# SOLAPUR UNIVERSITY, SOLAPUR



NAAC Accredited-2015 'B' Grade (CGPA 2.62)

Name of the Faculty – Science & Technology
Syllabus-CBCS Pattern
Name of the Course- B.A.III Geography
(Sem-V&VI)

With effect from June- 2018

## SOLAPUR UNIVERSITY, SOLAPUR

# CHOICE BASED CREDIT SYSTEM SYLLABUS

## **B. A. Part III GEOGRAPHY**

Semester V & VI (w. e. f. June 2018)

## **Semester V**

Sr. No.	Course No.	Paper No.	Name of the Paper	Internal Marks	External Exam Marks	Total Marks	Credit
1.		VII	Resource Geography	30	70	100	4
2.		VIII	Urban Geography	30	70	100	4
3.		IX	Development of Geography	30	70	100	4

## **Semester VI**

Sr. No.	Course No.	Paper No.	Name of the Paper	Internal Marks	External Exam Marks	Total Marks	Credit
1.		X	Geography of Economic Activities	30	70	100	4
2.		XI	Political Geography	30	70	100	4
3.		XII	Applied Geography	30	70	100	4

## **Practical Examination: (CBCS)**

# Annual Practical Examination will be of 400 marks. The Distribution of marks will be as follows

Sr. No.	Course No.	Paper No.	Name of the Paper	Internal Marks	External Exam Marks	Total Marks	Credit
1.		I	Elements of Map Work and Weather Reports	30	70	100	4
2.		II	Cartographic and Advanced Techniques in Geography	30	70	100	4
3.		III	Topographical Maps and Statistical Methods	30	70	100	4
4.		IV	Surveying and Field work	30	70	100	4

## **Semester-V**

(w. e. f. June 2018)

# **Paper Title: -Resource Geography (Paper- VII)**

**Course No:** Total Marks: - 70+30 = 100

Total Lectures: 60 No. of Credit: 04

#### **Objectives:-**

Development in science and technology has changed the pattern of economic activities throughout the world. The major objectives of Economic Geography are as fallows.

- 1. To acquaint the student with basic concepts of Economic Geography.
- 2. To Study the various types of Resources the basis for various economic activities.

Unit	Name of the	Sub topic	No. of		
No.	Topic		Lectures		
1	Economic	1.1 Meaning of Economic Geography	15		
	Geography	1.2 Nature and Scope of Economic Geography			
		1.3 Branches of Economic Geography			
		1.4 Approaches to the study of Economic			
		Geography			
		1.5 Significance of Economic Geography			
2	Resources	2.1 Meaning and Concept of Resources	15		
		2.2 Classification of Resources			
		2.3 Utilization of Resources for the			
		sustainable Economic growth			
		2.4 Need and nature of conservation of			
		Resources			
3	Mineral and	Distribution, Production and Trade of	15		
	Power	following Minerals and Power Resources			
	Resources	A) Mineral Resources-			
		3.1 Iron-Ore: China., India			
		3.2 Manganese- India, South Africa			
		3.3 Bauxite- India, Australia			
		B) Power Resources:			
		3.4 Coal-China, India			
		3.5 Petroleum- India, Middle East Countries			
		3.6 Hydel Power- India, Japan			
4	Non	4.1 Non conventional energy resources- Solar	15		
	Conventional	and Wind energy			
	Energy and	Distribution, Production and Trade of			
	Bio-	following Bio-Resources.			
	Resources	4.2 Forests			
		4.3 Live stocks-(Cattle, Sheep and Goat)			

- 1. Alexandar J.W. (1976): Economic Geography Printace Hall of India New Delhi.
- 2. Berry conkling and Ray (1988): Economic Geography Printace Hall of India New Delhi.
- 3. Hamilton I (Ed) (1992): Resource and Industry Oxford University Press New York.
- 4. Janaki V.A. (1985): Economic Geography, Concept Publication Co, New Delhi. 5. Robinson H. (1978): Economic Geography Madanlal and Evans.
- ५. प्रकाश सावंत-आर्थिक भूगोल
- ६. खतीब के. ए. व भांजे बी.एम.-साधन संपत्ती भूगोल

## **Semester-V**

(w. e. f. June 2018)

Paper Title: -Urban Geography (Paper- VIII)

**Course No: - Total Marks: - 70+30 = 100** 

Total Lectures: 60 No. of Credit: - 04

#### **Objectives:-**

1. To familiarize the students with the conceptual theoretical & empirical development in settlement studies in geography and current settlement scenario in the world & India.

