ्यासपत्रिकेची निवड करणे अनिवार्य आहे.
- 2. DSE 1, 2 मध्ये भूगोल या विषयाच्या अभ्यासपत्रिकांची निवड करणाऱ्या विद्यार्थ्यानी DSC मधील भूगोल विषयाच्या उपलब्ध सामान्य नकाशास्त्र (General Cartography- Sem: III) आणि मानवी भूगोल (Human Geography- Sem: IV) अभ्यासपत्रिकेची निवड करणे अनिवार्य आहे.
- 3. DSE 1, 2 मध्ये भूगोल या विषयाच्या अभ्यासपत्रिकांची निवड करणाऱ्या विद्यार्थांनी चौथ्या सत्रात DSC 3 मधील लघुअभ्यास प्रकल्प (Minor Study Project) या अभ्यासपत्रिकेसाठी भूगोल या विषयाची निवड करणे अनिवार्य आहे. प्रकल्पलेखनाची हि अभ्यासपत्रिका फक्त चौथ्या सत्रासाठी आहे.
- 4. SEC च्या सत्र तीन व चार यांमधील अभ्यासक्रमांसाठी विद्यार्थी महाविद्यालयात उपलब्ध विषयांपैकी कोणत्याही विषयाची निवड करू शकतात.
- 5. विद्यापीठ परीक्षा 60 गुणांची आणि अंतर्गत/प्रात्यक्षिक परीक्षा 40 गुणांची असेल.

Equivalence courses for SYBA Geography Students

S.Y.B.A Geography (Old Courses)	New Syllabus of S.Y.B.A Geography W.E.F. June 2019
Gg: 211(A) - Sem. III - G2: Human Geography OR Gg: 211(B) – Sem. III - G2: Geography of Resources	Gg. 231 (DSC) Sem. III General Cartography
Gg: 221(A) - Sem. IV - G2: Economic Geography OR Gg: 221(B) - Sem. IV - G2: Geography of Water Resource	Gg. 241 (DSC) Sem. IV Human Geography
Gg: 212(A) - Sem. III - S1: Geography of Tourism - I OR Gg: 212(B) - Sem. III - S1: Physical Geography of Maharashtra	Gg. 232 (DSE 1 A) Sem. III Geography of Tourism
Gg: 222 (A)- Sem. IV - S1: Geography of Tourism - II OR Gg: 222(B) - Sem. IV - S1: Economic Geography of Maharashtra	Gg. 242 (DSE 1 B) Sem. IV Geography of India
Gg: 213 - Sem. III - S2: Practical Geography – I (Scale and Map Projections)	Gg. 233 (DSE 2 A) Sem. III Practical Geography (Scale and Map Projection)
Gg: 214 - Sem. IV - S2: Practical Geography – II (Cartographic Techniques, Surveying and Excursion / Village / Project Report)	Gg. 243 (DSE 2 B) Sem. IV Practical Geography (Surveying)
	Gg. 234 (SEC 1) Sem. III Regional Planning and Development
	Gg. 244 (SEC 2) Sem. IV Remote Sensing and GPS Based Project Report
	Gg. 245 (DSC 3 D) Sem. IV Minor Study Project In semester IV, DSC 3 D will be Minor Study Project of DSE 1 B and 2 B (Papers of Special Subject)

Under Faculty of Science and Technology

S.Y.B.A. SEMESTER- III

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

DSC-C (Gg.231): GENERAL CARTOGRAPHY

Total Credits – 2 Total Clock Hours – 45 Internal Marks - 40 External Marks - 60

Objectives:

To acquaint the knowledge about practical and theoretical understanding of Cartographical concepts

Unit	Topic	Sub-Topics	Hours	Marks
I	Practical Component	A) Representation of Data: Symbols, dots, Choropleth, Isopleths and Flow Diagram. B) Practical Component (Every candidate shall complete the 04 practicals prescribed in the practical component or candidates also perform any practical apart from following practicals from practical component related to concerned course based on regional requirement or importance with the prior permission of course teacher. (Overall 04 practicals must be performed) 1. Reading of Map Scale 2. Actual measurements of land as per scale 3. Draw a simple graphical Scale 4. Map labeling 5. Draw the major parallels of latitudes on the world map 6. Draw the major meridians of longitudes on the world map 7. Draw the great circle on the map 8. Prepare a one air route on a world map 9. Filling the major city/canal/capital on the world map 10. Draw the weather symbols 11. Prepare star diagram 12. Draw the cylindrical equal area projection 13. Draw the combined line and bar graph 14. Construct the conical projection 15. Interpretation of thematic map 16. Analyzed of weather data 17. Criteria of forecasting of weather	30	
II	Introduction of cartography And Maps	 (A) Define the cartography (B) Explain the history of cartography in modern India (C) Types of Map (i) Thematic Map 	05	15

