

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Seventh Semester

Electronics and Communication Engineering

CRA332 - Drone Technologies

Regulations - 2021

Duration : 3 Hrs

Maximum : 100 Marks

PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BLT	CO	Marks
1.	Define drone technology.	RE	1	2
2.	Give the applications for entrepreneurship.	RE	1	2
3.	What is UAV? Give two applications of UAV.	RE	2	2
4.	Differentiate Drones and UAV.	UN	2	2
5.	What is flight mode?	RE	3	2
6.	Give two key benefits that a larger onboard storage capacity offers to users.	RE	3	2
7.	What is the role of drone in filming?	RE	4	2
8.	Give the commercial applications of drone.	RE	4	2
9.	Define safety risks.	RE	5	2
10.	What are two advantages of using drones in swarms for agricultural monitoring?	RE	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

Q.No	Questions	BLT	CO	Marks
11.	a Analyze the different types of current generation drones based on their method of propulsion.	AN	1	13
	Or			
	b Analyze the potential market opportunities for a drone-based delivery service. Give the applications for entrepreneurship	AN	1	13
12.	a Analyze the different types of UAVs based on their size, range, and application. Justify your classification by providing examples of each type and their specific uses	AN	2	13
	Or			
	b Analyze about drone configuration and Wi-Fi connection in detail.	AN	2	13
13.	a Analyze the various control mechanisms used in drone flight operations.	AN	3	13
	Or			
	b Identify the key features of linked mobile devices and analyze their applications in enhancing user connectivity and productivity in everyday life.	AN	3	13

14. a Classify the most suitable type of drone for specific applications as, search and rescue, or aerial photography. AN 4 13
- Or
- b Analyze the drones in filming and panoramic picturing in detail. AN 4 13
15. a Apply the key aviation regulations that govern the operation of drones in your country. AP 5 13
- Or
- b Identify the methods to assess the impact of drone miniaturization on the regulatory landscape and privacy concerns? AP 5 13

PART – C (Marks 1*15 = 15)

Q.No		Questions	BLT	CO	Marks
16.	a	Design a the detailed construction and testing from below case study. Agriculture purpose for drones with suitable diagram and program	AN	4	15
		Or			
	b	Design a system for a humanitarian aid mission where drone swarms are used to deliver medical supplies to hard-to-reach areas. Consider factors such as coordination, safety, and resource allocation.	CR	5	15