



“A” Re-accredited By NAAC

(2014) with CGPA-3.16

**New/Revised Syllabus For  
Bachelor/Master of**

-----  
**B.A. Part III (Spl.) Geography  
Sem. - V Paper - VII,  
Physical Geography of India.**

(Subject to the modifications to be made from time to time)  
**Syllabus to be implemented from June 2015 onwards.**

**A] Ordinance and Regulations:-  
(As applicable to degree/program)**

---

**B] Shivaji University, Kolhapur  
New/Revised Syllabus for Bachelor of —Arts.  
Semester- V Paper No. VII**

**1. TITLE: Subject – Physical Geography of India.  
Optional/Compulsory/Additional/IDS under the Faculty of – Science-**

**2. YEAR OF IMPLEMENTATION:** - New/Revised Syllabi will be implemented from June -2015 onwards.

**3. PREAMBLE:-**

[**Note:** - The Board of Studies should briefly mention foundation, core and applied components of the course/paper. The student should get into the prime objectives and expected level of study with required outcome in terms of basic and advance knowledge at examination level.]

**4. GENERAL OBJECTIVES OF THE COURSE/ PAPER/:**  
**(As applicable to the Degree /Subject- Paper concerned)**

- 1) To acquaint the students with distinct dimensions of India.
- 2) To understand the physical setup of the country.
- 3) To focus the climate of India and mechanism of monsoon of India.
- 4) To get information about soils in India.
- 5) To get information about vegetation in India.
- 6) To make students aware of the magnitude and nature of problem & Prospectus of national & state level on geographical basis.
- 6) To help the students to understand recent trends in regional study.

**5. DURATION**

- The course shall be a full time course.
- The duration of course shall be of Three years, as applicable to the respective degree.

**6. PATTERN:-**

Pattern of Examination will be Semester.

**7. FEE STRUCTURE :-**

**As per Government /University rules**

[**Note:** - In case of any New degree/Program started at university/college, the respective colleges/ Dept. should submit a separate proposal of fee structure to BOS office. (i. e. Tuition Fee & Laboratory Fee, if any.)]

### 9. ELIGIBILITY FOR ADMISSION:-

As per eligibility criteria prescribed for respective degree program and the merit in the qualifying (i.e. Entrance Examination) examination, if any.

### 10. MEDIUM OF INSTRUCTION:

The medium of instruction shall be in English or Marathi. (As applicable to the course/programme concerned.)

### 11. STRUCTURE OF COURSE- 40+10=50

(Note – The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)

#### THIRD YEAR (SEMESTER V/VI) (NO.OF PAPERS-----)

Sr.No.	Subjects/Papers	Theory	Internal	Total Marks
1	Physical Geography of India	40	10	50

### 12. SCHEME OF TEACHING AND EXAMINATION:-

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

#### THIRD YEAR / SEMESTER – V/

Scheme of Teaching and Examination **Teaching Scheme (Hrs/Week) Examination Scheme**

Sr. No.	(Marks) Subject/Paper	Teaching Scheme (Hours/per week)				Examination Scheme (Marks)		
		L	T	P	Total	Theory	Term Work	Total
1	Physical Geography of India	4	0	0	4	40	10	50

### 13. SCHEME OF EXAMINATION:-

- The examination shall be conducted at the end of each academic year for annual pattern and at the end of each term for semester pattern.
- The Theory paper shall carry 40 marks (as applicable to the course)
- The evaluation of the performance of the students in theory papers shall be on the basis of Semester Examination of 40 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

**14. STANDARD OF PASSING:-**

[As Prescribed under rules & regulation for each degree/programme.]

**15. Nature of Question paper**

Question - 1	Objective (Multiple Choice)	05 Marks
Question - 2	Short Note (3 Out of 5)	15 Marks
Question - 3	Descriptive question (2 Out of 3)	20 Marks
<b>Total</b>		40 Marks
<b>Marks</b>		

**16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)**

<b>Sr. No.</b>	<b>Title of New Paper</b>	<b>Title of Old Paper</b>
1	Physical Geography of India Sem-V, Paper- VII	Physical Geography of India Sem-V, Paper- VII

# **New/ Revised syllabus for**

**B.A. (Part III) (Semester -V-)**

**(Introduced from June -2015 onwards)**

**(i) Paper – VII**

**(ii) Title of Paper - Physical Geography of India.**

**(iii) Specific Objectives: -----**

**(iv) A brief note: - (On expected level of study from examination and assessment point of view):- -----**

**UNIT**

**No. of**

**Lectures**

## **Unit. 1. Location and Physiographic**

**Period-15**

- 1.1 Location: Absolute, Relative and Strategic
- 1.2 Geological Setting of India.
- 1.3 Physiographic Divisions of India and their characteristics and Importance
  - 1.3.1 The Northern Mountain Region
  - 1.3.2 The North Indian Plain Region
  - 1.3.3 The Peninsular Plateau Region
  - 1.3.4 Costal Low lands and Islands

## **Unit: 2 Climate**

**Period- 15**

- 2.1 Introduction: Mechanism of Indian Monsoon: Origin-Characteristics
- 2.2 Effects of El- Nino and La Nina on the Indian Monsoon.
- 2.3 Seasons and weather conditions in India: Summer, Rainy and winter
- 2.4 Distribution of rainfall and rainfall variability.
- 2.5 Climatic regions of India. (As per Koppens climatic classification)

**Unit. 3 Drainage Systems and Water Resources**  
**Period- 15**

- 3.1 The Himalayan River systems
- 3.2 The Peninsular river systems
- 3.3 River Linking in India
- 3.4 Surface and Groundwater: Distribution

**Unit. 4.0 Soils and Forests: Types and Distribution**  
**Period- 15**

- 4.1 Major soil types, characteristics and distribution in India.
- 4.2 Soil degradation and soil conservation in India
- 4.3 Major forest types: characteristics and their distribution.
- 4.4 Deforestation and conservation of forests in India.

References:

1. Majid Husain: Geography of India, Tata Mcgraw Hill, 2008.
2. R.D. Khullar: India- A Compressive Geography, Kalayani Publisher, 2007.
3. R.C. Tiwari: Geography of India, Prayag Pustakalaya, 2009.
4. Singh R.L.: Regional Geography of India
5. Dr. Alka Goutam: Advance Geography of India
6. Savadi, Kolekar: Bharatacha Samarag Bhugol, Nirali Prakashan, Pune.
7. K.A. Khatib: Geography of India
8. Dr. C.T. Pawar & others : Geography of India
9. K.L.Rao Water wealth in India.
10. Soil and Water conservation manual Govt.India.

**(NOTE:**

- i) The details of field work, seminar, Group Discussion and Oral examination are given wherever necessary.
- ii) General/Specific instructions for Laboratory safety should be given wherever necessary

A] **Ordinance and Regulations:-**  
**(as applicable to degree / programme)**

---

B] **Shivaji University, Kolhapur**  
**New/Revised Syllabus For**  
**Bachelor of Art's**  
**Paper VIII, Sem. V**

1. **TITLE : Subject – Economic Geography**

**Optional/Compulsory/Additional/IDS under the Faculty of –Social Science-----**

2. **YEAR OF IMPLEMENTATION:-** New/Revised Syllabi will be implemented from June 2015 onwards.

3. **PREAMBLE:-**

[**Note :-** The Board of Studies should briefly mention foundation, core and applied components of the course/paper. The student should get into the prime objectives and expected level of study with required outcome in terms of basic and advance knowledge at examination level.]

4. **GENERAL OBJECTIVES OF THE COURSE/ PAPER/ :**

**(as applicable to the Degree /Subject- Paper concerned)**

- To Study the basic part of Economic Geography.
- Student should get acquainted with the relationship of human activities with resources.
- To Study the core part of subject at global level.
- To study the global level situation and apply this knowledge at local level.
- The students should get thorough knowledge of regional resources.

