# MGM’S College of Engineering, NANDED.

**Department of Mechanical Engineering**

**QUESTION BANK FOR TEST-** **I**

ACADEMIC YEAR 2013-14, SEM – II

Class: S.E. (Mech.) Subject: TOM Date:15/02/2014

Duration : 01 Hr. Max. Marks: 20

Q.1 What is a machine? Giving example, differentiate between a machine and a structure.

 (05)

Q.2 Explain different kinds of kinematic pairs giving example for each one of them. (05)

Q.3 What is the significance of degrees of freedom of a kinematic chain when it functions as a mechanism? Give examples. (05)

Q.4 Sketch and explain the inversions of single slider crank chain. (05)

Q.5 Sketch and explain the inversions of double slider crank chain. (05)

Q.6 Sketch and explain the inversions of four bar mechanism. (05)

Q.7 State and prove the ‘Aronhold Kennedy’s theorem’ of three instantaneous centers. (05)

Q.8 Explain the three types of instantaneous centers for a mechanism. (05)

Q.9 Problems on relative velocity method. (10)

Q.10 Problems on I-centre method. (10)

Q.11 Find the acceleration in mechanism. (10)

Q.12 Sketch and explain the working of two different types of quick return mechanisms, Give examples of their applications. (10)

 **Subject Incharge**

 **Mr. V.N. Kamble**