

## FIRST YEAR BDS DEGREE EXAMINATION (RS &amp; RS2)

Time: 90 Minutes

Biochemistry Nutrition &amp; Dietics Q.P. Code: 2003 &amp; 2103

Max. Marks: 35

Objective Instructions	Subjective Instructions
<ul style="list-style-type: none"> <li>Each question is followed by four options.</li> <li>Pick up single best option and darken appropriate circle in OMR Sheet</li> <li>Each question carries one mark. No negative marking</li> </ul>	<ul style="list-style-type: none"> <li>Answers should be specific to the Questions asked.</li> <li>Draw neat, labeled diagrams wherever necessary.</li> </ul>

**1) M.C.Q. 10 X 1 = 10**

- Allergic reactions are mediated by
 

(A) IgE	(B) IgG
(c) IgM	(D) IgD
- Anticodon on t-RNA is complimentary to the triplet codon on :
 

(A) r-RNA	(B) m-RNA
(c) hn-RNA	(D) t-RNA
- The ammonium ions ( $\text{NH}_4^+$ ) excreted into the urine are derived from :
 

(A) Glutamine	(B) Glutamate
(c) Glycine	(D) Asparagine
- An example of ligases is
 

(A) Glycogen synthase	(B) Glutamine synthetase
(c) Porphobilinogen deaminase	(D) Histidine decarboxylase
- The amino acid with greatest buffering capacity at physiologic pH is
 

(A) Lysine	(B) Histidine
(c) Glycine	(D) Alanine
- Basal Metabolic rate (BMR) is raised in
 

(A) Hyperthyroidism	(B) Under nutrition
(c) Starvation	(D) Hypothyroidism
- All of the following are dietary fibres EXCEPT
 

(A) Lignin	(B) Pectin
(c) Cellulose	(D) Starch
- Which of the following enzymes are used as markers of hepatocellular injury?
 

(A) Alanine transaminase & Aspartate transaminase	(B) Acid Phosphatase & Gamma-glutamyl transferase
(c) Acid Phosphatase & Lactate dehydrogenase	(D) Creatine kinase & Lactate dehydrogenase
- Deficiency of which vitamin causes excretion of Formimino Glutamic Acid (FIGLU) in the urine :
 

(A) Folic acid	(B) Thiamine
(c) Biotin	(D) Niacin
- The main site of urea synthesis in mammals is :
 

(A) Intestine	(B) Skin
(c) Liver	(D) Kidney

**LONG ESSAY QUESTIONS: 1 X 10 = 10**

- Name the Ketone bodies. How are they formed in the body? Mention the causes for ketosis.

**SHORT ANSWER QUESTIONS: 5 X 3 = 15**

- Compare and contrast the structure and functions of glycogen and starch.
- Mention any three causes of respiratory acidosis.
- List the different isoenzymes of creatine kinase with their tissue of origin.
- What is the normal plasma urea level? Name two conditions causing increased blood urea level.
- Mention the coenzyme form of pyridoxine and the reactions catalysed by it.



FIRST YEAR BDS DEGREE EXAMINATION (RS & RS2)

Time: 3 Hours

Dental Anatomy, Embryology & Oral Histology

Q.P. Code: 2004 & 2104

Max. Marks: 70

Objective Instructions	Subjective Instructions
<ul style="list-style-type: none"> <li>• Each question is followed by four options.</li> <li>• Pick up single best option and darken appropriate circle in OMR Sheet</li> <li>• Each question carries one mark. No negative marking</li> </ul>	<ul style="list-style-type: none"> <li>• Answers should be specific to the Questions asked.</li> <li>• Draw neat, labeled diagrams wherever necessary.</li> </ul>

1) M.C.Q. 20 X 1 = 20

1. Enamel is the derivative of
 

(A) Ectoderm	(B) Endoderm
(c) Ectoderm & Endoderm	(D) Endoderm & Mesoderm
2. A supernumerary tooth results from a deviation during
 