**5. DURATION**

- **The course shall be a full time course.**
- **The duration of course shall be of Three years, as applicable to the respective degree.**

**6. PATTERN:-**

Pattern of Examination will be Semester.

**7. FEE STRUCTURE :-**  
As per Government /University rules

[Note :- In case of any New degree/Programme **started** at university/college, the respective colleges/ Dept. should submit a separate **proposal of fee structure** to BOS office. (i. e. Tution Fee & Laboratory Fee, if any.)

**8. ELIGIBILITY FOR ADMISSION :-**

As per eligibility criteria prescribed for respective degree programme and the merit in the qualifying (i.e. Entrance Examination) examination, if any.

**9. MEDIUM OF INSTRUCTION :**

The medium of instruction shall be in English or Marathi. ( as applicable to the course/programme concerned.)

**11. STRUCTURE OF COURSE- = 50 Marks**

(Note – The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)



**THIRD YEAR (SEMESTER V/VI) (NO.OF PAPERS -VIII)**

Sr.No.	Subjects/Papers	Theory	Internal	Total Marks
1.	Economic Geography	40	10	50

**10. SCHEME OF TEACHING AND EXAMINATION:-**

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

**THIRD YEAR / SEMESTER – V**

Scheme of Teaching and Examination

Sr. No.	Subject/Paper	Teaching Scheme (Hrs/Week)				Examination Scheme (Marks)		
		L	T	P	Total	Theory	Term Work	Total
1	Economic Geography Paper-VIII	04	---	---	04	40	10	50

**11. SCHEME OF EXAMINATION :-**

- The examination shall be conducted at the end of each academic year for Semester pattern and at the end of each term for semester pattern.
- The Theory paper shall carry **40** marks (as applicable to the course)
- The evaluation of the performance of the students in theory papers shall be on the basis of Semester Examination of 40 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

**14. STANDARD OF PASSING:-**

[As Prescribed under rules & regulation for each degree/programme.]

**15. NATURE OF QUESTION PAPER AND SCHEME OF MARKING :-**

(Unitwise weightage of marks should also be mentioned)

Question No	Type of Question	Marks
1.	Objective Type (Multiple Choice) (TEN out of TEN)	<b>05</b>
2.	Short Note (Any Three out of Five)	<b>15</b>
3.	Descriptive Answer Type  (Any Two out of Three)	<b>20</b>

**16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)**

Sr.No.	Title of Old Paper	Title of New Paper
1.	<b>Economic Geography Paper-VIII Semester - V</b>	<b>Economic Geography Paper-VIII Semester - V</b>

**17. SPECIAL INSTRUCTIONS , IF ANY.**

# **NEW/REVISED SYLLABUS FOR**

**B.A.III(Semester V)**

**(Introduced from June 2015 onwards)**

**NEW/REVISED SYLLABUS FOR**

**B.A. ( Part III ) (Semester -V-) Paper – VIII**

**(Introduced from June \_2015 onwards)**

- (ii) Title Of Paper - Economic Geography.**
- (iii) Specific Objectives:**
- (iv) A brief note :- ( On expected level of study from examination and assessment point of view):- -----**
- (v) (Economic Geography)**

## **Unit 1**

### **Introduction to Economic Geography**

**(No. of Lectures 15)**

1.1 Meaning and Definitions of Economic Geography

1.2 Nature and Scope of Economic Geography

1.3 Classification of Economic Activities: a) Primary, Secondary, Tertiary and Quaternary

1.4 Branches of Economic Geography

1.5 **Unit 2**

### **Resources**

**(No. of Lectures 15)**

2.1 Concept and Types

2.2 Mineral Resources: Iron ore (World Production, Distribution and Trade)

2.3 Power Resources: a) Petroleum (World Production, Distribution and Trade)

2.4 Non Conventional Power Resources: Wind and Solar (World Production Distribution)

### **Unit 3**

#### **Manufacturing Industries**

**(No. of Lectures 15)**

3.1 Factors Affecting the Location of Manufacturing Industries

3.2 Classification of Industries

3.3 Theories of Industrial Location: Weber, Losch and Behavioral Location Theory

3.4 Iron and Steel Industry in USA

### **Unit 4**

#### **Globalization and International Trade**

**(No. of Lectures 15)**

4.1 Meaning and Impact of Globalization

4.2 Significance of Transport and Trade

4.3 Recent Trends in International Trade

4.4 Major Trade Organization and Trade Blocks: WTO, EEC, OPEC and BRICS

#### **(vi) Recommended Reading :**

**(In MLA/APA Style Sheet Format)**

**a) Basic Reading :-**

**b) Additional Reading :-**

**c) References :-**

## i) Books

## ii) Periodicals/Journal

### References

1. Hartshorn, T.N. and Alexander, J.W. (1994): Economic Geography, prentice Hall, New Delhi.
2. H. Robinson (1978): Economic Geography, Macdonaid & Evans.
3. Goh Chang & morgan, G.C. (1997): Human and Economic Geography, oxford University Press.
4. Boesch H. (1964) : A Geography of world Econimy” D. Van Nostrand co. New york.
5. Wheeler J.O. et.al (1995) : Economic Geography John wiely, New York.
6. Roberstson D (2001) : Globalization and Environment E. elgar CO.U.K.
7. Hamilton, I (1992) : Resources and Jndurtry, Oxford University Press New York.
8. White H.P. and senior M.L. (1983) Transport Geography, Longman, London.
  - 9.खतीब के.ए. – आर्थिक भूगोल, अजब प्रकाशन, कोल्हापूर
  - 10.धारपूरे विठ्ठल – आर्थिक भूगोल, पिंपळापुरे अँण्ड कं, नागपूर
  11. सवदी, कोळेकर – आधूनिक भूगोल, निराली प्रकाशन, पुणे.
  - 12.सवदी कोळेकर (2008) – भूगोलाची मुलतत्वे, खंड दुसरा, निराली प्रकाशन
  - 13.Alexander J. W., (1963): Economic Geography, Prentic Hall Inc Englewood Cliffs, New Jersey.
- 14.Meyer, B. S., Aanderson, D. B. and Bohning, R. H. (1960): An Introduction to Plant Physiology, Von Nostrand Company, New York.
- 15.Walker, D. F., Collins, L. (Eds.), (1975): Locational Dynamics of Manufacturing Activity, John Wiley and Sons, New York.
- 17.Zimmermann, E. W., (1933): World’s Resources and Industries, Harper and Row, New York.
- 18 Truman A. Hartshorn and John W. Alexander, (1988): Economic Geography, PHI Learning Private Limited, New Delhi.
- 19Sadhukhan S. K., (1990): Economic Geography An Appraisal of Resources, S. Chand and Company Ltd., New Delhi.

**(NOTE :**

- i) The details of field work, seminar, Group Discussion and Oral examination be given wherever necessary.
- ii) General/Specific instructions for Laboratory safety should be given wherever necessary.

A]

**Ordinance and Regulations:-  
(As applicable to degree/Program)**

---

B]

**Shivaji University, Kolhapur  
New/Revised Syllabus For  
Bachelor of Arts  
Semester –V, Paper No. IX**

**1. TITLE: Subject – Research Methodology**

Optional under the Faculty of Science

**2. YEAR OF IMPLEMENTATION:-** New/Revised Syllabus will be implemented from June 2015 onwards.

**3. PREAMBLE:-**

Research Methodology is the most important part of Geography. The present syllabus of this paper includes nature, scope, types, approaches, significance, research design, data collection, data analysis and report writing.

In the process of development of geography, the changing nature of subject will make aware to the students about the recent technologies used in geography. This will further help to improve the use of geographical techniques and methods in teaching, learning and research work.