**2.** To provide the students in idea about international & national concerns on settlement issues.

Unit	Name of the	Sub topic	No. of		
No.	Topic		Lectures		
1	Urban	1.1 Definition of Urban Geography	15		
	Geography	1.2 Nature of Urban Geography			
		1.3 Scope of Urban Geography			
		1.4 Approaches to the study of Urban			
		Geography			
		1.5 Significance of Urban Geography			
2	Urbanization	2.1 Concept of Urbanization	15		
	& Urban	2.2 Factors of Urbanization			
	Function	2.3 Trends of Urbanization in World			
		2.4 Functional Classification of Towns &			
		Cities			
3	Site and	3.1 <b>Site</b> -Significance & Classification 15			
	Situation	3.2 <b>Situation</b> -Significance & Classification			
4	Urban	4.1 Development of Town structure:	15		
	Morphology,	Theories-Concentric Zone theory, The			
	Urban	sector theory, The Multi-Nuclei theory.			
	Problem &	4.2 Central Business District			
	Urban	4.3 Residential & Manufacturing areas in the			
	Planning	city			
		4.4 Rural-Urban fringe			
		4.5 Urban Problems			
		4.6 Solution of Urban Problems			
		4.7 Urban Planning: Importance of planning			

- 1. Carter H. (1972): The Study of Urban Geography, Edward Arnold. London.
- 2. Singh R.Y. (1994): Geography of Settlement, Rawat Publication, Jaipur.
- 3. Bose A.: India Urbanization 1974-2000, Tata McGraw Hill, New Delhi.
- 4. Mayer H.M. & Kohn C.F. (1967): Readings in Urban Geography, Chicago printing press.
- 5. Rao V.L.S.P.: Urbanization in India: Spacial Dimensions, Concept Publication Co. New Delhi.
- 6. Deckinson R.E. (1964): City and Region Rouledge, London.
- ७. खतीब के. ए. व भांजे बी. एम- नागरी भूगोल, संजोग प्रकाशन, कोल्हापूर.
- ८. प्रकाश सावंत नागरी भूगोल, फडके प्रकाशन, कोल्हापूर.
- ९. ए. बी. सवदी- नागरी भूगोल, निराली प्रकाशन, पुणे.
- १०. विट्टल घारपुरे नागरी भूगोल, पिंपळापूर प्रकाशन, नागपूर
- ११. एन. जी. शिंदे-नागरी भूगोल, चिन्मय प्रकाशन, औरंगाबाद

## **Semester-V**

(w. e. f. June 2018)

## **Paper Title: Development of Geography (Paper- IX)**

Course No: - Total Marks: - 70+30 =100
Total Lectures: 60
No. of Credit: - 04

#### **Objectives:-**

- 1. To introduce the students to the Philosophical and Methodological foundation of the geography.
- 2. To provide information related to the major landmarks in development of geographical thought.

Unit	Name of the	Sub topic	No. of		
No.	Topic		Lectures		
1	History of	1.1 Contribution of Greek & Roman	15		
	Geographical	1.2 Ancient Indian geographical concepts			
	idea: brief	1.3 Alexandar Von Humboldt			
	review &	1.4 Carl Ritter			
2	Dichotomy in	2.1 Physical Vs Human	15		
	Geography	2.2 General Geography Vs. Regional			
		Geography			
3	School of	3.1 The German School of Geography:	15		
	Geographical	Contribution of Friedrich Ratzel			
	Thoughts	3.2 The French School of Geography:			
		Contribution of Vidal – de-la-Blache			
		3.3 The American School of Geography:			
		Contribution of Ellen Semple			
4	Development	4.1TheQuantitative revolution in 15			
	of Geography	Geography: Concept, Objectives, merits and			
	after World	demerits.			
	War II	4.2 Behavioural Geography			
		4.3 Humanistic Geography			

