**Dr.V.S.Krishna Govt. Degree & PG College (A)**

**ENVIRONMENTAL STUDIES**
Common for B.A, B.Com and B.Sc Students

**SEMESTER**

Total hours of Teaching
60 @ 4 hours per week

**Syllabus**

**Module I**

**15 hrs**

<table>
<thead>
<tr>
<th>Environmental studies introduction, Ecosystems and Biodiversity</th>
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Definition scope and importance of environmental studies. Ecosystems concept on ecosystem and structure and function of it. Producers consumers and decomposers. Food chains food webs and Ecological Pyramids. Study of following ecosystems

(a) Forest ecosystem
(b) Aquatic ecosystem.

Biodiversity and it’s Conservation: Definition Genetic, Species and ecosystem diversity value of biodiversity India as mega diversity nation, Hot Spots of Biodiversity, Threats to Biodiversity Endangered and endemic species of India, Conservation of Biodiversity Insitu – Exsitu Conservation of Biodiversity.

**Module II**

**15 Hours**

**Natural Resources:**

Type of Natural resources:

**Forest Resources:** Use and over exploitation, deforestation mining, dams and their effects on forests and Trible people.

**Water Resources:** Use and over utilization of surface and ground water, floods drought, conflicts over water dams benefits and problems.

**Food Resources:** World food problems effects of modern agriculture Fertilizer pesticide problems water logging, Salinity.

**Energy Resources:** Growing energy needs renewable and non Renewable energy resources uses of alternate energy Resources.

**Mineral resources:** Use and over use of mineral resources environmental effects.
**Land Resources:** Land degradation, Soil erosion desertification, Land Slide Role of Individual in Conservation of natural Resources.

**Module III**

**Environmental Pollution**

15 hours

Definition causes effects and control measures of Air pollution water pollution noise pollution thermal Pollution nuclear Pollution solid waste management role of individual in prevention of pollution.

Disaster Management: Floods, Earth Quake, Cyclone, Land, Slider, Nuclear accidents.

**Module IV**

**Social issues and Environmental acts**

15 hours

From unsustainable to sustainable development. Water Conservation, Rain water harvesting water shed management Resettlement and rehabilitation of people

Classmate change, Global warming, Acid rains, ozone layer depletion

Environmental ethics, Human population growth, Environment and human health.

E.I.A, Public hearing
Environmental Protection Act
Air (Prevention and Control Pollution) Act
Water (Prevention and Control Pollution) Act
Wild Life Protection Act
Forest Conservation Act.

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ENVIRONMENTAL STUDIES
I-MID SEMESTER EXAMINATION MODEL PAPER

Max Marks: 20
Time 1 Hour

SECTION – A

Answer the following in one or two lines 1 x 4 = 4M

1. Food Chain
2. Endemic Species
3. NTFP
4. Mineral Resources

SECTION -B

Answer the Following questions in paragraphs: 2 x 4 = 8M

5. Structure and function of Ecosystem.
6. Hot Spots of Biodiversity
8. World food Problems

SECTION –C

Answer any two of the following in one page 2 x 4 = 8M

9. Describe Ecological Pyramids in details
10. Write on the Conservation of Biodiversity
11. Explain energy resources and the types of it.
12. Give the role of individual in conservation of natural resources.

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ENVIROMENTAL STUDIES

II mid Semester Examination Model Paper

Max Marks 20

SECTION – A

Answer the following question in one or two lines 1 \times 4 = 4 \text{ m}

1. Lead Pollution
2. B.O.D
3. Acid Rain
4. E.I.A

SECTION – B

Answer the following question in Paragraph 2 \times 4 = 8 \text{ m}

5. Noise Pollution
6. Cyclone
7. Sustainable Development
8. Wild life Conservation

SECTION – C

Answer any two of the following question in one page 4 \times 2 = 8 \text{ m}

9. Explain Causes, effects and Control of water Pollution
10. Write on the solid waste Management
11. Describe water Conservation, rain water Harvesting and water shed management.
12. Give the details of Environmental Protection Act.