**3. GENERAL OBJECTIVES OF THE COURSE/ PAPER:**

- 1) To introduce the students with the importance of research methodology.
- 2) To understand the concepts in research methodology.
- 3) To give basic information to the students about research.
- 4) To get familiar with principles and techniques of research.
- 5) To understand the process and value of geographical research.
- 6) To develop skills for applying ICT in geography.
- 7) To aware the students research methodology with recent technology.

**5. DURATION**

- The course shall be a full time course
- The duration of course shall be of three years as applicable to respective degree.

**6. PATTERN:-**

Pattern of Examination will be Semester

**7. FEE STRUCTURE:- (as applicable to regular/self supporting course)**

**i) Entrance Examination Fee ( If applicable)- Rs----- ( Not refundable)**

**ii) Course Fee-**

Particulars	Rupees
Tuition Fee	Rs.
Laboratory Fee	Rs.
Computer Fee	Rs.
Semester fee- Per student	Total Rs.

Other fee will be applicable as per University rules/norms.

**8. IMPLEMENTATION OF FEE STRUCTURE:-**

In case of revision of fee structure, this revision will be implemented in phase wise manner as mentioned below:-

For Part I- From academic year\_\_\_\_\_ onwards.

For Part I & II- From academic year\_\_\_\_\_ onwards.

For Part I, II & III- From academic year \_\_\_\_\_ onwards.

**9. ELIGIBILITY FOR ADMISSION:-** As per eligibility criteria prescribed for each course and the merit list in the qualifying examination.

**10. MEDIUM OF INSTRUCTION:**

The medium of instruction shall be in English or Marathi. ( as applicable to the course/program concerned.)

**11. STRUCTURE OF COURSE-** (Note – The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)

**THIRD YEAR B. A. III (NO.OF PAPERS EIGHT)**

**SEMESTER FIFTH**

Paper.No.	Title	Marks
IX	Research Methodology	50

**12. SCHEME OF TEACHING AND EXAMINATION:-**

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

**THIRD YEAR**

*Scheme of Teaching and Examination*

Sr. No.	Subject/Paper	Teaching Scheme (Hrs/Week)				Examination Scheme Sr. (Marks)		
		L	T	P	Total	Theory	Term work	Total
1	Research Methodology Paper- IX	04	-	-	04	40	10	50

**13. SCHEME OF EXAMINATION:-**

- The examination shall be conducted at the end of each semester
- The Theory paper shall carry 40 marks
- The evaluation of the performance of the students in theory papers shall be on the basis of semester Examination of 40 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

**14. STANDARD OF PASSING:-**

As Prescribed under rules & regulation for each degree/programme.

**15. NATURE OF QUESTION PAPER AND SCHEME OF MARKING:-**

(Unit wise weightage of marks should also be mentioned)

Semester V	Marks
Qus : 1) Objective Type Question ( Multiple Choice)	05
Qus : 2) Short Note Type Question (Any three out of five)	15
Qus: 3) Description Type Question (Any two out of three)	20



**16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)**

Sr. No.	Title of Old Paper		Title of New Paper	
	Semester – V		Semester – V	
1	Paper – IX	Development of Geography	Paper – IX	Research Methodology

**17. SPECIAL INSTRUCTIONS, IF ANY.**

**NEW/REVISED SYLLABUS FOR**

**B.A. Part III, Geography**

**(Introduced from June 2015 onwards)**

**Semester – V Paper – IX**

**(ii) Title of Paper: - Research Methodology**

**(iii) Specific Objectives:-**

**(iv) A brief note: - (On expected level of study from examination and assessment point of view):- -----**

- (v) UNIT** **No. of Lectures**
- Unit 1** **(No. of Lectures – 15)**
- Introduction to Research Methodology**
- 1.1 Research: Meaning and Definition
- 1.2 Types of Research
- 1.3 Research Approaches
- 1.4 Significance of Research.
- Unit 2** **(No. of Lectures – 15)**
- Research Design**
- 2.1 Research design: Meaning and Concept
- 2.2 Stages in research design
- 2.3 Characteristics of research design
- 2.4 Significance of research design.
- Unit 3** **(No. of Lectures – 15)**
- Data Collection and Analysis**
- 3.1 Data: Meaning and Types
- 3.2 Methods of data collection
- 3.3 Sampling: meaning, types and selection of sampling
- 3.4 Hypothesis: meaning and types
- 3.5 Analysis of data.
- Unit 4** **(No. of Lectures – 15)**
- Research Report Writing**
- 4.1 Outline of research report
- 4.2 Style of Report writing
- 4.3 References, Bibliography, Quotation and Footnotes.

**(vi) Recommended Reading:**

**c) References:-**

1. Kothari, C. R. (1985): Research Methodology- Methods and Techniques, Wiley Eastern Limited, New Delhi
2. Herekar, D. M. (2008): Research Methodology and Project Work, Phadke Prakashan, Kolhapur
3. Ahuja Ram (2007): Research Methodology, Rawat Publication, New Delhi.
4. Aslam Mehmood (1976): Statistical Techniques in Geographical studies, Rajesh Publication, New Delhi.
5. Clifford, N. Fresh S, Valentine, G. (2010)- Key Methods in Geography, Saga Publication.
6. Hagget Peter (1990): Geography: Modern Synthesis. Harper International, New York.
7. Harvey, David (1971): Explanation in Geography, Edward Arnold, London.
8. Goode, W.J. & Hatt P.K. (2000): Methods in Social Research, Mc.Graw Hill Tokyo.
9. Misra H.N. and V.P. Singh (1998): Research Methodology in Geography: Social, Spatial and Policy Dimensions, Rawat Publications New Delhi.
10. Har Prasad (1992): Research Methods and Techniques in Geography, Rawat Publications, New Delhi.
11. Sheskin, I.M. (1987): Survey Research for Geographers Scisntific Publisher, Jodhpur,
12. Misra, R.P. (1989): Research Methodology, A Handbook, Concept Publishing Co., New Delhi.
13. Johnston, R.J. (1978): Multivariate Statistical Analysis in Geography, Longman Scientific & Technical Essex, England.
14. Singh, Gopal (2007): Map Work and Practical Geography, Vikas Publising House Pvt. Ltd., New Delhi.
15. डॉ. भांडरकर, पु. ल. (1987): सामाजिक संशोधन पध्दती, महाराष्ट्र विद्यापीठ ग्रंथनिर्मिती मंडळ, नागपूर -1
16. डॉ. संत, दु. का. (2007): संशोधन: पध्दती, प्रक्रिया व अंतरंग, पुणे विद्यार्थी गृह प्रकाशन, पुणे - 30
17. कुंभोजकर, ग. वि. (1989): संशोधन पध्दती व संख्याशास्त्र, फडके प्रकाशन, कोल्हापूर
18. पाटील, ज. फा., पठाण, के. जी. आणि ताम्हनकर, पी. जे. (1979): अर्थशास्त्रीय संशोधनाची तोंडओळख, कॉन्टिनेन्टल प्रकाशन, पुणे - 30
19. आगलावे, प्रदीप (2000): संशोधन पध्दतीशास्त्र व तंत्रे, विद्या प्रकाशन, नागपूर -1
20. डॉ. कायंदे-पाटील, गंगाधर (2006): संशोधन पध्दती, चैतन्य पब्लिकेशन्स, नाशिक-13
21. डॉ. पाटील, वा. भा. (2012): संशोधन पध्दती, प्रशांत पब्लिकेशन्स, जळगाव
22. डॉ. कार्लेकर, श्रीकांत आणि डॉ. काळे, मोहन (2007): भूगोलशास्त्रातील संशोधन पध्दती, डायमंड पब्लिकेशन्स, पुणे - 30
23. आहिराव, डी. वाय. व करंजखेले, इ. के., : प्रात्यक्षिक भूगोल, सुदर्शन, नाशिक 2002
24. गाताडे डी. जी. व अडवितोट, एस. सी. : प्रात्यक्षिक भूगोल, अक्षरलेणं प्रकाशन, सोलापूर 2008
25. शिंदे, एस. बी. : नकाशाशास्त्राचा प्रात्यक्षिक भूगोल, फडके प्रकाशन, कोल्हापूर, 2002

**NOTE:**

- i) The details of field work, seminar, Group Discussion and Oral examination be given wherever necessary.
- ii) General/Specific instructions for Laboratory safety should be given wherever necessary.

