

**KAVERI - I (2008 COURSE): DECEMBER-2009**  
**SUBJECT: DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

Day : Monday  
Date : 14-12-2009

Time : 9:00 A.M. To 12:00 Noon,  
Max. Marks: 70.

**N.B.**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer both the sections should be written in the **SEPARATE** answer books.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.

**SECTION-I**

**Long Essay Questions ANY ONE:**

[10]

- Q.1 Describe amelogenesis in detail and give its clinical consideration.  
Q.2 Describe the morphology of a permanent maxillary first molar.

**Short Essay Questions ANY THREE:**

[15]

- Q.3 List the theories of tooth eruption and describe periodontal ligament traction theory.  
Q.4 Describe the preparation of a decalcified section of a tooth in brief.  
Q.5 Compare and contrast histology of compact and cancellous bone.  
Q.6 Describe the development of the tongue.

**Short Answer Questions ANY FIVE:**

[10]

- Q.7 List the age and sequence of eruption of permanent maxillary teeth.  
Q.8 Define contact area and embrasure. Give its clinical significance.  
Q.9 Enumerate the nerves that supply the permanent teeth.  
Q.10 List the various papillae on the dorsal surface of the tongue. Which papilla does not have taste buds?  
Q.11 List the functions of the maxillary sinus.  
Q.12 Give the chemical composition of dentin.

**SECTION - II**

**Long Essay Questions ANY ONE:**

[10]

- Q.1 Enumerate the various stages of tooth development. Describe early bell stage and advanced bell stage in detail.  
Q.2 Classify oral mucous membrane and describe the macroscopic and microscopic appearance of gingiva.

**Short Essay Questions ANY THREE:**

[15]

- Q.3 Principle fibers of periodontal ligament.  
Q.4 Function of pulp.  
Q.5 Sclerotic or transparent dentin.  
Q.6 Difference between cellular and acellular cementum..

**Short Answer Questions ANY FIVE:**

[10]

- Q.7 Osteoclasts  
Q.8 Myoepithelial cells.  
Q.9 Post eruptive tooth movement.  
Q.10 Physical properties of enamel.  
Q.11 Articular disk of temporomandibular joint.  
Q.12 Neonatal line

**KAVERI - I (2008 COURSE): JUNE - 2009**  
**SUBJECT: DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

Day : *Wednesday*  
Date : *24-06-2009*

Time : *9.00 A.M. To 12.00 Noon.*  
Max. Marks: 70.

**N.B.**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer both the sections should be written in the **SEPARATE** answer books.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.

**SECTION-I**

**Long Essay Questions ANY ONE:**

- Q.1 Define eruption and describe the various theories of tooth eruption. [10]  
Q.2 Compare and contrast crown and root of Permanent Maxillary and mandibular first premolar.

**Short Essay Questions ANY THREE:**

- Q.3 Describe preparation of a ground section of a tooth. [15]  
Q.4 Describe any two dental factors affecting occlusion.  
Q.5 Describe the advanced bell stage of tooth development.  
Q.6 Describe primary and secondary dentin.

**Short Answer Questions ANY FIVE:**

- Q.7 List the various tooth numbering systems. [10]  
Q.8 List the hypocalcified areas of dentin.  
Q.9 Define line angle, point angle, ridge and fossa.  
Q.10 Give four differences between the deciduous and permanent teeth.  
Q.11 Describe the chemical composition of enamel.  
Q.12 Give four differences between cellular and acellular cementum.

**SECTION - II**

**Long Essay Questions ANY ONE:**

- Q.1 Describe the various stages in the life cycle of an ameloblast. Add a note on its clinical significance. [10]  
Q.2 Define and classify oral mucous membrane. Describe the macroscopic and microscopic appearance of the hard palate.

**Short Essay Questions ANY THREE:**

- Q.3 Theories of pain transmission through dentin. [15]  
Q.4 Functions of saliva.  
Q.5 Pulp stones.  
Q.6 Describe occlusal morphology of permanent mandibular first molar.

**Short Answer Questions ANY FIVE:**

- Q.7 Submerged deciduous teeth. [10]  
Q.8 Bundle bone.  
Q.9 Osteoblasts and osteocytes.  
Q.10 List the principal fibers of the periodontal ligament.  
Q.11 Enamel lamellae and Enamel tufts.  
Q.12 Functions of maxillary sinus.

**KAVERI-I (2008 COURSE) : JUNE - 2009**  
**SUBJECT : GENERAL HUMAN ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**

Day : Saturday  
Date : 20-06-2009

Time : 9:00AM TO 12:00 PM.  
Max. Marks : 70.

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Answers to the two sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.
- 4) Draw neat diagrams wherever necessary.

**SECTION-I**

**Q.1** Describe the blood supply and nerve supply of Face. Add a note on its applied anatomy. (10)

**OR**

**Q.1** Describe the Deep cervical Fascia. Add a note on its applied anatomy. (10)

**Q.2** Short essay questions : (Any Three) (15)

- a) Classification of Bones.
- b) Fontanelle.
- c) Bronchopulmonary segments.
- d) Axillary artery.