- HarsorneRechard (1959) Perspective on the nature of Geography Rand McNally& Co., New York
- 2. Dixit R.D. Geography Thought
- 3. Dickinson R.E. Makers of Modern Geography
- 4. Taylor Griffith Geography of 20th Century
- 5. Harvey David (1980) Explanation in Geography Edward Arnold Landon
- 6. Husain Majid (1984) Evolution of Geographical Thought Rawat Publication, Jaipur
- ७. खतीब के. ए. व भांजे बी. एम- भूविज्ञान विकास, संजोग प्रकाशन, कोल्हापूर.

# **GEOGRAPHY** (Special)

# **Practical Paper I**

## ELEMENTS OF MAP WORK AND WEATHER REPORTS

(W.E.F. June 2018)

Course	No: Marks: 70+30=100			
Objecti	ives:			
1. T	To enable the students to use elements of map work.			
2. T	To introduce students to Weather instruments and weather charts.			
UNIT 1.	CARTOGRAPHY 30			
• N	Map definition, Basic components of Map			
• N	Map Scale- Definition, Methods of expression of Scales: Statement Scale (Verbal			
S	cale), Numerical Scale/Representative Fraction, Graphical Scale.			
• C	Conversion of Scale			
• C	Construction of Scale: (Metric System Only)			
i) Simple	e Graphical scale ii) Time and Distance Scale iii) Diagonal Scale.			
UNIT 2.	MAP PROJECTION 30			
• D	Definition and Classification of Projection.			
	a) Based on method of construction			
	b) Based on the developed surface used			
	c) Based on the position of view point			
	d) Based on preserved quantities			
	e) Based on the position of tangent surface			
• C	Construction, Properties and Uses of the following Projection			
	1. Zenithal Polar Gnomonic Projection			
	2. Zenithal Polar Equal Area Projection			
	3. Simple Conical Projection with One Standard Parallel			
	4. Simple Conical Projection with Two Standard Parallel			
	5. Cylindrical Equal Areal Projection			

Mercator's Projection

6.

- Weather Instruments
- i) Thermograph iii) Barograph iii) Wet and Dry bulb Thermometer
  - iv) Cup Anemometer v) Rain gauge vi) Hair hygrometer
  - Isobaric pattern and weather associated with them:

Cyclone, Anticyclone, Secondary Cyclone, Wedge, Ridge, Col.

- The Study of Indian Daily Weather Reports
  - A) Signs and Symbols used in IMD Chart
  - B) Interpretation of Weather Reports: Summer, Rainy and Winter seasons.
- i) Day, Date, Time and Season
- ii) Air pressure iii) Wind
- iv) Rainfall v) Cloud condition vi) Other phenomena
- vii) Sea condition viii) Temperature departure from normal

#### UNIT 4. Journal & Viva

10

#### **References**: (For Practical Paper I,II,III& IV)

- 1. Singh R. L. &dutt P. K. (1979): Element of Practical Geography, Kalyani Publishers, New Delhi.
- 2. Singh R. &Kanaujia L.R.S. (1970): Map Work & Practical Geography, Central Book Depot, Allahabad.
- 3. John Bygott: An Introduction to Map Work & Practical Geography
- 4. Mishra R. P. & Ramesh (1986): A Fundamentals of Cartography, McMillan Co., New Delhi.
- 5. Robinson A. H. (1995): Elements of Cartography, John wiley& Sons, U. S. A
- 6. Ludar D. (1959): Aerial Photography Interpretation: Principles & Application, McGraw Hill, New York.
- 7. Curran Paul J. (1985): Principles of Remote Sensing, Longman, London.
- 8. Lillesand T. M. & Kefer R. W. (1994): Remote Sensing and Image Interpretation, John Wiley & Sons, New York.
- ९. डॉ. कुभार अर्जुन, प्रात्यक्षिक भूगोल
- १०. डॉ. डी. जी. गाताडे व डॉ. एस. सी. आडवीतोट-प्रात्यक्षिक भूगोल
- ११.खतीब के. ए. व भांजे बी. एम- प्रात्यक्षिक भूगोल, संजोग प्रकाशन, कोल्हापूर.

