GBGS SCHEME

USN	I v		17AE831

Eighth Semester B.E. Degree Examination, July/August 2022 Flight Testing

Time: 3 hrs. Max. Marks: 100

	N	ote: Answer any FIVE full questions, choosing ONE full question from each	module.
		Module-1	
1	a.	Explain the techniques for minimizing errors related to flight testings.	(10 Marks)
	b.	Explain planning of flight test instrumentations.	(10 Marks)
		OR	
2	a.	Explain the different instruments used for measuring acceleration.	(10 Marks)
	b.	Explain the measurement of static and total pressure.	(10 Marks)
		Module-2	
3	a.	Explain climb performance test methods.	(10 Marks)
	b.	What are the tests methods used for take-off and landing test?	(10 Marks)
		OR OR	
4	a.	Explain the primary limitations on turning performance of an airplane.	(10 Marks)
	b.	Explain flight test technique for speed power test of a jet aircraft.	(10 Marks)
		Module-3	
5	a.	What are the flight path stability and speed stability?	(10 Marks)
	b.	What are flight test methods for evaluating maneuvering stability?	(10 Marks)
		OR	
6	a.	Explain stick free stability methods.	(10 Marks)
	b.	Explain the data reduction techniques.	(10 Marks)
		Module-4	
7	a.	Explain coupling between rolling and yawing moments.	(10 Marks)
	b.	Explain definition of roll stability and adverse yaw effects.	(10 Marks)
		OR	
8	a.	Explain steady heading slide slip.	(10 Marks)
	b.	Explain Aileron reversal regulations.	(10 Marks)
		Module-5	
9	a.	Explain the Copper-Harper scale for handling qualities of aeroplanes.	(10 Marks)
	b.	Explain Stall and Spin regulations.	(10 Marks)
		OR	
10	a.	Explain spin build up and spin recovery techniques.	(10 Marks)
	1		(10 Mandra)

Explain the test techniques for vibration and buffering.

(10 Marks)