

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026***Fifth Semester**Civil Engineering***CE3025 - Airport and Harbours***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.	List any three characteristics of air transport.	L1	1	2
2.	Why is efficient planning of parking and circulation areas crucial for an airport?	L2	1	2
3.	What is the primary function of an aircraft apron?	L2	2	2
4.	State the key differences in the geometric design standards of a runway compared to a taxiway.	L1	2	2
5.	Define wind rose diagram.	L1	3	2
6.	Classify the elements of air traffic control tower.	L2	3	2
7.	What is meant by port?	L1	4	2
8.	State the role of Jetties.	L2	4	2
9.	How is inland water transport different from sea transport?	L2	5	2
10.	List the shore protection methods followed.	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 Explain the various classification of airports.	L4	1	8
	ii Summarize briefly the various geometric of the runway as recommended by ICAO.	L4	1	8
	Or			
	b Analyze the socio-economic and environmental impacts that must be evaluated during the site selection process for a major airport.	L4	1	16
12.	a i Describe the factors that influence the design of a runway's length, width, and longitudinal profile.	L3	2	8
	ii Discuss in detail about special consideration for pavement design.	L3	2	8
	Or			
	b Outline the key elements of an effective airport surface drainage system and its importance for safety.	L3	2	16
13.	a What are the different types of Airport zones? Explain its concepts with neat sketch.	L4	3	16
	Or			
	b Distinguish between Type 1 and Type 2 wind rose diagrams. Explain how the optimum runway orientation is determined.	L4	3	16

14.	a	Explain with neat sketches of a harbor layout and show the various components mention the objectives of each.	L3	4	16
		Or			
	b i	What is the function of wet docks? Explain with neat sketches their working and marine features.	L3	4	8
	ii	Bring out the difference between a port and a harbor. What are the requirements of good port?	L3	4	8
15.	a	Explain clearly about the coastal regulation Zone-2011.	L5	5	16
		Or			
	b	Explain about the wave action on coastal structures and coastal protection works.	L5	5	16