



My note  
to ) No. of  
Website, N.B.  
G.P.  
BT-2008  
15/8

Gram : UNIVERSITY  
Tel. : 27667494  
27667725/1259

UNIVERSITY OF DELHI  
DELHI - 110007

**CONFIDENTIAL**

Ref. No. Exam-II/2011/1653  
Delhi, the 01.08.2011

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**Principal**  
Zakir Hussain College (Day)  
Jawahar Lal Nehru Marg  
New Delhi -110002  
Ph.

Dear Sir / Madam,

This is to inform you that Committee of Courses, Department of Botany, University of Delhi, has approved the following modalities / Guidelines of teaching Environmental Studies Courses (Es-111) to be taught in second semester of various B.Sc. Courses.

1. It will be qualifying paper for semester based students of B.Sc. (Hons.), B.Sc. (Physical Science) and B.Sc. (Life Science)
2. Will be taught in second semester.
3. One lecture per week.
4. Theory examination at the end of semester : 50 Marks.
5. No internal assessment.
6. Each college may decide which of the 50% course students will be taught by Botany staff and remaining course students by Zoology Staff.
7. No division of course required between Botany and Zoology Staff.
8. Specific note for third semester student of 2011;

"The above guidelines will be followed for these students as well since they have not yet been evaluated for this qualifying paper".

You are requested to kindly follow the above guidelines for Environmental Studies Courses (ES-111). The copy of syllabus is also enclosed herewith.

Yours faithfully,

Assistant Registrar(Exams)  
Ph: 27667922/27667494/  
27667725 Extn. 1259/1272

Encl: As above

**Unit – I**      **Introduction**

Environment: Definition and its Various Components. Multidisciplinary nature of environmental studies. Importance and scope of environmental studies.

**Unit – II**      **Natural resources and biodiversity**

Renewable and non-renewable resources.

Natural resources: their utility, concern and conservation (forest, water, mineral and energy).

Biodiversity – definition and types (genetic species and ecosystem diversity), Value and conservation of biodiversity (Basic idea of In situ and Ex situ conservation)

**Unit – III**      **Environmental Pollution**

Causes, effects and control measures of air, water, soil and noise pollution; Climate change; Global warming; Ozone depletion; Urban problems (Population and waste management), Environment related health problems (Occupational hazards)

Readings:

1. Cunningham, W.P. and Cunningham, M.A. 2008 Environmental Science- a global concern. 10<sup>th</sup> edition McGraw Hill International Boston.
2. Bharucha, E. 2005 Textbook of Environmental Studies for undergraduate courses( for UGC) University Press, Hyderabad.
3. Miller, G.T. 2006 Environmental Science 11<sup>th</sup> edition Brooks/Cole, Australia.
4. Roy, S. Environmental Science 2003. Publishing syndicate, Kolkata.
5. Daniel D. Chiras. Environmental Science 2008. Student Edition  
Jones & Bartlett. Publishers.