

DEPARTMENT: MECHANICAL SEMESTER: 4

SUBJECT NAME: KINEMATICS AND THEORY OF MACHINE

SUBJECT CODE: 3131906

FACULTY NAME: PROF. JIGNESH PATEL

ASSIGNMENT 3

- 1. Explain any five terminology of gear tooth with neat sketch.
- 2. Explain what is meant by the term "Interference" as related to toothed gears having profile? Discuss various methods used to avoid interference.
- 3. Explain epicyclic gear train with the help of neat sketch. Write its merits and demerits as compared to reverted and compound gear trains.
- 4. Explain any five terminology of gear tooth with neat sketch.
- 5. Enlist different types of gear train. Explain compound gear train with neat sketch. Also derive the equation of the velocity ratio for compound gear train.
- 6. What is gear train? Give classification of it and Explain epicyclic gear train in detail.
- 7. Differentiate between involute and cycloidal profile of gear teeth.
- 8. Determine the velocity ratio of differential gear box
- 9. Comparison between Involute and Cycloidal tooth profile.
- 10. Fundamental Law of Gearing.

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