Vivekanand Education Society's

College of Arts, Science and Commerce

(Autonomous)

Sindhi Society, Chembur, Mumbai, Maharashtra – 400 071.

Accredited by NAAC "A Grade" in 3rd Cycle - 2017
Best College Award – Urban Area, University of Mumbai (2012-13)
Recipient of FIST Grant (DST) and STAR College Grant (DBT)

Affiliated to the

University of Mumbai

Syllabus for

Program: F.Y.B.COM (Environmental Studies)

(Program code: VESUCCO)

As per Choice Based Semester and Grading System (CBSGS)
with effect from Academic Year 2022 - 2023

Program Outcomes (PO):

A learner completing B.Com. will be able to:

PO-1 Understand the role of business , commerce, management, accounting and economics and it's implications on society.
PO-2 Acquire conceptual knowledge of accounting and skills of maintaining financial statements, their components and how information from business transactions flow into these statements.
PO-3 Acquire entrepreneurial, administrative, legal and managerial skills.
PO-4 Develop the skills and techniques of communication and creative ability.
PO-5 Improve competency to make eligible and employable in the job market.
PO- 6 Recognize different value systems and ethics and develop a sense of social service.
PO-7 Become a responsible and dutiful citizen

On completion of B.COM program, learners will be enriched with knowledge and be able to:

PSO-1 Understand the Concept of Business, Business environment, Entrepreneurship, Services, Services Mix, retail sector and E-commerce.
PSO-2 Understand and apply the Concepts of Management, it's Functions, Production Management, Quality Management, Indian Financial System and Recent Trends in Finance in practical world.
PSO-3 Be familiar of the framework of Indian Business Laws, legal aspects of business and case law studies related to Business Laws.
PSO-4 Gain knowledge about the concept of advertising, IMC, advertising agencies and economic and social aspects of advertising, advertising media, creativity in advertising and careers in advertising.
PSO-5 Understand the Concepts of Marketing, Marketing Mix, Consumer Behaviour, Market segmentation, Functions of HRM, HRP, HRD and current issues in Marketing and HRM.

F.Y.B.COM. (ENVIRONMENTAL STUDIES I)

(SEMESTER I)

Course Code	Title	Credits & Lectures per Semester	Lectures per Week
VESUCES101	Unit I : Environment and Ecosystem	13 Lectures	04
	Unit II: Natural Resources and Sustainable Development	13 Lectures	
	Unit III : Population and Emerging Issues of Development	13 Lectures	
	Unit IV : Urbanisation and Environment	13 Lectures	
	Unit V : Reading of Thematic Maps and Map Filling	08 Lectures	

Detailed Syllabus: Unit wise / Module wise with number of lectures

Course title: Environmental Studies I
Course code: VESUCES101

Course Objectives:

1. To develop an in-depth understanding of various environmental issues and concerns of national and global importance.
2. To develop a balanced view of the relationship between environment and development.
3. To understand the concepts related to sustainable development vis-a-vis improvement of quality of life.

Learning Outcomes (LO):

On successful completion of this course students will be able to:

LO -1 - Understand the basic concepts of environment.

LO- 2 – Acquire knowledge about the relationship between environment with development, sustainability and quality of life.

LO- 3 - Learn the role of an individual, community and several agencies in solving environmental problems.

LO-4 - Acquire the skills and methods for dealing with environmental problems.

