AC: 20.022019
Item No. 2.28

Rayat Shikshan Sanstha's

KARMAVEER BHAURAO PATIL COLLEGE, VASHI,

AUTONOMOUS COLLEGE

Sector-15- A, Vashi, Navi Mumbai -400 703

NAAC Grade "A+" with CGPA 3.53

Revised Syllabus

Program: S.Y.B.A.

Course: Geography

Semester: III and IV

(As per Credit Based Semester and Grading System
with effect from the academic year 2019-20)

Rayat Shikshan Sanstha's

Karmaveer Bhaurao Patil College, Vashi

(Autonomous College)

Department of Geography

Program: SYBA

Course: Geography

Details of course wise credits

Semester	Course Code	Course Title	Paper No	Credit
III	UGGEO 301	An Introduction to Climatology	II	03
	UGGEO 302	Physical Geography of India	III	03
IV	UGGEO 401	An Introduction to Oceanography	II	03
	UGGEO 402	Agricultural Geography of India	III	03
Total Credits				**12**

S.Y.B.A. GEOGRAPHY PAPER- II

AN INTRODUCTION TO CLIMATOLOGY

SEMESTER: III COURSE CODE**:** UGGEO 301, Credits: 03

Units	Name of the Sub Topic	No of Lectures
	Unit- I Introduction to Climatology	12
1.1	Definition, nature, scope and branches of climatology	
1.2	Concept and elements of weather and climate	
1.3	Composition and structure of atmosphere	
1.4	Insolation: Vertical and horizontal distribution of temperature	
	Unit – II Air Pressure and Atmospheric Circulation	12
2.1	2. 1 Air pressure: Influencing factors – Tricellular model	
2.2	2.2 Horizontal distribution of air pressure	
2.3	2.3 Wind: Types of winds – global, regional and local	
2.4	2.4 Upper air circulation – jet stream (concept, origin and effects)	
	Unit – III Humidity and Precipitation	12
3.1	3.1 Humidity: Types - absolute, relative and specific	
3.2	3.2 Condensation and its form	
3.3	3.3 Precipitation and its types	
3.4	3.4 Global distribution of rainfall	
	Unit – IV Climate and Weather Phenomena	12
4.1	4.1 Cyclones: tropical and temperate	
4.2	Anti-cyclones and tornados	
4.3	El Nino and Indian monsoon	
4.4	Global warming and climate change	
	Unit – V Practical Component	12
5.1	Isobars ad Isobaric Pattern: Cyclone Anticyclone, Secondary cyclone, Trough, Wedge, Col	
5.2	Construction of wind rose, climograph and hythergraph	
5.3	Weather signs and symbols, Interpretation of IMD weather charts Weather instruments	

Note: 1. Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development

2. Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability

REFERENCES:

1. Ahrens, C.D. (2012): Essentials of Meteorology: An Invitation to the Atmosphere; Cengage Learning, Boston
2. Ahrens, C.D., Jackson, P.L., Jackson, C.E.J. and Jackson, C.E.O. (2012): Meteorology Today: An Introduction to Weather, Climate and the Environment; Cengage Learning; Boston
3. Barry, R.G. and Chorley, R.J. (2003): Atmosphere, Weather and Climate; Psychology Press, Hove; East Sussex.
4. Chawan S.V. (ed) (2015): Physical Geography, Paper I, Published by Director (I/C), Institute of Distance and Open Learning, University of Mumbai.
5. Critchfield, H.J., (1975): general Climatology, Prentice Hall, New Jersey.
6. Lal D.S. (1997): Climatology; Sharda Pustak Bhavan; Allahabad
7. Lydolph, P.E.(1985): The Climate of the Earth, Rowman Nad Allanheld, Totowa, New Jersey.
8. Mather,J.R.(1974): Climatology: Fundamentals and Applications; Mc Craw Hill Book Co., U.S.A.
9. Matthews, W. H., Kellogg, W., Robinson, G.D. (1971): Man's Impact on Climate; M.I.T. Press Design Dept. U.S.A.
10. Oliver, J.E. (1993): Climatology: An Atmospheric Science, Pearson Education India, New Delhi
11. Rosenberg, N.J., Blad, B.L., Verma, S.B.(1983): Micro-climate Biological Environment; John Wiley & Sons, U.S.A.
8. Rumney, G.R. (1968): Climatology and the World Climates, Macmillan, London.
9. Shinde P. ; Pednekar H. et.al. (2010): Introduction to Geography, Sheth Publishers Pvt.Ltd., Mumbai.
10. Subrahmanyam, V.P. (ed) (1983): Contributions to Indian Geography a) Vol III- General Climatology, b) Volume IV- Applied Climatology. Heritage Publishers, New Delhi.
11. Trewartha, G.T. (1980): An Introduction to Climate; McGraw Hill, New York, 5th edition, (International Student Edition)