		(ii) Topological Map			
		(D) Elements Map			
		(E) Uses of Maps in various fields			
		(A) Definition of scale			
		(B) Methods of representing of scale			
		(a) Numerical Scale			
III	Maps & Scale	(b) verbal Scale		05	25
111	Maps & Scale	(c) Graphical Scale			
		(C) Conversion Scale			
		(British &Metric System)			
		(D) Conversion of Nautical Mile in feet & Meters			
		(A) Introduction			
		(i) Definition of map & globe			
		(ii) Definition of map projection			
		(B) Classification of map projection			
	I	(according to constructional approach)			
		(i) Perspective projection			
		(ii) Non- perspective projection(C) Criteria for choice of following projections			
		a) Developable Surface			
		b) Source of Light		05	20
IV	Map Projection	c) Position of Developable Surface Projections			20
1 4	Wiap Frojection	i, Zenithal Gnomonic projection			
		ii, Zenithal stereographic projection			
		iii, Cylindrical equal area Projection			
		iv, Conical Projection with one standard parallel			
		v, Bonne's projection			
		(D) Properties and Uses of following projection			
		i, Zenithal Gnomonic projection			
	ii, Zenith	ii, Zenithal stereographic projection			
		iii, Cylindrical equal area Projection			
		iv, Conical Projection with one standard parallel			
		v, Bonne's projection			
		v, boinc s projection			

Instructions:

1. Nature of Practical Exam. (Internal Practical Test Exam):-

Practical Exam is of 40 marks (Internal Exam) in each semester. ---

A. Submission of Practical journal = 20 Marks (Each Practical 05 Marks $(4 \times 5 = 20)$

B. Oral Exam (at semester end) = 15 Marks

C. Attendance & Behavior = 05 Marks

Total = 40 Marks

- 2. Every candidate shall complete the 04 practicals entering these practicals in the laboratory journal, which shall be produced at the time of Internal test exam along with the certificate sign by course teacher, head of the department and Principal of the concern college.
- 3. Practical examination (Internal Test Exam) is to be conducted at the end of the semester prior to the 15 days before theory exam.
- 4. <u>U.A. Question Paper should be based on Unit No. II, III and IV only.</u>

University Assessment (U.A.)	60
College Assessment (C.A.) (Internal Practical Test Exam)	40
(Internal Fractical Test Exam)	

References: -

- 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

Under Faculty of Science and Technology

S.Y.B.A. SEMESTER- IV

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

DSC-D (Gg. 241): HUMAN GEOGRAPHY

Total Credits – 2 Total Clock Hours – 45 Internal Marks - 40 External Marks - 60

Unit No.	Unit	Sub Unit	Hours	Marks
1	Practical Component	Practical Component (Every candidate shall complete the 04 practicals prescribed in the practical component or candidates also perform any practical apart from following practicals from practical component related to concerned course based on regional requirement or importance with the prior permission of course teacher. (Overall 04 practicals must be performed) 1. Calculate child women ratio of the District/Tahsil/Village. 2. Age Sex pyramid 3. Dependency ratio 4. Population growth rate 5. Density of population 6. Fertility rate 7. Mortality rate 8. Study of settlement of any region (Size, Location, Work etc.) 9. Study of health facilities of tribal people 10. Study of mode of life of local tribes 11. Distribution of population 12. Occupational structure 13. Educational structure 14. Socio-economic condition of local area 15. Economic status according to income	30	
2	Introduction to Human Geography	 Definitions, Nature and Scope of Human Geography. Branches of Human Geography Determinism and Possibilism Stop and Go Determinism 	05	15
3	The Race of Mankind, Religion and Language	 Meaning and definition of race Physical basis of racial groups Classification of World Races (Caucasoid, Mongoloid, Negroid, Australoid) Ethnic groups in India. Major religion in the world and their distribution Major languages in India (Hindi, Marathi, Gujrathi and Tamil) 	05	25

4	Population and Settlement	 A) Population: 1. Factors affecting population distribution 2. Distribution of population and growth of Population: Global and National B) Settlement: 1. Definitions of Rural and Urban Settlement 2. Types of Settlements: Rural & Urban 3. Process of Urbanization 4. Patterns of Rural Settlement. 		05	20
			Total	45	60

Instructions:

1. Nature of Practical Exam. (Internal Practical Test Exam):-

Practical Exam is of 40 marks (Internal Exam) in each semester. ---

A. Submission of Practical journal = 20 Marks (Each Practical 05 Marks ($4 \times 5 = 20$)

B. Oral Exam (at semester end) = 15 Marks

C. Attendance & Behavior = 05 Marks

Total = 40 Marks

- 2. Every candidate shall complete the 04 practicals entering these practicals in the laboratory journal, which shall be produced at the time of Internal test exam along with the certificate sign by course teacher, head of the department and Principal of the concern college.
- 3. Practical examination (Internal Test Exam) is to be conducted at the end of the semester prior to the 15 days before theory exam.
- 4. <u>U.A. Question Paper should be based on Unit No. II, III and IV only.</u>