(A) Initiation	(B) Differentiation
(c) Apposition	(D) Calcification
3. Dentinal tubules are
 

(A) Concave	(B) Straight
(c) S-shaped	(D) Y shaped
4. The primary function of the dental pulp is
 

(A) Formation of Hertwig's epithelial root sheath	(B) Production of dentin
(c) Production of enamel	(D) Formation of epithelial diaphragm
5. In case cementum is not formed
 

(A) Ankylosis of teeth will occur	(B) Teeth will be exfoliated
(c) No change	(D) Root will not be formed
6. Sharpey's fibers are present in
 

(A) Bone	(B) Dentin
(c) Periodontal ligament	(D) Pulp
7. The type of epithelium lining maxillary sinus is
 

(A) Simple columnar	(B) Pseudo stratified columnar & ciliated
(c) Stratified squamous	(D) Simple squamous
8. Keratinized oral epithelium has which of the following cell layers
 

(A) Basal cell layer	(B) Basal and spinous cell layers
(c) Basal, spinous, granular and cornified cell layers	(D) Basal, cornified and granular cell layers
9. The Langerhan cells of oral mucosa function as
 

(A) Pressure sensitive receptors	(B) Pain receptors
(c) Immune response cells	(D) Touch sensitive receptors
10. The papillae present in front of the terminal sulcus is
 

(A) Circumvallate papillae	(B) Filiform papillae
(c) Fungiform papillae	(D) Foliate papillae
11. The normal pH of saliva is about
 

(A) 5.5	(B) 7.5
(c) 8.5	(D) 9.5
12. Tooth eruption is primarily due to
 

(A) Fibroblasts proliferation	(B) Proliferation of cells at crypt
(c) Exfoliation of primary tooth	(D) Eruptive forces
13. The condyle of the mandible is composed of
 

(A) Compact bone	(B) Cancellous bone
(c) Cancellous bone covered by thin layer of compact bone	(D) Compact bone covered by cancellous bone
14. Muscle which helps in elevation of mandible

- (A) Masseter  
(c) Medial Pterygoid
- (B) Temporalis  
(D) Buccinator
15. Leeway space is  
(A) The difference in sizes between the premolars and primary molars  
(c) The difference in sizes between the deciduous incisors and permanent incisors
- (B) The difference in sizes between deciduous canine and permanent canines  
(D) The difference in sizes between deciduous molars and permanent molars
16. The permanent longest tooth in oral cavity is  
(A) maxillary and mandibular canine  
(c) mandibular premolar
- (B) maxillary 1st molar  
(D) Maxillary central incisor
17. Greater crown bulk distal to the facio lingual bisecting plane of a tooth is most typical of the mandibular  
(A) central incisor  
(c) Canine
- (B) Lateral incisor  
(D) 1st premolar
18. Maxillary 1st premolars erupts at  
(A) 8–9 yrs  
(c) 12–13 yrs
- (B) 10–11 yrs  
(D) 14–16 yrs
19. Two roots are seen in  
(A) Maxillary I Premolar  
(c) Mandibular I Premolar
- (B) Maxillary II Premolar  
(D) Mandibular II Premolar
20. Largest cusp in permanent mandibular first molar is  
(A) Mesiobuccal  
(c) Mesiolingual
- (B) Distobuccal  
(D) Distal

**LONG ESSAY QUESTIONS: 2 X 10 = 20**

2. Classify oral mucosa. Discuss in detail the differences between keratinized and nonkeratinised epithelium. Add a note on non-keratinocytes (2+6+2)
3. Describe the occlusal surface of maxillary permanent first molar. Add a note on its chronology. (6+4)

**SHORT ANSWER QUESTIONS: 10 X 3 = 30**

4. Describe enamel Lamellae
5. What are Types of Cemento–enamel junction
6. Write in brief Resting and reversal lines
7. Write in brief about Langerhans cell
8. Draw a well labeled diagram of histology of mixed salivary gland
9. Functions of Muscles of mastication
10. Write chronology of maxillary permanent central incisor
11. Write in brief about Buccal aspect of maxillary canine
12. Write in brief about Set traits
13. Write in brief about Tubercle of Zuckerkandl

## FIRST YEAR BDS DEGREE EXAMINATION (RS &amp; RS2) DECEMBER 2020

Time: 3 Hours General Human Anatomy including Embryology, Osteology and Histology Q.P.