#### **GEOGRAPHY** (Special)

# Practical Paper IICARTOGRAPHIC AND ADVANCED TECHNIQUES IN GEOGRAPHY

(W.E.F. June 2018)

Course No: Marks: 70+30=100

#### **Objectives:**

- 1. To enable the students to use various cartographic Technique.
- 2. To introduce the importance & basic principles of Remote Sensing, G.I.S. & G.P.S.

#### UNIT 1. Representation of Statistical Data by following Cartographic Techniques 30

- i) Climograph ii) Hythergraph iii) Ergograph (Crop Calendar & Circular)
- iv) Wind Roses and Star Digram v. Traffic Flow cartogram

#### UNIT 2. INTRODUCTION TO REMOTE SENSING

**30** 

- Definition & Concept of Remote Sensing
- Types of Sensor and Platform
- Types of Aerial Photograph
- General Equipments used in Aerial Photo interpretation
  - i) Pocket Stereoscope ii) Mirror Stereoscope
- Aerial Photo interpretation elements: Size, Shape Shadow, Tone, Texture, Colour, Associated features.
- Visual interpretation of Aerial Photographs.

#### UNIT 3. INTRODUCTION TO COMPUTER, G.I.S., G. P.S.

**30** 

- **A)** Computer: Evolution of computer, Components: Input & Output device, application in GeographyConstruction of Line Graph, Bar Graph and Pie diagram with the help of computer.
- B) Geographical Information System (G.I.S.)
- i) Definition, component and technical element of G.I.S.
  - ii) Basic functions of G.I.S.
  - iii) Application of G.I.S. in Geography.

**Introduction to GIS Software:** Hands on /practical using open source software QGIS: Geo-referencing, Digitization, Point, Line and Polygon, Final Map Layout and Design.

#### C) Global Positioning System (G.P.S)

- i) Introduction, Determinants and Components of G.P.S
  - ii) Application of G.P.S. in Geography

#### UNIT 4. Journal & Viva

10

#### **References:** (For Practical Paper I,II,III& IV)

- 1. Singh R. L. &dutt P. K. (1979): Element of Practical Geography, Kalyani Publishers, New Delhi.
- 2. Singh R. &Kanaujia L.R.S. (1970): Map Work & Practical Geography, Central Book Depot, Allahabad.
- 3. John Bygott: An Introduction to Map Work & Practical Geography
- 4. Mishra R. P. & Ramesh (1986): A Fundamentals of Cartography, McMillan Co., New Delhi.
- 5. Robinson A. H. (1995): Elements of Cartography, John wiley& Sons, U. S. A.
- Ludar D. (1959): Aerial Photography Interpretation: Principles & Application, McGraw Hill, New York.
- 7. Curran Paul J. (1985): Principles of Remote Sensing, Longman, London.
- 8. Lillesand T. M. & Kefer R. W. (1994): Remote Sensing and Image Interpretation, John Wiley & Sons, New York.
- 9. Dr. Kumbhar Arjun: Practical Geography, SumeruPrakashan, Mumbai.
- 10. Dr. Gatade D.G. & Dr. Adavitot S.C. (2007) Practical Geography, AksharlanePrakashan, Solapur.
- 11. Khatib K.A.: Practical Geography, SanjogPrakashan, Kolhapur.

## **Semester-VI**

(w. e. f. June 2018)

## Paper Title: Geography of Economic Activities (Paper- X)

Course No: - Total Marks: - 70+30 =100
Total Lectures: 60
No. of Credit: - 04

#### **Objectives:-**

Development in science and technology has changed the pattern of economic activities throughout the world. The major objectives of Economic Geography are as fallows.