University Assessment (U.A.)	60
College Assessment (C.A.)	40
(Internal Practical Test Exam)	40

Reference Books:

- 1. Barrett H. R., 1995: Population Geography, Oliver and Boyd.
- 2. Carter Harold (1977): The study of Urban Geography
- 3. Clarke, J.I. (1992): Population Geography, Pergamon Press, Oxford.
- 4. Hans Raj (1978): Fundamentals of Demography
- 5. Hornby, F. William and Jones, M. (1987): An Introduction to Population Geography, Cambridge University Press, Cambridge.
- 6. Hudson F.S. (1976): Geography of Settlements
- 7. Liendsor, J. M. (1997): Techniques in Human Geography, Routledge.
- 8. Majid Husain, Human Geography,
- 9. Michael E. and E. Hurse: Transportation Geography

- 10. Pollard A. H. and Farhat Yusu: Demographic Techniques
- 11. Singh, R. L. Reading in Rural Settlement Geography
- 12. Yeats, M. H. (1974). An introduction to Quantitative Analysis in Human Geography.
- 13. ए. के. खातीब., मानवी भूगोल,
- 14. डॉ. व्ही. जे. पाटील आणि डॉ. आर. व्ही. भोळे, मानवी व आर्थिक भूगोल,
- 15. डॉ. नामदेव नरसिंगराव गजरे मानवी भूगोल, प्रशांत पब्लिकेशन, जळगाव
- 16. Bhaise S. D. and Mhaski D. A Loksankhya Bhugol (Marathi Medium) : Atharva Publication, Jalgaon
- 17. Bhaise S. D. and Mhaski D. A Medical Geography (Marathi Medium) : Atharva Publication, Jalgaon

Under Faculty of Science and Technology

S.Y.B.A. SEMESTER- III

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

Gg. 232 (DSE 1 A): GEOGRAPHY OF TOURISM

Total Credits – 3. Total Clock Hours – 45 Internal Marks - 40 External Marks - 60

Objectives

- 1. To develop and communicate basic conceptual frame work of Geo Tourism.
- 2. To realize its potentials and against achieved in the Indian context.
- 3. To understand the various Geo tourism.
- 4. To know the role and responsibilities, economic growth of Tourism industry in India.
- 5. To evaluate the role of various organization of tourism.
- 6. To know the importance of the sustainable tourism.
- 7. To develop Socio cultural aspects for the Tourism geography.

Sr. No.	Topic	Sub Topics	Hours	Marks
1	Introduction to Tourism Geography	 (A) Introduction to Tourism Geography i) Concept of Tourism, ii) Definition of tourism, iii) Nature and scope of tourism geography, iv) Role of geography in tourism, v) Components and characteristics of tourism geography. (B) Factors affecting on Tourism. 1) Physical – i) Relief, Beaches, Waterfall, Mountain & Hot – spring ii) Climate – Hill station, Health resort iii) Vegetation – National park, Sanctuaries 2) Cultural – i) Religious and pilgrim centres ii) Historical monuments iii) Archaeological sites. 3) Economic – i) Accommodation ii) Transportation 	12	16

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		A) Regional Tourism;		
		i) Domestic- (India)		
		a) Geographical (Hill Station)- Darjeeling		
		b) Historical- Ajanta		
		c) Educational- Kolkata & Pune		
		d) Beaches- Goa		
	Recent Trends	ii) Eco-tourism –Sanctuaries, Forts Capital &		
2	and Types of	historical places and national park (M.P.,	10	16
	Tourism	Gujarat & Maharashtra)		
		iii) Sustainable Tourism - Agro tourism,		
		heritage tourism & Adventure tourism		
		B) Role of MICE (Meetings, Incentives,		
		Conventions and Exhibitions) in Tourism		
		C)Types of Tourism: Cultural Tourism,		
		Medical Tourism, Pilgrimage & Eco tourism		
		A) Economy –		
		i) Employment ii) Increased trade iii) Inflation		
		of land values iv) Increased revenue v) Effect of		
		foreign exchange		
	Impost of	1 5		
3	Impact of	B) Society –	12	14
	Tourism	i) Regional language ii) Cultural change		
		iii) Crime & gambling iv) Establish new		
		colonies		
		C) Environment –		
		i) Land ii) water iii) Noise iv) Air		
		A) National tourism policy in India		
		B) Infrastructure & support system for tourism		
4	Tourism in C	C)Tourism development in Konkan region	11	14
	India	D)Tourism development in Khandesh region:	11	^7
		case study		
		of Patna Devi, Toranmal and Pal.		