**A] Ordinance and Regulations:-**  
**(as applicable to degree/program)**

---

**B] Shivaji University, Kolhapur**

New/Revised Syllabus for **Bachelor of Arts.**

**Semester - VI, Paper - X**

- 1. TITLE: Subject- Economic Geography of India.**  
**Optional/Compulsory/Additional/IDS under the Faculty of - Science**

**IMPLEMENTATION:-** New Revised Syllabus will be implemented from June 2015 onwards.

**3. PREAMBLE:-**

[**Note:** - The Board of Studies should briefly mention foundation, core and applied components of the course/paper. The student should get into the prime objectives and expected level of study with required outcome in terms of basic and advance knowledge at examination level.]

**4. GENERAL OBJECTIVES OF THE COURSE/ PAPER/ :**  
**(As applicable to the Degree /Subject- Paper concerned)**

- 1) To acquaint the students with distinct dimensions of India.**
- 2) To understand the economic setup of the country.**
- 3) To focus on the agricultural product of the country.**
- 4) To get information about air ways, railways, and road ways in India.**
- 5) To get information about transport and trade in India.**

**5. DURATION**

- The course shall be a full time course.**
- The duration of course shall be of Three years, as applicable to the respective degree.**

**6. PATTERN:-**

Pattern of Examination will be Semester.

**7. FEE STRUCTURE :-**

**As per Government /University rules**

[Note :- In case of any New degree/Program started at university/college, the respective colleges/ Dept. should submit a separate proposal of fee structure to BOS office, (i. e. Tution Fee & Laboratory Fee, if any.)]

**8. ELIGIBILITY FOR ADMISSION:-**

As per eligibility criteria prescribed for respective degree program and the merit in the qualifying (i.e. Entrance Examination) examination, if any.

**9. MEDIUM OF INSTRUCTION:**

The medium of instruction shall be in English or Marathi. (As applicable to the course/programme concerned.)

**10. STRUCTURE OF COURSE ..... —**

(Note - The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)

**THIRD YEAR (SEMESTER V/VI) (NO.OF PAPERS Eight)**

Sr.No	Subjects/Papers	Theor v	Internal	Total Marks
1.	Economic Geography of India- Paper- X	<b>40</b>	10	<b>50</b>

**11. SCHEME OF TEACHING AND EXAMINATION:-**

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

**THIRD YEAR / SEMESTER - VI**

Scheme of Teaching and Examination

Sr. No.	Subject/Paper	Teaching Scheme (Hrs/Week)				Examination Scheme (Marks)		
		L	T	P	Total	Theory	Term Work	Total
<b>1</b>	<b>Economic Geography</b>	04	—	—	04	<b>40</b>	<b>10</b>	50

## 12. SCHEME of Examination

- The examination shall be conducted at the end of each academic year for annual pattern and at the end of each term for semester pattern.
- The Theory paper shall carry 40 marks (as applicable to the course)
- The evaluation of the performance of the students in theory papers shall be on the basis of Semester Examination of 40 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

### 13. STANDARD OF PASSING:-

[As Prescribed under rules & regulation for each degree/program.]

### 14. NATURE OF QUESTION PAPER AND SCHEME OF MARKING:-

(Unitwise weightage of marks should also be mentioned)

### 15. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)

Sr.No.	Title of Old Paper	Title of New Paper
1	Economic Geography of India Paper –X Sem.VI	Economic Geography of India Paper –X Sem.VI

### 16. SPECIAL INSTRUCTIONS, IF ANY.

#### NEW/REVISED SYLLABUS FOR

**B.A. (Part III) (Semester -VI-)**

**(Introduced from June \_2015**

**onwards)**

**Paper-X Sem.VI**

**Title of Paper - Economic Geography of India**

**(iii) Specific Objectives: -----**

**(iv) A brief note: - (On expected level of study from examination and assessment point of view):**

## 1.1 Conventional Resources

1.1.1 Mineral Resources: Distribution and Production of Iron Ore, Bauxite, and

Manganese.

1.1.2 Power Resources: Distribution and Production of Coal, Mineral Oil, Natural Gas.

## 1.2 Non Conventional Resources :

1.2.1 Solar

1.2.2 Wind

## Unit 2 **Agriculture** (No. of Lectures -15)

2.1 Importance of Agriculture in Indian Economy.

2.2 Major Crops:

2.2.1 Cereal Crops : Rice, Wheat

2.2.2 Cash Crops : Sugarcane, Cotton and Tea

2.3 Green Revolution and Agro Climatic Regions of India.

2.4 Problems of Indian Agriculture in the Context of Globalization.

## Unit 3 **Industry** (No. of Lectures - 15 )

3.1 Importance of Industries in Indian Economy.

3.2 Agro Based Industries: Location Factors, Distribution, Production and

Trade of Sugar Industry, Cotton Textile Industry and Meat & Dairy

Industry.

3.3 Mineral based and other industries: Location Factors, Distribution, Production and

Trade of Iron and Steel Industry, Automobile Industry and Fertilizer industry.

## Unit 4 **Transport and Trade** (No. of Lectures -15)

4.1 Road Ways: Types of Roads and their Economic Significance.

4.2 Railways: Railway Zones Konkan Railway.

4.3 Air Ways: Important Air Ways and Air Ports.

4.4 Indian Trade: Major Goods of Export and Import and India's Foreign Trade Policy.

### (vi) **Recommended Reading:**

**(In MLA/APA Style Sheet Format)**

- a) Basic Reading :-**  
**b) Additional Reading :-**  
**c) References :-**

**i) Books**

**ii) Periodicals/Journals:**

- 1 . Despande, CD.: India: A Regional Interpretation, Northern Book Centre, New Delhi, 1992.
2. Dubey R. N. : Economic Geography Of India.
3. Gaikwad S. B. : Sugar Industry in India, Vidya Prakashan, Kanpur ( U.P.)
4. Government of India. : The Gazetteer of India, Vol. I & II, Publication Division, New Delhi, 1965..
5. Memoria, C. B.: Geography of India, Shivalal Agrawal and Co., Agra, 1986.
6. Negi, B. S.: Economic and Commercial Geography of India, Kedarnath Ramnath, New Delhi.
7. Patil, Gaikwad , Advitote, Nanavare, (2008): wnnrai ajata araFtw y\*iaw -did 14/ .
8. Sharma, and Coutihno,.: Economic and Commercial Geography of India. Vikas Publishing House, India, 1998.
9. Tirtha, Ranjit. : Geography of India, Rawat, Jaipur, 1996.
10. Tiwari : Geography Of India
11. Tata McGraw Atlas: Socio Economic Atlas of India,
12. कुंभार अरुण राजाराम : भारताचा भूगोल पायल प्रकाशन पुणे २०१४ .
13. खतीव के . ए : भारताचा भूगोल मेहता प्रकाशन पुणे २००५ .
14. मगर जयकुमार : भारताचा भूगोल विद्या प्रकाशन नागपूर १९९० .
15. पवार . सी . टी : भारताचा भूगोल फडके प्रकाशन कोल्हापूर १९९८ .
16. सावंत प्रकाश : भारताचा भूगोल फडके प्रकाशन कोल्हापूर २००५ .
17. शिंदे एस . वी : भारताचा भूगोल धनवंती प्रकाशन कराड २००५ .

