Reg. No.					
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MANIPAL ACADEMY OF HIGHER EDUCATION

MDS PART - I (ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS) DEGREE EXAMINATION – NOVEMBER 2019

SUBJECT: PAPER I - APPLIED BASIC SCIENCES

Tuesday, November 12, 2019

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Max. Marks: 100

- & Write legibly.
- Ø Draw diagrams wherever necessary.
- 1. Discuss in brief the Etio-pathology of TMD.
- 2. Write in brief about the cells involved in bone metabolism.
- 3. Discuss ANOVA.
- 4. Write about bending tests used in Orthodontics.
- 5. A 46-year-old female patient referred for your specialist advice has been undergoing orthodontic treatment for the last 1 year however the rate of tooth movement is abnormally slow. Her physician has prescribed OSTEOFOS (Alendronate). Discuss the possibilities with an explanation of the biologic basis for the same.
- 6. Write about Systematic Reviews in Orthodontics.
- 7. Discuss in brief about the properties and orthodontic applications of Beta Titanium.
- 8. Write in brief about PAR and IOTN.
- 9. Write about the role of tongue in etiology of malocclusion and relapse.
- 10. Write in brief about growth rotations.

 $(10 \text{ marks} \times 10 = 100 \text{ marks})$