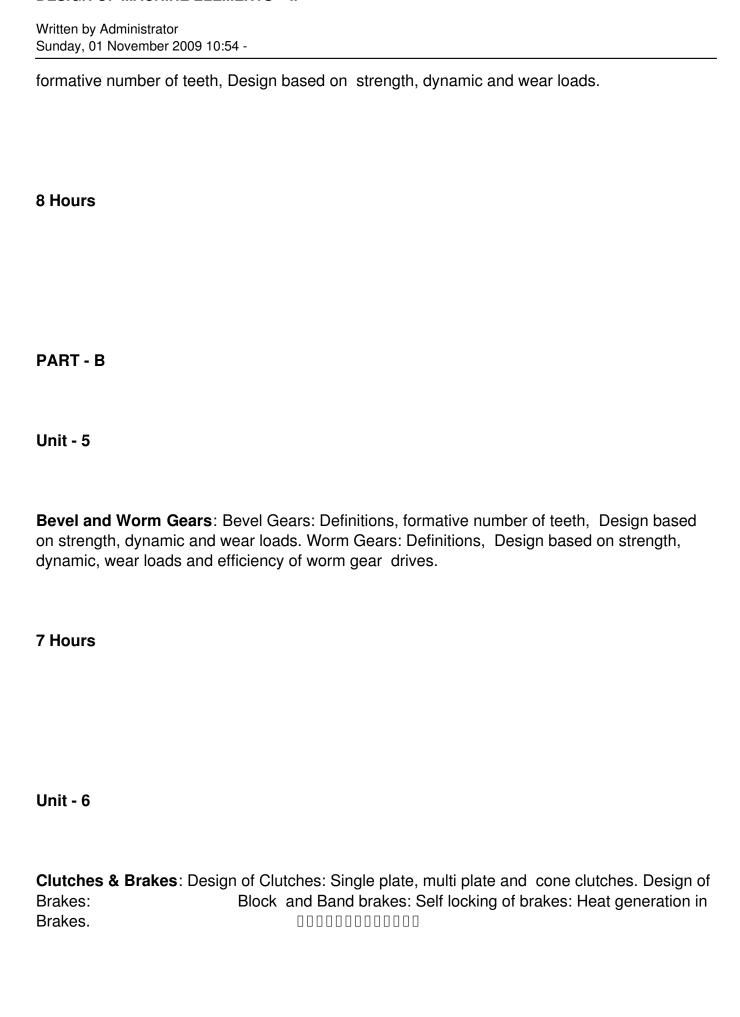
:

Written by Administrator Sunday, 01 November 2009 10:54 -
Subject Code
06ME61
IA Marks
25
No. of Lecture Hrs./ Week
04
Exam Hours

Written by Administrator Sunday, 01 November 2009 10:54 -
03
Total No. of Lecture Hrs.
52
Exam Marks
100
PART - A
Unit - 1
Curved Beams : Stresses in curved beams of standard cross sections used in crane hook, punching presses & clamps, closed rings and links.

Written by Administrator Sunday, 01 November 2009 10:54 -5 Hours Unit - 2 Cylinders & Cylinder Heads: Review of Lame's Equations; compound cylinders, stresses due to different types of fits, cylinder heads, flats. 5 Hours Unit - 3 Springs: Types of springs - stresses in Helical coil springs of circular and non-circular cross sections. Tension and compression springs, springs under fluctuating loads, - Energy stored in springs, Torsion, Belleville and Rubber springs. Leaf Springs: Stresses in leaf springs. Equalized stresses, 8 Hours Unit - 4

Spur & Helical Gears: Spur Gears: Definitions, stresses in gear tooth: Lewis equation and form factor, Design for strength, Dynamic load and wear load. Helical Gears: Definitions,



Written by Administrator Sunday, 01 November 2009 10:54 -
7 Hours
Unit - 7
Lubrication and Bearings : Lubricants and their properties, Mechanisms of Lubrication, Bearing modulus, coefficient of friction, minimum oil film thickness, Heat Generated, Heat dissipated, Bearing Materials, Examples of journal bearing and thrust bearing design.
7 Hours
Unit - 8
Belts, Ropes and Chains : Flat belts: Length & cross section, Selection of V-belts, ropes and chains for different applications.
5 Hours
Design Data Hand Books:

Written by Administrator Sunday, 01 November 2009 10:54 -

- 1. **Design Data Hand** Book, K. Lingaiah, McGraw Hill, 2nd Ed. 2003.
- 2. **Design Data Hand Book**, K. Mahadevan and K.Balaveera Reddy, CBS Publication
 - 3. **Machine Design Data** Hand Book, H. G. Patil, Shri Shashi Prakashan, Belgaum.
 - 4. P.S.G.Design Data Hand Book-PSG College of Tech Coimbature

Text Books:

- 1. **Mechanical Engineering Design:** Joseph E. Shigley and Charles R. Mischke. McGraw Hill International Edition, 6 th Edition 2003.
- 2. **Design of Machine Elements:** V.B. Bhandari, Tata McGraw Hill Publishing Company Ltd., New Delhi, 2

Reference Books:

- 1. **Machine Design**: Robert L. Norton, Pearson Education Asia, 2001.
- 2. **Machine Design:** Hall, Holowenko, Laughlin (Schaum's Outlines series) Adapted by S. K. Somani, Tata McGraw Hill Publishing Company Ltd., New Delhi, Special Indian Edition, 2008.
- 3. **Machine Design:** A CAD Approach: Andrew D Dimarogonas, John Wiley Sons, Inc, 2001.