SHAHEED NANDKUMAR PATEL VISHWAVIDYALAYA RAIGARH (C.G.)

ENVIROMENTAL STUDIES

Part- I

SYLLABUS FOR ENVIROMENTAL STUDIES AND HUMAN RIGHTS FOR UNDER GRADUATE

इन्वाहरमेंटल साइंस के पाठयक्रम को स्नातक स्तर भाग– एक की कक्षाओं मे विश्वविद्यालय अनुदान आयोग के निर्देशानुसार अनिवार्य रूप से शिक्षा सत्र 2003–2004 (परीक्षा 2004) से प्रभावशील किया गया है। स्वशासी महाविद्यालयों द्वारा भी अनिवार्य रूप से अंगीकृत किया जाएगा।

भाग 1, 2 एवं 3 में से किसी भी वर्ष में पर्यावरण प्रश्न–पत्र उत्तीर्ण करना अनिवार्य है। तभी उपाधि प्रदाय योग्य होगी।

पाठ्यक्रम 100 अंकों का होगा, जिसमें से 75 अंक सैद्धांतिक प्रश्नों पर होगें एवं 25 अंक क्षेत्रीय कार्य (Field Work) पर्यावरण पर होंगे।

सैद्धांतिक प्रश्नों पर अंक – 75 (सभी प्रश्न इकाई आधार पर रहेगें जिसमें आंतरिक विकल्प रहेगा)

(अ) लघु प्रश्नोंत्तर – 25 अंक

(ब) निबंधात्मक – 50 अंक

Field Work – 25 अंको का मूल्यांकन आंतरिक मुल्यांकन पद्धति से कर विश्वविद्यालय को प्रेषित किया जावेगा। अभिलेखों की प्रायोगिक उत्तर पुस्तिकाओं के समान संबंधित महाविद्यालयों द्वारा सुरक्षित रखेगें।

उपरोक्त पाठ्यक्रम से संबंधित परीक्षा का आयोजन वार्षिक परीक्षा के साथ किया जाएगा।

पर्यावरण विज्ञान विषय अनिवार्य विषय है, जिसमें अनुत्तीर्ण होने पर स्नातक स्तर भाग–एक के छात्र/छात्राओं को एक अन्य विषय के साथ पूरक की पात्रता होगी। पर्यावरण विज्ञान के सैद्धांतिक एवं फील्ड वर्क में संयुक्त रूप से 33% (तैतींस प्रतिशत) अंक उत्तीर्ण होने के लिए अनिवार्य होंगे।

स्नातक स्तर भाग–एक के समस्त नियमित/भूतपूर्व/अमहाविद्यालयीन छात्र/छात्राओं को अपना फील्ड वर्क सैद्धाांतिक परीक्षा की समाप्ति के पश्चात् 10 (दस) दिनों के भीतर संबंधित महाविद्याय/परीक्षा केन्द्र में जमा करेंगे एवं महाविद्यालय के प्राचार्य/केन्द्र अधीक्षक, परीक्षकों की नियुक्ति के लिए अधिकृत रहेंगे तथा फील्ड वर्क जमा होने के सात दिनों के भीतर प्राप्त अंक विश्वविद्यालय को भेजेंगे।

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(PAPER CODE – 0828)

M.M.75

UNIT - I THE MULTI DISCIPLINAITY NATURE OF ENVIRONMENTAL STUDIES:

Definition, Scope and Importance

Natural Resources:

Renewable and Non-renewable Resources:

Natural resources and associated problems

(a) Forest resources: Use and over-exploitation. deforestation Timber extraction, mining, dams and their effects on forests and tribal people and relevant forest Act.

(b) water resources: Use and over-utilization of surface and ground water, floods drought, conflicts over water, dams benefits and problems and relevant Act.

(c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources.

(d) Food resources: world food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.

(e) Energy resources: Growing energy needs. Renewable and non- Renewable energy sources, use of alternate energy sources.

(f) Land resources: Land as a resource. land degradation. man induced landslides soil erosion and desertification.

UNIT- II ECOSYSTEM **(12 Lecturer)**

(a) Concept, Structure and Function of an ecosystem

- Producers, consumers and decomposers.
- Energy flow in the ecosystem
- Ecological succession.
- Food chains, food webs and ecological pyramids.
- Introduction, Types, Characteristic Features. Structure and Function of Forest, Grass, Desert and Aquatic Ecosystem.

