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**B.Tech. MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

June, 2014

BIMEE-006 : TRIBOLOGY

Time : 3 hours

Maximum Marks : 70

Note : *Answer any five of the following questions. Each question contain equal mark.*

1. State and explain the laws of frictions. Also describe the working of cross - cylinder arrangement for measurement of friction. **14**
2. Explain the effects of surface roughness on wear. Differentiate between waviness and surface roughness. Explain the method used for the measurement of surface roughness. **14**
3. What is boundary lubrication ? Explain in detail with the help of sketches. **14**
4. State the assumptions made in derivation of Reynold's equation and also derive the Reynold's equation in two dimensions. **14**
5. Define Wear ? Discuss various techniques that are used for its measurement. **14**

6. Explain the construction and working of thrust bearing with the help of neat diagram. 14
7. Write short notes on the following : 14
- (a) Dry Friction.
 - (b) Wear Resistance Materials.
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