Unit no.	Details of topics	No of lectures
1	**Environment and Ecosystem** Environment: Meaning, Definition, Scope and its Components; Concept of Ecosystem: Definition, Characteristics, Components and Types, Functioning and structure; Food Chain and Food Web; Ecological Pyramids; Man and environment relationship; Importance and Scope of Environmental Studies.	13 Lectures
2	**Natural Resources and Sustainable Development** Meaning and Definitions; Classification and Types of Resources, Factors influencing resource; Resource Conservation- Meaning and Methods Non-Conventional Resources, Problems associated with and Management of Water, Forest and Energy Resources Resource Utilization and Sustainable Development	13 Lectures
3	**Populations and Emerging Issues of Development** Population explosion in the world and in India and arising concerns; Demographic Transition Theory; Pattern of population growth in the world and in India and associated problems; Measures taken to control population growth in India; Human population and Environment; Environment and Human Health; Human Development Index; The World's Happiness Index	13 Lectures
4.	**Urbanisation and Environment** Concept of Urbanisation; Problems of Migration and Urban Environment Changing landuse, Crowding and Stress on Urban Resources, Degradation of Air and Water, loss of soil cover, Impact on Biodiversity, Urban heat islands; Emerging Smart Cities and Safe Cities in India ; Sustainable Cities	13 Lectures
5	**Reading of Thematic Maps and Map Filling** Reading of Thematic Maps: Located bars, Circles, Pie charts, Isopleths, Choropleth, Flow map and Pictograms Map Filling: Map filling of World (Environmentally significant features) using point, line and polygon segment.	08 Lectures

References:

- Bharucha, Erach (2004). Textbook for Environmental Studies for Undergraduate Courses of all Branches of Higher Education, University Grants Commission, New Delhi. 2004.
- Kaushik Anubha and Kaushik C. P. (2016) Perspectives in Environmental Studies, Fourth Edition, New Age International (P) Limited, Publishers.
- Rajagopalan, R. (2016). Environmental studies: from crisis to cure. Oxford University Press.
- P.G. Shinde and et.al. Environmental Studies, Sheth Pub.
- Vibha Kumar and et.al. Environmental Studies, Vipul Pub.
- Amrite and Chakraborti. Environmental Studies, Manan Pub.

Additional References:

- Banerjee, A. (2013). Contemporary Urbanisation in India: Issues and Challenges. Concept Publishing Co. Pvt. Ltd. New Delhi.
- Bharucha Erach (2002), The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad
- Botkin and Keller. (2012). 'Environmental Science'. John Wiley & Sons Inc., Wiley India (P) Ltd., New Delhi. Eighth Edition.
- Boyle, G. (Ed.) (2012). Renewable Energy: Power for a Sustainable Future. Oxford University Press.
- Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. (2001). Environmental Encyclopedia, Jaico Publ. House, Mumbai
- Das, B.K., and Banerjee A. (2014). Biodiversity Conservation in India: Management Practices, Livelihood Concerns and Future Options. Concept Publishing Co. Pvt. Ltd. New Delhi.
- Goel, S. (Ed) (2016). Management of Resources for Sustainable Development. Orient Blackswan.
- Gurung, C. (2013). Eco-Conservation and Sustainable Living. Narosa Publishing House.
- Laine, N. (2012). Nature, Environment and Society- Conservation, Governance and Transformation in India. Orient Blackswan.

- Mani, N. (2017). Environment, climate change and disaster management. New Century.
- Narain, S. (2018). Body Burden: Lifestyle Diseases. Center for Science and Environment.
- Singh, S. (2018). Environmental Geography. Parvalika Publications.

Modality of assessment

The performance of the learners shall be evaluated into two parts. The learner's performance shall be assessed by Internal Assessment with 25% marks in the first part & by conducting the Semester End Examinations with 75% marks in the second part.

Student will have to score 40% of marks in Internal assessment as well as End Sem examination to pass the course.

The allocation of marks for the Internal Assessment and Semester End Examinations are as shown below:-

Internal Assessment: It is defined as the assessment of the learners on the basis of internal evaluation as envisaged in the Credit & Choice based system by way of participation of learners in various academic and correlated activities in the given semester of the programme.

Semester End Assessment : It is defined as the assessment of the learners on the basis of Performance in the semester end Theory/ written/ Practical examination.

