# DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

## B.D.S. DEGREE EXAMINATION – APRIL 2026

### FIRST BDS EXAMINATION

### GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY (NR & OR)

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the Principal fibres of periodontal ligament...Add a note on their functions. **2x9 =18**

**2.** Describe the morphology of permanent mandibular first molar

**WRITE SHORT NOTES ON** **8X4=32**

3. Histology of Gingiva
4. Clinical consideration of Dentin
5. Functional of Pulp
6. Physiologic stages of tooth development
7. Age changes of cementum
8. Difference between mature and immature bone
9. Difference between Primary Teeth and Permanent Tooth
10. Hypocalcified structures of Enamel

**WRITE BRIEFLY ON** **10X2=20**

11. Embrasures
12. Lamina dura
13. Oblique ridge
14. Derivative of Neural Ceft
15. Phase of Deglutition
16. Fixation
17. Functions of Temporomandibular joint
18. Curve of spee
19. Tomes' granular layer
20. Von Ebnerglands

**416 / 400**

# DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

**B.D.S. DEGREE EXAMINATION – OCTOBER 2025**

**FIRST BDS EXAMINATION**

**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY (NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1 Describe the Carotid triangle under the following headings. **2X9=18**

a). Bone Taking Part b). Features
c). Openings d).Nerve Supply

2 Describe the blood supply, relations and development of thyroid gland

**WRITE SHORT NOTES ON** **8X4=32**

3.Facial artery
4.Otic ganglion
5.Spinal accessory nerve
6.Foramen magnum
7.External jugular vein
8.Scalenus anterior muscle
9.Meiosis
10.Lateral pterygoid muscle

**WRITE BRIEFLY ON** **10X2=20**

11.Pterion
12.Medican atlantoaxial joint
13.Primary teeth
14.Classify stratified epithelium with examples
15.Parts and nerve supply of inferior constrictor of Pharynx
16.Four modifications of Deep fascia
17.Attachments to Ramus of mandible
18.Development of Upper lip
19.Ansa cervicalis-formation and branches
20. Boundaries of digastric triangle

# DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

## B.D.S. DEGREE EXAMINATION – APRIL 2025

### FIRST BDS EXAMINATION

### GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY (NR & OR)

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1 Describe the Carotid triangle under the following headings. **2+3+3+1=9**

a). Boundaries' b). Contents
c). Ansa Cervicalis. d).Applied Anatomy

2 Describe the Anatomy of tongue under the following heading **2+5+2=9**

**WRITE SHORT NOTES ON** **8X4=32**

3.Classify skeletal muscles with examples
4.Explain the microscope structure of serous Salivary gland with a neat labeled diagram
5.Otic ganglion
6.Explain the nerves supply and blood supply of scalp
7.Enumerate the muscles of Mastication , Describe any one muscle
8.Explain the development of pituitary gland
9.Maxillary Sinus
10,Tentorium Cerebelli

**WRITE BRIEFLY ON** **10X2=20**

11.List any two silent features of Axis and Atlas Vertebra
12.Mention two anomalies of face with anatomic basis
13.Permanent teeth
14.List any four branches of maxillary artery
15.Draw a neat labeled diagram of microscopic structure of elastics Cartilage
16.Modiolus
17Enlist any four laws of ossification
18.Explain the anatomical basis of Frey's syndrome
19.Enumerate any four important features of autosomal dominant Inheritance
21. Mention the structures passing through internal acoustic meatus

# DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008

## B.D.S. DEGREE EXAMINATION – OCTOBER 2024

### FIRST BDS EXAMINATION

### GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY (NR & OR)

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the lateral wall of the nose under the following headings **2+3+3+1=9**

a). Features c). Blood supply & Nerve supply
b) Sinuses opening into it . d).Applied Anatomy

2. Describe the temporomandibular joint under the following **1+2+2+3+1=9**

**WRITE SHORT NOTES ON** **8X4=32**

3. Explain the microscopic structure of compact hone with a neat labeled diagram
4. Classify chromosomes with examples
5. Buccinator muscle
6. Explain the development of the palate. Mention the embryological basic of any two congenital anomalies
7. Forth layer of the scalp
8. Microscopic picture of lymph node
9. Explain the boundaries and features of the nasopharynx
10. Mention the branches of the glossophayngeal nerve and their distribution

