

**END SEMESTER EXAMINATION
AUTOMOBILE ENGINEERING ME-016
FINAL YEAR MECHANICAL**

TIME 3 Hrs

ATTEMPT ANY FIVE QUESTIONS

MAX MARKS 60

- 1) Explain the working of single plate clutch with neat sketch and describe mechanical clutch linkage.
- 2) Explain synchromesh gear box with neat sketch, showing the engagement of the cone surfaces and how dog teeth help in smooth engagement.
- 3) Explain with neat sketch the working of a single stage torque converter. What are the limitations of the torque converter?
- 4) Explain how different gear ratios are obtained with epicyclic gear train. Explain the working of Laycock overdrive with neat sketch.
- 5) Explain the working of a shock absorber with neat sketch, showing the operation of both the valves in it.
- 6) Explain the Tyre manufacture in detail , draw the diagram showing the various processes which go into tyre manufacture.
- 7) Explain what are the uses of proportioning valve, metering valve wheel cylinder and master cylinder cylinder with neat sketches