



Indraprastha College for Women University of Delhi

Work Plan for ODD SEMESTER –2026

Course Name:	GE
Paper Title:	E waste: Legislation, Trade and Management
Unique Paper Code:	2184001204
Semester:	V
Faculty:	Dr. Nawin Kumar Tiwary
Year:	2026-27

Work Plan			
Unit No.	Learning Objective	Lecture No.	Topics to be Covered
1	Define e-waste and explain its composition, generation and hazardous properties. Describe the health and environmental impacts of e-waste. Explain the principles and components of e-waste management. Describe major recycling, resource recovery and material recovery processes.	8	Definition, composition and generation of e-waste; global and national perspective; co-pollutants; hazardous properties; effects on human health and environment; domestic e-waste disposal; basic principles and components of e-waste management; resource recovery potential; technologies for recovery of resources; steps in recycling and recovery of materials, including mechanical processing; and occupational and environmental health effects.
2	Explain the global e-waste trade and factors influencing it. Discuss electronic recycling and international waste trading. Examine the issue of hazardous e-waste imports into India. Compare the organized and unorganized e-waste sectors in India.	7	Factors in the global waste trade economy; waste trading and electronic recycling; free trade agreements as a means of waste trading; import of hazardous e-waste in India; India's stand on liberalizing import rules; e-waste economy in the organized and unorganized sectors; and

Unit	Contents/Syllabus
I	E-waste Composition, Generation and Management Definition, composition and generation of e-waste; global and national perspective; co-pollutants; hazardous properties; effects on human health and environment; domestic e-waste disposal; basic principles and components of e-waste management; resource recovery potential; technologies for recovery of resources; steps in recycling and recovery of materials, including mechanical processing; and occupational and environmental health effects.
II	Global Trade of E-waste Factors in the global waste trade economy; waste trading and electronic recycling; free trade agreements as a means of waste trading; import of hazardous e-waste in India; India's stand on liberalizing import rules; e-waste economy in the organized and unorganized sectors; and production and recycling of e-waste in Indian metropolitan cities.
III	Control Measures Need for stringent health safeguards and environmental protection laws in India; Extended Producer Responsibility (EPR); import of e-waste permissions; producer–public–government cooperation; administrative and engineering controls; monitoring of compliance with rules; effective regulatory mechanisms strengthened by manpower and technical expertise; and reduction of waste at source.
IV	Relevant Legislation Hazardous Waste Rules, 2008; E-waste (Management and Handling) Rules, 2011; and E-waste (Management) Rules, 2016, including their salient features and likely implications; government assistance for Treatment, Storage and Disposal Facilities (TSDFs); and international legislation including the Basel Convention, Bamako Convention, Rotterdam Convention, Waste Electrical and Electronic Equipment (WEEE) Directive of the European Union, and Restriction of Hazardous Substances

	(RoHS) Directive.
S.No.	Name of Authors/Books/Publishers
1.	Hester, R. E. and Harrison, R. M. (2009). <i>Electronic Waste Management: Design, Analysis and Application</i> . Royal Society of Chemistry Publishing, Cambridge, UK.
2.	Fowler, B. A. (2017). <i>Electronic Waste: Toxicology and Public Health Issues</i> . Academic Press.
3.	Eduljee, G. H. and Harrison, R. M. (eds.) (2019). <i>Electronic Waste Management</i> . Royal Society of Chemistry.
4.	

Paper Components			
Credits	Lecture (L)	Tutorial (T)	Practical (P)
4	2		2
Assessment Scheme			
S.No.	Component	Marking Scheme	Total Marks
1	Internal Assessment - Assignment - Class Test - Attendance		20
		8	
		8	
		4	
2.	Continuous Assessment (Tutorial) - Activity 1 - Activity 2 - Attendance		
3.	Practical - Continuous Assessment - End Term Written/Practical Exam - Viva		80
		20	
		40	
		20	

4.	EndSemesterExamination	60
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