Seat No.:	Enrolment No
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-V EXAMINATION - WINTER 2015**

Subject Code: 150101 Date: 15/12/2			
_		Name: Flight Mechanics	
	Time: 10:30am to 1:00pm Total Marks: 70		
Instru	1. 2.		
Q-1	A	Define with respect to Aeronautical terminology. (1)Angle of Attack (2) Angle of Incidence (3) Centre of Pressure (4) Aerodynamic Centre (5) Centre of Gravity (6) Static Margin (7) Tail Moment Arm.	07
	В	Discuss effect of thrust/weight ratio on flight performance.	07
Q-2	A B	$\varepsilon$	07 07
	В		07
Q-3	A B		07 07
	A B	Discuss importance of lift enhancement devices used in aircraft.	07 07
Q-4	A B	Classify different types of stall with neat sketch.  Differentiate between stick free and stick fix stability.  OR	07 07
	A	Discuss effect of high wing, low wing and mid wing configuration on flight stability.	07
	В	·	07
Q-5	A B		07 07
	A B	Draw and explain vector diagram of a flight during climb.  With neat sketch explain why a glider does not require thrust during glide.  ***********************************	07 07