S.Y.B.A. GEOGRAPHY PAPER- III

PHYSICAL GEOGRAPHY OF INDIA

SEMESTER: III COURSE CODE**:** UGGEO 302, Credits: 03

Units	Name of the sub Topics	No of Lectures
Unit – I Introduction of India		12
1.1	India: Location , extent and significance	
1.2	Introduction to physiography of India	
1.3	Mountainous region of India	
1.4	North Indian plains	
1.5	Peninsular plateau of India	
Unit – II Drainage and Climate		12
2.1	introduction to drainage system	
2.2	Major Himalayan rivers of India	
2.3	Major Peninsular Rivers of India	
2.4	Major lakes of India	
2.5	Seasons in India	
Unit – III Soils and Natural Vegetation		12
3.1	Classification of soils of India	
3.2	Problems associated with soils and its remedies in India	
3.3	Classification of Forest in India	
3.4	Importance of Forest in Indian context	
3.5	Causes and effects of Deforestation and their remedial measures	
Unit – IV Mineral and Power Resources		12
4.1	Distribution of Metallic Minerals in India: Iron ore, manganese, bauxite and copper.	
4.2	Distribution of Non-Metallic Minerals in India: Mica, limestone, gypsum, clay and other important minerals	
4.3	Distribution of Power Resources : Coal, mineral oil and natural gas, thorium and uranium	
4.4	Depletion and conservation of minerals and power resources in India	
Unit – V Practical Component		12
5.1	Map filling: Showing geographical features in the Map of India	
5.2	Map Scale – Types, Conversion and drawing	
5.3	Topological analysis of drainage networks by using Strahler's and Horton's method	

Note: 1. Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development

2. Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability

REFERENCES

1. Deshpande C.D. (1992): India: A Regional Interpretation, Northern Book Centre, New Delhi.
2. Bharucha, F.R. (1983): A text book of the plant geography of India, Oxford Unievrsity Press, Bombay.
3. Dikshit, K.R.(1991): Environment, Forest Ecology and man in the Western Ghats-The Case of Mahabaleshwar Plateau, Rawat Publications, New Delhi.
4. Forest Survey of India: State Forests Reports, Dehradun.
5. Khullar, D.R. (2014): India: A Comprehensive Geography; Kalyani Publishers
6. Miller, R.W. et al. (1995): Soil in Our Environment, Prentice hall, U.S.A.
7. Raychudhari, S.P.(1958): Soils of India, ICAR, New Delhi
8. Robinson, F (ed.) (1989): The Cambridge Encyclopedia of India, Pakistan,
9. Bangla desh and Sri Lanka,Cambridge University Press.
10. Savindra Singh (2006) : Physical Geography of India ; Pravalika Publications, Allahabad.
11. Sharma T.C. (2013) Economic Geography of India; Rawat Publications, New Delhi.
12. Shinde P. ; Pednekar H. et.al. (2010): Introduction to Geography, Sheth Publishers Pvt.Ltd., Mumbai.
13. Shinde P. ; Pednekar H. et.al. (2011): Economic Geography of India, SYBA paper II Sheth Publishers , Pvt.Ltd., Mumbai
14. Singh, R.L. (1971): India-A Regional Geography, National Geographical Society of India,Varanasi.
15. Tirth, R (1996): Geography of India, Rawat Publications, Jaipur.
16. MajidHussain (2014, 5th edition): Geography of India, McGraw Hill Education (India) Private Ltd, Uttar Pradesh..

