

SOLAPUR UNIVERSITY, SOLAPUR

Semester Pattern Syllabus

(w. e. f. June 2012)

For

B. A. Part – I

*** (a) Syllabus of Semester - I**

&

*** (b) Syllabus for Semester - II**

(Subject to Modifications that will be made from time to time)

Submitted By:

Board of Studies in Geography

Solapur University, Solapur.

SOLAPUR UNIVERSITY, SOLAPUR
Semester Pattern Syllabus for B.A. Part - I
(Optional Geography)
Semester - I
(w.e.f. June 2013)
Paper I : Geomorphology

Total Lectures - 50
Total Marks - 50

Course No:- AOG- 101

Objective : -

1. To sensitize the students about background knowledge of Geography, Geology and Environmental Science.
2. To familiarize the students with some geomorphological concepts and processes take place on the earth and within the earth
3. To provide knowledge about atmospheric phenomena

Geomorphology
Contents of the course:

Unit No.	Name of the Unit	Details	Lectures
1	Introduction	Definition, Nature, Scope and Branches of Physical Geography. Importance of Physical Geography	10
2	Lithosphere & Hydrosphere	Interior of the Earth, Wegners theory of continental drift & Configuration of ocean floor: Continental Shelf, Slope, Plains, Trenches, Coral Reefs, ridges and Island only.	10
3	Diastrophic Movements	Meaning and types of Androgenic and Exogamic force. Effects of androgenic forces - Earthquakes & Volcanoes- their origin, causes, distribution, effects on human life	10

4.	Weathering and Erosion	Types of Rocks, Meaning & types of weathering. Agents of erosion. Landforms associated with rivers and winds. Effect on human life.	10
5.	Practical (Only theory)	Methods of Showing relief – Hachures. Spot height, hill shading, layer tint and contours. Representation of slopes by contours.	10

Book for References :

1. Dayal P. A. (1996): Text book of Geomorphology, Shukla Book Depot, Patana.
2. Steers J.A. (1964): The Unstable Earth Some Recent Views in Geography, Kalyani Publishers, New Delhi.
3. Dury G.H. (1980): The Face of the Earth, Penguins
4. Pitty A. (1974) : Introduction to Geomorphology, Methuen, London.
5. Small R.J. (1985) : The Study of Landforms, Mc Graw Hill, New York.
6. Summerfield M.A. (1991) : Global Geomorphology, Methuen, London.
7. Kale V. & Gupta (2001): A Element of Geomorphology, Oxford Uni. Press, Calcutta.
8. Thorn bury W.D.(1969) : Principal of Geomorphology, Wiley Eastem
9. Wooldrige S.W. & Morgan R.S. (1959): The Physical Basis of Geography - An outline of Geomorphology, Longman Green & Co, London
10. प्रा. जगताप जे. पी. इतर (२००७) : प्रकृतिक भूगोल, अक्षरलेणं प्रकाशन, सोलापूर
प्रा. के. ए. खतीब : प्राकृतिक भूगोल, मेहता प्रकाशन, कोल्हापूर

SOLAPUR UNIVERSITY, SOLAPUR

Semester Pattern Syllabus for B.A. Part- I

(Optional Geography)

Semester- II

(w.e.f.June, 2013)

Name of the Paper: Physical Geography Paper-II (Climatology)

Paper Code No-	Lectures per week-	04
	Total Lectures-	60
Course No-	Total Marks-	50

Objectives:-

1. To Sensitize the Students about background knowledge of Environmental Science.
2. To provide Knowledge about atmospheric phenomena.

Climatology

Contents of the course

Unit No.	Name of the Unit	Details	Lectures
1.	Climatology (Weather & Climate)	<ul style="list-style-type: none">• Definition, Nature & Scope of Climatology,• Elements of Weather & Climate.• Composition & structure of the Atmosphere, Homosphere, & Heterosphere,• Ozone hole.• The role of Climate in living habitation on Earth.	10
2.	Temperature	<ul style="list-style-type: none">• Meaning of Insolation• Factors affecting the distribution of Insolation.• Terrestrial heat balance,	12