(b) **Biodiversity and its Conservation**

- Introduction – Definition: genetic, species and ecosystem diversity.
- Bio-geographical classification of India.
- Value of biodiversity: consumptive use productive use social, ethics, aesthetic and option values.
- Biodiversity at global, national and local levels.
- India as mega- diversity nation.
- Hot spots of biodiversity.
- Threats to biodiversity: habitat loss, poaching of wildlife, man-wild life conflict.
- Endangered and endemic species of India.
- Conservation of biodiversity: In situ and Ex-situ conservation of biodiversity.

UNIT-III ENVIRONMENTAL POLLUTION **(12 Lecturer)**

Definition

(a) Causes, effect and control measures of-

- Air water, soil, marine, noise, nuclear pollution and Human population.
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Role of individual in prevention of pollution
- Disaster Management : floods, earthquake, cyclone and landslides.

(b) Environmental Management **(12 Lecturer)**

- From Unsustainable to sustainable development.
- Urban problems related to energy.
- Water conservation, rain water harvesting, watershed management.
- Resettlement and rehabilitation of people, its problems and concerns.
- Environmental ethics : issues and possible solutions.
- Climate change, Global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Wasteland reclamation.
- Environmental Protection Act : issues Involved in enforcement of environmental legislation.
- Role of Information technology in Environmental and Human Health

UNIT - IV

General background and historical perspective. Historical development and concept of Human Rights, Meaning and definition of Human rights Kind and Classification of human Rights.

Protection of Human Rights Under the UNO charter, Protection of Human Rights under the Universal Declaration of Human Rights 1948.

Convention on the Elimination of all Forms of Discrimination against woman.

Convection on the rights of the Child 1989

UNIT- V

Impact of Human Rights norms in India, Human Rights Under the Constitution of India. Fundamental Rights under the Constitution of India, Directive Principles of State Policy under the Constitution of india. Enforcement of Human Rights in india.

Protection of Human Rights under the Human Rights Act, 1993 – national Human Rights Commission State Human Rights commission and Human Rights court in india.

Fundamental Duties under the Constitution of India

Reference/Books Recommended :

1. S.K. Kapoor - Human Rights under international Law and the Indian Law.
2. HO Agrawal – Internation law and Human Rights
3. एस. के. कपूर – मानव अधिकार
4. जे. एन. पान्डेय – भारत का संविधान
5. एम.डी. चतुर्वेदी – भारत का संविधान
6. J.N. Pandey – Constitutional Law of India
7. Agrawal K.C. 2001 Environmental Biology, Nidhi Pub. Ltd Bikaner
8. Bharucha Erach the Biodiversity of India, Mapin Pub. Pvt. Ltd. Ahmedabad 380013 India, Email : mapin@icenet.net (R)
9. Buinner R.C. 1989, Hazardous Waste Incineration Mc Graw Hill Iinc. 480p
10. Clark R.S. Marine Pollution Clanderson press Oxford (TB)
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12. Dr. A.K. Environmental Chemistry, Wiley Eastern Ltd.
13. Down to Earth Center for Science and Environmental (R)
14. Gloick. H.P. 1993 Water in crisis. Pacific Institute lbr studies in Deve' Environment & Security. Stockholm Eng. lnstitute Oxlbrd Llniversity Press m 4T3p
15. Hawkins R.E. Enc-vclopedia of Indian Natural History' Bombay Natural History. Society, Mumbai (R)

16. Heywood V.H. & Watson R.T. 1995 Global Biodliversity Assessment. Cambridge Uni. Press 1140P

17. Jadhav H. & Bhosale.V.H.1995 .Environmental Protection and Law. Himalaya pub. House, Delhi 284P

18. Mckinney M.L. & School R.M.1996 ,Environmental Science systems & Solutions, web enhanced edition, 639P

19. Mhaskar A.K. Matter Hazardous, Techno-science Publication (TB)

20. Miller T.G. Jr. Environment Science. Wadsworth Publishing Co.(TB)

21. Odum, E.P. 1971 , Fundamentals of Ecology. W.B Saunders Co. USA 574p

22. Rao M.N. & Datta. A.K. 1987. Waste water treatment Oxford & IBH Pub. Co. Pvt. Ltd. 345p

23. Sharma B.K. 2001. Environmental Chemistry. Goel Pub. House. Meerut

24. Survey of the Environment, The Hidu (M)

25. Townsend C. Harper J. and Michael Begon. Essentials of Ecology. Blackwell Science (TB)

26. Trivedi R.K. Handbook of Environment Laws. Rules, Guidelines, Compliances and Standards, Vol Iand II, Environment Media (R)

27. Trivedi R.K. and P.K. Goel, Introduction to air pollution. Techno-science publication (TB)

28. Wanger K.D.1998 ,Environmental Management. W.B. Saunders Co. Philadelphia' USA 499P

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