

24 DEC 2019

Examination

Seat No.

First Year BDS

Subject:- Oral & Dental Anatomy, Physiology & Histology

Code: 9524

Duration: 3 hours

Maximum Marks: 70

Note:

All questions are compulsory

Figures on right side indicate marks

Draw diagrams wherever necessary

SECTION I

1) Describe the morphology of permanent maxillary first premolar with appropriate diagrams. (10)

2) Attempt any one out of the two. (10)

Explain various tooth notation systems with examples

OR

Describe the chronology of primary and permanent teeth

3) Write short notes on any three out of four (09)

1) Draw a neat labeled diagram of longitudinal section of tooth with its supporting structures.

2) Explain functional importance of incisors and canines

3) Explain the terms with diagrams: Root trunk, Cingulum and Oblique ridge

4) Explain the concept of "Maxillary molar primary cusp triangle"

4) Multiple choice questions: attempt all (06)

1. By what age the child would have his/her complete set of deciduous dentition?

a. 2 ½ - 3 years

b. 1 - 2 years

c. 0 - 1 ½ years

d. 3 ½ - 6 years

2. Find out the **FALSE** statement about mandibular second premolar with two cusps:

a. It has round shaped occlusal outline

b. It has single root and single root canal

c. It is developed from five lobes

d. It has two cusps viz. buccal and lingual

3. The two buccal cusps of permanent mandibular first molar are separated by:

a. Central developmental groove

b. Mesio Buccal developmental groove

c. Distobuccal developmental groove

d. Transverse groove of oblique ridge

4. The mucosa of lower lip receives its blood supply by following artery:

a. Mental artery

b. Inferior alveolar artery

c. Buccal artery

d. Facial artery

5. Which of the following is the remnant of the Meckel's cartilage?

a. Temporomandibular ligament

b. Fibrous capsule of TMJ

c. Sphenomandibular ligament

d. Stylomandibular ligament

6. Find out the **CORRECT** locations of primate spaces:

a. In midline between central incisors

b. Mesial to upper incisors & distal to lower incisors

c. Mesial to upper and lower canines

d. Mesial to upper canines & distal to lower canines

## SECTION II

- 1) With diagrams, describe the anatomy and histology of dental pulp. (10)

- 2) Attempt any one out of the two (10)

Discuss the chemical composition and microscopic structure of cementum.

OR

Discuss in detail the development of tongue.

- 3) Write short notes on any three out of four (09)

- 1) Describe minor salivary glands and their importance in brief
- 2) Describe resting lines and reversal lines
- 3) Describe the functions of Periodontal ligament in brief
- 4) Describe ameloblasts and odontoblasts in brief

- 4) Multiple choice questions: attempt all (06)

- Following is the main reason for changes in the shape of enamel organ during odontogenesis:
  - Proliferation of ectodermal cells
  - Proliferation of ectomesenchymal cells
  - Pressure exerted by ectomesenchymal cells
  - Differential growth of its own cells
- Average number of perikymata in the cervical region of the tooth is:
  - 0
  - 10
  - 30
  - 70
- Find out the **FALSE** statement about mantle dentin when compared to circumcupal dentin.
  - It is more mineralized
  - It has von Korff's fibers
  - It has fewer defects
  - It undergoes globular mineralization
- Eruption of the following permanent teeth is **NOT** guided by Gubernacular cord.
  - Incisors
  - Canines
  - Premolars
  - Molars
- The nonkeratinized and keratinized epithelia differ in all of the following aspects **EXCEPT**,
  - Number of total cell layers
  - Turnover rate
  - Number of tonofilaments
  - Number of basal cell layers
- Following represents the thinnest wall of the maxillary sinus:
  - Towards lateral wall of nose
  - Towards the infratemporal region
  - Towards the alveolar process
  - Towards the zygomatic arch