**NOTE:i)**

- i) The details of field work, seminar, Group Discussion and Oral examination begiven wherever necessary,
- ii) General/Specific instructions for Laboratory safety should be given wherever necessary.

**A] Ordinance and Regulations:-  
(as applicable to degree)**

---

**B] Shivaji University, Kolhapur  
Revised Syllabus For  
Bachelor of Arts  
Semester - VI, Paper - XI**

**1. TITLE : Subject – URBAN GEOGRAPHY**

**Optional Subject under the Faculty of Science**

**2. YEAR OF IMPLEMENTATION:-** Revised Syllabi will be implemented from June 2015 onwards.

**3. PREAMBLE:-**

[**Note:** - The Board of Studies should briefly mention foundation, core and applied components of the course/paper. The student should get into the prime objectives and expected level of study with required outcome in terms of basic and advance knowledge at examination level.]

**4. GENERAL OBJECTIVES OF THE PAPER:**

**(As applicable to the Paper concerned)**

- To Study the basic of Urban Geography.
- To Study the types of Urban Settlements, site & Situation.
- To get the ideas of relationship between human activities & urban development.
- To make the students capable for handling the present problematic situation in Urban and rural areas.
- The students studying this syllabus will become good planner and environmental Conservator.

**5. DURATION**

- The course shall be a full time course.
- The duration of course shall be of Three years, as applicable to the respective degree.

**6. PATTERN:-**

Pattern of Examination will be Semester.

**7. FEE STRUCTURE :-**

As per Government /University rules

[**Note :-** In case of any New degree/Program started at university/college, the respective colleges/ Dept. should submit a separate proposal of fee structure to BOS office. (i. e. Tution Fee & Laboratory Fee, if any.)

**9. ELIGIBILITY FOR ADMISSION:-**

As per eligibility criteria prescribed for respective degree program and the merit in the qualifying examination, if any.

**10. MEDIUM OF INSTRUCTION:**

The medium of instruction shall be English or Marathi. (as applicable to the course/programme concerned.)

**11. STRUCTURE OF COURSE- 40 + 10 = 50**

(**Note –** The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)



**THIRD YEAR -SEMESTER VI PAPER - XI****Sr.No.Subjects/Papers TheoryInternal Total Marks**

1. Urban Geography - Paper-XI

Paper.No.	Title	Marks
XI	Urban Geography	50

**12. SCHEME OF TEACHING AND EXAMINATION:-**

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

**THIRD YEAR / SEMESTER – VI**

Scheme of Teaching and Examination

Sr. No.	Subject/Paper	Teaching Scheme (Hrs/Week)				Examination Scheme Sr. (Marks)		
		L	T	P	Total	Theory	Term work	Total
1	Urban Geography Paper- XI	04	-	-	04	40	10	50

**13. SCHEME OF EXAMINATION:-**

- The examination shall be conducted at the end of each academic year for Semester pattern and at the end of each term for semester pattern.
- The Theory paper shall carry 40 marks (as applicable to the course)
- The evaluation of the performance of the students in theory papers shall be on the basis of Semester Examination of 40 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

**14. STANDARD OF PASSING:-**

[As Prescribed under rules & regulation for each degree/programmed.]

**15. NATURE OF QUESTION PAPER AND SCHEME OF MARKING :-**

Semester VI	Marks
Qus : 1) Objective Type Question ( Multiple Choice)	05
Qus : 2) Short Note Type Question (Any three out of five)	15
Qus: 3) Description Type Question (Any two out of three)	20

**16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)**

Sr. No.	Title of Old Paper		Title of New Paper	
1	Semester – VI		Semester – VI	
	Paper – XI	Urban Geography	Paper – XI	Urban Geography

**16. SPECIAL INSTRUCTIONS, IF ANY.**

**REVISED SYLLABUS FOR**  
**B.A. Part III Semester –VI, Paper – XI**  
**(Introduced from June \_2015 onwards)**

**(ii) Title of Paper - Urban Geography**

**Unit 1 Introduction to Urban Geography (No. of Lectures – 15)**

- 1.1 Meaning and Definitions of urban Geography
- 1.2 Nature and Scope of Urban Geography
- 1.3 Approaches in Urban Geography
- 1.4 Significance of Urban Geography

**Unit 2 Urbanization (No. of Lectures – 15)**

- 2.1 Site and Situation: Significance & Types.
- 2.2 Concept and Factors of Urbanization.
- 2.3 Functional Classification of towns.
- 2.4 Central Place Theory of W. Christaller.

**Unit 3 Structure and Morphology of Urban Centers**

**(No. of Lectures – 15)**

- 3.1 Concept of Structure and Morphology.
- 3.2 Concept of City Region and C.B.D.
- 3.3 Rural-Urban Fringes.
- 3.4 Models of Town Morphology : The Concentric Zone Theory, The Sector Theory and the Multi – Nuclei Theory

**Unit 4**

**(No. of Lectures – 15)**

**Urban Problems and Urban Planning**

- 4.1 Major Urban Problems.
- 4.2 Urban Planning in India.
- 4.3 Concept of Garden city.
- 4.4 Urban Policy in India.

**References**

1. Tim Hall. (1998) : Urban Geography, Routledge , London.
2. L.N. Verma : Urban Geography, Rawat Publications , Jaipur.
3. Johnson J.H. (1967) : Urban Geography, An Introductory Analysis.
4. Bose A : India's Urbanization 1974-2000, Tata Mc Graw Hill, New Delhi.
5. Carter H (1972) : The study of urban Geography, Edward Arnold, London.
6. Smailes A.E. : The Geography of Towns.
7. Taylor and Pntnam : Geography of Urban Places.
8. Hudson F : Settlement Geogrpahy
9. देशपांडे सी.डी. 1983 : शहरे - कॉन्टीनेंटल प्रकाशन, पुणे
10. सवदी, कोळेकर, 2005 : आधुनिक भूगोल निराली प्रकाशन, पुणे
11. खतीब के. ए. 2007 : वसाहती भूगोल, अजब प्रकाशन, कोल्हापूर
12. Mandal : Urban Geography



**10. MEDIUM OF INSTRUCTION:**

The medium of instruction shall be in English or Marathi. (As applicable to the course/programme concerned.)

**11. STRUCTURE OF COURSE- 40+10=50**

(Note – The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)

**THIRD YEAR (SEMESTER VI/XII) (NO.OF PAPERS-----)**

Sr.No.	Subjects/Papers	Theory	Internal	Total Marks
1	Political Geography	40	10	50

**12. SCHEME OF TEACHING AND EXAMINATION:-**

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

**THIRD YEAR / SEMESTER – VI/ XII**

Scheme of Teaching and Examination **Teaching Scheme**

**(Hrs/Week) Examination Scheme**

Sr. No.	(Marks) Subject/Paper	Teaching Scheme (Hours/per week)				Examination Scheme (Marks)		
		L	T	P	Total	Theory	Term Work	Total
1	Political Geography	4	0	0	4	40	10	50

**13. SCHEME OF EXAMINATION:-**

- The examination shall be conducted at the end of each academic year for annual pattern and at the end of each term for semester pattern.
- The Theory paper shall carry 40 marks (as applicable to the course)
- The evaluation of the performance of the students in theory papers shall be on the basis of Semester Examination of 40 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

**14. STANDARD OF PASSING:-**

[As Prescribed under rules & regulation for each degree/programme.]

