Assignment No-1 (Design of Spur Gear)

2007-08

1. Write a short note on lubrication of gears.

2. Advantages and disadvantages of helical gear over spur gear.

2008-09

1. Why involute gears are more commonly used as compared to the cycloidal gears? Discuss briefly.

2009-2010

1. Explain the phenomenon of interference in involute gears. How is it avoided?
2. Write short note on Gear manufacturing methods
3. Write short note on Gear tooth profiles

2010-1 I

1. Briefly discuss the following :
   - **(i)** System of gear teeth
   - **(ii)** Pressure angle
   - **(iii)** Interference in gears

2011-12

1. Describe the law of gearing. Why involute teeth are preferred over cycloidal teeth? What is the reason of interference in gears and how it can be avoided?

2012-13

1. Derive the expression of beam strength of a spur gear tooth.

2013-14

2. Briefly discuss the following :
   - (i) Pressure angle.
   - (ii) Failures in-gear tooth and their causes.

3. What condition must be satisfied in order that a pair of spur gears may have a constant velocity ratio?

2014-15

1. Write the expressions for static, limiting wear load dynamic load for spur gears and explain the various terms used there in.

Assignment No-1 (Design of Spur Gear)

2015-16

1. What do you understand by beam strength of gear tooth?

2016-17

1. Explain the different causes of gear tooth failures and suggest possible remedies to avoid such failures.