A. Theory - Internal assessment 25% **25 marks**

Sr No	Evaluation type	Marks
1.	Class Test (multiple choice questions / objective)	15
2.	- Assignments on practical aspects - Project based learning activities (Case studies/ Assignments / role Plays/Presentations / Skit / Poster / Field visit etc.)	10

B. Theory - External examination - 75%

Semester End Theory Assessment

Duration - Each paper shall be of 2.5 hours duration.

Total Marks: 75

Question no.	Details	Marks
Q1.	**Based on Unit 5**	**15**
	(A) Map Reading and Interpretation (World Thematic Map) (B) Map Filling (World Map) (C) Multiple Choice Questions	**5** **5** **5**
Q2.	**Based on Unit 1**	**15**
	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	
Q3.	**Based on Unit 2**	**15**
	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	
Q4.	**Based on Unit 3**	**15**

	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	
Q5.	**Based on Unit 4**	15
	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	

F.Y.B.COM. ENVIRONMENTAL STUDIES II

(SEMESTER II)

Course Code	Title	Credits & Lectures per Semester	Lectures per Week
VESUCES201	**Unit I :** Solid Waste Management for Sustainable Society	**13 Lectures**	**04**
	Unit II: Agriculture and Industrial Development	**13 Lectures**	
	Unit III : Tourism and Environment	**13 Lectures**	
	Unit IV : Environmental Movements and Management	**13 Lectures**	
	Unit V : Map Filling	**08 Lectures**	

Detailed Syllabus: Unit wise / Module wise with number of lectures

Course title: ENVIRONMENTAL STUDIES II
Course code: VESUCES201

Course Objectives:

1. To develop a deeper concern for the environment and a sense of commitment and responsibility to take proactive action
2. To appreciate the role of the individual, community, national and international agencies in resolving environmental problems
3. To respect customs and traditions related to local conservation practices and accept indigenous eco-friendly technologies
4. To develop skills to undertake investigative studies on various environmental issues
5. To participate in activities dealing with environmental problems

Learning Outcomes (LO):

On successful completion of this course students will be able to:

LO1 Understand the environmental issues at global, national and regional levels.

LO2 Acquaint with the functional links between environment, economy and society.

LO3 Be a responsible citizen by following effective waste management practices

LO4 Know the Environmental Protection's rules and regulations

Unit no.	Details of topics	No of lectures
1	**Solid Waste Management for Sustainable Society** Classification of solid wastes – Types and Sources of Solid Waste ; Effects of Solid Waste Pollution- Health hazards, Environmental Impacts; Solid Waste Management – solid waste management in Mumbai- Schemes and initiatives run by MCGM- role of citizens in waste management in Mumbai	13 Lectures
2	**Agriculture and Industrial Development** Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, Desertification - Uneven Food Production – Hunger, Malnutrition and Food Security – Sustainable Agricultural practices Environmental Problems Associated with Industries – pollution - Global warming, Ozone Layer Depletion, Acid rain, - Sustainable Industrial practices – Green Business and Green Consumerism, Corporate Social Responsibility	13 Lectures
3	**Tourism and Environment** Tourism: Meaning, Nature, Scope and importance –Typology of tourism- classification; Tourism potentials in India and challenges before India; New Tourism Policy of India; Consequences of Tourism: Positive and Negative Impacts on Economy, Culture and environment- Ecotourism	13 Lectures

4.	**Environmental Movements and Management** Environmental movements in India: Save Narmada Movement, Chipko Movement, Appiko Movement, Save Western Ghat and Save Jaitapur; Environmental Management: Concept, need and relevance; Concept of ISO 14000 and 16000; Concept of Carbon Bank and Carbon Credit.EIA - Environment Protection Acts – Concept and Components of Geospatial Technology- Applications of GST in Environmental Management.	13 Lectures
5	**Map Filling** Map filling of Konkan and Mumbai (Environmentally significant features and GST centers) using point, line and polygon segment.	08 Lectures

References:

- Bharucha, Erach (2004). Textbook for Environmental Studies for Undergraduate Courses of all Branches of Higher Education, University Grants Commission, New Delhi. 2004.
- Kaushik Anubha and Kaushik C. P. (2016) Perspectives in Environmental Studies, Fourth Edition, New Age International (P) Limited, Publishers.
- Rajagopalan, R. (2016). Environmental studies: from crisis to cure. Oxford University Press.
- P.G. Shinde and et.al. Environmental Studies, Sheth Pub.
- Vibha Kumar and et.al. Environmental Studies, Vipul Pub.
- Amrite and Chakraborti. Environmental Studies, Manan Pub.

