

ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ  
(1961 ਦੇ ਪੰਜਾਬ ਐਕਟ ਨੰ: 35 ਤਹਿਤ ਸਥਾਪਤ)  
(ਮੀਟਿੰਗਜ਼ ਬ੍ਰਾਂਚ)

ਨੰ: 3444-3625/ਸਮ-6  
ਮਿਤੀ: 08.09.17

ਪ੍ਰਿੰਸੀਪਲ ਸਾਹਿਬਾਨ,  
ਯੂਨੀਵਰਸਿਟੀ ਨਾਲ ਸਬੰਧਿਤ ਕਾਲਜ,  
ਜਿਥੇ Qualifying Subject - Environmental and Road Safety Awareness  
ਪੜ੍ਹਾਇਆ ਜਾਂਦਾ ਹੈ।

**ਵਿਸ਼ਾ: ਅਕਾਦਮਿਕ ਸੈਸ਼ਨ 2017-18 ਦੇ Qualifying Subject - Environmental and Road Safety Awareness ਦੇ ਸਿਲੇਬਸ ਦੀ ਜਾਣਕਾਰੀ ਸਬੰਧੀ।**

ਸ਼੍ਰੀਮਾਨ/ਸ਼੍ਰੀਮਤੀ ਜੀ

ਯੂ.ਜੀ.ਸੀ. ਦੀਆਂ ਗਾਈਡਲਾਇਨਜ਼ ਅਨੁਸਾਰ ਅਤੇ ਯੂਨੀਵਰਸਿਟੀ ਵਲੋਂ ਲਏ ਫੈਸਲੇ ਦੇ ਅਧਾਰ ਤੇ ਯੂਨੀਵਰਸਿਟੀ ਵੈਬਸਾਈਟ ਤੇ Qualifying Subject - Environmental and Road Safety Awareness ਦੇ ਸਿਲੇਬਸ ਮਿਤੀ 04.07.2017 ਨੂੰ ਅਪਲੋਡ ਕਰ ਦਿੱਤਾ ਗਿਆ ਸੀ।

ਇਸ ਸਿਲੇਬਸ ਵਿੱਚ ਡਾਇਰੈਕਟਰ, ਸਿਖਿਆ ਵਿਭਾਗ (ਕਾ) ਪੰਜਾਬ, ਚੰਡੀਗੜ੍ਹ (ਕਾਲਜ ਐਜੂਕੇਸ਼ਨ ਸ਼ਾਖਾ) ਅਤੇ ਮਾਨਯੋਗ ਭਾਰਤ ਦੀ ਉੱਚਤਰ ਅਦਾਲਤ ਅਤੇ ਯੂਨੀਵਰਸਿਟੀ ਗ੍ਰਾਂਟਸ ਵਲੋਂ ਪ੍ਰਾਪਤ ਹੋਈਆਂ ਪ੍ਰਤੀ ਬੇਨਤੀਆਂ ਦੀ ਲੋਅ ਵਿੱਚ ਕੁਝ ਤਬਦੀਲੀਆਂ ਕੀਤੀਆਂ ਗਈਆਂ ਹਨ। ਉਨ੍ਹਾਂ ਤਬਦੀਲੀਆਂ ਤੋਂ ਬਾਅਦ ਇਹ ਸਿਲੇਬਸ ਮਿਤੀ 31.08.2017 ਨੂੰ ਮੁੜ ਅਪ-ਲੋਡ ਕਰ ਦਿੱਤਾ ਗਿਆ ਹੈ ਅਤੇ ਇਹ ਸਿਲੇਬਸ ਅਕਾਦਮਿਕ ਸੈਸ਼ਨ 2017-18 ਹੇਠ ਯੂਨੀਵਰਸਿਟੀ ਵੈਬ-ਸਾਈਟ [www.punjabiversity.ac.in](http://www.punjabiversity.ac.in) ਦੇ Link - Download Syllabus ਤੇ ਜਾ ਕੇ ਵੇਖਿਆ/ਡਾਊਨਲੋਡ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

ਇਸ ਸਬੰਧੀ ਸਬੰਧਿਤ ਨੂੰ ਜਾਣੂ ਕਰਵਾਉਣ ਦੀ ਕ੍ਰਿਪਾਲਤਾ ਕਰਨਾ ਜੀ।

ਵਿਸ਼ਵਾਸਪਾਤਰ,

9/2-3/17  
ਡਿਪਟੀ ਰਜਿਸਟਰਾਰ (ਮੀਟਿੰਗਜ਼)

\* ਸਾਹਿਬ ਸਾਹਿਬ ਕ੍ਰਿਪਾਲਤਾ ਕਰਕੇ ਆਪਣੀ Environment and Road Safety Awareness ਦੇ ਸਿਲੇਬਸ ਨੂੰ 2017-18 ਤੋਂ Revised ਕੀਤਾ ਗਿਆ।

**All UG Courses - II Year(Annual & 4th Semester)**  
**Environmental and Road Safety Awareness**  
**Session: 2017-18, 2018-19 & 2019-20**

Total Marks : 100  
Theory : 70 marks  
Internal Assessment: 30

Max Time: 3 hrs.  
Lectures per week 5  
**Total Credit : 50**

**INSTRUCTIONS FOR THE PAPER SETTERS**

The question paper will consist of three sections A, B and C. Each of sections A and B will have four questions from the respective sections of the syllabus. Each question shall carry 11 marks. Section C will consist of 13 short answer type questions of 2 marks each.

**INSTRUCTIONS FOR THE CANDIDATES**

Candidates are required to attempt any two questions from each section A and B. Section C is compulsory.

