
**Deccan Education Society's
FERGUSSON COLLEGE (AUTONOMOUS),
PUNE**

**Syllabus
for**

S. Y. B. A. Geography

[Pattern 2019]

(B.A. Semester-III and Semester-IV)

From Academic Year

2020-2021

Fergusson College (Autonomous), Pune

Structure of S.Y.B.A. – Faculty of Arts and Humanities

Under CBCS pattern (2019-20) *effective from June 2020*

Equivalence Syllabus for Department of Geography

SY BA	New CBCS Pattern	Old Existing Pattern
Sem III	DSE 1A (3 credits) XXX2301: Title:NA.....	Special Paper 1 Title:NA.....
	DSE 2A (3 credits) XXX2302: Title:NA.....	Special Paper 2 Title:NA.....
	SEC 1A (3 credits) GEO2303: Title: Fundamentals of Climatology	General Paper 2 Title: Fundamentals of Climatology
	SEC 2A (1 credits) (Value/Skill Based) XXX2304: Title:NA...	----

Note: SEC 1A is CC '1 or 2' (General paper for other department students)

SY BA	New CBCS Pattern	Old Existing Pattern
Sem IV	DSE 1B (3 credits) XXX2401: Title:NA.....	Special Paper 1 Title:NA.....
	DSE 2B (3 credits) XXX2402: Title:NA.....	Special Paper 2 Title:NA.....
	SEC 1B (3 credits) GEO2403: Title: Fundamentals of Oceanography	General Paper 2 Title: Fundamentals of Oceanography
	SEC 2B (1 credits) (Value/Skill Based/ Field Work of SEC-1B) XXX2404: Title:NA.....	----

Note: SEC 1B is CC-'1 or 2' (General paper for other department students)

S.Y. B.A. Semester III**Subject: Geography****SEC 1A - General Paper (GE02303): Fundamentals of Climatology****[Credits-3]****Course Outcomes**

At the end of this course, students will be able to

CO1-Introduce themselves with basic concepts and principles of climatology.

CO2-Develop the understanding about heat budget of the earth and examine factors affecting it.

CO3-Identify different types of winds.

CO4-Analyze the basic atmospheric systems and circulations in the world.

CO5-Differentiate between tropical and temperate cyclones.

CO6-Acquire the skill to interpret weather maps.

Unit	Details	Lectures
I	Introduction to Climatology and Insolation 1. Definition, meaning, nature and scope of Climatology and Meteorology 2. Weather and climate. 3. Composition and structure of the atmosphere 4. Heat budget of the Earth. 5. Vertical and Horizontal distribution of temperature and factors affecting them 6. Temperature Inversion	[18]
II	Atmospheric Pressure, Wind System and Precipitation 1. Atmospheric pressure and its distribution 2. Pressure belts 3. Type of winds - planetary winds, Seasonal winds, local winds 4. Humidity and its types 5. Stability and Instability of atmosphere 6. Forms of precipitation	[18]
III	Cyclone and Anticyclone 1. Cyclones - tropical and temperate: associated weather conditions 2. Anticyclones: associated weather conditions 3. Interpretation of weather maps	[12]

Books-

1. Synoptic and Dynamic Climatology: Roger G. Barry and Andrew M. Carleton, Routledge, New York and London, 2001.
2. The Atmosphere: an Introduction to Meteorology, Frederick k. Lutgens, Edward J. Tarbuck and Dennis G. Tasa, Pearson, 2016

3. General Climatology, Howard J. Critchfield. Prentice-Hall India, New Delh;1987.
4. Climatology, D. S. Lal, Sharda Pustak Bhawan, 2003.
5. A World of Weather: Fundamentals of Meteorology-A Text / Laboratory Manual, Second Edition, Jon M. Nese, Lee M. Greci. Kendall/Hunt Publishing Company; 1998.
6. Climatology: An Atmospheric Science, John E. Oliver, John J. Hidore, Prentice Hall; 2002.
7. Applied Climatology: Principles and Practice. Russell D. Thompson, Allen Howard Perry, Psychology Press; 1997.
8. An Introduction to Climate. Glenn Thomas Trewartha, Lyle Henry Horn. McGraw-Hill; 1980.
9. Practical Geography: A systematic Approach, Ashis Sarkar, 3rd Edition, Orient Black Swan, New Delhi, 2015.
10. हवामानशास्त्र आणि सागरविज्ञान : डॉ.श्रीकांत कार्लेकर,डायमंड पब्लिकेशन्स, पुणे.
11. प्राकृतिक भूगोलाची मूलतत्त्वे : डॉ.श्रीकांत कार्लेकर आणि प्रा. अ. वि. भागवत, डायमंड पब्लिकेशन्स, पुणे.

S.Y. B.A. Semester IV**Subject: Geography****SEC 1B - General Paper (GEO2403): Fundamentals of Oceanography****[Credits-3]****Course Outcomes**

At the end of this course, students will be able to

CO1- Acquaint themselves with the basic concepts and principles of Oceanography.**CO2-** Identify and differentiate various submarine landforms.**CO3-** Understand the importance & distribution of physical properties of ocean water.**CO4-** Explain the causes and distribution of various circulations in ocean water.**CO5-** Recognize and analyze various marine deposits

Unit	Details	Lectures
I	Introduction to Oceanography 1. Definition, nature and scope. 2. Historical development and significance of Oceanography	[08]
II	Submarine relief 1. Submarine profile and hypsometric curve. 2. Relief of Pacific, Atlantic and Indian Oceans	[10]
III	Properties of Ocean Water 1. Meaning, factors affecting and distribution of - a. Temperature b. Density c. Salinity	[10]
IV	Ocean water Circulations 1. Waves- Characteristics and types 2. Ocean currents-Types and effects 3. Ocean currents of Pacific, Atlantic and Indian Oceans 4. Tide and its types	[10]
V	Ocean Deposits and Marine Resources 1. Meaning & Types of Ocean Deposits 2. Classification of Ocean Deposits 3. Sea level changes 4. Oceans as resources for the future	[10]

Books-

1. The World Ocean: An Introduction to Oceanography:-William A. Anikouchine, Richard W. Sternberg; Prentice-Hall, 1981.
2. Oceanography: An Invitation to Marine Science, Tom S. Garrison, 9th Edition, Cengage Learning-NGS. 2010.
3. Invitation to Oceanography Paperback: Paul R. Pinet; Jones & Bartlett Learning, 2012.
4. Oceanography: An Earth Science Perspective-Steve Kershaw, Andy Cundy, Psychology

Press, 2000.

5. Essentials of Ocean Science: Keith Stowe, 1st Ed., Wiley & Sons.1987.
6. An Introduction to the World's Oceans: Keith A. Sverdrup, E. Virginia Armbrust, 10th Edn. MacGraw-Hill. 1984.
7. Essentials of Oceanography: Alan P. Trujillo, Harold V. Thurman, Pearsons; 12th Edn. 2016.
8. हवामानशास्त्र आणि सागरविज्ञान : डॉ.श्रीकांत कार्लेकर,डायमंड पब्लिकेशन्स, पुणे.
9. प्राकृतिक भूगोलाची मूलतत्त्वे : डॉ.श्रीकांत कार्लेकर आणि प्रा. अ. वि. भागवत, डायमंड पब्लिकेशन्स, पुणे.