Code: 2001&amp;2101

Max. Marks: 70

**Objective Instructions**

- Each question is followed by four options.
- Pick up single best option and darken appropriate circle in OMR Sheet
- Each question carries one mark. No negative marking

**Subjective Instructions**

- Answers should be specific to the Questions asked.
- Draw neat, labeled diagrams wherever necessary.

**1. MCQ 20 X 1 = 20**

- The muscle of mastication that takes origin from maxilla is
  - Temporalis
  - Masseter
  - Medial pterygoid
  - Lateral pterygoid
- The cochlear canal is arranged spiral around the modiolus making -----turns
  - 2 & one fourth
  - 2 & half
  - 2 & three fourth
  - 3 & one fourth
- Maxillary sinus opens into
  - Spheno ethmoidal recess
  - Superior meatus
  - Middle meatus
  - Inferior meatus
- Palatine tonsil is present in
  - Nasopharynx
  - Oropharynx
  - Laryngopharynx
  - Lateral wall of the nose
- Superior thyroid artery is a branch of
  - Internal carotid artery
  - External carotid artery
  - Thyrocervical trunk
  - Subclavian artery
- Epiglottis is made up of ----- cartilage
  - Hyaline
  - Elastic
  - Fibrous
  - None of the above
- The head of spermatozoa is covered by
  - Basal body
  - Acrosomal cap
  - Axoneme
  - Annulus
- The cavity of blastocyst is called
  - Blastocoel
  - Blastula
  - Blastomere
  - Blastpore
- Which of the following is a primary lymphoid organ?
  - Palatine tonsil
  - Spleen
  - Thymus
  - Lymph node
- Melanocytes are seen in which layer of skin?
  - Stratum lucidum
  - Stratum corneum
  - Stratum granulosum
  - Stratum basale
- All of the following bones are pneumatic bones except
  - Maxilla
  - Mandible
  - Frontal
  - Sphenoid
- All of the following are the examples of the fibrous joint except
  - Suture
  - Syndesmosis
  - Symphysis
  - Gomphosis
- The commonest neurotransmitter is:
  - Noradrenaline
  - Acetylcholine
  - Serotonin
  - Dopamine
- Stapedius is a muscle of ----- arch
  - First
  - Second
  - Third
  - Fourth
- Optic canal transmits -----

- (A) Optic nerve  
(c) Supraorbital nerve
16. Safety muscle of the tongue is \_\_\_\_\_  
(A) Palatoglossus  
(c) Genioglossus
17. Nasolacrimal duct opens into \_\_\_\_\_  
(A) Inferior meatus  
(c) Middle meatus
18. Torticollis is caused by \_\_\_\_\_  
(A) Paralysis of sternocleidomastoid  
(c) Complete paralysis of trapezius
19. Ligament of Berry is formed by \_\_\_\_\_  
(A) Investing layer of deep cervical fascia  
(c) Prevertebral fascia
20. All the following are infrahyoid muscles EXCEPT \_\_\_\_\_  
(A) Sternohyoid  
(c) Thyrohyoid
- (B) Frontal nerve  
(D) Supra trochlear nerve
- (B) Styloglossus  
(D) Chondroglossus
- (B) Vestibule of nose  
(D) Superior meatus
- (B) Contraction of trapezius and sternocleidomastoid  
(D) Avulsion of sternomastoid
- (B) Pretracheal fascia  
(D) Buccopharyngeal fascia
- (B) Sternothyroid  
(D) Omohyoid – inferior belly