S.Y.B.A. GEOGRAPHY PAPER- II

AN INTRODUCTION TO OCEANOGRAPHY

SEMESTER: IV COURSE CODE**:** UGGEO 401, Credits: 03

Units	Name of the sub Topics	Na of Lectures
	Unit- I Nature of Oceanography	12
1.1	Origin and development of oceanography	
1.2	Oceanography : meaning, definition, nature and scope	
1.3	Branches of oceanography: physical chemical and biological	
1.4	Introduction to Major Oceans	
	Unit – II Bottom Relief and Ocean Water	12
2.1	Ocean floor and its characteristics	
2.2	Composition of ocean water	
2.3	Factors affecting ocean water temperature	
2.4	Distribution of ocean temperature	
2.5	Factors affecting salinity of ocean water	
2.6	Distribution of oceanic salinity	
	Unit – III Movements of Ocean Water	12
3.1	Waves- Formation and types	
3.2	Tsunami and its effect	
3.3	Concept and types of Tides	
3.4	Equilibrium theory of Tides	
3.5	Major Ocean Currents – types and their effects	
	Unit – IV Man and Ocean	12
4.1	El- Niño and La-Niña phenomenon	
4.2	Coral reefs and their importance	
4.3	Marine Ecosystem	
4.4	Marine pollution	
4.5	Oceans and global climate change	
	Unit – V Practical Component	12
5.1	Map filling : Related to Oceanography	
5.2	Signs and symbols of bathymetric maps	
5.3	Reading and Interpretation of navigation charts and bathymetric maps	

Note: 1. Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development

2. Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability

REFERENCES:

1. Bhatt, J.J. 91978): Exploring the Planet Ocean, D.VonNostrandCo.New York.
2. Birla Economic Research Foundation, economic Research Division 91992): The Oceans, Allied Publishers Ltd. New Delhi.
3. Chandra, S. and Others (eds).(1993): The Indian Ocean and its islands: Strategic Scientific and Historical perspectives, sage Publications, New Delhi.
4. Chawan S.V. (ed) (2015): Physical Geography, Paper I, Published by Director (I/C), Institute of Distance and Open Learning, University of Mumbai.
5. Fairbridge, R.W.ed) Encyclopeadia of Oceanography, Reinholt, New York.
6. Sharma, R.C. (ed)(1985): The Oceans: realities and Prospects, Rajesh Publications, New Delhi.
7. Sengupta,R. and Desa E,(eds) (2001): The Indian Ocean: A Perspective Vol.,I and II Oxford and IBH Publishing Company Private Limited, New Delhi.
8. Paul, P.R.(1998): Invitation to Oceanography, Jones and Bartlett Publishing, Sudbury, Massachusetts.
9. Rajgopalan, R (ed) (1996): Voices for Oceans, A Report to the Independent World Commission on the Oceans, International Ocean Institute, Operational centre, Madras, India.
10. Qasim, S.Z(1998): Glimpses of Indian Ocean, Universities Press(India) Limited, Hyderabad.