### 15. Nature of Question paper

**B.A.Part - III Geography Sem. - V & VI**

**Nature of Question Paper for Theory papers only**

Question - 1	Objective (Multiple Choice)	05 Marks
Question - 2	Short Note (3 Out of 5)	15 Marks
Question - 3	Descriptive question (2 Out of 3)	20 Marks
<b>Total Marks</b>		<b>40 Marks</b>

### 16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)

Sr. No.	Title of New Paper	Title of Old Paper
1	Applied Geography	Political Geography

**Shivaji University, Kolhapur**

**New syllabus for B. A. III**

(Introduced from June, 2015 onwards)

## **GEOGRAPHY**

**Title of the paper : POLITICAL GEOGRAPHY**

Semester VI Paper No. : XII

**Unit-1 : Introduction to Political Geography 15**

- 1.1 Definition, Nature and Scope
- 1.2 Historical Development
- 1.3 Relation with other Branches
- 1.4 Approaches to the Study of Political Geography

**Unit-2 : Major Concepts and Element in political Geography 20**

- 2.1 Concept of State, Nation, Nation-state
- 2.1 Frontiers and Boundaries: Meaning and Types
- 2.3 Elements
  - A) Physical Elements
  - B) Human Elements
  - C) Economic Elements

<b>Unit-3 : Geo-Strategic Views</b>	<b>10</b>
3.1 H. J. Mackinder's Heart-Land Concept	
3.2 Spykman's Rimland Concept	
<b>Unit-4 : Geo-political Issues (with special referenceto India)</b>	<b>15</b>
4.1 Water Sharing	
A) Water Dispute Between India and Bangladesh	
B) Krishna Water Dispute	
4.2 Boundary Dispute	
A) Indo – China Boundary Dispute	
B) Indo–Pakistan Boundary Dispute	

### **Pedagogy**

The students should be encouraged to participate in classroom – discussions on the geographical aspects of different political issues at the national and international levels.

### **Suggested Readings**

1. Adhikari, S. (1997) : Political Geography, Rawat Publications, Jaipur
2. Disshit, R. D. (1985) : Political Geography, AContemporaryPerspective, McGraw Hill, New Delhi
3. Dwivedi, R. L. (1996) :Political Geography, ChaitanyaPrakashan, Allahabad.
4. Jones, M. (2004) : An Introduction to Political Geography,Rontledg.
5. Muir, Richand (1995) : Modern Political Geography, Macmillan, London.
6. Pounds, N. J. G. (1972) :Political Geography 2<sup>nd</sup> Ed. McGraw Hill, N. Y.
7. Sharma, T. C. : Political Geography.
8. सवदी, कोळेकर (२०१०) भूगोलाचीमूलतत्त्वे (खंड दुसरा) निरालीप्रकाशन, पुणे.

**A) Ordinance and Regulations  
(As applicable to degree)**

---

**B) Shivaji University, Kolhapur.**

**Revised Syllabus for  
Bachelor of Arts  
Paper XIII (Practical Paper -I)**

**1. Title: Map work and Map Interpretation**

Optional Subject Under the Faculty of Science

2. **Year of Implementation:** Revised Syllabi will be implemented from June 2015 onwards.

**3. Preamble:**

Practical Work is the most important part of Geography. Map is an indispensable tool in Geographical Studies & Research activities. The present syllabus of this paper includes study of maps and their types, Map Projections, S.O.I. Topomaps, I.M.D. Weather Maps, Statistical Methods and Cartographic Techniques. In the process of development of science and technology, the changing nature of subject of geography will make aware to the student about the map work and map interpretation. This will further help to improve the use of maps, cartographic techniques and methods in teaching-learning and research work.

**4. General objectives of the Paper:**

(As applicable to the – paper concerned)

- 1) To introduce the students with the importance of map making & map Interpretation.
- 2) To make the students to understand map, concept of projection and concept of scale.
- 3) To provide training in analysis of landforms.
- 4) To develop the skill of map Interpretation among the students.
- 5) To give basic information to the students about S.O.I. topomaps and I.M.D. weather maps.

6) To familiarize the students with the different cartographic techniques and methods used for representation of demographic and physio- socio-economic database.

7) **Duration:**

- The course shall be a full time course.
- The duration of course shall be of three years, as applicable to the respective degree.

8) **Pattern:**

Pattern of Examination will be **ANNUAL**.

9) **Fee Structure:**

As per Government / University rules.

9. **Eligibility for Admission:**

As per eligibility criteria prescribed for respective degree program and  
the

merit in the qualifying examination, if any.

10. **Medium of Instruction:**

The medium of instruction shall be in English or Marathi. (As applicable to the course / programme concerned)

11. **Structure of Course: Theory & Practical's**

(Note – The structure & title of papers of the degree as a whole should be submitted at the time of submission / revision of first year syllabus.)

**Third Year (Semester VI) Paper No. XIII**

Sr. No.	Subjects/Papers	Theory	Practical	Total marks
1	Map Work & Map Interpretation	---	100	100
	Total		100	100



**12. Scheme of Teaching and Examination:**

(The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

**B.A. part -III**

Sr. No	Subjects/Papers	Theory				Examination scheme (Marks)		
		L	T	P	Total	Practical	Term Work	Total (Annual)
1	Map Work & Map Interpretation			10	10	100	---	100

**13. Scheme of Examination:**

- The examination shall be conducted at the end of each academic year.
- The Practical paper shall carry 100 marks.
- The evaluation of the performance of the student in practical papers shall be on the basis of annual practical examination of 100 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each unit of syllabi.

**14. Standard of Passing:**

(As prescribed under rules & regulation for each degree / program)

**15. Nature of Question Paper and Scheme of Marking:**

(Unit wise weightage of marks should also be mentioned)

**16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS (For revised Syllabus)**

Sr. No.	Title of Old Paper	Title of New Paper
1	Map Work & Map Reading Paper XIII (Practical Paper -I)	Map Work & Map Interpretation Paper XIII (Practical Paper - I)

**17. Special Instructions, If any.**

**Revised Syllabus for B. A. III**

(Introduced from June 2015 Onwards)

Revised Syllabus for

B.A. (Part III) Geography

**Paper No. XIII (Practical Paper -I)**

**Title of Paper: Map Work and Map Interpretation**

**Unit – 1 : Introduction to Scales and Map:                      Periods 50                      Marks (15)**

1.1 Scale

1.1.1 Meaning and Definition,

1.1.2 Methods of Representation of scale - Verbal, Numerical and Graphical.

1.1.3 Scale Conversion

1.1.4 Construction of graphical scale –

i) Simple(Plane Scale)

ii) Comparative Scale;

iii) Time and Distance Scale

iv) Diagonal Scale.

1.2 Map

1.2.1 Map – Definition , Elements

1.2.2 Classification of Maps

A) Based on Scale    B) Based on purpose



Introduction, Pressure, Winds, Clouds, Rainfall, Sea Condition,  
Temperature departure from normal.

**Unit – 4 : Slope and Gradient**                      **Periods 50**                      **Marks (15)**

4.1 Types of Slope - Gentle, Steep, Convex, Concave, Terraced.

4.2 Expression of Slopes

a) Gradient    b) Degree    c) Per Cent    d) Mills

4.3 Methods of Analysis of Slope

a) C.K. Wentworth's method of Average Slope

4.4 Representation of Relief by Contours.

(Hill, Mountain, Ridge, Saddle, Plateau, Knoll, Spur, Col or Pass, Volcanic  
Col or Crater, Gorge, 'V' Shaped Valley, Waterfall, 'U' Shaped Valley  
Cirque, Hanging Valley, Ria Coast, Fiord Coast, Sand dunes.)

