

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL  
UNIVERSITY, LONERE - RAIGAD -402 103  
Mid Semester Examination - October - 2017**

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**Branch: M.Tech (Mechanical Engineering) Sem.:- I**

**Subject with Subject Code:- Mechanical Vibration MME 1103**

**Paper Solution and Scheme of Marking**

**Q.No.1 Attempt any one of the following (08)**

- a.) Explanation of Rayleigh's Method and procedure for finding natural frequency. (08)
- b.) Explanation of Holzer's Method and procedure for finding natural frequency. (08)

**Q.No. 2 Attempt any three of the following: (12)**

- a.) Statement and proof of Maxwell's reciprocal theorem. (04)
- b.) Derivation of Longitudinal vibration of bars. (04)
- c.) Explanation of Transient vibration and its Give examples. (04)
- d.) Derivation of Duhamel's integral. (04)

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