



Fifth Semester B.E./B.Tech. Degree Examination, June/July 2025  
**Unmanned Aerial Vehicles – Basics and Applications**

Max. Marks: 100

- Note:*
1. Answer any FIVE full questions, choosing ONE full question from each module.
  2. M : Marks , L: Bloom's level , C: Course outcomes.
  3. Assume missing data suitably.

Module – 1			M	L	C
Q.1	a.	Write a short note on Aviation History of UAV system.	10	L1	CO1
	b.	Write a short note on classes and missions of UAV.	10	L1	CO1
<b>OR</b>					
Q.2	a.	Explain fundamentals of UAV's.	10	L2	CO1
	b.	Explain with sketch very small and small UAV's.	10	L3	CO1
<b>Module – 2</b>					
Q.3	a.	Write a short note on forces on Air vehicles.	10	L3	CO2
	b.	Write a short note on Aircraft polar.	10	L3	CO2
<b>OR</b>					
Q.4	a.	Explain the concept of real wing and air plane.	10	L3	CO2
	b.	Explain with sketch Induced drag.	10	L3	CO2
<b>Module – 3</b>					
Q.5	a.	Explain with sketch of longitudinal stability of the air craft.	10	L2	CO3
	b.	Write a short note on lateral stability and dynamic stability.	10	L3	CO3
<b>OR</b>					
Q.6	a.	Explain Aerodynamic control and pitch control.	10	L2	CO3
	b.	Write a short note on Autopilots.	10	L3	CO3
<b>Module – 4</b>					
Q.7	a.	Explain with sketch of thrust generation of the aircraft.	10	L2	CO4
	b.	Write a short note on powered lift of the Aircraft.	10	L3	CO4
<b>OR</b>					
Q.8	a.	Explain with sketch 4 stroke cycle petrol engine.	10	L2	CO4
	b.	Differentiate between four stroke engine and two stroke engine.	10	L3	CO4
<b>Module – 5</b>					
Q.9	a.	Explain with block diagram of MPCs.	10	L2	CO5
	b.	Write short note on elements of a LAN.	10	L3	CO5
<b>OR</b>					
Q.10	a.	Explain OSI standard of the aircraft.	10	L2	CO5
	b.	Write a short note on Bridges and Gateways of the aircraft.	10	L3	CO5

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