UNIT II SPUR GEARS AND HELICAL GEARS

1 State law of gearing and summarize how interference can be avoided in gear.
2 Name the profiles of spur gear. List the various methods of manufacturing gears.
3 Describe the following (i) Pressure angle (ii) Diametrical pitch iii) module
4 List the different types of gear mechanism.
5 Describe backlash. What factors influence backlash?
6 Explain undercutting in gears.
7 Why is gear tooth subjected to dynamic load?
8 Classify the main types of gear tooth failure?
9 Why dedendum value is more than addendum value?
10 Integrate the materials commonly used for gears.
11 Differentiate involute and cycloid profiles
12 Mention the advantages of non metallic gears.
13 How does failure by pitting happen in gears?
14 How number of teeth affects the design of gears?
15 Specify the conditions based on which gear cutters are selected?
16 Identify the forces and stresses that act on spur gear tooth? give their expressions
17 Label (a) addendum (b) flank in simple sketch of a gear tooth
18 State the advantages and disadvantages of helical and herringbone Gear.
19 Name four important elements in chain
20 Define chordal action in chain drives? Name a company that produces driving chain.