

Model Question Paper-1 with effect from 2023-24 (CBCS Scheme)

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**Third Semester B.E. Degree Examination
UNMANNED AERIAL VEHICLES**

TIME: 03 Hours**Max. Marks: 100**

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

Module – 1			Marks	L	C
Q.1	(a)	Brief the history of Aviation Systems	10	L1	CO1
	(b)	Provide a summary of Unmanned Aerial Vehicles Systems	10	L2	CO1
OR					
Q.2	(a)	Explain Line of Sight and Ground Control Station	10	L2	CO1
	(b)	Explain the applications of UAV	10	L2	CO1
Module – 2					
Q.3	(a)	Write a short note on the Basic Aerodynamic Equations	10	L2	CO2
	(b)	Define the term "Aircraft Polar" and its significance in aerodynamics	10	L2	CO2
OR					
Q.4	(a)	Explain the concept of total air vehicle drag and its components	10	L3	CO2
	(b)	What are the different ranges in Aircraft, Jet-driven Aircraft, Guiding Flight	10	L2	CO2
Module – 3					
Q.5	(a)	Provide an overview of Avionics Hardware and its role in modern aircraft	10	L2	CO3

	(b)	Define the concept of stability in aviation and its significance	10	L3	CO3
OR					
Q.6	(a)	Define lateral stability and its significance in aircraft control	10	L2	CO3
	(b)	What is the purpose of autopilots in aircraft, and how do they contribute to flight operations?	10	L2	CO3
Module – 4					
Q.7	(a)	Provide an overview of propulsion systems in aircraft	10	L2	CO4
	(b)	Identify and explain the primary sources of power used in aviation	10	L2	CO4
OR					
Q.8	(a)	Define loads in the context of aircraft structures	10	L3	CO4
	(b)	Explain the use of resin materials in aircraft construction	10	L2	CO4
Module – 5					
Q.9	(a)	Explain the significance of air vehicles and payload control in unmanned systems	10	L3	CO5
	(b)	What types of sensors are commonly used in reconnaissance and surveillance payloads?	10	L3	CO5
OR					
Q.10	(a)	What are the fundamental functions of data-link systems in communication payloads?	10	L2	CO5
	(b)	Explain the role of recovery systems.	10	L2	CO5
OR					