- 1. To acquaint the students with economic activities i.e. Agriculture, Manufacturing, Transportation economic & Trade and Tourism.
- 2. To acquaint the students with basic concepts of Regional Planning.

Unit	Name of the	Sub topic	No. of
No.	Topic		Lectures
1	Agriculture	1.1 Factors Affecting on Agriculture	15
		1.2 Role of Agriculture in Economic development.	
		1.3 Types, Characteristics and Pattern of the following	
		agricultural practices.	
		Subsistence Agriculture: Shifting cultivation,	
		Intensive farming.	
		Commercial Agriculture: Plantation, Commercial	
		grain farming, Mixed farming & Fruit farming.	
2	Manufacturing	2.1 Factors of Industrial localization.	15
	Industries	2.2 Concept of localization, centralization &	
		decentralization, Weber's Theory of Industrial location	
		2.3 Brief study of following industries in Japan & U.	
		S. A.	
		i. Iron & Steel Industries	
		ii. Cotton Textile Industries	
3	Transportation,	3.1 Significance of Transportation, Communication &	15
	Communication	Trade.	
	& Trade	3.2 Modes of Transport :i) Trance continental Rail	
		Routes. ii) Major Ocean Routes.	
		3.3 Modes of Communication	
		3.4 Trade organizations – OPEC, WTO, EEC	
4	Tourism,	A) <b>Tourism:</b> 4.1 Meaning Significance & impacts of	
	Regional	Tourism.	15
	Planning	4.2 Factors influencing on Tourism.	
		4.3 Tourism management & Planning.	
		4.4 Major Tourism areas in Asia	
		B) Regional Planning:	
		4.5 Concept and Types of Region	
		4.7 Concept of Regional Planning	
		4.8 Application of Regional Planning for	
		Maharashtra.	

- 1. Alexanderson C. (1967): Geography of Manufacturing, Prentice Hall, Bombay.
- 2. Boesch H (1964): A Geography of World Economy, S. Van Notrand Co., New York
- 3. Goh Chang Leong and Morgan (1977): Human and Economic Geography, Oxford University Press.
- 4. H. Robinson (1978): Economic Geography, Macdonald and Evans.
- 5. Hamilton I. (Ed) (1992): Resources and Industry, Oxford University Press, New York.
- 6. Hartshorn T. N. and Alexandar J. W. (1994): Economic Geography, Prentice Hall, New Delhi.
- 7. Janaki V. A. (1985): Economic Geography, Concept publication Co. New Delhi.
- 8. Miller E. (1962): Geography of Manufacturing, Prentice Hall, New York.
- 9. Milton D. (1993): Gography of World Tourism, Longman, London.
- 10. Mishra R. P. (1969): Regional Planning: Concepts, Techniques & Policies, University of Mysore.
- 11. Raza M. and Agrawal Y. P. (1985): Transport Geography of India, Concept publication, New Delhi.
- 12. Thoms R. S. (1962): The Geography of Economic Activities, McGraw Hill, NewYork.
- 13. White H. P. And Senior M. L. (1983): Transport Geography, Longman, London.
- १४.खतीब के. ए. व भांजे बी. एम- आर्थिक भूगोल, संजोग प्रकाशन, कोल्हापूर.

## **Semester-VI**

(w. e. f. June 2018)

## **Paper Title: -Political Geography (Paper-XI)**

Course No: - Total Marks: - 70+30 =100
Total Lectures: 60
No. of Credit: - 04

#### **Objectives:-**

- 1. To understand the basic concepts of political geography.
- 2. To familiarize the students with the geographical factors which have a bearing on the geopolitical/administrative organization of space.
- 3. To enhance awareness of multidimensional nature of geo-political space.

