

Name of the Faculty : VISITING FACULTY

Discipline : Civil Engineering

Semester : SECOND

Subject : ENVIRONMENTAL STUDIES

Lesson Plan Duration : 15 Weeks (from Jan 9 -2018 to Apr-2018)

Week	Theory	
	Lecture Day	Topic (including assignment / test)
1 st	1	1. Basics of ecology, eco system- concept, structure and importance of ecosystem,.
	2	Carbon, Nitrogen, Sulphur cycle
	3	Sustainable development
2 nd	1	2 Conservation of land reforms ,preservation of species,
	2	Prevention of advancement of desert sand lowering of water table, rain water harvesting,
	3	Acid Rain, maintenance of ground water, Water supply engineering,
3 rd	1	Deforestation – its effects and control measures
	2	3 Pollution: Sources of pollution - natural and manmade. Classification of pollutants,
	3	Causes, effects and control measures of pollution (air, water, noise, soil, radioactive and nuclear).
4 th	1	Prevention of Pollution: Introduction to Cleaner Production Technologies
	2	physical, chemical and biological treatment of pollutants
	3	photo catalytic degradation of pollutants,
5 th	1	Waste Minimization Techniques – Chemical degradation of waste
	2	Concept of Zero Discharge
	3	Test
6 th	1	4. Solid waste management, classification of refuse material ,sources,
	2	Effects and control measures.
	3	Introduction to E-waste Management
7 th	1	5 Environmental Legislation - Water (prevention and control of pollution) Act 1974,
	2	Air (Prevention and Control of Pollution) Act 1981 and Environmental Protection Act 1986,
	3	Role and Function of State Pollution Control Board
8 th	1	Environmental Impact Assessment (EIA).
	2	Environmental Impact Assessment (EIA).
	3	Introduction to Energy Conservation Act 2001 and
9 th	1	Energy Conservation (Amendment) Act 2010 & its importance.
	2	6 Energy Conservation: Introduction to Energy Management
	3	Energy Conservation
10 th	1	Energy efficiency & its need..
	2	Energy efficiency & its need

	3	Test
11 th	1	Role of Non-conventional Energy Resources (Solar Energy,
	2	Wind Energy,
	3	Bio Energy,
12 th	1	Hydro Energy) in environmental protection
	2	Impact of Energy Usage on Environment – Global Warming
	3	Impact of Energy Usage on Environment – Global Warming
13 th	1	Green House Effect,
	2	Depletion of Ozone Layer
	3	7. Eco-friendly Material: Recycling of Material
14 th	1	Recycling of Material
	2	Recycling of Material
	3	Concept of Green Buildings
15 th	1	Revision
	2	Revision
	3	Test

Name of the Faculty : Visiting Faculty
Discipline : Civil Engg.
Semester : Second Sem.
Subject : Engg Drawing-II
Lesson Plan Duration : 15 weeks

Week	Theory		Practical	
	Lecture Day	Topic (including assignment / test)	Practical Day	Topic
1.	1.		1.	1. Detail and Assembly Drawing 1.1 Principle and utility of detail and assembly drawings
	2.		2.	1.2 Wooden joints i.e. corner mortise and tenon joint, Tee halving joint, Mitre faced corner joint, Tee bridle joint,
2.	1.		1.	Crossed wooden joint, Cogged joint, Dovetail joint,
	2.		2.	Through Mortise and Tenon joint, furniture drawing - freehand and with the help of drawing instruments
3.	1.		1	2. Screw Threads 2.1 Thread Terms and Nomenclature
	2		2	2.1.1 Types of threads-External and Internal threads, Right and Left hand threads (Actual and Conventional representation), single and multiple start threads.
4.	1.		1.	2.1.2 Different Forms of screw threads-V threads (B.S.W threads, B.A thread, American National and Metric thread)
	2.		2.	Square threads (square, Acme, Buttress and Knuckle thread)
5.	1.		1.	3. Nuts and Bolts 3.1 Different views of hexagonal and square nuts. Square and hexagonal headed bolt.

	2.		2.	Test
6.	1.		1.	3.2 Assembly of Hexagonal headed bolt and Hexagonal nut with washer
	2.		2.	3.3 Assembly of square headed bolt with hexagonal and with washer
7.	1.		1.	4. Locking Devices 4.1 Different types of locking devices-Lock nut, castle nut, split pin nut,
	2.		2.	Locking plate, slotted nut and spring washer.
8.	1.		1.	4.2 Foundations bolts-Rag bolt, Lewis bolt, curved bolt and eye bolt
	2.		2.	4.3 Drawing of various types of studs
9.	1.		1.	5. Keys and Cotters 5.1 Various types of keys and cotters - their practical application, drawings of various keys and cotters showing keys and cotters in position.
	2.		2.	5.2 Various types of joints - Spigot and socket joint - Gib and cotter joint - Knuckle joint
10.	1.		1.	6. Rivets and Riveted Joints (04 sheets) 6.1 Types of general purpose-rivets heads 6.2 Caulking and fullering of riveted joints
	2.		2.	Test
11.	1.		1.	6.3 Types of riveted joints (i) Lap joint-Single riveted, double riveted (chain and zig-zag type) (ii) Single riveted, Single cover plate butt joint
	2.		2.	(iii) Single riveted, double cover plate butt joint (iv) Double riveted, double cover plate butt joint(chain and zig-zag type)
12.	1.		1.	7. Couplings 7.1 Introduction to coupling,

	2.		2.	Their use and types
13.	1.		1.	7.2 Muff coupling
	2.		2.	7.3 Flange coupling (protected)
14.	1.		1.	7.4 Flexible Coupling
	2.		2.	Revision
15.	1.		1.	Test
	2.		2.	Revision