S.Y.B.A. GEOGRAPHY PAPER- III

AGRICULTURAL GEOGRAPHY OF INDIA

SEMESTER: IV COURSE CODE**:** UGGEO 402, Credits: 03

Units	Name of the Sub Topics	No of Lectures
Unit – I Introduction to Agricultural Geography		12
1.1	Definition, nature and scope of agricultural geography	
1.2	Approaches: regional approach, systematic approach, commodity approach, recent approaches	
1.3	Importance of agriculture in Indian economy	
1.4	Influencing Factor of agriculture	
Unit – II Irrigation Scenario		12
2.1	Importance of Irrigation	
2.2	Sources of Irrigation	
2.3	Major Canals	
Unit – III Introduction to Indian Agriculture		12
3.1	Salient features of Indian agriculture	
3.2	Types of farming in India	
3.3	Major crops of India	
3.4	Agro- climatic regions of India	
3.5	Problems associated with Indian agriculture	
Unit – IV Green and White Revolution in India		12
4.1	Introduction to Agricultural Revolution (Green and White)	
4.2	Components of Green and White Revolution	
4.3	Impact of Green Revolution	
4.4	Need for sustainable agriculture in India	
Unit – V Practical Component		12
5.1	Interpretation/ question- answer on thematic maps related to agriculture of India (NATMO and other)	
5.2	Crop Concentration and Diversification	
5.3	Crop Combination	

Note: 1. Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development

2. Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability

REFERENCES:

1. Bansil, B. C. (1975): 'Agricultural Problems of India', Delhi.
2. Bayliss Smith, T.P. (1987) : The Ecology of Agricultural Systems. Cambridge University Press, London .
3. Berry, B.J.L. et. al.(1976) : The Geography of Economic Systems. Prentice Hall, New York.
4. Gregor, H.P.: Geography of Agriculture. Prentice Hall, New York, 1970.
5. Grigg, D. (1984): 'An Introduction to Agricultural Geography', Hutchinson Publication, London
6. Grigg, D.B.(1974) : The Agricultural Systems of the World. Cambridge University Press, New York.
7. Hartshorn, T.N. and Alexander, J.W. (1988): Economic Geography. Prentice Hall, New Delhi.
8. Morgan W.B. and Norton, R.J.C. (1971): Agricultural Geography. Mathuen, London,
9. B Boulde..(1978): Agriculture in the Third World - A Spatial Analysis. Westview Press,
10. Sauer, C. O. (1952): 'Agricultural Origins and Dispersals', American Geographical Journal
11. Sauer, C.O.(1969): Agricultural Origins and Dispersals. M.I.T. Press, Mass, U.S.A.
12. Singh J.(1997): Agricultural Development in South Asia: A Comparative A Study in the Green Revolution Experiences, national Books Organization, New Delhi.
13. Singh, J. and Dhillon, S. S. (1984): 'Agricultural Geography', McGraw Hill, New Delhi.

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SYBA Geography Paper- II and III

Evaluation Pattern

SCHEME OF EXAMINATION:

The performance of the learners shall be evaluated into two parts viz continuous Internal Evaluation and Semester End examination. In both semester internal assessment with 40% marks and semester End Examinations with 60% marks. The allocation of marks for the Continuous Internal Assessment and Semester End Examinations are as shown below:-

CONTINUOUS INTERNAL ASSESSMENT- 40 MARKS

Practical Component will ask for Internal Examination and it will be conducted separately

Evaluation type	Marks
Internal Evaluation	**40**
a. Practical + Journal	20
b. Class Room Presentation	10
c. Field Visit and report writing Viva Assignments PPT presentation Quiz competition Online courses Knowledge sharing Innovative Ideas Active participation	10

SEMESTRER END EXAMINATION- 60 MARKS

- Duration – 2 Hours for each paper.
- There shall be eight questions each question and each questions carry 15 marks.
- All questions shall be compulsory with internal choice within the questions.
- Questions shall be subdivided into sub-questions

Questions	Sub-questions	Questions	Marks
1	a) OR b)	Based on Unit - I	15
2	a) OR b)	Based on Unit – II	15
3	a) OR b)	Based on Unit – III	15
4	a) OR b)	Based on Unit – IV	15