Unit	Name of the Topic	Sub topic	No. of
No.			Lectures
1	Political Geography	1.1 Definition	15
		1.2 Nature	
		1.3 Scope	
		1.4 Relation with allied branches	
		1.5 Approaches to the study of Political	
		Geography	
2	Global Strategic views	2.1 Sea Power Concept of A.T.Mahan	15
	and their Relevance to	2.2 The Heartland Theory of H.J.	
	contemporary world	Mackindar	
	situation	2.3 Rim Land Theory of Spykman	
3	Major Concepts of	3.1 Concept of State and Nation	15
	State, Nation,	3.2 Elements of State-Location,	
	<b>Boundaries, Frontiers,</b>	Shape, Size, Topography,	
	Capitals and Core	Climate, Vegetation, Resources,	
	Areas	Population and Communication.	
		3.3 Concept of Boundaries and	
		Frontiers.	
		3.4 Meaning, Classification and	
		Functions of Boundaries,	
		Capital and Core areas.	
		3.5 Buffer State: Meaning and	
		Examples.	
4	Geo-Political Issues of	4.1 Changing Political Map of India	15
	India	4.2 Inter-State issue of Water	
		disputes	
		4.3 Conflict resolutions insurgency	
		in Border States.	
		4.4 Boundary disputes:	
		i) India and Pakistan	
		ii) India and China	

- 1. Alexandar L.M. (1963): World Political Patterns, Ran McNally, Chicago.
- 2. Bhagwati, J. N. (Ed) (1976): New International Economic Order The North South Debate. M.I.T Press, London
- 3. Deckinson R.E. (1964): City and Region Rouledge, London.
- 4. Deshpande C.D. (1992): India- A Regional Interpretation, Northern Book Center, New Delhi.
- 5. Dikshit, R.D. (1982): Political Geography: A Contemporary Perspective, Tata McGraw-Hill Publishing Company. New Delhi
- 6. Glassner M.I. (1993): Political Geography, John Wiley, New York.
- 7. John R. Short (1982): An Introduction to Political Geography, Methuen, London.
- 8. Panikkar, K.M. (1956): Geographical factors in Indian History. BharatiyaVidyaBhavan, Bombay.
- 9. Pounds N.T. (1972): Political Geography McGraw Hill, New York.
- 10. Short J. R. (1982): An Introduction to Political Geography, Routledge and Kegan Paul, London.
- 11. Sharma T.C. Political Geography.
- 12. Singh R.Y. (1994): Geography of Settlement, Rawat Publication, Jaipur.
- 13. Tylor Peter (1985): Political Geography, Longman, London.
- १४.खतीब के. ए. व भांजे बी. एम- राजकीय भूगोल, संजोग प्रकाशन, कोल्हापूर.

## **Semester-VI**

(w. e. f. June 2018)

Paper Title: -Applied Geography (Paper- XII)

Course No: Total Marks: 70+30 =100
Total Lectures: 60
No. of Credit: - 04

#### **Objectives:-**

**1.** To familiarize the students Nature & Scope of Applied Geography.

**2.** To understand the various issues related to physical environment, human resources and economy etc.

Unit	Name of the Topic	Sub topic	No. of
No.		_	Lectures
1	<b>Applied Geography</b>	1.1 Definition of Applied Geography	15
		1.2 Nature of Applied Geography	
		1.3 Scope& Content of Applied Geog.	
2	Issues related to	2.1 Environmental degradation:	15
	physical	i) soil erosion ii) Deforestation	
	environment:	iii) Pollution: Air, Water & Noise its causes,	
	Environmental	effects	
	degradation	2.2 Global environmental issues – Global	
		warming, ozone layers depletion & Acid rain	
3	Issues related to	3.1 Natural disaster- Floods, Droughts, Earth	15
	physical	quakes & Land Slides with special reference	
	environment:	to India.	
	Environmental	3.2 Environmental management	
	disaster		
4	Issues related to	4.1 Quality Vs. Number	15
	<b>Human resources</b>	4.2 Social and Demographic issues	
	and Economy	4.3 Modern Agriculture & Associated	
		Problem	
		4.4 Industrialization& Associated problem.	

