

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***Seventh Semester**Biomedical Engineering***OBT356 - Lifestyle Diseases***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>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Differentiate between communicable and lifestyle diseases.	L2	1	2
2.	Clarify one way in which illicit drug use can affect mental health.	L2	1	2
3.	Describe one major cause of mouth cancer.	L1	2	2
4.	Why a biopsy is an important diagnostic tool for cancer?	L2	2	2
5.	Compare the effects of high blood pressure and high cholesterol on coronary artery disease risk.	L2	3	2
6.	What is cardiac rehabilitation?	L1	3	2
7.	State the Type 1 diabetes.	L1	4	2
8.	What does BMI stand for, and how is it calculated?	L1	4	2
9.	What does COPD stand for?	L1	5	2
10.	List the benefit of nasal breathing over mouth breathing.	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 i Describe lifestyle diseases and discuss the role of risk factors like unhealthy eating habits, smoking, and alcohol consumption in their development.	L2	1	8
	ii Discuss the impact of obesity, diabetes, and respiratory diseases on overall health and quality of life.	L2	1	8
	Or			
	b i Examine how stress, lack of physical activity, and illicit drug use contribute to the prevalence of lifestyle diseases.	L3	1	8
	ii Evaluate the importance of diet and exercise in preventing lifestyle diseases, particularly cardiovascular diseases and cancer.	L3	1	8
12.	a i Discuss the types of cancers influenced by lifestyle factors.	L2	2	8
	ii Examine the role of tobacco usage as a major cause of cancers.	L3	2	8
	Or			
	b i Explain the role of biomarkers in diagnosing cancers. How do they assist in early detection?	L2	2	8
	ii Illustrate Cervical and esophagus Carcinoma.	L2	2	8

13.	a	i	Explain coronary atherosclerosis and its role in the development of coronary artery disease.	L2	3	8
		ii	Discuss how excess lipid component and alcohol abuse contribute to the risk of coronary artery disease.	L2	3	8
	Or					
	b	i	Describe the diagnostic tools used to detect coronary artery disease by using electrocardiography.	L2	3	8
		ii	Evaluate the importance of exercise and cardiac rehabilitation in the treatment and management of coronary artery disease.	L3	3	8
14.	a	i	Describe the types of Diabetes Mellitus and highlight the differences between Type 1 and Type 2 diabetes.	L2	4	8
		ii	Explain the process of blood glucose regulation in the body and discuss how diabetes disrupts this balance.	L2	4	8
	Or					
	b	i	Discuss the complications associated with diabetes and the health risks it poses in both children and adults.	L2	4	8
		ii	Examine the relationship between pediatric and adolescent obesity focusing on the role of Body Mass Index (BMI).	L3	4	8
15.	a	i	Write short notes on chronic lung diseases.	L2	5	8
		ii	Differentiate between asthma and Chronic Obstructive Pulmonary Disease (COPD).	L2	5	8
	Or					
	b	i	Analyze how different breathing patterns can impact respiratory health.	L4	5	8
		ii	Explain the role of pulmonary function testing in diagnosing chronic lung disease.	L2	5	8