Weightage of Marks

Unit No	Marks	Hours
1	16	12
2	16	10
3	14	12
4	14	11
University Exam	60	-
Internal examination	40	-

Reference Books

- 1. Dhar, P.N. (2006) International Tourism: Emerging Challenges and Future Prospects. Kanishka, New Delhi.
- 2. Hall, M. and Stephen, P. (2006) Geography of Tourism and Recreation Environment, Place and Space, Routledge, London.
- 3. Kamra, K. K. and Chand, M. (2007) Basics of Tourism: Theory, Operation and Practise, Kanishka Publishers, Pune.
- 4. Page, S. J. (2011) Tourism Management: An Introduction, Butterworth Heinemann- USA. Chapter 2.
- 5. Raj, R. and Nigel, D. (2007) Morpeth Religious Tourism and Pilgrimage Festivals Management: An International perspective by, CABI, Cambridge, USA, www.cabi.org
- 6. Tourism Recreation and Research Journal, Center for Tourism Research and Development, Lucknow
- 7. Singh Jagbir (2014) "Eco-Tourism" Published by I.K. International Pvt. Ltd. S- 25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).
- 8. Sing R.L (1985): Regional Geography of India,
- 9. Sheth Tourism Management (New Delhi Sterling) Sustainable tourism development guide for local planner by WTO
- 10. Dixit M: Tourism Geography and Trends Royal Publication
- 11. Bhatia Tourism development New Delhi Sterling.

Marathi Medium Books

- 1. Suryawanshi D.S, Pryatan Bhugol, Pritam Prakashan Jalgaon
- 2. Shinde S B, Pryatan Bhugol, Phadke Prakashan Kolhapur
- 3. Bhatewal D.P. & Baviskar V. R., Paschim Bhartacha Sanskrutik ani Paryatan Bhogol, Atharva Publication, Jalgaon
- 4. Gharpure V.T. Pryatan Bhugol Vidya prakashan Nagpur
- 5. Bhagwat and Joshi Pryatan Bhugol Murlidhar Prakashan pune
- 6. Wagh & Sonawane Pryatan Bhugol Atharva Prakashan Jalgaon
- 7. Nagtode Pardhi D A Pryatan Bhugol pimpalapure Prakashan Nagpur
- 8. Sambhaji Patil Pravas vyawasthapan and Pryatan uydyog Atharva Publication Jalgaon
- 9. Bhatewal D.P. & Baviskar V. R., Paryatan Bhugol, Prashant Publication, Jalgaon
- 10. Khatib K.A Pryatan Bhugol Ajab Pustakalaya Kolhapur

Under faculty of Science and Technology

S.Y.B.A. SEMESTER- IV

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

Gg. 242 (DSE 1 B): GEOGRAPHY OF INDIA

Total Credits – 3. Total Clock Hours – 45 Internal Marks - 40 External Marks – 60

Objectives:

- i. To make the students able to understand Geographical Personality of India.
- ii. To study minerals and power resources in the specific regions of India.
- iii. To study the nature of industries and their development in India.
- iv. To aware the students about agricultural and demographic problems and make them able to find remedial measures on those problems.

Unit	Topic	Sub Topics	Hours	Marks
1	Geographical personality of India	A) Introduction: i) Location, extent and Geographical area ii) Administrative divisions of India iii) Adjoining countries B) Physiography: i) Physiographic divisions of India (a) The Northern Mountainous Region- Himalaya (b) The Northern Indian Plain (c) The Peninsular plateau (d) Coastal Plains (e) Indian Islands C) Drainage: i) Drainage system (a) Himalayan Drainage system (b) Peninsular Drainage system	10	14
2	Climate, Soils and Natural Vegetation	A) Climate i) Characteristics of climate ii) Factors affecting on climate iii) Seasons and rainfall distribution B) Soils: i) Major soil types in India ii) Soil Erosion and conservation in India C) Vegetation: i) Major Types and Distribution of natural vegetation ii) Economic importance of forest	12	16
3	Population and Agriculture	A) Population: i) Growth of population in India Since 1901 ii) Factors affecting the distribution of population in India (Physical and Cultural) iii) State – wise Density distribution of	12	15

		Population in India.		
		iv) Sex Ratio - its regional variation and		
		associate problems of low Sex Ratio.		
		B) Agriculture:		
		i) Study of geographical condition,		
		Production and distribution of following		
		crops:		
		a) Rice b) Cotton		
		ii) Agro-climatic Regions of India		
		A) Mineral and Power Resources:		
		Production and distribution of following		
		resources:		
		i) Iron ore ii) Bauxite iii) Coal		
		iv) Hydel Power		
4	Resources and	B) Industries:	11	1.5
4	Industries	i) Distribution and Production of following	11	15
		Industries.		
		a) Cotton Textile industries		
		b) Sugar Industries		
		ii) Major Industrial Belts in India.		
		iii) Industrial Policy of India		

Weightage of Period and Marks

Unit No.	Hours	Marks
1	10	14
2	12	16
3	12	15
4	11	15

University Assessment (U.A.) = 60

College Assessment (C.A.) = 40

References:

- 1) Dastane, "Bharat Ek Pahani", Dastane Ramchandra and Company.
- 2) Gharpure V.T. (2004): "Bharatacha Bhugol", Pimplapure Prakashan, Nagpur (Marathi Medium)
- 3) Hussain M. (1992): "Geography of India", Tata MacGraw Hill Education.
- 4) Miller F.P. and et. Al. (2009): "Geography of India", Alphascript Publishing.
- 5) Nag P. and Sengupta S.: "Geography of India", Concept Publishing Company.
- 6) Patil V.J., Sandanshiv L.P. & Mrs. Jangale P.P. (2017): "Physical Geography of India", Prashant Publication, Jalgaon (MS).
- 7) Patil V.J., Sandanshiv L.P. & Mrs. Jangale P.P. (2017): "Economic Geography of India", Prashant Publication, Jalgaon (MS).

