

Marks: 60



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST BDS DEGREE EXAMINATION - APRIL 2024 SUBJECT: DENTAL ANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY (CASUAL BATCH)

Answer all the questions. Draw diagrams wherever necessary 1A) Enumerate the stages of life cycle of ameloblasts. (2) 1B) Discuss the hypocalcified structures of enamel. (6)1C) A 16-yr-old boy reported to the dental clinic with a chief complaint of sensitivity to cold beverages on upper left back tooth. Upon examination a mechanical defect was noticed in the cervical region of the buccal aspect of left maxillary molars. The patient upon further questioning revealed that he uses a hard-bristled toothbrush. Explain the defect that the patient is having? (2) 2A) Discuss in detail the morphological aspects of permanent maxillary canine. (8) 2B) Add a note on differentiating features between mandibular and maxillary canine. (2) 3) Write short notes on 3A) Tooth numbering systems. (4) 3B) Fossae and grooves on occlusal aspect of permanent mandibular first molar. (4) 3C) Morphological and histological differences between permanent and deciduous teeth. (4) 3D) Zones of pulp. (4) 3E) Principal fibres of periodontal ligament. (4) 3F) Histology of maxillary sinus. (4) 3G) Masticatory cycle. (4) 3H) A 25-year-old male patient visited the dental clinic for extraction of grossly decayed permanent maxillary second molar. During delivery of local anaesthesia in the palate, it was difficult for the dentist to inject, and patient had a slightly painful experience. Discuss the histology of hard palate and relate the histology of the palate with the pain experienced during injecting the anaesthesia. (4) 3I) Root formation in odontogenesis. (4) 3J) Myoepithelial cells. (4)

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Duration: 165 mins.