EPCET LIBRARY BANGALORE-49

CBCS SCHEME

USN | | | | | | | | | | |

BCV515C

Fifth Semester B.E./B.Tech. Degree Examination, June / July 2026
Solid Waste Management

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

			M	L	C
		Module – 1			
Q.1	**a.**	Write a detailed note on 3R's in Integrated solid waste management.	**10**	**L2**	**CO1**
	b.	Discuss the role of stake holders in solid waste management.	**10**	**L2**	**CO1**
		OR			
Q.2	**a.**	Briefly explain the need of solid waste management. also explain the classification of solid waste.	**10**	**L2**	**CO1**
	b.	Write a detailed note on global perspective of solid waste management.	**10**	**L2**	**CO1**
		Module – 2			
Q.3	**a.**	List and explain the physical and chemical properties of solid waste.	**10**	**L2**	**CO1**
	b.	Describe various factors affecting solid waste generation.	**10**	**L2**	**CO1**
		OR			
Q.4	**a.**	Briefly explain various biological methods of waste characterization.	**10**	**L2**	**CO1**
	b.	Describe the methods to estimate the quantity of waste generated.	**10**	**L2**	**CO1**
		Module – 3			
Q.5	**a.**	Write brief note on the following : i) Types of storage containers ii) Collection vehicles	**10**	**L2**	**CO2**
	b.	Define transfer station. Explain any two types of transfer station.	**10**	**L2**	**CO2**
		OR			
Q.6	**a.**	List different on – site processing techniques used for solid waste and explain any two techniques in detail.	**10**	**L2**	**CO3**
	b.	Explain the parameters to be considered in designing a stationery container system.	**10**	**L2**	**CO3**
		Module – 4			
Q.7	**a.**	What is composting? With aid of neat sketch explain Bangalore method of composting.	**10**	**L2**	**CO4**
	b.	Briefly explain the following : i) Biogas recovery ii) Leachate management	**10**	**L2**	**CO4**
		OR			
Q.8	**a.**	With help of a neat sketch, explain working of a municipal incinerator.	**10**	**L2**	**CO4**
	b.	Explain the factors to be considered while designing a landfill.	**10**	**L2**	**CO4**
		Module – 5			
Q.9	**a.**	Write a detailed note on classification of biomedical waste.	**10**	**L2**	**CO5**
	b.	Describe briefly about usage of IoT in storage, collection and treatment of solid waste.	**10**	**L2**	**CO5**
		OR			
Q.10	**a.**	Write a brief note on treatment and disposal of construction and demolition waste.	**10**	**L2**	**CO5**
	b.	What is electronic waste? Briefly explain the treatment and disposal of e – waste.	**10**	**L2**	**CO5**

* * * * *

VTU-08-06-2026 01:20:59pm - EP - EP - EP