- 8) Puranik Madhav (2005): "Bharatacha Bhugol", Vidya Prakashan, Nagapur.
- 9) Rana, Tejbir Singh (2015): "Diversity of India", R.K. Book, Delhi.
- 10) Sandanshiv L.P. and et. al. (2015): "NET/ SET Geography", Prashant Publication, Jalgaon (Marathi).
- 11) Sinngh Jasbir, "An Agricultural Atlas of India: A Geographical Analysis". Tata MacGraw Hill Education.
- 12) Sinha B.N., "Industrial Geography of India.

Under faculty of Science and Technology

S.Y.B.A. SEMESTER- III

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

Gg. 233 (DSE 2 A): PRACTICAL GEOGRAPHY

(Scale and Map Projections)

(Work load – 06 Periods per week per batch of 12 students)

Total Credits – 3. Internal

Total Clock Hours – 90

Internal Marks - 40

External Marks - 60

Objectives

- 1. To give basic information about various tools and techniques used in making maps.
- 2. To understand the concept of scale at the initial stage
- 3. To know how to draw the maps on various scale
- 4. To acquaint the students with basic of Scale, Map Projections and cartographic Techniques
- 5. To enable the students to use Scale Map Projections and cartographic techniques

Sr.No.	Unit	Sub Unit	Hours
1	Scale	Definition of Map Scale Methods of Scale Representation Conversion of Scale (British & Metric System) 1. Verbal Scale to R.F. 2. R. F. to Verbal Scale Construction of scales 1. Simple Graphical Scale 2. Time and Distance Scale 3. Comparative Scale	30
2	Classification of Map Projection	 A. Maps and Globe: Definition, Meaning B. Classification and Types of Map C. Importance and use of maps D. Need and Use of Map Projections E. Classification of Map Projection on the basis of their development 1. Perspective Projections 2. Non Perspective Projections 3. Conventional Projections 	25
3	Construction of Map Projections	A. Zenithal Polar Projection 1. Zenithal Polar Gnomonic Projection 2. Zenithal Polar Stereographic Projection B. Cylindrical Projection 1. Cylindrical Equal Area Projection	

2. Mercator's Projection	35
3. Introduction to Universal Transverse Mercator's	
(UTM) Projection	
C. Conical Projection	
Conical Projection with one Standard Parallel	
2. Bonne's Projection.	
D. Choice of Map Projections	

Weightage of Marks

Unit	Unit	Weightage
1	Scales	20
2	Map Projections	10
3	Construction of Map Projections	30
	University Assessment (U.A.)	60
	College Assessment (C.A.)	40
	Total Marks	100

Internal Practical Test Exam.

1) Attendance and Behavioral: 10 Marks 2) Internal Test : 30 Marks

Total: 40 Marks

References 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, ConceptPublishing.
- 4. Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers.
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Websites

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- b) Indian National Cartographic Association: www.incaindia.org
- c) Indian Naval Hydrographic Department: www.hydrobharat.nic.in
- d) National Bureau of Soil Survey and Land Use planning: www.nbsslup.in
- e) Survey of India: www.surveyofindia.gov.in

Under faculty of Science and Technology

S.Y.B.A. SEMESTER- IV

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

Gg. 243 (DSE 2 B): PRACTICAL GEOGRAPHY

(Surveying)

(Work load – 06 Periods per week per batch of 12 students)

Total Credits – 3.

Internal Marks - 40

Total Clock Hours – 90

External Marks - 60

Objectives

- 1. To acquire knowledge of survey language and sense of technique of surveying.
- 2. To know the scale and distance of surveying.
- 3. To know how to draw layout by surveying of region.
- 4. To acquaint the students with basic knowledge and technique of ground survey.
- 5. To acquire the knowledge of survey instruments.
- 6. To provide basic information about mechanism of survey instruments.
- 7. To acquaint the knowledge how to use survey instruments.
- 8. To know the importance of surveying and survey instruments.

