

# Question Paper

Exam Date & Time: 02-Jan-2021 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST BDS DEGREE EXAMINATION - DECEMBER 2020/JANUARY 2021  
SUBJECT: DENTAL ANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY

Marks: 60

Duration: 165 mins.

Answer all the questions.

Draw diagrams wherever necessary

1. Enumerate the stages in the lifecycle of an ameloblast. Describe in detail three hypocalcified structures seen in enamel. Describe the alteration seen in enamel due to excess fluoride intake.

(2+6+2 = 10 marks)

2. Write in detail the buccal, lingual, mesial, distal and occlusal morphology of mandibular first premolar. Mention the features that differentiate it from mandibular second premolar.

(2+1+2+1+2+2 = 10 marks)

3. **Short notes**

3A) Describe the contents of the dentinal tubule

3B) Enumerate the principal fibers of the periodontal ligament. Enumerate the resorptive cells seen within the periodontal ligament

3C) Define - Cusp, Cingulum, Tubercle and Mamelon

3D) Differences between maxillary and mandibular canine

3E) Differences between woven bone and lamellar bone

3F) Describe the structure and function of striated duct (10)

3G) Enumerate the functions of Maxillary sinus. Name the type of epithelium that lines the maxillary sinus.

3H) Describe the occlusal aspect of Deciduous Maxillary first molar

3I) Discuss the hormones and their actions that increase the serum calcium level

3J) A child presents to the clinic with peg shaped lateral incisor. Discuss the physiologic stage in the development of tooth that has resulted in the alteration.

(4 marks × 10 = 40 marks)

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