**BBDNITM**

**MECHANICAL DEPARTMENT**

**SESSION (2018-19)**

**Subject- IC Engine and Compressors [RME-051]**

**Assignment no. 4**

1. Define Supercharging And Give Its Advantage And Disadvantage. Give Limitation Of Supercharging.
2. Which are the supercharging limitation for SI engine and CI engine?
3. Explain method of supercharging.
4. What do you mean by turbo charging? Write advantage and limitation of turbo charging.
5. What do you understand by knock in S.I. Engines? Explain this phenomenon? How does the knock in S.I. Engines differ from the knock in C.I. Engines?
6. Explain with neat sketch Combustion stages in S. I. Engine. Also define Auto ignition Temperature.
7. What are basic requirements of good spark ignition engine combustion chamber and general principles of spark ignition combustion chamber?
8. Explain the phenomenon of diesel knock. Compare it with the phenomenon of detonation in SI engine.
9. Explain with neat sketch splash lubrication system.
10. What are the different methods of cooling I.C. engine? Compare different methods.
11. Explain the importance of engine testing.
12. In a Morse test with four cylinder four stroke petrol engine, the following data were obtained for a particular setting and speed.

Brake power with all cylinders working = 32.0

Brake power with no. 1 cylinder cut out = 21.6

Brake power with no. 2 cylinder cut out = 22.3

Brake power with no. 3 cylinder cut out = 22.5

Brake power with no. 4 cylinder cut out = 23.0

Estimate the indicated power of the engine and its mechanical efficiency.