Unit	Topic	Sub-Topic	Hours
1.	Introduction to Surveying	A) Introduction to Surveying: Definitions B) Basic principles of surveying. C) Types of Survey: a) Plane Survey b) Geodetic Survey D) Classification of Survey: a) According to purpose: 1) Topographical 2) Cadastral 3) Geodetic 4) Engineering 5) Railway 6) Military b) According to instruments used: 1) Chain or Tape Survey 2) Compass Survey 3) Levelling Survey 4) Theodolite Survey E) Various Methods of deciding North direction: True, Magnetic and Grid North.	30

		A) Plane Table Survey.				
		B) Necessary Equipments of Plane Table				
		Survey:				
		1) The plane table with a tripod stand				
		2) Alidade				
		3) Chain or Tape				
		4) Spirit level				
		5) Trough Compass				
	Plane Table	6) Ranging Rods				
2.	Survey	7) Plumb bob	40			
	Survey	8) Drawing essential: Paper, pencil, rubber,				
		drawing pins, pencil, sharpener, scale etc.				
		C) Methods of Plane Table Survey:				
		1) Radiation Method				
		2) Intersection Method				
		D) Advantages and Disadvantages of Plane				
		7) Plumb bob 8) Drawing essential: Paper, pencil, rubber, drawing pins, pencil, sharpener, scale etc. C) Methods of Plane Table Survey: 1) Radiation Method 2) Intersection Method				
		E) At Least Experiment of Actual Measurement				
		of Piece of Land or Ground.				
3.	Study Tour/ Village Survey	Tour / Excursion or Village Survey Report	20			

Weightage of Marks

Unit No	Weightage
1	15
2	25
3	20
Total	60

University Assessment (U.A)	60
College Assessment (C.A)	40
Total Marks	100

Internal Practical Test Exam.

1) Attendance and Behavioral: 10 Marks
2) Internal Test : 30 Marks

Total: 40 Marks

Note: The educational tour or village survey should be conduct and organized by the directions of Maharashtra Govt. rules and regulations.

Reference Books:

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- 2. Mishra, R.P and Ramesh A. (2000): Fundamental of Cartography, Concept Publishing Company, New Delhi.
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- 11. Dr. P. G. Saptarshi and Dr. S. R. Jog, Statistical Methods.
- **12.** T. P. Kanetkar and S. V. Kulkarni, (1986): Surveying and Leveling, Pune Vidyrthi Griha Prakashan Pune
- 13. डॉ. अर्जुन कुंभार प्रात्यक्षिक भूगोल, सुमेरू प्रकाशन, डोंबिवली.
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Under faculty of Science and Technology

S.Y.B.A. SEMESTER- III

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

Gg. 234 (SEC 1): REGIONAL PLANNING AND DEVELOPMENT

Total Credits – 2. Internal Marks - 40
Total Clock Hours – 60 External Marks – 60

Objectives:

- 1. Student will become well aware about the Regional Planning and Development.
- 2. Students will get the knowledge of planning, its limitation.
- 3. Students will be able to participate in planning and regional development.
- 4. Students will get knowledge about various approaches and models of regional planning and development.
- 5. Students will be aware of the Special area development plans and Agro Ecological Zones of Maharashtra.

Sr. No.	Торіс	Sub Topics	Hours	Marks
1	Regional Planning	 A. Concept, Need of regional Planning. B. Characteristics of Regional Planning C. Types of regional planning- Short and long term, physical and economic, developmental and imperative, regional, national, international level planning. D. Approaches to regional planning- Export based, growth based, input based. 	18	18
2	Regional Development	A. Concept of growth and development. B. Measures of Regional development. (Indicators-Economic, Social and Environmental)	12	12
3	Models of regional planning and Development	 A. Regional Development models – Rastows Model of economic development. B. Models for regional planning- Growth Pole Theory in Indian context. 	12	12

4	Regional Planning and Development in India	 A. Regional Planning- Special Area Development Plans in India; WGDP (Western Ghats Development Programme) The Success Story and the Failures, Backward Regions of India. B. Regional planning in India. (Through five years plans) I) Rural development planning. II) Tribal area development planning. A. Regionalization of Maharashtra for Planning (Agro Ecological Zones) B. NITI Aayog 	18	18
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References:

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- 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.
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- 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

Under faculty of Science and Technology

S.Y.B.A. SEMESTER- IV

New Syllabus (CBCS Pattern)

(with effect from: June 2019)

Gg. 244 (SEC 2): REMOTE SENSING AND GPS BASED PROJECT REPORT

Total Credits – 2. Total Clock Hours – 60 Internal Marks - 40

External Marks – 60

Objectives:

- 1. To understand the principles of Remote Sensing.
- 2. To acquaint the students with fundamental concepts of Aerial Photography.
- 3. To introduce students with advance techniques for data collection.
- 4. To learn principles and applications of GPS.
- 5. To learn basics of GPS based survey.