**LONG ESSAY QUESTIONS: 2 X 10 = 20**

2. Describe the lateral wall of the nose with diagram. Add a note on its applied Anatomy (8 + 2)
3. Describe the submandibular gland in detail. Add a note on its secreto motor nerve supply (8 + 2)

**SHORT ANSWER QUESTIONS: 10 X 3 = 30**

4. Name the Tributaries of cavernous sinus.
5. Mentions the clinical features of Bels palsy.
6. Name the contents of Carotid sheath
7. Name the branches of the maxillary nerve.
8. Structures passing through foramen ovale.
9. Name the meninges
10. Write the derivatives of first pharyngeal arch
11. Histology of adipose tissue.
12. Blood supply of Thyroid gland
13. Sternocleidomastoid Muscle

## FIRST YEAR BDS DEGREE EXAMINATION (RS &amp; RS2) DECEMBER 2020

Time: 90 Min

General Human Physiology – I

Q.P. Code: 2002 &amp; 2102

Max. Marks: 35

Objective Instructions	Subjective Instructions
<ul style="list-style-type: none"> <li>• Each question is followed by four options.</li> <li>• Pick up single best option and darken appropriate circle in OMR Sheet</li> <li>• Each question carries one mark. No negative marking</li> </ul>	<ul style="list-style-type: none"> <li>• Answers should be specific to the Questions asked.</li> <li>• Draw neat, labeled diagrams wherever necessary.</li> </ul>

**1) M.C.Q. 10 X 1 = 10**

- Sodium dependent glucose transport is an example of
 

(A) Facilitated diffusion	(B) Simple diffusion
(c) Primary active transport	(D) Secondary active transport
- Motor unit consists of
 

(A) All muscle fiber in a muscle	(B) Motor Nerve and muscle fibers that it supplies
(c) Afferent neuron, center and efferent neuron	(D) Single muscle fiber and all neurons that innervate
- Purpura is caused due to deficiency of
 

(A) Red Blood Cells	(B) White Blood Cells
(c) Clotting factors	(D) Platelets.
- Humoral immunity is served by
 

(A) Helper T cell	(B) Cytotoxic T cell
(c) Natural killer cell	(D) B lymphocyte
- Most of the Co<sub>2</sub> transported in blood is
 

(A) dissolved in plasma	(B) bound to Chloride
(c) in carbamino form	(D) in bicarbonate form
- Which phase of the Deglutition is involuntary
 

(A) Oral & oesophageal	(B) Pharyngeal & Oesophageal
(c) Only Oesophageal	(D) Oral & Pharyngeal
- End diastolic volume is directly proportional to
 

(A) Preload of the heart	(B) Systolic vascular resistance
(c) Afterload	(D) Heart rate
- counter current system mainly feature of
 

(A) cortical nephron	(B) juxtamedullary nephron
(c) both A&B	(D) Vasarecta
- The receptor for stretch reflex is
 

(A) Muscle spindle	(B) Golgi tendon organ
(c) Pacinian corpuscles	(D) ruffini's end organ
- Long Sightedness is
 

(A) Hypermetropia	(B) Presbyopia
(c) Myopia	(D) Astigmatism

**LONG ESSAY QUESTIONS: 1 X 10 = 10**

- Define cardiac cycle. Explain with the help of a diagram the mechanical and pressure changes during Cardiac cycle.

**SHORT ANSWER QUESTIONS: 5 X 3 = 15**

- Draw and describe the structure of Na<sup>+</sup>-K<sup>+</sup> pump & list the functions of it.
- Define and classify hypoxia and explain any two of them
- Pharangeal phase of deglutition.
- Mention the peculiarities of renal circulation
- What is referred pain? Explain the Theories of referred pain. [1+2]