- Hartshorne, Richard (1959): Perspective on the Nature of Geography, Rand McNally & Co. New York.
- 2. Minshull, R. (1970): The Changing Nature of Geography, London.
- 3. Dickinson, R. E.: Makers of Modern Geography.
- 4. Taylor Griffith: Geography of 20th Century
- 5. Harvey, David (1980): Explanation in Geography, Edward Arnold, London.
- 6. Johnston, R. J. &Claval, P. (Ed.) (1984): Geography Since the Second World War, Croom Helm, London.
- 7. Holt Jensen, A. (1980): Geography: Its History and Concept, Longman London.
- 8. Singh Savindar: Environmental Geography
- 9. Chand & Puri : Regional Geography
- 10. Dhameja S. K.: Environmental Studies, New Delhi.
- 11. Lownsburg, R. J. & Aldrich, F. T. (1979): Introduction of Geographical Methods and Techniques, Charles Marrill, Columbus.
- 12. खतीब के. ए. व भांजे बी. एम- उपयोजित भूगोल, संजोग प्रकाशन, कोल्हापूर.

## **GEOGRAPHY** (Special)

# Practical Paper III: Topographical Maps and Statistical Methods(W.E.F. June 2018)

**Course No:** Marks: - 70+30=100

#### **Objectives:**

- 1. To acquaint the students with the Topographical Maps
- 2. To introduce the students about Statistical Methods in Geography.

#### UNIT 1. METHODS OF REPRESENTATION OF RELIEF

30

- Methods Representation of Relief by Spot height, layer tint, Hatures, Form lines, Contours.
- Representation of Relief features by Contours i) Conical Hill i) Plateau iii) Mountain Cliff iv) Sea Cliff v) Waterfall vi) Valley vii) Gorge viii) Ridge ix) Saddle
- Representation of Slope by Contours i) Gentle ii) Steep iii) Even iv) Uneven v)
  Concave vi) Convex vii) Terraced
- Methods of expression of Slope Gradient, Degree, Percentage

#### UNIT 2. STUDY OF S.O.I. TOPOSHEET

**30** 

- Indexing of Toposheet
- Signs and Symbols used in S.O.I. Toposheets.
- Interpretation of S. O. I. Toposheets (Plain, Plateau & Mountain region) with respect to following points A) Marginal information B) Physiographic information i) Relief ii) Drainage iii) Vegetation C) Cultural information i) Land use ii) Transportation & Communication iii) Settlement iv) Irrigation
- UNIT 3. STATISTICAL METHODS (Simple, Discrete and Continuous data) 30
- Need and Importance of Statistical Data
- Nature of Statistical data
- Measures of Central Tendency: i) Mean ii) Median iii) Mode
- Measures of Dispersions: i) Mean Deviation ii) Quartile Deviation iii) Standard
   Deviation
- Coefficient of Correlation by Carl Pearson's method

#### Note:

• Each department should have at least 2 computers, 1 printer, 1 scanner, 10 pairs of Aerial Photographs, 10 Pocket Stereoscopes, 2 Mirror Stereoscopes and 10 Remote Sensing Images.

#### **References**: (For Practical Paper I,II,III& IV)

- 1. Singh R. L. &dutt P. K. (1979): Element of Practical Geography, Kalyani Publishers, New Delhi.
- 2. Singh R. &Kanaujia L.R.S. (1970): Map Work & Practical Geography, Central Book Depot, Allahabad.
- 3. John Bygott: An Introduction to Map Work & Practical Geography
- 4. Mishra R. P. & Ramesh (1986): A Fundamentals of Cartography, McMillan Co., New Delhi.
- 5. Robinson A. H. (1995): Elements of Cartography, John wiley& Sons, U. S. A
- Ludar D. (1959): Aerial Photography Interpretation: Principles & Application, McGraw Hill, New York.
- 7. Curran Paul J. (1985): Principles of Remote Sensing, Longman, London.
- 8. Lillesand T. M. & Kefer R. W. (1994): Remote Sensing and Image Interpretation, John Wiley & Sons, New York.
- 9. Dr. Kumbhar Arjun: Practical Geography, SumeruPrakashan, Mumbai.
- 10. Dr. Gatade D.G. & Dr. Adavitot S.C. (2007) Practical Geography, AksharlanePrakashan, Solapur.
- 11. Khatib K.A.: Practical Geography, SanjogPrakashan, Kolhapur.