**PRIVATE STUDENTS**

Max Marks: 100

Max Time: 3hrs.  
Lectures per week 5

**INSTRUCTIONS FOR THE PAPER SETTERS**

The question paper will consist of three sections A, B and C. Each of sections A and B will have four questions from the respective sections of the syllabus. Each question shall carry 15 marks. Section C will consist of 20 short answer type questions of 2 marks each.

**INSTRUCTIONS FOR THE CANDIDATES**

Candidates are required to attempt any two questions from each section A and B. Section C is compulsory.

**SECTION-A**

**INTRODUCTION TO ENVIRONMENTAL STUDIES:**

The multidisciplinary nature of environmental studies. Definition, scope and importance  
Concept of Biosphere – Lithosphere, Hydrosphere, Atmosphere. **(Credit -2)**

**ECOSYSTEM & BIODIVERSITY CONSERVATION**

Ecosystem and its components, Types of Ecosystems  
Biodiversity - Definition and Value, Threats to biodiversity and its conservation  
Level of biological diversity: genetic, species and ecosystem diversity; biogeographic zones of India; biodiversity patterns and global biodiversity hot spots.  
India as Mega-biodiversity nation; Endangered and endemic species of India.  
Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value.

**(Credit -6)**

## **NATURAL RESOURCES–RENEWABLE AND NON RENEWABLE RESOURCES**

Land resources and land use change; land degradation, soil erosion and desertification.

Deforestation: causes and impacts due to mining, dam building on environment, Forests, Biodiversity and tribal populations.

Water: Use and over-exploitation of surface and ground water, Floods, droughts, conflicts over water (international & inter-state)

Energy resources: renewable and nonrenewable energy sources, use of alternate energy sources, growing energy needs, case studies.

**(Credit -8)**

### **Environmental Pollution**

Environmental Pollution : types, causes, effects and controls; Air, Water, Soil and noise pollution. Nuclear hazards and human health risks Solid waste management : Control measures of urban and Industrial waste. Pollution case studies.

**(Credit -6)**

## **SECTION-B**

### **ENVIRONMENTAL PROTECTION LAWS IN INDIA**

Environmental protection act for; Air (Prevention and control of pollution), Water (Prevention and Control of pollution), Wild life, Forest Conservation, Issues involved in the enforcement of environmental legislation. Role of an individual in prevention of pollution.

Environmental policies & Practices; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.

**(Credit -5)**

### **Human Communities and the Environment**

Human population growth: Impacts on environment, human health and welfare. Resettlement and rehabilitation of project affected persons; case studies. Disaster management: floods, earthquake, cyclones and landslides. Environment movements: Chipko, Silent valley, Bishnoi of Rajasthan. Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.

Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi)

**(Credit -5)**

### **ROAD SAFETY AWARENESS**

Concept and significance of Road safety, Traffic signs, Traffic rules, Traffic Offences and penalties, How to obtain license, Role of first aid in Road Safety.

**(Credit -5)**

### **Stubble Burning**

Its meaning : Why Stubble burning , Alternatives to Stubble Burning, Environmental and Health effects/Hazards, Policies to control Stubble burning.

**(Credit -4)**

### **Field Work**

Visit to an area to document environmental assets: river/Forest/Flora/Fauna, etc.

Visit to Local polluted site –urban/Rural/Industrial/Agricultural.

Study of common Plants, Insects, Birds and basic principles of identification.

Study of simple ecosystems-pond, river, Delhi Ridge, etc.

**(Credit -5)**

## **Prevalence**

1. Extent and management of crop stubble
2. Impact on Health and Environment.
3. Alternative uses of crop stubble.
4. Environmental Legislations and Policies for Restriction of Agriculture Residue Burning in Punjab. **(Credit -4)**

## **Suggested Readings :**

1. Carson, R.2002. Silent Spring, Houghton Mifflin Harcourt.
2. Gadgil.M., & Guha,R.1993. This Fissured Land : An Ecological History of India.Univ. of California Press.
3. Gleeson, B. and Low, N.(eds.)1999. Global Ethics and Environment, London, Routledge.
4. Gleick,P.H.1993. Water in Crisis.Pacific Institute for Studies in Dev. Environment & Security .Stockholm Env. Institute,Oxford Univ.Press.
5. Groom , Martha J., Gary K. Meffe, and Carl Ronald Carroll.Principles of Conservation Biology.Sunderland : Sinauer Associates, 2006.
6. Grumbine,R.Edward, and Pandit,M.K.2013. Threats from India's Himalays dams. Science,339:36-37.
7. McCully,P.1996. Rivers no more: the environmental effects of dams (pp.29-64). Zed Books.
8. McNeill,John R. 2000. Something New Under the Sun : An Environmental History of the Twentieth Century.
9. Odum, E.P., H.T & Andrews, J.1971. Fundamentals of Ecology.Philadelphia : Saunders.
10. Pepper,I.L., Gerba ,C.P & Brusseau,M.L.2011. Environmental and Pollution Sciences.Academic Press.
11. Rao, M.N. & Datta,A.K.1987. Waste Water Treatment.Oxford and IBH Publishing Co.Pvt.Ltd.
12. Raven, P.H., Hassenzahl, D.M. & Berg, L.R.2012,Environment. 8Th edition. John Wiles & Sons.
13. Rosencranz, A., Divan, S., & Nobie, M.L. 2001. Environmental law and policy in India. Tripathi 1992
14. Sengupta, R. 2003. Ecology and economics: An approach to sustainable development. OUP.
15. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
16. Sodhi, N.S. Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology: Voices from the Tropics. John Wiley & Sons.
17. Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.
18. Warren, C.E. 1971. Biology and Water Pollution Control. WB Saunders.
19. Wilson, E.O. 2006. The Creation: An appeal to save life on earth. New York:Norton.
20. World commission on Environment and Development. 1987. Our Common Future. Oxford University Press.