

Instructions for EN 310 (IC Engine Lab)

- Soft copy of the manual will be uploaded on moodle. Each group should print and carry hard copy for the lab.
- Shoes are compulsory. No loose clothing or shorts.
- Error analysis should be performed and reported for each experiment, wherever applicable.
- Try and get adequate number of data points (recommended is at least 3 data points) for each experiment.
- Marks distribution for the lab:
 - Insem = 70% (100 marks)
 - 10 marks for each experiment (2 marks for attendance, 2 marks for raw data signed by the TA, and 6 marks for the report)
 - Hard copy of the journal should be submitted in the instructor's office (Research space 9, 6th Floor, new DESE Building) on the following Monday by 1 p.m.
 - Endsem = 30%

List of Experiments

Expt. No.	Title of the Experiment	Venue	TA Allotted
E1.	To perform load test on diesel engine with Diesel	CERF Lab	Shweta Kamat (153170003)
E2.	To perform Morse test on multi-cylinder petrol engine; To conduct performance test at constant throttle position	IC Engine Lab (ME Dept.)	Shivam (163170005)
E3.	To measure flame speed	IC Engine Lab (ME Dept.)	Satyaki Chandra (174176002)
E4.	To measure calorific value of gaseous fuel by gas calorimeter	URJA Lab	Sarthak Mittal (14D170018)
E5.	To measure viscosity of lube oils and determine the viscosity index	URJA Lab	Onkar Bhalchandra Gadade (14D170012)
E6.	Biodiesel Synthesis	URJA Lab	Atish Sonawane (14D170014)
E7.	Gasification	Outside CERF Lab	Shubham Patil (14D170015)
E8.	To test fuel properties (Flash Point, Pour point and Aniline Point)	URJA Lab	Shashwata Ghosh (154176002)
E9.	Boiler Efficiency Testing	Forbes Marshall Lab	Nikhil Dilip Khedkar (184176004)
E10.	Pump and Motor Efficiency Testing	URJA Lab	Kalim Uddeen (184170002)

CERF Lab: Cummins Engine Research Facility Lab

Schedule of Experiments

Date	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9
1st Feb 2019	E1	E2, E3	E3, E2	E4	E5	E6	E7	E8	E10
8th Feb 2019	E2, E3	E4	E5	E2, E3	E3, E2	E7	E8	E6	E1
15th Feb 2019	E4	E5	E6	E10	E8	E2, E3	E3, E2	E1	E7
1st Mar 2019	E5	E6	E7	E8	E4	E10	E1	E2, E3	E3, E2
8th Mar 2019	E6	E7	E8	E5	--	E1	E10	E10	E4
15th Mar 2019	E7	E8	E10	--	E1	E5	E4	--	E6
22nd Mar 2019	E8	E10	--	E1	E6	E4	--	E7	E5
29th Mar 2019	E10	--	E1	E6	E7	E8	E5	E4	--
5th Apr 2019	--	E1	E4	E7	E10	--	E6	E5	E8
12th Apr 2019	E N D – S E M E X A M								

Dates for Boiler Efficiency Testing Experiment (E9): 2nd February 2019 (Groups 4, 5 and 6), 9th February 2019 (Groups 7, 8 and 9), 16th February 2019 (Groups 1, 2 and 3). Please note that all these are Saturdays.

Student Groups

S. No.	Roll No.	Name	Group No.
1.	160110036	SARAF PUSHKAR UMESH	1
2.	15D170023	ONI MALHOTRA	2
3.	16D170002	CHAUBAL SOUMIL KISHOR	3
4.	16D170003	ANSARI MOHAMMAD RAZI MOHAMMAD REHAN	4
5.	16D170004	ARYAN AGAL	5
6.	16D170006	PRUTHVIRAJ SUNIL NETKE	6
7.	16D170007	KUMARESH RAMESH	7
8.	16D170008	TRISHANT ROY	8
9.	16D170009	DESHPANDE VARAD PRAMOD	9
10.	16D170010	MOHITE INDRAJEET NAGESH	1
11.	16D170011	MENON GOVIND RAJESH	2
12.	16D170012	AMLEKAR SHRVAN SHRIKRISHNA	3
13.	16D170013	KSHIRSAGAR PRANAV BAPU	4
14.	16D170014	VYANKTESH ISHWARCHANDRA NAGRE	5
15.	16D170015	CHITRANGNA BHATT	6
16.	16D170016	ANKIT S BATTISE	7
17.	16D170017	RAHUL KUMAR MEENA	8
18.	16D170018	PREMANSHU KUMAR SINGH	9
19.	16D170019	ADITI MAHAJAN	1
20.	16D170020	AAYUSH GARG	2
21.	16D170021	SOURABH SURAGE	3
22.	16D170022	MANOJ VISHWAKARMA	4
23.	16D170023	ABHISHEK SISODIYA	5
24.	16D170025	ANSHUL MAHOR	6
25.	16D170026	SATYAPRAJNA SARTHAK SAHOO	7
26.	16D170027	PRABHAT RANJAN	8
27.	16D170029	KONDETI ISALAH BENEDICT	9
28.	16D170031	ANANT TARANIYA	5