Appendix 1A

No-01

Questionnaire

Name
Class:
College:
Age:
Designation:
Student Of Environmental Education:

Q1. What does Environmental Studies mean to you?

Q2. Are you in favour of Mumbai University’s decision to introduce Environmental Education in higher education?

Q3. The study of Environmental studies will benefit the students and the society at large.

   Agree.
   Disagree.
   Undecided.

Q4. Do you think the students studying Environmental Studies will be better equipped to tackle the environmental problems of today?

Q5. Which according to you are the three most serious environmental issues in Mumbai today?
Q6. How can teachers make Environmental Studies more effective and relevant for the students?

Q7. What changes would you suggest in the Mumbai University curriculum?

Q8. How can students be made more responsible towards protecting and sustaining the environment?

Q9. What impact can the teachers and students of Environmental Studies collectively make on the environment?

Q10. What suggestions would you suggest to measure this impact?
Appendix 1B

Questionnaire

Name:
Class:
College:
Ph. No.:

Student/Teacher of Environmental Studies/Science/Management.

Q1. University of Mumbai introduced Environmental Studies in 1992 as a compulsory subject in higher education. Do you think it was necessary?

Yes : Go to Ques. no. 1.1

No : Go to Ques. no. 2

Q1.1 How has the subject helped you as a student?

a) Made you eco friendly and changed your lifestyle.
b) Made you aware of environmental problems - local and global.
c) Makes you want to do something good for the environment.
d) Makes you want to share your awareness with others.

Q2. In your opinion do you think Environmental Education will benefit the society in the long run?

Yes : Go to Ques no. 2.1

No : Go to Ques no. 3
Q2.1 Have you organized or participated in any of the following?

Yes :

No :

If Yes--- Choose from the following.

a) Street plays
b) Workshops.
c) Presentations/Exhibitions.
d) Environmental Rallies or Walks.
e) Tree Plantation drives.
f) Any other.

Q3 Are you satisfied with the University of Mumbai curriculum on Environmental Studies?

Yes :

No :

Undecided :

Q4 Which topics should be further included in the University of Mumbai curriculum vis a vis Environmental Education?

1.______________________________________________________________
2.______________________________________________________________
3.______________________________________________________________
4.______________________________________________________________
5.______________________________________________________________
6.______________________________________________________________
Q5. How can teachers make Environmental Education more effective and interesting for the students?

   a) Show environmental documentaries and group discuss.
   b) Go on nature tours.
   c) Do group projects.
   d) Case studies.
   e) Encourage write ups.
   f) Any other.

Q6. In your opinion do you think teachers need to acquire any special training to teach the subject?

   Yes :         Go to Ques. no 6.1
   No :

Q6.1 Which of the following would you suggest to help an Environmental Education teacher in the class?

   a) Be well read and informed and give examples in the class.
   b) Should attend workshops and conferences every year.
   c) Should be part of an ongoing environmental project.
   d) Should write on environmental issues and encourage students to publish papers.

Q7 Do you think students studying Environmental Education develop a different perspective of the world? Please give reasons.

   Yes :         No :

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A5
Q8 Do you make a conscious effort to:

a) Switch off the lights and fans when not in use:
   Yes: Always/Sometimes
   No:

b) Use energy savers at home:
   Yes: Always/Sometimes
   No:

c) Conserve potable water:
   Yes: Always/Sometimes
   No:

d) Keep the surroundings clean:
   Yes: Always/Sometimes
   No:

e) Separate dry and wet garbage from your home:
   Yes: Always/Sometimes
   No:

f) Conserve trees by using less paper:
   Yes: Always/Sometimes
   No:
g) Delete junk mails and minimize carbon footprints:
   Yes: Always / Sometimes
   No:

h) Reduce the use of environment polluting gadgets:
   Yes: Always / Sometimes
   No:

Q9. Which according to you are the two most serious environmental problems in Navi Mumbai today?

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Q10. Suggest innovative methods to solve the above mentioned environmental problems of Navi Mumbai.

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Appendix 2

Points Used For Focus Group Discussions And Interviews

With Teachers And Students

Q 1. What is the importance of Environmental Education in today’s times?

Q 2. Do you think justice was done while framing the syllabus for EE at the University of Mumbai?

Q 3. Is the syllabus for EE of any help to the students of Navi Mumbai?

Q 4. Do you think the Environmental Education syllabus needs to be changed as per the present times?

Q 5. Keeping in mind the appalling environmental conditions all around, what is your opinion about environmental laws in India?

Q 6. How can we as teachers help in mitigating environmental problems?

Q 7. Which are the main environmental issues in Navi Mumbai and how can we tackle them?

Q 8. Are the environmental problems of Navi Mumbai different from those of Greater Mumbai?

Q 9. Has the Environmental Education programme helped the society vis a vis their awareness, attitude, alertness and participation?

Q 10 What is India’s stand vis a vis Environmental Education in other countries?
Appendix 3 A

Research Student: Ms. Rita Basu
SIES (Nerul) College of Arts, Science & Commerce
Navi Mumbai – 400703

Guide : Dr. Sulabha Natraj
Principal
Waymade College of Education
Vallabh Vidyanagar, Gujrat – 388120.

Topic : Environmental Education At The Mumbai University:
An Impact Study

Pre Test

Questionnaire

Name:_________________________

Class: _______________

College: SIES, Nerul College of Arts, Science and Commerce

Mob. No. _______________ Ph. No. _____________

Student / Teacher of Environmental Studies/ Science/ Management.

1. Define Environment

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1.1 What are the components of environment?
1. 
2. 
3. 