**WRITE BRIEFLY ON** **10X2=20**

11. Mention the parts and two functions of the auditory tube
12. Draw a neat labeled diagram of the histology of the Traches
13. Mention the components of the lacrimal apparatus
14. Primary teeth
15. Name any two neuroglial cells with one function of each
16. Mention any four branches of the external carotid artery
17. Name any four structures passing through the jugular foramen
18. Name any four modifications of the investing layer of deep cervical fascia
19. List any four structures derived from neural crest cells
20. Pterion

**Q.P. CODE:416/400**

**DR. YSR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – FEBRUARY 2023**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1 **Describe the scalp under** **2+3+2+2=9**
a). Layers , b). Nerve supply c). Blood supply d). Applied Anatomy

2 **Describe the Temporamandibular Joint under :** **2+2+3+2=9**
a). Type, subtype b) Articular surfaces c) Ligaments. d). Movements and muscles e). Applies aspects

**WRITE SHORT NOTES ON:** **8x4=32**

3 Microscopic structure of a lymph node

4 Cricothyrold muscle

5 Boundaries and contents of the carotid trangle

6 Cavernous sinus

7 Maxillary artery

8 Development of palate

9 Trigeminal ganglion

10 Nasal septum

**WRITE BRIEFLY ON:** **10x2=20**

11 Hare lip

12 Structures passing through superior orbital fissure

13 Muscles derived from first pharyngeal arch

14 Falx cerebri

15 Name the granches of the facial artery

16 Name the muscle of soft palate

17 Contents of the carotid sheath

18 Seretomotor nerve supply of submandibular gland

19 Name the paranasal air sinuses

20 Emissary veins

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE, 2022**

**FIRST BDS EXAMINATION**

**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1 Describe the parotid gland under the following headings **2+3+2+2=9**
a). External features, coverings and relations, b). Nerve supply c). Applied Anatomy

2 Describe the Palatine tonsil under the following **2+2+3+2=9**
a). Situation b) Features with relations c), Blood supply
d). Clinical importance

**WRITE SHORT NOTES ON:** **8x4=32**

3 Histology of the optic nerve

4 Histology of the pituitary gland

5 Digastrics muscle

6 Lingual nerve

7 Ciliary ganglion

8 Nerve supply of the scalp

9 Superior sagittal sinus

10 Development of the tongue

**WRITE BRIEFLY ON:** **10x2=20**

11 Movements of the vocal folds

12 Attachments of the styloid process

13 Barr body

14 Cervical sinus

15 Pseudostratified Columnar epithelium

16 Submandibular group of lymph nodes

17 Thyroid gland capsules

18 Dental formular in adults

19 Fibrous joints

20 Nerve supply and action of the sternocleidomastold muscle.

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – DECEMBER 2021**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the tongue under the following beadings **2+3+2+2=9**
   a). External features, b). Nerve supply c). Lymphatic drainage d). Applied Anatomy

2. Describe the lateral wall of the nose under the following **2+2+3+2=9**
   a). Formation b) Features c), Clinical importance

**WRITE SHORT NOTES ON:** **8x4=32**

3. Histology of the thin skin
4. Faial artery
5. Superior oblique muscle of the eye ball
6. Maxillary sinus
7. Histology of Parotid gland
8. Frontonasal process
9. Superior cervical ganglion
10. Interior alveolar nerve

**WRITE BRIEFLY ON:** **10x2=20**

11. Sigmoid sinus
12. Attachments of the stylopharyngeus muscle
13. Formation of Ansa cervicalis
14. Derivatives of the ill pharyngeal pouch
15. Classification of the epithelium
16. Pharyngeal tonsil
17. Piriform fossa
18. List the branches of the subsclavian artery
19. Jugular foramen
20. Submandibular duct.

