



# BMS

## INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

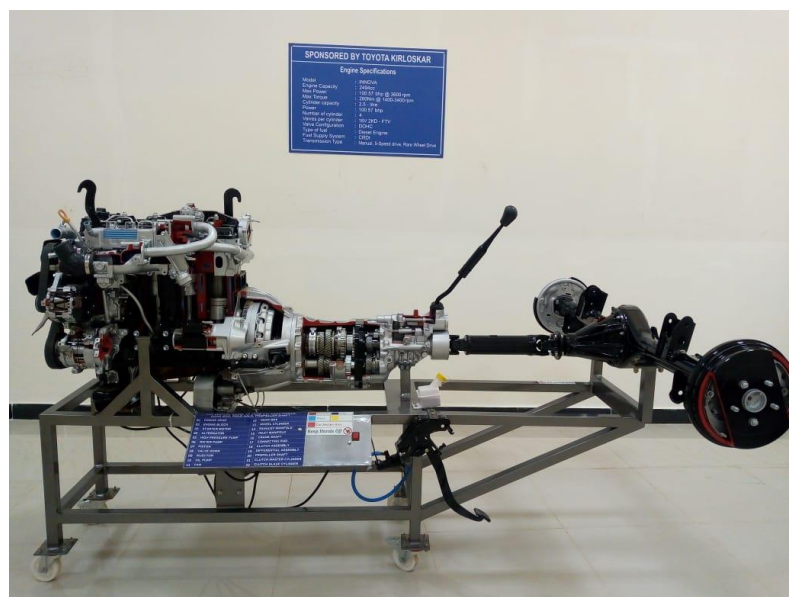
### DEPARTMENT OF MECHANICAL ENGINEERING

### Industries Supported Engine Laboratory

Engines Laboratory Supported by various Industries has been established in the Department of Mechanical Engineering. Engine and Gear box assembly unit have been sponsored by **Toyota Kirloskar Motors Pvt. Ltd.**, Multi Cylinder assemblies have been sponsored by **BMW India Pvt. Ltd.**, and **Volvo India Pvt. Ltd.**

Following are the objectives of Industries Supported Engine Laboratory:

1. To demonstrate various parts of an engine and working of multi cylinder 4 stroke CRDI diesel engine which is used in Innova model of Toyota Kirloskar Motors Pvt. Ltd (TKML).
2. To provide hands on training to students on engine assembly and dis-assembly of Innova model.
3. To provide hands training on assembling and dis-assembling of Innova model Engine gear box.
4. To demonstrate the various parts and working of BMW Twin power Turbo in-line Diesel Engine.
5. To demonstrate the various parts of multi cylinder turbocharged Volvo engine.
6. To perform combustion, performance and emission characteristics of fuels using single cylinder 4 stroke DI diesel engine.



Photos of the Engines and Gearbox assembly:

Cut section of Innova engine and transmission assembly of TKML.



Engine unit for Assembly and Disassembly. Gear box unit for Assembly and Disassembly.



View of Industries Supported Engine Laboratory

## Activity

Mrs S.Nithya Poornima, Assistant Professor of ME as a part of the OBE activity has organized a lab visit to show the working of I.C.Engines for the students of ISE II semester for the subject Elements of Mechanical Engineering on 24<sup>th</sup> April 2019. This activity enabled the students to perceive a better understanding of the concept by visually seeing the working of I.C.Engines This OBE activity has enabled the students to work on communications Skills (P10) and has given platform to visualise the concepts in a better perspective (P09)



The students being benefitted in understanding the concepts and helps in involving various senses to make learning permanent. It had developed interest in the learners and motivates them for their active participation. Any simple or complex skill becomes easy to understand through this demonstration