

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.Tech DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026*****Fifth Semester******Biomedical Engineering*****CBM358 – MEDICAL WASTE MANAGEMENT*****Regulations – 2021******Duration : 3 Hrs******Maximum : 100 Marks******PART – A(ANSWER ALL QUESTIONS) (Marks 10*2=20)***

<i>Q.No</i>	<i>Questions</i>	<i>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	Differentiate "unsafe act" and an "unsafe condition".	L2	1	2
2.	What is meant by workers compensation?	L1	1	2
3.	State the major and minor sources of biomedical waste.	L1	2	2
4.	Define waste segregation and why is it important in biomedical waste management?	L2	2	2
5.	List some examples of Hazardous materials	L1	3	2
6.	How are medical gas systems considered hazardous material?	L2	3	2
7.	Why is fall protection important for scaffolding and elevated work?	L2	4	2
8.	Mention the key safety considerations for landscape and ground maintenance.	L1	4	2
9.	Compare disinfectants, sterilant and antiseptics.	L2	5	2
10.	Give the concept of Healthcare-Associated Infection (HAI).	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11. a	Outline the hierarchy of hazard control in healthcare, the different types of hazards, and the roles and responsibilities of a hazard control management system.	L2	1	16
	Or			
b	Explain the key theories and models of accident causation in healthcare, focusing on the role of human factors and the process of accident analysis and reporting.	L2	1	16
12. a	Classify the various types of biomedical waste and need for biomedical waste disposal.	L4	2	16
	Or			
b	Categorize the methods of biomedical waste collection, segregation, labelling, storage and transportation.	L4	2	16
13. a	Analyze the key components of a Hazardous Materials Management program in a healthcare setting, focusing on the OSHA Hazard Communication Standard and DOT Hazardous Material Regulations.	L4	3	16
	Or			
b	Classify the different types of hazardous materials found in a healthcare environment and explain the principles of a Hazardous Waste Operations and Emergency Response (HAZWOPER) program and Respiratory Protection.	L4	3	16

14.	a	Explain the key components of a comprehensive facility safety program, with a focus on administrative area safety.	L2	4	16
		Or			
	b	Explain the purpose and importance of a Respiratory Protection program and the specific safety considerations for compressed air systems.	L2	4	16
15.	a	Analyze the importance of a comprehensive immunization program for healthcare workers and how the OSHA Bloodborne Pathogens Standard helps to protect them from infectious diseases.	L4	5	16
		Or			
	b	Dissect the concept of patient-centered healthcare and discuss how quality improvement tools and strategies are used to create a safety culture and prevent errors and adverse events.	L4	5	16
