

**BACHELOR OF DENTAL SURGERY (2008 COURSE) FIRST - B.D.S.: WINTER- 2019**  
**SUBJECT: DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY (T WR)**

Friday 06-12-2019  
09:00 AM-12:00 PM

W-3791-2019  
Max. Marks: 70

**N.B.:**

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

**SECTION-I**

- Q.1** Write chemical composition of dentin. Describe in detail histology of dentin. (10)

**OR**

Write in detail about the life cycle of Ameloblast. Add a note on Amelogenesis.

- Q.2** Write short note on (Any **THREE**) (15)
- a) Enamel lamellae
  - b) Tooth numbering systems
  - c) Theories of dentin hypersensitivity
  - d) Fate of dental lamina

- Q.3** Answer the following (Any **FIVE**) (10)
- a) Enumerate the cells of the pulp.
  - b) What are Enamel Spindles?
  - c) Enumerate the transient structures seen in the stages of development of tooth.
  - d) Define line angle & point angle.
  - e) Name the incremental lines of dentin and cementum
  - f) Define Pit & Fossa.

**SECTION-II**

- Q.4** Write in detail about the chronology notations and morphology of Permanent Maxillary Canine. Write a note on arch traits of canine. (10)

**OR**

Write in detail about the chronology, notations and morphology of Permanent Maxillary First molar.

- Q.5** Write short note on (Any **THREE**) (15)
- a) Note on zones of pulp.
  - b) Dead tracts.
  - c) Hertwig's epithelial root sheath.
  - d) Development of Palate

- Q.6** Answer the following (Any **FIVE**) (10)
- a) What are mamellons?
  - b) What is Lamina Limitans.
  - c) Define Oral mucous membrane.
  - d) What are the derivatives of Dental Papilla and Dental Sac?
  - e) Eruption time of Permanent Maxillary & Mandibular Central Incisors.
  - f) Define Stain. Give two examples of special stains.

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**BACHELOR OF DENTAL SURGERY (2008 COURSE) FIRST - B.D.S.: WINTER- 2019**  
**SUBJECT: GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY (T WR)**

Wednesday 04-12-2019  
09:00 AM-12:00 PM

W-3790-2019  
Max. Marks: 70

**N.B.:**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

**SECTION-I**

**Q.1** Draw a diagram of sarcomere. Describe the molecular basis of muscle contraction. Add a note on myaesthesia gravis. (3 +5 +2) (10)

**OR**

Define synapse. Enumerate various properties of synapse. Describe any two properties in detail. (1+3+6) (10)

**Q.2** Write notes on (Any **THREE**): (15)

- a) Electrocardiogram
- b) Chemical control of respiration
- c) ABO blood group system
- d) Actions of glucocorticoids

**Q.3** Short Answer questions: (Any **FIVE**) (10)

- a) Enumerate ovarian changes in menstrual cycle.
- b) Enumerate various mechanisms of transport across cell membrane.
- c) Define glomerular filtration rate. Give its normal value.
- d) List muscles involved in inspiration.
- e) Give functions of cerebellum.
- f) Enumerate functions of gastric juice.

**SECTION-II**

**Q.4** Describe Urea cycle. Write the importance of measuring blood urea level. (5 +5) (10)

**OR**

Describe the sources, RDA, functions and deficiency manifestations of Vitamin A. (1+1+4+4)

**Q.5** Write notes on: (Any **THREE**): (15)

- a) Diagnostic applications of enzymes
- b) Hormonal regulation of serum calcium level
- c) Liver function tests
- d) Glucose Tolerance test (GTT)

**Q.6** Short Answer questions: (Any **FIVE**) (10)

- a) Enlist compounds synthesized from tyrosine.
- b) Give importance of four homopolysaccharides.
- c) Define ketosis, enumerate ketone bodies.
- d) Define mutation and give two examples.
- e) Enumerate four functions of plasma proteins.
- f) Mention one function each of Copper, Iron, Fluorine and Zinc.