

# Question Paper

Exam Date & Time: 22-Jul-2024 (02:15 PM - 05:00 PM)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**FINAL BDS PART - I DEGREE EXAMINATION - JULY 2024**  
**SUBJECT: ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**  
**(IR BATCH)**

**Marks: 60**

**Duration: 165 mins.**

**Answer all the questions.**

**Draw diagrams and flowcharts wherever appropriate.**

**Essay Question:**

- 1) Classify Anchorage. Explain in detail the sources of anchorage. (2+8 = 10 marks)
- 2) Define Oral habits. Explain in detail Tongue thrusting habit. (2+8 = 10 marks)
- 3) **Short Notes:** (4 marksx10 = 40 marks)
  - 3A) Plan the steps in the design and components of Frankel 2 appliance.
  - 3B) List the Theorems of retention.
  - 3C) List the reference planes and Sketch the reference planes used in Simon's Classification
  - 3D) A 10 year old male reports to the clinic with a  $SNA = 80^\circ$  and  $SNB = 87^\circ$  and a concave profile and posterior divergence. His CVMI is stage 2. Diagnose the problem and formulate treatment plan.
  - 3E) Sketch the Scammon's growth curve with explain significance.
  - 3F) Categorize the Principles of Welding
  - 3G) Discuss the etiology of Cleft lip and palate.
  - 3H) During fixed orthodontic treatment, a force of 150 grams applied on maxillary right canine moves the tooth about 1mm/month. In a 16-year old male patient, a force of 200 gm was applied during canine retraction, and the tooth movement observed was 0.3 mm. Analyse and interpret the clinical scenario and the reason for underlying phenomenon.
  - 3I) Define Preventive Orthodontics and outline the various clinical preventive procedures.
  - 3J) Identify the Indications and Contraindications of Rapid Maxillary Expansion

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