Environmental Studies

Semester end examination Model Paper

Guide Lines for question Paper Preparation

1. Maximum attempt may be made to give all questions from all Modules.
2. 40\% of questions should be easy one.
3. 40\% of questions should be answered by average students
4. 20\% of questions may be given for high achievers.
5. Environmental studies entire course in one semester.
6. At least 2 questions of Very short (2marks) from each module.
7. At least 2 question of short (3marks) from each module.
8. Two question essay type with or choice from module.

ENVIRONMENTAL STUDIES    Max Marks: 75 m

Model Question Paper  
Time: 3 Hours

Section A

Answer all the following short question   2 x 6 = 12 m

1) Food Web
2) Endemic Species
3) Deforestation
4) Land Slider
5) Thermal Pollution
6) Earth Quake
7) Rain water Harvesting
8) Public Hearing
9) Nuclear Accidents

SECTION B

Answer any Five of the following Question 3 x 5 = 15 M

11. Aquatic Ecosystem
12. Hot spots of biodiversity
13. Use and over use of exploitation of forest resources.
14. Renewable energy resources
15. Noise Pollution
16. Type of solid waste
17. Global warming
18. Forest Conservation act
19. Rehabilitation of people
20. Conflicts over water.

SECTION – C

Answer the following question and write detailed answer 10 x 4 = 40m

21. A) Define scope and importance of Environmental Studies.

    (OR)

    B) Describe Biodiversity and its Conservation
22. A) Write an essay on forest Resources.

(Or)

B) Explain mineral Resources and environmental effects in their extractor.

23. A) Write an essay on Causes, effects and Control of water pollution.

(Or)

B) Describe role of individual in the prevention of pollution.


(OR)

B) Give the details of environmental acts.

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**INTERNAL EXAMINATIONS AND ASSESSMENT**

1. Internal examinations and assessment marks 25 Marks
2. Distribution of internal marks
   a. Mid semester exams 10 Marks
   b. Field trip 3 Marks
   c. Record 4 Marks
   d. Viva Voice 4 Marks
   e. Seminars/Quiz/Group Discussion/ Skills/ Activities 4 Marks

   Total - 25 Marks
EXTERNAL EXAMINATIONS AND ASSESSMENT
At the end of III Semester

<table>
<thead>
<tr>
<th>S.No</th>
<th>Form of questions</th>
<th>No of questions to be answered</th>
<th>Choice</th>
<th>Marks allotted</th>
<th>Estimated time</th>
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<tbody>
<tr>
<td>1</td>
<td>Very short</td>
<td>Ten</td>
<td>No choice</td>
<td>2x10 =20</td>
<td>50 minutes</td>
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<tr>
<td>2</td>
<td>Short</td>
<td>Five</td>
<td>Any five out of ten</td>
<td>3x5= 15</td>
<td>40 minutes</td>
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<tr>
<td>3</td>
<td>Essay</td>
<td>Four</td>
<td>Either or Choice</td>
<td>10x4 = 40</td>
<td>90 minutes</td>
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<td></td>
<td>Total</td>
<td></td>
<td></td>
<td>75</td>
<td>180 minutes</td>
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FIELD WORK
1. Visit to local area to document environmental assets like River/forest/Grassland/Hill/Mountain.
2. Visit to local polluted site Urban/Rural/Industrial/Agricultural.
3. Study of common plants, animal, birds, etc..
4. Study of simple ecosystems.
5. Visit to sanctuaries/ National Parks/ Protected Zoos/ Botanical Gardens.

PROJECTS
Students of B.A, B.Com, and B.Sc can choose environmental studies course for the general project to be submitted at the end of IV Semester.

THEMES OF PROJECT
1. Pond ecosystem
2. Forest resources
3. Food resources
4. Ozone layer
5. Rivers in Andhra Pradesh
6. Endangered species of Andhra Pradesh
7. Endemic species
8. Solid waste management
9. Zoo
10. Air pollution of Visakhapatnam,
11. Water pollution
12. Environmental Acts
13. Green products marketing
14. Population studies
15. Commerce & environment