

Code: 20EC2701B

**IV B.Tech - I Semester – Regular / Supplementary Examinations  
OCTOBER 2024**

**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
<b>UNIT-I</b>					
1	a)	Explain about the basic principles of E-waste Management.	L2	CO1	7 M
	b)	Explain the steps involved for recycling and recovery of materials.	L2	CO1	7 M
<b>OR</b>					
2	a)	Describe the technologies involved for the recovery of resources from electronic waste.	L2	CO1	7 M
	b)	Illustrate the effects of pollutant (E-waste) on human health and surrounding environment.	L2	CO1	7 M
<b>UNIT-II</b>					
3	a)	Discuss the essential factors in global waste trade economy.	L2	CO2	7 M

	b)	Explain about the E-waste economy in the organized and unorganized sector in India.	L3	CO2	7 M
<b>OR</b>					
4	a)	Explain the estimation and recycling the E-waste in Metro cities in India.	L2	CO2	7 M
	b)	Illuminate the import of hazardous E-waste in India.	L3	CO2	7 M
<b>UNIT-III</b>					
5	a)	Describe the need for health safeguards and environmental protection laws in India.	L3	CO2	7 M
	b)	Explain the procedure for public–government cooperation.	L3	CO2	7 M
<b>OR</b>					
6	a)	Explain about the Administrative controls and Engineering controls in India.	L3	CO3	7 M
	b)	Explain about the initial steps for reduction of E-waste at the source.	L3	CO3	7 M
<b>UNIT-IV</b>					
7		Compare the salient features of E-waste (management) rules 2016 and E-waste (Management & handling) rules 2011.	L4	CO3	14 M
<b>OR</b>					
8		Explain the India Government assistance for Treatment, Storage and Disposal Facilities (TSDFs).	L4	CO3	14 M

<b>UNIT-V</b>					
9	a)	Compare the salient features Basel convention and Bamako convention.	L4	CO4	7 M
	b)	Analyze the Rotterdam convention of Hazardous waste and disposals.	L4	CO4	7 M
<b>OR</b>					
10	a)	Examine the Restrictions of Hazardous substances (ROHS) directive to solve the toxic E-waste in Electrical and electronics equipment.	L4	CO4	7 M
	b)	Inspect Waste Electrical & Electronic Equipment (WEEE) in terms of collection, recycling and recovery of targets.	L4	CO4	7 M