4.5 Profiles

a) Superimposed Profile

b) Composite Profile

c) Projected Profile

**Unit 5: Map Projection**                      **Periods 50**                      **Marks (15)**

5.1 Definition, Classification

a) Based on the methods of Construction –

Perspective and Non-perspective

b) Based on Developable Surface used -

Conical, Cylindrical, Zenithal, Conventional.

c) Based on Position of Tangent Surfaces –

Polar, Equatorial (normal), Oblique.

d) Based on Position of view point or light –  
Gnomonic, Stereographic, Orthographic

e) Based on Preserved qualities -

i) Equal area projection (Homolographic)

ii) Orthographic Projection

iii) Azimuthal Projection (True Bearing Projection)

5.2 Graphical Construction of the following Projections:

i) Cylindrical Equal –Area Projection

ii) Mercator’s Projection

iii) Simple Conical Projection with one standard Parallel

iv) Zenithal Polar Gnomonic projection

v) Zenithal polar Equidistant Projection

vi) Zenithal Polar Equal Area Projection

5.3 Choice of Projection.

**Unit 6 : Representation of Statistical Data**

**Periods 50**

**Marks (15)**

Diagrams and Graphs

6.1 One Dimensional Diagrams:

1) Band Graph

2) Climograph

3) Hythergraph

4) Traffic Flow Diagram

6.2 Two Dimensional Diagrams:

1) Proportional Circle

2) Proportional Rectangle

### 6.3 Three Dimensional Diagram:

- 1) Cube Diagram
- 2) Spherical Diagram

### 6.4 Distributional Diagram

- 1) Choropleth Map
- 2) Isopleths Map

**Unit 7** Journal and Viva Voce

**Marks 10**

#### **Reference:**

1. Bygoot, J: An Introduction to Mapwork and Practical Geography, University Tutorial, London 1964.
2. Khan MD. Zulfequar Ahmad : Text Book of Practical Geography, Concept Publishing Company, New Delhi, 1998
3. Mishra, R.P. and Ramesh A. : Fundamentals of Cartography, Concept Publishing Company, New Delhi, 2000
4. Monkhouse F.J. and Wilkison, H.R.: Maps and Diagrams, Mathuen. London, 1971.
5. Negi. , Dr. Balbir Singh : Practical Geography, Kedar Nath Ram Nath, Meerut, Delhi.
6. Raisz, E.: Principals of Cartography, McGraw Hill Book Com., Inc, New York, 1962.
7. Robinson, A.H. and Sale, S.D.: Elements of Cartography, John Witey and Sons, Inc, New York, 1969.
8. Saha, Pijushkanti and Basu Partha : Advanced Practical Geography – A Laboratory Manual Books and Allied (P) Ltd, Kolkata. 2010.
9. Sarkar, Ashis : Practical Geography: A systematic Approach, Orient Longman limited, Calcutta, 1997.
10. Singh, Gopal : Map work and Practical Geography Vikas Publishing House Pvt. Ltd. New Delhi, 1996.
11. Singh, R and Kanaujia, L.R.S.: Map Work and Practical Geography, Central Book Depot, Allahabad.
12. Singh, R. L. and Rana P.B. : Elements of Practical Geography, Kalyani Publishers, New Delhi – Ludhiana, 1998.

A] **Ordinance and Regulations:-**  
**(as applicable to degree)**

---

B] **Shivaji University, Kolhapur**

Revised Syllabus For  
**Bachelor of Arts**  
**Paper XIV (Practical Paper - II)**

**1. TITLE: Subject – Advanced Tools, Techniques & Field Work**

**Optional under the Faculty of –Science-----**

**2. YEAR OF IMPLEMENTATION:** - Revised Syllabi will be implemented from June 2015 onwards.

**3. PREAMBLE:-**

Modern science & technology have gained momentum. The last couple of Decades have witnessed a sudden expansion of knowledge. In the process of development of science and technology, the changing nature of subject of Geography will make aware to the students about the advanced techniques such as Remote Sensing, GIS, and GPS. The application of computers has revolutionized the use of methods & techniques. The present syllabus of this paper includes study of Aerial Photographs, Remote Sensing, GIS, Application of Computer and use of field work in Geography. This will further help to improve the use of advanced techniques and methods in teaching-learning and research work.

**4. GENERAL OBJECTIVES OF THE PAPER/ :**  
**(As applicable to the - Paper concerned)**

- 1) To introduce the students with the importance of field work & advanced Techniques in Geography.
- 2) To provide training in application of modern tool & techniques in Geography.
- 3) To enhance the skill of the students in instrumental survey.
- 4) To enable the students to understand the use of computer for analysis of Geographical data.
- 5) To give basic information to the students about Aerial Photographs, Remote Sensing, GIS and GPS.

**5. DURATION**

- The course shall be a full time course.
- The duration of course shall be of Three years, as applicable to the respective degree.

**6. PATTERN:-**

Pattern of Examination will be **ANNUAL**.

**7. FEE STRUCTURE :-**

**As per Government /University rules**

[Note :- In case of any New degree/Program started at university/college, the respective colleges/ Dept. should submit a separate proposal of fee structure to BOS office. (i. e. Tuition Fee & Laboratory Fee, if any.)]

**9. ELIGIBILITY FOR ADMISSION:-**

As per eligibility criteria prescribed for respective degree program and the merit in the qualifying (i.e. Entrance Examination) examination, if any.

**10. MEDIUM OF INSTRUCTION:**

The medium of instruction shall be in English or Marathi. ( as applicable to the course/programme concerned.)

**11. STRUCTURE OF COURSE- Theory & Practical's**

(Note – The structure & title of papers of the degree as a whole should be submitted at the time of submission/revision of first year syllabus.)

**THIRD YEAR (SEMESTER VI) (NO.OF PAPERSXI)**

Sr.No.Subjects/Papers TheoryInternal Total Marks

Sr.No.	Subject/ Paper	Theory	Practical	Total Marks
1	Advanced Tools, Techniques and Field Work		100	100
	<b>Total</b>		<b>100</b>	<b>100</b>

**12. SCHEME OF TEACHING AND EXAMINATION:-**

[The scheme of teaching and examination should be given as applicable to the course/paper concerned.]

**THIRD YEAR B.A. Part - III**

Scheme of Teaching and Examination

Sr.No.	Subject/Paper	Teaching Scheme Hrs/Week				Examination Scheme (Marks)		
		L	T	P	Total	Practical	Term Work	Total
1	Advanced Tools, Techniques and Field work							
				10	10	100		100

**13. SCHEME OF EXAMINATION :-**

- The examination shall be conducted at the end of each academic year.
- The Practical paper shall carry 100/ marks.
- The evaluation of the performance of the students in Practical papers shall be on the basis of Annual Practical Examination of 100 marks.
- Question Paper will be set in the view of the /in accordance with the entire Syllabus and preferably covering each unit of syllabi.

**14. STANDARD OF PASSING:-**

[As Prescribed under rules & regulation for each degree/program.]

**15. NATURE OF QUESTION PAPER AND SCHEME OF MARKING :-**

(Unit wise weightage of marks should also be mentioned)



**16. EQUIVALENCE IN ACCORDANCE WITH TITLES AND CONTENTS OF PAPERS- (FOR REVISED SYLLABUS)**

<b>Sr.NO.</b>	<b>Title of the old Paper</b>	<b>Title of the New Paper</b>
<b>1</b>	Advanced Techniques and Field Work. Paper XIV( Practical paper II)	Advanced Tools,Techniques and Field Work. Paper XIV( Practical paper II)

**17. SPECIAL INSTRUCTIONS, IF ANY.**

**REVISED SYLLABUS FOR**

**B.A. ( Part III ) Geography**

**Paper no XIV (Practical Paper - II)**

**(Introduced from June \_2015onwards)**

**(ii) Title of Paper - Advanced Tools, Techniques & Field Work (100 Marks)**

**Unit: 1**

**Introduction to Computer**

**Lectures- 50**

**Marks-15**

- 1.1: Computer fundamentals: Definition, Structure, characteristics, hardware –software.
- 1.2: Application of computer in geography
  - 1.2.1: Construction of Line graphs, Bar graphs,
  - 1.2.2: Construction of Pie diagram and scatter diagram.
- 1.3: Significance and application of internet in geographical studies.

