

Which of the following describes enamel where prisms appear twisted and interwoven around each other at the cusps or incisal edges?

- A. Hunter-Schreger bands
- B. Enamel lamellae
- C. Enamel tufts
- D. Gnarled enamel

Answer: D. Gnarled enamel

A 10-year-old girl presented with a history of severe illness and high fever during tooth development. Later, accentuated incremental lines were observed in dentin. These lines are known as:

- A. Neonatal line
- B. Von Ebner lines
- C. Tome's granular layer
- D. Contour lines of Owen
- E. Retzius lines

Answer: D. Contour lines of Owen

4- No basal lamina is found between the cells of the:

- a- Stratum intermedium and inner enamel epithelium.
- b- Outer enamel epithelium and the dental sac.
- c- Inner layer of Hertwig's sheath and the dental papilla.
- d- Inner enamel epithelium and the dental papilla.

Ans:A

The hydroxyapatite crystals of enamel are long and ribbon-like, measuring:

- A) 25-30 nm in width and 60-70 nm in thickness.
- B) 60-70 μ m in width and 25-30 μ m in thickness.
- C) 60-70 nm in width and 25-30 nm in thickness.
- D) 60-70 mm in width and 25-30 mm in thickness.

Ans:c

A 45-year-old patient visited the dental clinic complaining of localized periodontal pocketing. During a radiographic and clinical examination of the maxillary first molar, you noticed a small, radiopaque, spherical mass located specifically in the furcation area. The mass is composed of enamel and is firmly attached to the root surface. What is the most likely diagnosis?

- A) Dental Calculus.
- B) Cementicle.
- C) Enamel Pearl.
- D) Pulp Ston

Ans:C

The number of enamel prisms (rods) varies depending on the type of tooth. Which of the following is correct regarding their distribution?

- A) 5 million in maxillary molars and 12 million in mandibular incisors.
- B) 5 million in mandibular incisors and 12 million in maxillary molars.
- C) 5,000 to 12,000 prisms across all human teeth.
- D) 12 million in mandibular incisors and 5 million in maxillary molars.

ans b

In the maturation proper phase, if ameloblasts modulate once every 8 hours, how many complete modulation cycles would they yield per day?

- A) One complete modulation cycle.
- B) Two complete modulation cycles.
- C) **Three complete modulation cycles.**
- D) Eight complete modulation cycles.

Ans:C

Hunter-Schreger bands are best demonstrated and visualized using which of the following types of microscopy?

- A) Phase-contrast microscopy.
- B) Scanning electron microscopy (SEM).
- C) Reflected light microscopy.
- D) Transmission electron microscopy (TEM).

Ans : C

Which of the following represents the correct chemical composition of Dentin by weight?

- A) 96% inorganic material, 1% organic material, and 3% water.
- B) 45% inorganic material, 33% organic material, and 22% water.
- C) 70% inorganic material, 20% organic material, and 10% water.
- D) 50% inorganic material, 25% organic material, and 25% water.

ans:C

Question:

The dental sac (follicle) is a condensed layer of mesenchymal cells that differentiates to give rise to which of the following combinations of cells and tissues?

- a) Ameloblasts, Odontoblasts, and Enamel.
- b) Fibroblasts), Osteoblasts , and Cementum.
- c) Keratinocytes, Melanocytes, and Oral Mucosa.
- d) Chondroblasts, Myoblasts, and Dental Pulp.

Ans:B

Question: The difference between **rod** and **interrod** enamel is:

- a) Their chemical composition.
- b) The orientation of their crystals.**
- c) The type of cells that form them.

Answer: b

سُبْحَانَكَ اللَّهُمَّ وَبِحَمْدِكَ ، أَشْهَدُ أَنْ لَا
إِلَهَ إِلَّا أَنْتَ ، أَسْتَغْفِرُكَ وَأَتُوبُ إِلَيْكَ .