Additional References:

- Banerjee, A. (2013). Contemporary Urbanisation in India: Issues and Challenges. Concept Publishing Co. Pvt. Ltd. New Delhi.
- Bharucha Erach (2002), The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad
- Botkin and Keller. (2012). 'Environmental Science'. John Wiley & Sons Inc., Wiley India (P) Ltd., New Delhi. Eighth Edition.
- Boyle, G. (Ed.) (2012). Renewable Energy: Power for a Sustainable Future. Oxford University Press.

- Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. (2001). Environmental Encyclopedia, Jaico Publ. House, Mumbai
- Das, B.K., and Banerjee A. (2014). Biodiversity Conservation in India: Management Practices, Livelihood Concerns and Future Options. Concept Publishing Co. Pvt. Ltd. New Delhi.
- Goel, S. (Ed) (2016). Management of Resources for Sustainable Development. Orient Blackswan.
- Gurung, C. (2013). Eco-Conservation and Sustainable Living. Narosa Publishing House.
- Laine, N. (2012). Nature, Environment and Society- Conservation, Governance and Transformation in India. Orient Blackswan.
- Mani, N. (2017). Environment, climate change and disaster management. New Century.
- Narain, S. (2018). Body Burden: Lifestyle Diseases. Center for Science and Environment.
- Singh, S. (2018). Environmental Geography. Parvalika Publications.

Modality of assessment

The performance of the learners shall be evaluated into two parts. The learner's performance shall be assessed by Internal Assessment with 25% marks in the first part & by conducting the Semester End Examinations with 75% marks in the second part.

Student will have to score 40% of marks in Internal assessment as well as End Sem examination to pass the course.

The allocation of marks for the Internal Assessment and Semester End Examinations are as shown below:-

Internal Assessment: It is defined as the assessment of the learners on the basis of internal evaluation as envisaged in the Credit & Choice based system by way of participation of learners in various academic and correlated activities in the given semester of the programme.

Semester End Assessment : It is defined as the assessment of the learners on the basis of Performance in the semester end Theory/ written/ Practical examination.

A. Theory - Internal assessment 25% **25 marks**

Sr No	Evaluation type	Marks
1.	Class Test (multiple choice questions / objective)	15
2.	- Assignments on practical aspects - Project based learning activities (Case studies/ Assignments / role Plays/Presentations / Skit / Poster / Field visit etc.)	10

B. Theory - External examination - 75%

Semester End Theory Assessment

Duration - Each paper shall be of 2.5 hours duration.
Total Marks: 75

Question no.	Details	Marks
Q1.	**Based on Unit 5**	**15**
	(A) Map Filling (Map of Mumbai) (B) Map Filling (Map of Konkan) (C) Multiple Choice Questions	**5** **5** **5**
Q2.	**Based on Unit 1**	**15**
	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	10 05 10 05
Q3.	**Based on Unit 2**	**15**

	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	10 05 10 05
Q4.	**Based on Unit 3**	**15**
	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** B. **Short Note /Brief**	10 05 10 05
Q5.	**Based on Unit 4**	15
	A. Full Length Question **B. Short Note /Brief** **(OR)** **A. Full Length Question** **B. Short Note /Brief**	10 05 10 05

Overall Examination and Marks Distribution Pattern

SEMESTER I & II

Course	VESUCES101	VESUCES201	Grand Total
Theory	100	100	200