

Sant Gadge Baba Amravati University, Amravati
Syllabus Prescribed under Choice based Credit System 2022-23
Faculty : Humanities
Programme: B.A. (Geography)

Part B

Syllabus prescribed Under choice based credit system 2023-24

U G Programme: B. A. (Geography)

Semester III

| Code Of the Course/Subject | Title of the Course/Subject | Total Number of periods |
|-----------------------------------|------------------------------------|--------------------------------|
| 1111 GEOGRAPHY | CLIMATOLOGY | 75 Periods |

COs

- 1) To know the fundamental concepts of Climatology and the significance of weather.
- 2) The students should be able to differential between weather and climate.
- 3) The Students is able to interpret structure and composition of atmosphere.
- 4) To explain the factors determining climate and its changes.
- 5) Learn the interaction between the atmosphere and the earth's surface. Understand the importance of the atmospheric pressure and winds.
- 6) Understand how atmospheric moisture works.
- 7) Learn to associate climate with other environmental and human issues.

| Unit | Content |
|-------------|---|
| Unit I | Definition and Significance of Climatology. Weather and Climate, Elements of Weathers and Climate. (12 Periods) |
| Unit II | Composition and Structure of the Atmosphere, Atmospheric temperature: Distribution of Temperature, Factor affecting the distribution of temperature, Range of Temperature. (12 Periods) |
| Unit III | Atmospheric Pressure: Vertical, Horizontal and seasonal distribution of pressure winds: Planetary, periodic and local (12 Periods) |
| Unit IV | Atmospheric moisture: humidity, evaporation and condensation, Forms of precipitation, Types of Rainfall (12 Periods) |
| Unit V | Atmospheric pollution and Global warming: General causes. Consequences and measures of control. (12 Periods) |

Skill Enhancement Module
(Weather map Interpretation)

COs:

- 1) The Students will be able to do basic knowledge of techniques in weather map.
- 2) The know the importance of climatology in applied research.
- 3) Enhance interpretative skills of the students about techniques in weather maps.
- 4) Identifying the natural phenomena with the help of techniques in the weather map.
- 5) This course will place a strong emphasis on practical/ Skill experience about weather maps.
- 6) The course will give you an integrated scientific understanding of the weather & climate

| Activities | Content |
|---|--|
| 1) Students draw that weather map symbolize different types of weather and then user information today. | 1) Introduction to weather map (3 Periods) 2) Study of weather maps - three season (12 Periods) |

Course Material/Learning Resources

- 1) Bara A. K. (2005), "Climatology" Dominant publisher & Distributors, New Delhi.
- 2) Borry R. G. & Charly R. J. " Atmosphere, weather and climate Rouiledga 1998.
- 3) Byers R. H. " Green Meteorology " Mcgraw Hill BK Co New York 1974.
- 4) Sellers W. D. " Physical Climatology " Ceniversity of Chicago Press 1965.
- 5) Trewartha G. T. " An Introduction to Climate " Mcgrow HillBk Co. NewYork 1968.
- 6) Das P. K. " The mansoon", Prayag Pustak Bhavan, Allahabad.

Syllabus Prescribed for B. A.

U. G. Programme B. A.

Semester:- III

Practical

| Code of the course/ Subject | Title of the course/ Subject Practical | No. Of Periods/ Week |
|--|---|-----------------------------|
| III/ Geography | Construction of scale | 2 Periods/ Week |

COs:

- 1) To Familiar students with types of map scales.
- 2) Map Scale refer to the relationship between distance on a map and the corresponding distance on the ground.
- 3) Students will be able to acquire the knowledge of locational analysis.

List of practical / Laboratory Experiments / Activities etc.

| Sr. No. | Construction of Scale | Marks |
|----------------|------------------------------|--------------|
| 1 | A- Simple Scale | 5 marks |
| 2 | B- Comparative Scale | 5 marks |
| 3 | C- Practical Record | 5 marks |
| 4 | D- Viva Voce | 5 marks |

Part B

Syllabus Prescribed for B.A. Second year UG Programme

Programme: B.A.(Geography)

Semester IV

| Code of Course/ Subject | Title of the course/ Subject | (Total Number of Periods) |
|---------------------------|------------------------------|----------------------------|
| 1111 GEOGRAPHY | OCEANOGRAPHY | 75 |

