

JAIN COLLEGE OF ENGINEERING & RESEARCH, BELAGAVI Programme: Mechanical Engineering

ASSIGNMENT-III

Semester: 4

Course: FLUID MECHANICS

Code: 18ME43

Date: 05/08/2022 Max. Marks:10

Submission date:16/08/2022

Course Coordinator: Prof. Karthik Ramadurg

Q. No.	Questions	со	R.B.T. Level
1	With a neat sketch explain the boundary layer separation. explain the methods to control it	4	L2,L3
2	Sketch and explain streamline and Bluff body	4	L2, L3
3	A kite weighing 9.8N and having an area 1m ² make an angle of 7 ⁰ to horizontal when flying in a wind of 36km/hr. if pull on the string attached to the kite is 49N and it is inclined to the horizontal at 45 ⁰ . calculate the lift and drag coefficient. take density for air 1.2kg/m ³	4	L2, L3
4	What are the need of CFD. mention its merits and demerits	5	L2

Course coordinator

√√ HoD

Figure 2.2.2.3 : Sample copy of assignment