**Q.3** Short answer questions : (Any Five) (10)

- a) Name 4 types of sutures.
- b) Name 4 muscles supplied by Oculomotor nerve.
- c) Give nerve supply, action of Trapezius muscle.
- d) Give function of Auditory tube.
- e) Name openings in Right Atrium.
- f) Name structures in Porta Hepatis.

**SECTION-II**

**Q.4** Describe the movements of Temporomandibular joint. Add a note on muscles producing them. (10)

**OR**

**Q.4** Describe the Constrictors of Pharynx. (10)

**Q.5** Short essay questions : (Any Three) (15)

- a) Development of Tongue.
- b) Karyotyping.
- c) Describe microscopic structure of Ovary.
- d) Describe microscopic structure of Lymph node.

**Q.6** Short answer questions : (Any Five) (10)

- a) Name 4 derivatives of neural crest cells.
- b) Name derivatives of Tubotympanic recess.
- c) What is sex chromatin?
- d) Broca's area.
- e) Give the site and secretion of Brunner's gland.
- f) Draw and label microscopic structure of Elastic artery.

**KAVERI - I (2008 COURSE): DECEMBER-2009**  
**SUBJECT: GENERAL HUMAN PHYSIOLOGY AND BIOCHEMISTRY**

Day: Saturday  
Date: 12-12-2009

Time: 9:00 A.M. To 12:00 Noon  
Max Marks: 70

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Answers to the two sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.
- 4) Draw neat diagrams **WHEREVER** necessary.

**SECTION-I**

- Q.1** What is normal heart rate? How is it regulated? (10)  
Add a note on tachycardia and bradycardia.

**OR**

Draw and label reflex arc. Define reflex action. Describe any five properties of reflex action.

- Q.2** Write notes on any **THREE** of the following: (15)
- a) Deglutition.
  - b) Chemical regulation of respiration.
  - c) First and second heart sound.
  - d) Errors of refraction.

- Q.3** Write notes on any **FIVE** of the following: (10)
- a) Role of T-lymphocytes.
  - b) Kidney functions.
  - c) Ovulation and its regulation.
  - d) Stages of hypovolemic shock.
  - e) Functions of cerebellum.
  - f) Factors preventing lung collapse.

**SECTION-II**

- Q.4** Define lipids and give its Biological significance. (10)

**OR**

Define glycolysis and give all the steps with respect to enzymes reversible and irreversible reactions inhibitor and ATP formation.

- Q.5** Write notes on any **THREE** of the following: (15)
- a) Urea formation.
  - b) Give lever function test.
  - c) Inhibition.
  - d) Sterol.

- Q.6** Write notes on any **FIVE** of the following: (10)
- a) What is mean by fluorosis? Give normal and abnormal concentration of fluorine in water.
  - b) Four functions of Iodine.
  - c) Hepatic coma.
  - d) Sign and symptoms of Deficiency of vitamin alphotocopherol.
  - e) Name the Keton bodies and name the test to detect.
  - f) Why sucrose is called invert sugar?

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**KAVERI – I (2008 COURSE): JUNE 2009**  
**SUBJECT: GENERAL HUMAN PHYSIOLOGY AND BIOCHEMISTRY**

Day: **Monday**  
Date: **22-06-2009**

Time: **9.00 A.M. To 12.00 Noon**  
Max Marks: 70

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Answers to the two sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.
- 4) Draw neat diagrams **WHEREVER** necessary.

**SECTION-I**

- Q.1** Describe ventricular events in cardiac cycle. (10)  
Add a note on first and second heart sounds.

**OR**

Describe neurophysiology of pain. Add a note on analgesic system of body.

- Q.2** Write notes on any **THREE** of the following: (15)
- a) Mastication.
  - b) Nervous regulation of respiration.
  - c) Pulmonary circulation.
  - d) Functions of frontal and prefrontal lobe.

- Q.3** Write notes on any **FIVE** of the following: (10)
- a) Factors affecting erythropoiesis.
  - b) Functions of J-G apparatus.
  - c) Effects of sympathetic system stimulation.
  - d) Actions of testosterone.
  - e) Sinoatrial node and its function.
  - f) Definition and stages of asphyxia.

**SECTION-II**

- Q.4** Who discovered BETA oxidation? How glycerol and fatty acids oxidized? Give (10)  
detail with respect steps, role of carnitin, reversible and irreversible reactions,  
energetic, etc.

**OR**

Write in detail about TCA cycle.

- Q.5** Write notes on any **THREE** of the following: (15)
- a) Rhodopsin cycle.
  - b) Lipoproteins.
  - c) Hormonal regulation of glucose.
  - d) Abnormal hemoglobin.

- Q.6** Write notes on any **FIVE** of the following: (10)
- a) Denaturation.
  - b) Lipotropic action.
  - c) Why vitamin D deficiency can not occur in India? In which condition it occurs?
  - d) Give the coenzyme forms of  
i) Niacin ii) Flavin iii) Thiamin [B1] iv) Pyridoxine [B6]
  - e) Iodine number.
  - f) Sign and symptoms of Scurvy.