

DEPARTMENT OF MECHANICAL ENGINEERING

B.Tech (6th Semester Examination)

Course: Machine Design-II

Maximum Marks: 10

Assignment2

Q.1 Design a full depth 20 degree teeth gear for a machine for a chipper used in plywood industry manufacturing plant . The design requirements and other data is given below:

Power source is electrical motor drive running at 1500 rpm, output speed of gear = 430 rpm to 480 rpm.

Power transmitted is 2.5 KW

Compact design is required

Fatigue life of 16 million cycles is required

Design gear drive.

10
CO3

*Total= Score * Weightage(10)