No.	Topic	Sub-Topics	Hours	Marks
1	Introduction to Remote Sensing	 A) Introduction, Definition and Need of Remote Sensing B) Process of Remote Sensing in brief C) Applications of Remote Sensing D) Advantages and Limitations of Remote Sensing 	16	14
2	Basic Principles of Remote Sensing	 A) Sources of Energy and Radiation Principles B) Electromagnetic Spectrum C) EMR interaction with Atmosphere-Scattering, Absorption, Reflection D) EMR interaction with earth's surface features- Reflection, Absorption, Emission and Transmission 	16	16
3	Types of Remote Sensing and Aerial Photography	 A) Classification Based on Energy Source - Active and Passive remote Sensing B) Classification Based on Platforms – Air and Space Born a. Sensors – Major Types b. Orbital Characteristics Satellites C) Introduction, Types (Vertical and Low Oblique and High Oblique)and Scale of Aerial Photographs 	18	20
4	GPS based Project Report	 A) Introduction and Segments of GPS B) Applications of GPS C) GPS based Project Report a) Preparing GPS for data collection 	10	10

b) Input in GPS (Way points and Routes) c) Getting data from GPS to GIS d) Output as map or layout (Surfer, Easy	
GPS etc. software's)	

Weightage of Marks		
Units	Hours	Marks
1	16	14
2	16	16
3	18	20
4	10	10
Total	60	60
University Assessment		60
College Assessment		40
Total Marks		100

References:

English Medium -

- 1) Bhatta, Basudeb (2011) Remote Sensing and GIS, Oxford University Press, New Delhi.
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- 6) American society for Photogrammetry and Remote Sensing, 1999, Remote Sensing for the Earth Sciences, Manual of Remote Sensing, 3rd ed., vol. 3, Wiley, New York.

Marathi Medium -

- 1) Dr. ShrikantKarlekar (2007) "BhougolicMahitiPranali" Diamond Publication Pune.
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- 3) Dr. D. S. Suryawanshi (2018) "Geoinformatics" Prashant Publications, Jalgaon.
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KAVAYITRI BAHINABAI CHAUDHARI NORTH MAHARASHTRA UNIVERSITY, JALGAON S.Y.B.A. GEOGRAPHY – CBCS PATTERN

Semester – IV

Discipline Specific Core Course (DSC)

Gg. 245 (DSC 3D): MINOR STUDY PROJECT

W.E.F. – June 2019

Total Credits: 2 Total Clock Hours: 60

Objectives:

- 1. To motivate the students towards Research.
- 2. To understand the various problems in the field of Geography.
- 3. To introduce research methodology and to inculcate research aptitude.
- 4. To enhance analytical thinking and report writing ability of the students.

This is theory part introduce to the students by allotted guide teacher and guiding to the students on selected research problem.		
Unit	Sub Ûnit	Marks
Introduction to the Research	-Define ResearchResearch MotivationTypes of ResearchSignificance of ResearchDefining Research ProblemObjectives of the ResearchHypothesisResearch MethodologyResearch Methods -Data Collection- Primary & Secondary -Tools & Techniques -Analysis & InterpretationReferencesProject Report Writing.	

Minor Study Project.		
Unit	Sub Unit	Marks
Minor Study Project one project offers to maximum 5 students (one group)	-The Minor study report on various geographical topics (especially related to the problems in concerned local region i.e. Village/Tahsil/District/Khandesh level) will be a comprehensive work based on conceptual aspects, field work and analysis of primary and secondary data in the laboratoryStudents are required to select an exploratory topic of geographical importance based on empirical evidences of literature. They are expected to carry out field work & generate primary data or collect secondary data, analyze it & prepare a Project Report to submit at the time of examination.	60

General Guide Lines for the Writing Project Report:-

- 1. The final project report should cover the following aspects.
 - a. Introduction to the problem.
 - b. Aims and objectives of the study.
 - c. Methodology
 - d. Analysis, description and interpretation.
 - e. Results
 - f. Conclusions
 - g. Bibliography
 - h. Appendices
- 2. Every table, figure, maps, photograph should have a caption and with references.
- 3. The list of references should be given at the end and all the references should be complete in all respects (author(s)) name, year, title of the article or book, name of the journal, name of the publisher of the book and place of publication, volume of journal and page numbers).

Example- Wagh, S. A. (2015): Physical Geography, Atharva Publications, Jalgaon Wagh, S. A. And Patil, M. B. (2019): Gender Disparity in Maharashtra: A Geographical Analysis, Ajanta Research Journal, Vol. III, Issue I, January-March 2019, Pp. 55-63.

- 4. The total number of pages should be **minimum 30 and maximum 40**, including text, figures, tables, photographs, references and appendices.
- 5. The medium of writing will be Marathi and English. Project report should be **Hand written only**, computer typing strictly prohibited.
- 6. At the time of viva-voce presentation may be given with the help of equipments which are available in the respective department.

Internal Marks

Attendance & Behavior	10
Presentation with PPT	
OR	30
(Viva-Voce)	
Total Internal Marks	40

External Marks

	Project Report	60
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Important Notes:

- 1. Assessment of the project by guide teacher. One Copy of the Project and Sealed Mark list submit to the College Principal by guide teacher after conducting viva-voce.
- 2. Allocate of Guide Teacher at the start of Sem-III by Head of the concerned department through discussion with all other teachers as per their area of specialization/ interest.

