

Code: 20EC2701B

IV B.Tech - I Semester – Regular Examinations - DECEMBER 2023

E-WASTE MANAGEMENT
(Common for ALL BRANCHES)

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	Explain the basic principles of E-waste management and resource recovery potential of e-waste.	L2	CO1	7 M
	b)	Describe the technologies for recovery of resources from electronic waste.	L2	CO1	7 M
OR					
2	a)	Demonstrate the following: Define what is e-waste? Which e-waste is recyclable and not recyclable? How do I get rid of my e-waste? Why is recycling e-waste important?	L2	CO1	7 M
	b)	Explain the effects of pollutant (E-waste) on human health and surrounding environment.	L2	CO1	7 M

UNIT-II					
3	a)	Explain the essential factors in global waste trade economy.	L2	CO2	7 M
	b)	Explain Import of hazardous e-waste in India and India's stand on liberalizing import rules.	L2	CO2	7 M
OR					
4	a)	Compare E-waste economy in the organized and unorganized sectors.	L2	CO2	7 M
	b)	Describe the procedure of estimation and recycling of e-waste in metro cities of India.	L3	CO2	7 M
UNIT-III					
5	a)	Discuss the following: i) Who is a producer as per E-waste Management Rules 2016? ii) List any four electronic and electrical product covered under EPR obligation? iii) Who is required to get EPR registration for E-waste? iv) Is there any exemption for any entity from the requirement of EPR registration?	L2	CO3	7 M
	b)	Explain: i) Import of e-waste permissions ii) Reduction of waste at source.	L2	CO3	7 M
OR					
6	a)	Explain the need for stringent health safeguards and environmental protection laws in India.	L2	CO3	7 M

	b)	Describe the salient features of the Rules provided by the MoEF.	L2	CO3	7 M
UNIT-IV					
7	a)	Interpret the initiatives taken by the Government for Treatment, Storage and Disposal Facilities.	L3	CO4	7 M
	b)	Discuss any four responsibilities of dismantler and any three responsibilities of recycler defined in E-waste (Management and Handling) Rules, 2011.	L2	CO4	7 M
OR					
8	a)	Explain the Procedure for grant of authorization defined in - E-waste (Management and Handling) Rules, 2011.	L2	CO4	7 M
	b)	Demonstrate any two responsibilities of consumer, Dealer, Producer and one responsibility of dismantler in E-waste (Management) Rules, 2016.	L3	CO4	7 M
UNIT-V					
9	a)	Illustrate any two objectives of the Rotterdam Convention and the major provisions made in this convention.	L3	CO4	7 M
	b)	Explain the Obligations of the Producer under the WEEE.	L2	CO4	7 M
OR					

10	a)	Differentiate the Basel Convention with the Bamako Convention.	L2	CO4	7 M
	b)	Describe the Restrictions of Hazardous Substances (RoHS) Directive.	L2	CO4	7 M