## **GEOGRAPHY** (Special)

## **Practical Paper IV: Surveying and Field Work**

(W.E.F. June 2018)

**Course No:** Marks: -70+30=100

**Objectives:** 

- 1. To acquaint the students with the Surveying
- 2. To introduce the students about Field Work.

#### **UNIT 1. SURVEYING**

**30** 

- Definition, types of survey according to instruments used-
- Preparation of plans of the given area with the following surveys-
- **A) Plane Table Survey** Object & procedure of plane table survey i) Radial Method ii) intersection method iii) Open traverse survey (at least three points)
- **B)** Chain and Tape Survey Object & procedure of Chain & Tape Survey i) Triangulation Method ii) Open traverse survey iii) Computation of area by Cross Staff Survey method.
- C) Prismatic Compass Survey i) Radial Method ii)intersection method iii) Open traverse survey iv)Local attraction & correction of bearings.

#### **UNIT 2. PROJECT REPORT**

30

(Report on Any One of the following Topic) i) Flood affected Village ii) Problem of Village or City such as Pollution, water resources, Population, Electricity, Slum, Housing, Road, Industry, Health, Education, City traffic, Land use, Productivity any environmental degradation or Any other problem related to local area. (**Period of filed work maximum one week. Student have submit report at the time of University Examination**)

#### UNIT 3. STUDY TOUR TO IMPORTANT GEOGRAPHICAL PLACES 30

(Geographical places within India for a period of maximum 15 days) (Student have submit excursion tour report at the time of University Examination)

**Note:** Project work should be allotted in batches. Each batch should be not more than 12 students.

**References**: (For Practical Paper I,II,III& IV)

- 12. Singh R. L. &dutt P. K. (1979): Element of Practical Geography, Kalyani Publishers, New Delhi.
- 13. Singh R. &Kanaujia L.R.S. (1970): Map Work & Practical Geography, Central Book Depot, Allahabad.
- 14. John Bygott: An Introduction to Map Work & Practical Geography
- 15. Mishra R. P. & Ramesh (1986): A Fundamentals of Cartography, McMillan Co., New Delhi.
- 16. Robinson A. H. (1995): Elements of Cartography, John wiley& Sons, U. S. A
- 17. Ludar D. (1959): Aerial Photography Interpretation: Principles & Application, McGraw Hill, New York.
- 18. Curran Paul J. (1985): Principles of Remote Sensing, Longman, London.
- 19. Lillesand T. M. & Kefer R. W. (1994): Remote Sensing and Image Interpretation, John Wiley & Sons, New York.
- २०.डॉ. कुभार अर्जुन, प्रात्यक्षिक भूगोल
- २१. डॉ. डी. जी. गाताडे व डॉ. एस. सी. आडवीतोट-प्रात्यक्षिक भूगोल
- २२.खतीब के. ए. व भांजे बी. एम- प्रात्यक्षिक भूगोल, संजोग प्रकाशन, कोल्हापूर.

## **Equivalent Subject to Old syllabus**

Sr. No.	Name of the Old Paper	Name of the New Paper
1.	Resource Geography	Resource Geography
2.	Urban Geography	Urban Geography
3.	Development of Geography	Development of Geography
4	Geography of Economic Activities	Geography of Economic Activities
5	Political Geography	Political Geography
6	Applied Geography	Applied Geography

#### **Practical**

Sr. No.	Name of the Old Paper	Name of the New Paper
1.	Elements of Map Work and	Elements of Map Work and Weather
	Weather Reports	Reports
2	Cartographic and Advanced	Cartographic and Advanced Techniques
	Techniques in Geography	in Geography
3	Topographical Maps and Statistical	Topographical Maps and Statistical
	Methods	Methods
4	Surveying and Field work	Surveying and Field work