- 3. Allotted guide teacher should assist the students for selecting research problem, construct objectives and hypothesis and guiding on related topics from beginning of the Sem-III.
- 4. Guide teacher is expected to guide the students **in his/her regular periods of the week** for data collection, data interpretation and writing project report.
- 5. Introduce theory part related to research methodology within allotted regular periods.

Suggested Topic for Minor Study Project :-

Maximum 05 students should have select one topic of their interest through discussion with concern guide teacher. The following inventory is for the convenient only. A guide teacher is free to choose any other topic related to Geography apart from the list given below.

Population Geography-

- 1. Sex Ratio
- 2. Population Growth
- 3. Population Distribution
- 4. Population Characteristics
- 5. Literacy
- 6. Occupational Structure
- 7. Social study
- 8. Migration
- 9. Tribal/Rural/Urban Population Problems

• Agricultural Geography-

- 1. Land Use
- 2. Crop Combination/Diversification
- 3. Cropping Pattern
- 4. Agricultural Production
- 5. Irrigation System
- 6. Agricultural Market
- 7. Farming
- 8. Soil
- 9. Live stock Farming

• Economic Geography-

- 1. Human Occupations
- 2. Trade and Transport
- 3. Globalization
- 4. Agricultural Economy
- 5. Regional Development

• Settlement Geography-

- 1. Settlement Pattern
- 2. Rural Settlement study
- 3. Urban Settlement study
- 4. Tribal Settlement study

- 5. Rural Service Centre
- 6. Urban Sprawl
- 7. Problems of villages/cities

• Human Geography-

- 1. Human Race
- 2. Food Security
- 3. Poverty

• Geomorphology/Physical Geography-

- 1. Geomorphic study
- 2. Watershed Management
- 3. Groundwater
- 4. Morphometric Analysis
- 5. Indogenic Forces
- 6. Exogenic Forces

Biogeography/Phytogeography-

- 1. Natural Vegetation
- 2. Wildlife
- 3. Forest
- 4. Biodiversity

Medical Geography-

- 1. Health status
- 2. Malnutrition
- 3. Fertility/Mortality

• Social and Cultural Geography-

- 1. Religion Composition
- 2. Social Aspects
- 3. Language
- 4. Cultural Aspects

• Environmental Geography-

- 1. Environmental Issues
- 2. Global Warming
- 3. Climate Change
- 4. Ozone Depletion
- 5. Hazards
- 6. Pollution
- 7. Natural Resources
- 8. Water Scarcity

• Remote Sensing and GIS-

- 1. Application of Remote Sensing in....
- 2. Analysis with the help of GIS

References:-

- 1. Archer J.E. & dalton T.H. (1968): The fields work in Geography, E.t. Batsford Ltd., London.
- 2. Dikshit, R. D. 2003. The Art and Science of Geography: Integrated Readings. Prentice-Hall of India, New Delhi.
- 3. Johnes, P.A. (2008): Field Work in Geography, Longman.
- 4. Karlekar, S. N. (2006): Research Techniques in Geography, Diamond Publications, Pune
- 5. Kothari C.R.(1996): Research Methodology, Vishwas Prakashan, New Delhi.
- 6. Misra R.P. (1991): Research Methodology in Geography, concept pub. New Delhi.
- 7. Ranjeet Kumar: Research Methodologya Step-By-Step Guide For Beginners, Sage Publication
- 8. Pandey, Prabhat & Pandey, Meenu Mishra: Research Methodology: Tools And Techniques, Bridge Center, 2015
- 9. Sudhir Bodhankar and Vivek Aloni (2007) : Samajik Sanshodhan Paddhati, Sainath Prakashan, Nagpur
- 10. Pradip Aaglave- Samajik Sanshodhan Paddhati

Nature of Question Paper (CBCS Pattern Class S.Y.B.A.)

Time: 2 Hours

Instructions:		
1. All questions have equal marks.		
2. All questions are compulsory		
3. Draw neat and labeled diagram w	herever necessary.	
4. Use of map stencil is allowed.		
5. Figures to right indicate full mark	S.	
Q1 Answer in one sentence: ((Any 6 out of 9)	12 Marks
a)	· •	
b)	_	
c)	_	
d)		
e)	_	
f)	_	
g)	_	
h)	_	
i)	-	
Q2 Write answer in 3 to 4 sent	tences. (Any 4 out of 6)	12 Marks
a)	_	
b)	_	
c)		
d)	_	
e)	_	
f)	-	
Q3 Answer briefly.	(Any 3 out of 5)	12 Marks
a)	_	
b)	_	
c)	_	
d)		
e)	-	
Q.4- Write Notes	(Any 2 out of 4)	12 Marks
a)		 1/
b)		
c)		
d)		
Q.5- Write Answer in Detail		12 Marks
a)	· · · · · · · · · · · · · · · · · · ·	
b)		
c)		

Total Marks: 60