		<ul style="list-style-type: none"> • Temperature- factors affecting the distribution of temperature. • Temporal & Geographical distribution of temperature. 	
3.	Atmospheric Pressure & Wind	<ul style="list-style-type: none"> • Atmospheric Pressure- Formation of pressure belts, • Major global pressure belts & their effects. • Planetary winds. • Local winds, • Importance of pressure for human life & impact of human activities on atmospheric pressure. 	14
4.	Humidity	<ul style="list-style-type: none"> • Meaning & types of Humidity, • Adiabatic lapse rate, • Distribution – equilibrium conditions of atmosphere, • Condensation & precipitation & its forms. 	14
5.	Practical (Only theory)	<ul style="list-style-type: none"> • Presentation of climatic data by • Line graph, • Bar graph. • Climograph. 	10

Book for References

1. Triwartha G. T. (1968): An Introduction to Climate, Mc Gray Hill Bk Co, New York.
2. Lal D. S. : Climatology, Prayag Pustak Bhavan, Alhabad.
3. Sing Savindar (2000): Climatology, Prayag Pustak Bhavan, Alhabad.
4. Crist Field: Principles of Climatology, Prentice Hall, London.
5. Dr. S. B. Negi (1994): S. J. Publication, Meerat.

6. Mr. A. Austin Miller (1979): Climatology, B.I. Publication, Calcutta.

7. Howard Chrichfield (1975): General Climatology, Prenties Publication, Delhi

8. P. K. Das (1986): MaansaUna, P`yaaga P`kaSana, Alahabad.

9. P. K. Das (1979): Hvaamaana P`rcaya, Jamaanadasa
AaiNa kMpanal mauMba[-.

10. P. K. Das (2009): Hvaamaana Saas~, saMjaoaga P`akaSana
kaolhapur

11. D. Jagatap (2010): Hvaamaana Saas~, AxarlaoNaM P`akaSana, ,
saaolaapur

SOLAPUR UNIVERSITY, SOLAPUR
Semester Pattern Syllabus for B.A. Part - I
(S.T.D.)

Semester - I

(w.e.f. June 2013)

Paper I : Introduction to STD

Total Lectures - 50

Total Marks - 50

Course No:- STD- 101

Objective : -

1. To understand the scope and content STD in relation to agriculture, industries, transport and communication, Medical science etc.
2. To make acquaint the student with the dynamic aspects of development of science and technology.

Introduction to STD
Contents of the course:

Unit No.	Name of the Unit	Details	Lectures
1	Introduction	1.1 Definition of Science and Technology 1.2 Fundamental concepts in scientific thinking 1.3 Scientific methodology of study, Analysis, Results 1.4 Science and Superstitions 1.5 Scientific orientation	20
2	Science & Technology	2.1 A brief survey of development of science & Technology. 2.2 Contribution of Newton, Bhaskaracharya & Aryabhata	15
3	Life Sketches of Indian Scientist	3.1 Dr. C.V.Raman 3.2 Dr. Homi Bhaba	15

		3.3 Dr. Raja Ramanna 3.4 Dr. Swaminathan 3.5 Dr. A. P. J. Abdul Kalam 3.6 Dr. Jayant Naralika	
4.	Solar System & Our Earth	4.1 Solar System – Position of Earth 4.2 Origin of Earth 4.3 Interior of the Earth 4.4 Forces acting on the Earth centrifugal, centripetal & gravitational etc. – effects of forces.	12
5.	Resources	5.1 Concept of resources & Classification 5.2 Conventional power resources – Coal, Petroleum, Natural Gas, Hydal Power and Conservation. 5.3 Non conventional power resources – Solar energy, Wind and Atomic energy.	14

Reference Books: -

1. Dayal, P. A. (1996): Text book of Geomorphology, Shuka Book depot, Patna.
2. Dury G. H. (1980): The Face of the Earth, Penguins.
3. Ernst W. G. (2000) : Earth System – Process & Issues, Cambridge University press.
4. ICSSR (1983) : A Survey of Research in Physical Geography, Concept, New Delhi.
5. Kale V. & Gupta (2001) : A Element of Geomorphology, Oxford Uni. Press Calcutta.
6. Monnkhouse F. J. (1974) : Principles of Physical Geography, Hodder & Stoughton, London
7. Pitty A. (1974) : Introduction to Geomorphology, Methuen, London.
8. Sharma H. S. (1998) : Tropical Geomorphology, Concept, New Delhi.
9. Singh Savindar (1998) : Geomorphology, Prayag Pustakalata, Allahabad.
10. Small R. J. (1985) : The Study of Landforms, Mc Graw Hill, New York.
11. प्रा. के. ए. खतीब : प्राकृतिक भूगोल, मेहता पब्लिकेशन, कोल्हापूर
12. डॉ. पवार व इतर : प्राकृतिक भूगोल

SOLAPUR UNIVERSITY, SOLAPUR
Semester Pattern Syllabus for B.A. Part - I
(S.T.D.)
Semester - II
(w.e.f. June 2013)
Paper II : Application of STD

Total Lectures - 50
Total Marks - 50

Course No:- STD- 101

Objective : -

1. Provide knowledge to students about the contribution of some scientist in development of science and technology.
2. Provide knowledge to students about the importance of resources, human health and contribution of various scientific research institutes in india.