2. What is meant by Environmental management?

____________________________________________________________________
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2.1 What are the concepts of environmental management?

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____________________________________________________________________

A9
3. What is Environmental Degradation?

3.1 What are the social factors responsible for environmental degradation according to you.
1
2
3

4. What is the major causes of
a) Global Warming

b) Deforestation

c) Scarcity of Resources
d) Air Pollution
e) Water Pollution

5 1) There can be no economic development without some environmental degradation.
   : True/ False
2) Soft Technologies means technological procedure which is not harsh on the environmental & Produces less Pollutants.
   : True/ False
3) Resources do not change in quality and quantity in response to man’s effort to tap and utilize than.
   : True/ False
4) One of the commodities being traded these days is Carbon Dioxide.
   : True/ False
5) Waste Management is one of the most challenging issues man is facing today.
   : True/ False
Appendix 3B

Research Student: Ms. Rita Basu
SIES (Nerul) College of Arts, Science & Commerce
Navi Mumbai – 400703

Guide: Dr. Sulabha Natraj
Principal
Waymade College of Education
Vallabh Vidyanagar, Gujrat – 388120.

Topic: Environmental Education At The Mumbai University:
An Impact Study

_____________________________________________________________________

Post Test

Questionnaire

Name:__________________________

Class:_______________

College: SIES, Nerul College of Arts, Science and Commerce

Mob. No.______________ Ph. No. ____________

Student / Teacher of Environmental Studies/ Science/ Management.

Q. 1 What do you understand by Environment.

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Q. 1.1 What are the causes of Environmental Degradation?

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Q. 2 What is the need for Environmental Management

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Q. 2.1 What is carbon Trading?

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Q. 3 Define Global Warming.
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Q. 3.1 What are the causes of Global warming.
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Q. 4 How has Information Technology helped in environmental education
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Q. 5 State Whether True or False
1) Over exploitation and unwise utilization of natural resources lead to a decline in
   productivity of ecosystem as well as loss of bio-diversity.
   True / False
2) The energy flow in the ecosystem is a one-way process where the circulation of
   material is cyclic.
   True / False
3) The relationship between Man and Nature is not dynamic.
   True / False
4)) Today our planet is losing more heat and therefore, we are experiencing Global
   Warming
   True / False
5) Opportunities for the reduction of carbon footprints lie in construction and
   infrastructure building
   True / False
## Pre Test Questionnaire - Score Card

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UNIVERSITY OF MUMBAI

REVISED SYLLABUS
AT THE
F.Y.B.COM. COURSE
IN THE SUBJECT OF
ENVIRONMENTAL STUDIES

(with effect from the academic year 2009-2010.)
SYLLABUS FOR F.Y.B.Com. Course
in the subject of Geography
(w.e.f academic year 2009-10)

Environmental Studies

Objectives:

1. To create an awareness of environmental perspective, both natural and human, in Environmental studies.
2. To highlight functional links between environment, economy and society and bring out the issues emerging from this interface.
3. To expose the students to the emerging environmental issues, both natural and human.
4. To sensitize the students towards measures that could be taken to reduce and mitigate the environmental problems.
5. To acquaint students with relevant tools and techniques to assess and analyze the environmental aspects.

SEMESTER - I

Unit 1 : Environment : An Overview (11 Lectures)

a) Environment – Structure and components – Typology – Natural and Human
b) Ecosystem as part of Environment – Functioning and Levels of Organisation – Linkage with society and economy
c) Emerging issues of development – Environment as a source and depository of resources, products and waste
d) Sustainable use of resource – a multidisciplinary approach – importance of Environmental Studies

Unit 2 : Natural Resources (12 Lectures)

a) Definition, importance and classification of natural resources
b) Resource rich and resource poor regions – emerging gaps
c) Distribution patterns, utilisation and conservation of water, forest and energy resources

Unit 3 : Population and Environment (10 Lectures)

a) Man environment relationship – Changing patterns – Role of technology
b) Contemporary trends of growth and distribution of world population
c) Challenges of population growth – carrying capacity of Environment – Human Development Index as a measure of development – Patterns of human development in India.
d) Environment and human health (a case study)

Unit 4 : Food and Environment (11 Lectures)

a) Sources and areas of production of food in the world (Agriculture, Fishing, Livestock-rearing)
b) Pattern of food trade
c) Food Security and Global patterns of nutrition and hunger

Map Work

a) Map reading – Bar Diagram, Located Circles, Located pie diagram, Choropleth, Isopleth, Dot map, Flow map and Pictogram
b) Map Filling – Environmentally significant features – World
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<td><strong>Environment</strong>: <strong>Definition and Composition</strong> – Lithosphere, Hydrosphere, Atmosphere, Biosphere. (Biogeochemical cycles – Carbon, Nitrogen and Hydrological Cycle.) Man and Nature relation and interaction with respect to Food, Clothing. (Shelter and Occupation. Concept of Ecology and Ecosystem.)</td>
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<td>II)</td>
<td>Resources and Wealth – Meaning, Types of Resources, Exploitation of Resources, Use of Technology and its Impact on Natural Environment: Wealth – meaning, Distinction between wealth and resources, Optimum Conversion of Resources into wealth: Anthropogenic Waste – its effects, Man-made Industrial waste.</td>
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<td>Environmental Management: meaning, development and environmental linkages. Environmental concerns in India. The need for sustainable development. Actions for environmental protection: national and international initiatives, emerging environment management strategies, Indian initiatives – Environmental Protection Movements and NGOs in India. Disaster Management – meaning, need and Planning with reference to Flood, Storms, Tsunami, Cyclones and Earthquakes in India.</td>
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