		figurative drawings. Basic measurements and proportion.		

Evaluation pattern –
Internal Assessment:100 marks continuous evaluation which includes Class Assignments (75 Marks) and Test (25 Marks)

REFERENCE BOOKS:

1. Deshpande R., (2004), "*Colour Pencil*", Jyotsna Prakashan Pune, 1stEdition.
2. Kamath V. (2006) "*Sketching and Drawing*", Jyotsna Prakashan Pune, 2ndEdition.
3. Mulik M. (2004), "*Perspective",* Jyotsna Prakashan Pune, 1stEdition.
4. Narvekar S., Narvekar A**., "***Grade Examination-Drawing Made Easy",* Navneet Publication (India) Ltd.
5. Shelar S. (2007), "*Still Life",* Jyotsna Prakashan Pune, 1st Edition.
6. Vaze P., (2002), "*Draw and Paint",* Jyotsna Prakashan Pune, 1stEdition.

4-Year U.G. Degree Syllabus

B Design – Foundation Course

Semester – I

Subject	Credits	Hours	Marks				
Environment Studies	**4**	**60**	**Th**	**Pr**	**Th**	**Pr**	**100**
			25	**-**	**75**	**-**	
Theory			**Internal**		**External**		**Total**

OBJECTIVES:

The learner will be able to -

1) Build awareness about physical environment and its components.
2) Gain Knowledge of natural resources and their types.
3) Develop the concept of ecology and its components.

CONTENT:

Block No	Objectives	Topic/Content Analysis	Assignments	% of weightage Marks
1	To be able	**The Multidisciplinary Nature of**	Group	25

	to create awareness about physical environment and its components.	**Environmental Studies** Unit 1- Definition, Scope and Importance, Need for public awareness **Natural Resources** Unit 1- Renewable and Non- Renewable Resources Unit 2- Natural Resources and Associated Problems- a) Forest Resources: Use and Over- exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. b) Water Resources: Use and Over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems c) Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. d) Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilization- pesticide problems, water logging, salinity, case studies e) Energy Resources: Growing energy needs, renewable and non- renewable energy sources, use of alternate energy sources, case studies f) Land Resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. Unit 3- Role of individual in conservation of natural resources Unit 4- Equitable use of resources for sustainable lifestyles	Discussions And Test	
2	To be able to create awareness of natural resources and their types.	**Ecosystems** Unit 1- Concept of ecosystem Unit 2- Structure and function of ecosystem Unit 3- Producers, consumers and Decomposers Unit 4- Energy flow in the ecosystem Unit 5- Ecological succession Unit 6- Food chains, food webs and ecological pyramids. Unit 7- Introduction , types, characteristics features, structure and function of the following ecosystem- a) Forest ecosystem b0 Grassland Ecosystem c) Desert ecosystem d) Aquatic ecosystem (pounds, streams, lakes, rivers, oceans, estuaries) **Biodiversity and its conservation** Unit 1- Introduction- Definition: genetic, species and ecosystem diversity.	Group Discussions And Test	25

		Unit 2- Bio-geographical classification of India Unit 3- Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values Unit 4- India as a mega-diversity nation Unit 5- Hot-sports of biodiversity Unit 6- Threats to bio-diversity: habitat loss, poaching of wildlife, man-wildlife conflicts Unit 7- Endangered and endemic species of India Unit 8- Conservation of bio-diversity: In-Situ and Ex-situ conservation of biodiversity		
3	To be able to create awareness of ecology and its components.	**Environmental Pollution** Unit 1- Definition, Causes, effects and control measures of – a) Air pollution b) Water pollution c) Soil pollution d) Marine pollution e) Noise pollution f) Thermal pollution g) Nuclear hazards Unit 2- Solid waste management: Causes, effects and control measures of urban and industrial waste Unit 3- Role of individual in prevention of pollution Unit 4- Pollution case studies Unit 5- Disaster Management: floods, earthquake, cyclone and landslides **Social Issues and the Environment** Unit 1- From Unsustainable to Sustainable development Unit 2- Urban problems related to energy Unit 3- Water conservation, rain water harvesting , watershed management Unit 4- Re-settlement and rehabilitation of people; its problems and concerns. Case studies Unit 5- Environmental ethics: Issues and possible solutions Unit 6- Climate changes, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies Unit 7-Wasteland reclamation Unit 8- Consumerism and waste products Unit 9- Environment Protection Act Unit 10-Air (Prevention and Control of Pollution) Act Unit 11- Water(Prevention and Control of Pollution) Act Unit 12- Wildlife Protection Act Unit 13- Forest	Group Discussions And Test	25

		Conservation Act Unit 14- Issues involved in enforcement of environmental legislation Unit 15- Public awareness		
4	To be able to create awareness of human activities on ecology ant need to conserve the resources	Human Population and the Environment Unit 1- Population growth, variation among nation Unit 2- Population explosion- Family Welfare Program Unit 3- Environment and Human Health Unit 4- Human Rights Unit 5- Value Education Unit 6- HIV/AIDS Unit 7- Women and Child Welfare Unit 8- Role of Information Technology in Environment and Human health Unit 9- Case Studies Visit to local area to document environmental assets- a) rivers/forest/grassland/hill/mountain b) Local Pollution site- Urban/Rural/Industrial/ Agricultural c) Study of common plants/insects/birds d) Study of simple ecosystems- ponds, rivers, hill slope etc.	Group Discussions And Test	25

Evaluation pattern –

Internal Assessment: Test and Field Work- To Be Converted In To 25

External Assessment: Final Exam - 75 Marks.

REFERENCES:

1. Agarwal, K.C. (2001), "Environmental Biology", Nidi Publi.Ltd. Bikaner.
2. Brunner R.C. (1989), "*Hazardous Waste Incineration",* McGraw Hill Inc.480p.
3. Clark R.S, "*Marine Pollution*", Clanderson Press Oxford (TP).
4. Cunningham, W.P.Cooper (2001), "*Environmental Encyclopedia*", Jaico Publ. House, Mumbai, 1196p M.T
5. De A.K, "*Environmental Chemistry*", WileelyEastem Ltd.
6. "*Down to Earth*", Center for Science and Environment ®.
7. Erach. B., "*The Biodiversity of India*", Mapin Publishing Pvt.Ltd, Ahmedabad-380013, India.
8. Gleick, H.P (1993), "*Water in crisis*", Pacifics Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute. Oxford Univ. Press.473p