

## MANIPAL UNIVERSITY

## FINAL BDS PART – I DEGREE EXAMINATION – JANUARY 2013

SUBJECT: ORTHODONTICS (ESSAY)  
(OLD REGULATION)

Saturday, January 12, 2013

Time: 14:30 – 17:00 Hrs.

Maximum Marks: 80

1. Write in detail about the histology of tooth movement and the various theories of tooth movement.

(10 marks)

**2. Write short notes on:**

- 2A. Unfavorable sequelae of malocclusion and jacksons triad.
- 2B. Post natal development of the mandible.
- 2C. Various methods of studying growth.
- 2D. Andrews six keys of normal occlusion.
- 2E. Ackerman proffit system of classification.
- 2F. Etiology, phases and effects of the thumb sucking habit.
- 2G. Orthodontic study models.
- 2H. Skeletal maturity assessment using cervical vertebrae.
- 2I. Proximal stripping.
- 2J. Fr-2.

(5×10 = 50 marks)

**3. Write short answers on:**

- 3A. Wolff's law of transformation of bone.
- 3B. Curve of spee.
- 3C. Characteristic features of infantile swallow.
- 3D. Definition of couple with one example.
- 3E. Definition of reciprocal anchorage with one example.
- 3F. Intermittent and interrupted force.
- 3G. Enumerate the factors considered while designing a spring.
- 3H. Formulas to calculate the overall Boltons excess and anterior Boltons excess.
- 3I. Clip on retainer.
- 3J. Flux and antflux.

(2×10 = 20 marks)



**MANIPAL UNIVERSITY****FINAL BDS PART – I DEGREE EXAMINATION – JANUARY 2013****SUBJECT: ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS (ESSAY)  
(NEW REGULATION)**

Saturday, January 12, 2013

Time: 14:15 – 17:00 Hrs.

Maximum Marks: 60

1. Define and classify anchorage. Discuss in detail about the types of anchorage and planning anchorage.

(1+3+3+3 = 10 marks)

2. Write in detail about the etiology, clinical features and management of open bite.

(3+3+4 = 10 marks)

**3. Write Short Notes on:**

3A. Trajectories of force.

3B. Twin Block

3C. Adams Clasp

3D. Serial Extraction

3E. Jacksons Triad

3F. Catlans Appliance.

3G. Theories of tooth movement.

3H. Methods of studying growth.

3I. Orthodontic Brackets.

3J. Cervical Vertebrae Maturation Index.

(4×10 = 40 marks)