COs

1. The students will able to gate basic understanding of the science of oceanography.
2. The students will able to identify, explain, and interpret main features in spatial distributions of physical properties of seawater and sea flower.
3. Ability to analyze sea surface temperature fluctuation and its impact on southern oscillation.
4. The students will understand and assess the importance of Ocean in terms of resource utilization in a sustainable manner.
5. The students will discuss and differentiate between the various ocean waves, and tides
6. The students will able tounderstand the significance of groundwater quality and its circulation.
7. Students study the behavior and characteristics of the global ocean.
8. Identify marine recourses characteristics of ocean water.
9. Ability to analyze sea surface temperature fluctuation and its impact on southern oscillation.

| Unit | Content |
|--|--|
| Unit I | Definition, Nature & Scope of Oceanography. Significance of Ocean.(12 periods) |
| Unit II | Surface configuration of ocean floor: continental shelf, continental slope, Abyssal plain, mid-oceanic trenches. Relief of Atlantic, Pacific and Indian ocean. (12 periods) |
| Unit III | Distribution of temperature of Ocean and seas. Distribution of Salinity of ocean and sea. (12 periods) |
| Unit IV | Circulation of ocean water : waves, tides and currents of the Atlantic, Pacific and Indian Oceans. (12 periods) |
| Unit V | Marine deposits and coral reefs. (12 periods) |
| Skill Enhancement Module Interpretation of Topographical Maps | |
| COs: <ol style="list-style-type: none">1. He acquired knowledge of reading of Topographical maps .2. Understand skill of drawing topographical maps. | |

3. Understand the conventional symbols.
4. He is able to find association between natural landforms and human landform.
5. Learning the interpretation of the topographical maps.

| ** Activities | Contents |
|---|--|
| <ol style="list-style-type: none"> 1) How to read Topographical Maps (Easting & Wasting). 2) Four Figure grid reference. 3) Contour and contour interval. 4) Colors and Conventional symbols. 5) Scale and Different scale. 6) Direct distance Area. 7) Direction (N,S,E,W). 8) Drainage pattern. 9) Settlement pattern. 10) Natural and Manmade features. 11) Occupation of the people mode of communication. | <ol style="list-style-type: none"> 1. Topographical maps – Introduction of Topographical map Importance, types of SOI topographical maps based on scale. (4 period) 2. Conventional symbols– Meaning, Importance, Conventional symbols of physical and cultural phenomena. Marginal features of the topographical maps (4 period) 3. Interpretation of the topographical maps under the followings heads Mountain Plateau and Plain. (7 period) |

Course Material/Learning Resources

- 1) Ahirro W. R., Alizad S.S. & Dhapte C. S. : Climatology and Oceanography, Nirali Publication, Pune 1997
- 2) Grald S. : General Oceanography- An Introduction, John Wiley & Sons, New York, 1980
- 3) King C.A.M. : Oceanography for geographers E. Arnold, London. 1975
- 4) Shurma R. C. Vatel M. :Oceanography for geographers Chetnya Publication House, Allahbad, 1970
- 5) Singh. R.L : Elements of Practical Geography, Kalyani Publishers, New Delhi, 1979.
- 6) Gopal Singh : Map Work and Practical Geography, III ed, Vikas Publishing House, New Delhi
- 7) Gupta K.K and Tyagi V.C : Working with maps, Survey of India, Department of Science and Technology, Govt of India, Dehra Dun 1992.
- 8) Mishra R.P : Fundamentals of Cartography, 1969, Prasaranga, University of Mysore, Mysore.
- 9) D.R.Khullar : Essentials of Practical Geography., New Academic Publishing, Mai Hiran Gate, Jalandhar ,2003
- 10) Thurman H. B. :Introductory Oceanography, Charles Webber E Merril Publication Co. 1984
- 11) Kanetkar T. P. & Kulkarni S. V. : Surveying & Levelling- Pune Vidharthi Griha prakashan Pune 1990
- 12) चतुर्भुज मामोरिया : भूविज्ञान, साहित्य भवन पब्लिकेशनमेरठ
- 13) माजिद हुसेन : भौतिक भूगोल, रावत पब्लिकेशन, जयपूर
- 14) डॉ. डी. पी. उपाध्याय एवं डॉ. रामाश्रय सिंग : जलवायुविज्ञान व समुद्रविज्ञान , वसुंधरा प्रकाशन, नागपूर