**Unit: 2**

**Remote Sensing**

**Lectures- 50**

**Marks-15**

- 2.1 Definition, Concept and history of Remote Sensing
- 2.2 Elements of Remote Sensing: EMR, Sensors and Platforms.
- 2.3 Application of Remote Sensing in Geography
- 2.4 Aerial photographs and Satellite imagery: Definition, types and difference between them.
- 2.5 Identification of Physical and cultural features from Aerial Photographs or Satellite Imagery with the help of stereoscope.
- 2.6 Determination of Photo Scale.

**Unit: 3**

**GIS and GNSS (GPS)**

**Lectures- 50**

**Marks-10**

- 3.1.1 Geographical Information System: Definition and components

- 3.1.2 Raster and Vector data
- 3.1.3 Application of GIS in Geography.
- 3.2.1 Global Navigation Satellite System (Global positioning System): Definition and components
- 3.2.2: Application of GPS in geography with exercise
- 3.2.3 Field work in GPS: Determining latitude, longitude and altitude
- 3.3: Exercise with Google earth Program.

**Unit :4**

**Statistical methods and techniques**

**Lectures- 60**

**Marks-15**

- 4.1: Analysis of statistical data by the following methods and techniques
- 4.1.1: Measures of Central Tendency: Mean, Median and Mode
- 4.1.2: Dispersion: Mean deviation, Standard deviation, Quartile Deviation.
- 4.1.3: Correlation: Karl Pearson's Method
- 4.1.4: Analysis of Time Series: Semi-average Method and Moving average method

**Unit :5**

**Surveying**

**Lectures- 60**

**Marks-15**

- 5.1 Introduction to Survey: Meaning and types
- 5.2 Preparation of plans of the given area with the following survey method (Any one methods among them)
  - A Theodolite survey
  - B Dumpy Level survey
  - C Plane Table survey (Radial, Intersection, and Traverse method)
  - D : Abony Level Survey.
- 5.3 Preparation of plans Prismatic compass survey (Radical, intersection & Tranverse method)
  - 5.3.1 Types and conversion of bearings.
  - 5.3.2 Correction of bearing.

**Unit:6**

**Marks-10**

**Project work based on field work any one of below,**

(Resource survey, Population survey, Agricultural survey, Settlement Survey, Environmental issues, Industrial survey, Health survey)

**Unit:7**

**Marks-10**

**Study Tour ( Maximum 15 days at geographical interest in India)**

**Unit:8**

**(vi) Recommended Reading :**

**a) References :-**

1. Bygoot, J. : An Introduction to Mapwork and Practical Geography. University Tutorial, London, 1964  
27
2. Kanetkar, T.P. and Kulkarni S.V.: Surveying and Levelling ( Part I & II.) A.V.G. Prakashan, Poona, 1965.
3. Monkhouse, F. J. and Wilkinson, H. R.: Maps and Diadgrams. Mathuen, London, 1971.
4. Raisz, E.: Principals of Cartography. McGraw Hill Book Com., Inc, New York 1962.
5. Robinson, A.H. and Sale, R. D.: Elements of Cartography. John Wiley and Sons, Inc, New York 1969
6. Sarkar, A.K. : Practical Geography : A Systematic Approach. Oriental Longman, Calcutta, 1997.
9. Singh, L.R. and Singh, R.: Mapwork and Practical Geography. Allahabad, 1973.
8. Curran, P. : Principles of Remote Sensing, Logman, London, 1989.
9. Dickinson, G.C. : Maps and Air Photographs, Arnold Publisher, New Delhi, 1979.
10. Singh, R.L. : Elements of Practical Geography, Kalyani Publishers, New Delhi.
11. Singh, R and Kanaujia L.R.S. : Map Work and Practical Geography, Central Book Depot., Allahabad, 1970.
12. Maguire, D.J. : Computers in Geography, Longman scientific and technical Publication, London, 1989.
13. Mathur, P.M. : Computer Application in Geography, John Wiley and Sons, New York, 1993.
14. Mishra, R.P and Ramesh A. : Fundamentals of Cartography. Concept Publ. Com., New Delhi, 2000.
15. Burrough, P. A. and McDonell, R. : Princinples of Geographical Information Systems, Oxford University Press, Oxferd, 1998.
16. कुंभार अर्जुन : प्रात्यक्षिक भूगोल, सुमेरू प्रकाशन, पुणे.
17. गाताडे, डी.जी व अडवितोट एस.सी : प्रात्याक्षीक भूगोल, अक्षरलेन प्रकाशन, सोलापूर
18. अहिरराव व अलिझाड : प्रात्यक्षिक भूगोल, श्री विद्या प्रकाशन, नागपूर

**(NOTE:**

- i) The details of field work, seminar, Group Discussion and Oral examination be given wherever necessary.
- ii) General/Specific instructions for Laboratory safety should be given wherever necessary)

**SPECIFIC EQUIPMENTS AND INFORASTRUCTURE:**

**(Necessary to run the Course.) B.A./ B.Ed. Special Geography**

**A) Equipments**

Sr.No.	Name of Instrument	Quantity
1.	Wooden compass box	01
2	Meter scale (Wooden or plastic or steel)	01
3.	Tracing table	01
4.	Toposheets (1:50,000) & (1:25,000)	Min 20/6
5.	Weather map – Wall map and Daily Weather Report (summer, winter, rainy season)	20
6.	Thermograph	01
7.	Aneroid barometer	01
8.	Barograph	01
9.	Wet & Dry bulb thermometer	01
10.	Minimum & maximum Thermometer	01
11.	Cup anemometer	01
12.	Rain Gauge	01
13.	Wind vane	01
14.	Pocket stereoscope	06
15.	Mirror stereoscope	02
16.	Aerial Photograph – Colour with corresponding Toposheet (1:50,000)	10
17.	Imageries	02
18.	Plane table survey	02
19.	Chain & tape survey	01
20.	Prismatic compass survey	02
21.	Wall maps .District, State, National, World	08
22.	Big Atlas / School Atlas	01/01
23.	Globe- Political Physical	02
24.	Outline – Maharashtra, India, world	01 each
25.	Calculators	06
26.	Camera	01
27.	Magnifying Glasses	10
28.	Wall maps: Taluka, District, State, India & World & Outlines	01 each
29.	Video – cassettes/ C.D./D.V.D of: Volcano, Earth quakes, Urbanizations	01 each
30.	LCD	01
31.	Computer / Printer / Scanner	02/01/01
32.	Uno Bropel pen set	01
33.	Lettering set	01
34.	GPS	01

**B) Infrastructure**

01. Laboratory	
Size 30' X 20'	01
02. Computer Laboratory	01
03. Department Library	01
04. Laboratory Assistant	01
05. Peon	01

## **Minimum two journals from the following.**

(One English & One Marathi)

1. The Deccan Geographer, Pune.
2. I I G Transactions, Pune
3. Geographical Review of India, Calcutta
4. National Geographer Journal, Varanasi
5. National Geographic, Washington D.C.
6. NAGI – Annals
7. Journal of Regional Science: Kolkata.
8. Indian Geographers, Chennai.
9. Bhugol Sanshodan Patrika.
10. Goa Geographer
11. Research Link
12. Enrich Environment
13. Shodh Samiksha Aur Mulyankan
14. महाराष्ट्र भूगोलशास्त्र संशोधन पत्रिका
15. भूगोलशास्त्र संशोधक
16. Journal of Research and Development : A Multidisciplinary International Journal.
17. The Indian Geographical Quest.
18. Indian Stream Research Journal.