Application of STD
Contents of the course:

Unit No.	Name of the Unit	Details	Lectures
1	Science Technology & Agriculture	1.1 Science and Technological advances in agriculture such as Irrigation, Fertilizers, High Yielding varieties, plant protection methods 1.2 Green Revolution 1.3 Bio-technology in agriculture, genetic, engineering, tissue culture & cloning 1.4 Problems of Modern agriculture and their solutions.	20
2	Pollution & Disasters Management	2.1 Pollution: Air Pollution, Water Pollution, Sound & Soil Pollution- causes, effects and measures.	15
3	Science Technology & Human	3.1 Means of Communication & their application Telephone, Television, Computer, Internet, Mobile etc	15

	Health	3.2 Importance of Remote Sensing Satellites 3.3 Introduction of – a) Geographical Information System (GIS) b) Global Position System (GPS)	
4.	Science Technology & Human Health	4.1 Brief history of Medical Science with special reference to India. 4.2 Concept of nutrition, components of nutrition & balanced diet. 4.3 Diseases – A brief study of allergy & cancer – types, causes and measures. 4.4 Aids – causes, effects & preventive measures. 4.5 Nutrition & Diseases	10
5.	Science & Technological Institutes in India	5.1 Bhaba Atomic Research Centre, Mumbai 5.2 Haffkin Institute, Mumbai 5.3 International Institute for Population Science(Delhi) 5.4 Indian Agricultural Research Institute, New Delhi 5.5 National Institute of Oceanography, Goa 5.6 Survey of India- Deharadun	08

Reference Books: -

१. अणूच्या अंतरंगात - प्रभाकर सांजगिरी
२. अणूशाक्ती आज आणि उद्या - हार्डि व गेरी
३. अंतराळ झेप - च.मं. साखळकर व सं.को.कुलकर्णी
४. भारतीय अणूयुगाचे शिल्पकार- यदुनाथ थत्ते
५. विज्ञानाचे नवे विश्व - फॅक रॉस अनुवादन ज.स. चौबळ
६. विज्ञानाचा समाजधारणेवरील परिणाम - बॅट्टॉड रसेल
७. जीवन विज्ञान आणि तत्त्वज्ञान - अल्फ्रेड व्हाईटहेड अनुवादन चिं.श्री.कर्वे
८. विज्ञानाचा अन्वर्थ - रिची कल्डर अनुवादन श्री. द. लिमये
९. विज्ञानाची वाटचाल - ना. वा. कोगेकर
१०. अवकाश यात्रा - डेव्हिड वुडबरी अनुवादन प.स.बर्वे
११. अणू आणि अंतराळ - भालबा केळकर
१२. सापेक्षता - लॅडाऊ रुमर
१३. शास्त्रीय विचार पध्दती - अ.भि. शहा
१४. अणूयुगाचे निर्माते - प्र. न. जोशी
१५. अर्वाचिन भारतीय वैज्ञानिक - भालबा केळकर
१६. हाफकिन - ह. ई. आला
१७. कृत्रिक उपग्रह व अवकाश विज्ञान - सुधाकर भालेराव
१८. अग्निबाण - हेरॉल्ड एरॉल्ड एल गुडवीन अनुवादन चिं. श्री. कर्वे
१९. रडिओ व टेलिव्हिजन - द. वि. बडवे
२०. प्रदूषण - एन. शेषगिरी
२१. आरोग्य वेध - निरंजन घाटे
२२. भारतीय शास्त्रज्ञ - सरिजा पाठक क
२३. अॅलर्जी समज गैरसमज - इंद्रभूषण बडे
२४. संगणक इंजावत - दिपक शिकरपूर
२५. क्षारपड जमिनीची समस्या - वसंतराव जुगळे
२६. Wooldrige S.W. The Geographer as Scientist, Thomas Nelson and Sons Ltd. London, १९५६.
२७. Strahler A.N. : Environmental Geo- Science, Hamilton Pub., Santa Barbara, १९७३.