- 15) सिंग सविंदर : भू आकृती विज्ञान तारा प्रकाशन वाराणसी १९७६.
- 16) टिक्खाआर. एन. :भौतिक भूगोल, केदारनाथ रामनाथ पब्लिकेशन, मेरठ .
- 17) डॉ. विठ्ठल घारपुरे : भूगोल परिचय, पिपळापुरे प्रकाशन, नागपूर
- 18) डॉ. विठ्ठल घारपुरे : सागर विज्ञान पिंपळापुरे प्रकाशन, नागपूर
- 19) डॉ.दि.एस.गजहंस व डॉ. पाथरे यु. बी. : हवामानशास्त्र आणि सागरविज्ञान, विद्या बुक्स पब्लिकेशन औरंगपूरा, औरंगाबाद २०१०
- 20) डॉ. दिलीप लांजेवार व डॉ. विजय खराते प्राकृतिक भूगोल, नभ प्रकाशन अमरावती २०११.
- 21) डॉ. पंडितसुरेखा -बापट : भूरूपशास्त्र व सागर विज्ञान, श्रीसाईनाथ प्रकाशन, नागपूर -१०, २००९
- 22) प्रा. दाते, सु. प्र. व सौ दाते स. सु.: प्राकृतिक भूविज्ञान, रावल प्रकाशन सातारा
- 23) प्रा भागवत अ. वि. आणि प्रा. कार्लेकर श्री. ना. : भू विज्ञान जलावरण व वातावरण.
- 24) प्रा. गुप्ते श्रीधर, प्रा. तायडे मोहन व प्रा. मगर : प्राकृतिक भूगोल भाग १ भाग २ गो. य. राणे प्रकाशन पुणे
- 25) सवदी ए. बी. हवामानशास्त्र सागरशास्त्र, निराली प्रकाशन, पुणे
- 26) सक्सेना उमेश किशोर: मानचित्र चित्रण एवं प्रयोगात्मक भूगोल
- 27) श्रीवास्तव वि. के. एवं महात्म प्रसाद : भूगोल की सांख्यिकीय विधिया, वसुंधरा प्रकाशन, गोरखपूर १९९८
- 28) शर्मा जे. पी. : प्रायोगिक भूगोल, रस्तोगी पब्लिकेशन, शिवाजी रोड मेरठ २००२
- 29) अर्जुन कुंभार : प्रात्यक्षिक भूगोल सुमेरू प्रकाशन डोंबिवली पूर्व १९९८
- 30) प्रा. कुलकर्णी आणि प्रा. शुक्ल सांख्यिकी तत्व आणि व्यवहार, विद्या प्रकाशन नागपूर
- 31) मेहता पुरुषोत्तम : सांख्यिकीची मूलतत्वे, मी. तू. पडगिलवार प्रकाशन नागपूर १९९०

Syllabus Prescribed for B.A. Year U. G. Programmer

Programmer : B.A.

Practical

| Code of the Courses/ Subject | Title of the Course/ Subject | (No. of Period/ Week) |
|------------------------------|----------------------------------|-----------------------|
| 1111/ Geography | Cartography & Statistical Method | 2 Periods/Week |

COs

- 1) To acquaint the students with the Statistical information.
- 2) The students will be able to understand the Importance and application of standard deviation in Geography
- 3) Gain knowledge about association and correlation.
- 4) Understand the co-relation analysis of the groups.

| | | |
|---|----------------------------|-----------|
| 1 | Standard Deviation | (5 Marks) |
| 2 | Correlation of coefficient | (5 Marks) |
| 3 | Practical Record | (5 Marks) |
| 4 | Viva-Voce | (5 Marks) |

CERTIFICATE

DEPARMENT OF GEOGRAPHY

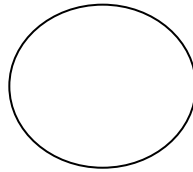
Name of college _____

This is certify that this practical is the records is bonafide Practical work of

Shri Ku. _____ during the Academic
year _____ Semester _____

Dated :-

1. _____
2. _____
3. _____



Signature of the teacher

Head of the Department

Note :

In absence of Practical record book, examinee will not be allowed to appear for the Practical examination.