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – APRIL 2021**

**FIRST BDS EXAMINATION**

**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks: 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe maxillary artery under the following headings **2+3+2+2=9**
   a). Origin , b). Course c). Branches d). Applied anatomy

2. Describe the scalp under the following headings **2+2+3+2=9**
   a). Attachments. b) Nerve supply c), Actions

**WRITE SHORT NOTES ON:** **8x4=32**

3. Microscopic picture of nerve trunk
4. Nerve supply of face
5. External carotid artery
6. Carotid sheath
7. Nerve supply of nasal cavity
8. Pterygopalatine ganglion
9. History of stratified squamous keratinized epithelium
10. Superior thyroid artery

**WRITE BRIEFLY ON** **10x2=20**

11. Ear ossicies
12. Pterygold process
13. Medial wall of orbit
14. Primary teeth
15. Levator palpebrae superioris
16. Pterion
17. Cartilaginous joints
18. Arterial supply of tonsil
19. Membranous ossification
20. Extra ocular muscles

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – NOVEMBER, 2020**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe mandibular nerve under the following heading **2+3+2+2=9**
   a). Origin b).Course c). Distribution d).Applied anatomy

2. Describe the position, relation, blood supply and microanatomy of submandibular gland. **2+2+3+2=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3. Microscope picture of muscular artery
4. Cistern of brain
5. Later wall of nose
6. Cleft lip
7. Nerve supply of oral cavity
8. Otic ganglion
9. Histology of fibro cartilage
10. Facial artery

**WRITE BRIEFLY ON:** **10x2=20**

11. Hard palate
12. Spine of sphenoid
13. Foramen ovale
14. Digastrics Muscle
15. Posterior cricoarytenoid muscle
16. Cleft palate
17. Fibrous joints
18. Motor supply of tongue
19. Types of neurons
20. Internal judular vein

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JUNE/ JULY, 2019**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the cavernous sinus under the following headings **2+3+2+2=9**
   a). Location and extent, b). Relations c). Tributaries d). Applied Anatomy

2. Describe the scalp under the following headings **2+2+3+2=9**
   a). Extent. b)Layers with features and clinical importance.

**WRITE SHORT NOTES ON:** **8x4=32**

3. History of the stratified squamous epithelium
4. Facial nerve in the face
5. Extra ocular muscles of eye fall, nerve supply and their action
6. Cricoid cartilage
7. Carotid sheath
8. Development of the palate
9. Pterygopalatine ganglion
10. Superior thyroid artery

**WRITE BRIEFLY ON:** **10x2=20**

11. Sphenomandibular ligament
12. Nerve supply and action of the levatorpalpebraesuperioris
13. Primary teeth
14. Development of the parathyroid glands
15. AnsaCervicalis
16. Nerve supply of the muscles of the pharyns
17. Attachments of the thyrohyoid membrane
18. Structures pierced by and site of opening of the parotid duct
19. Arterial supply of the nasal septum
20. Turner's syndrome

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2019**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Name the muscles of mastication. Mention the attachments, nerve supply and action of any one muscle of mastication. **2+3+2+2=9**

2. Explain the parotid gland under the following headings: situation, parts, relations and nerve supply. **2+2+3+2=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3. Microscopic structure of hyaline cartilage
4. Sternocleidomastoid muscle
5. Classification of chromosomes
6. Facial artery
7. Pharyngeal clefts
8. Hyoglossus muscle
9. Nasopharynx
10. Microscopic picture of palantine tonsil

**WRITE BRIEFLY ON:** **10x2=20**

11. Parasympathetic fibers of sphenopalatine ganglion
12. Types of epiphysis with examples
13. Harelip
14. Arterial supply of scalp
15. Formation and termination of external jugular vein
16. Muscles attached to ramus of mandible
17. Structures passing through jugular foramen
18. Name any four branches of external carotid artery
19. Vocal Cord
20. Submandibular lymph nodes

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2018**
FIRST BDS EXAMINATION
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the Tongue under following headings: **1+2+4+2=9**
   a) Parts
   b) External features
   c) Nerve Supply
   d) Lymphatic Drainage
2. Describe the Pituitary gland under the following headings: **1+2+4+2=9**
   a) Position
   b) Parts
   c) Microscopy
   d) Blood Supply

**WRITE SHORT NOTES ON:** **8x4=32**

3. Nerve supply of scalp
4. Facial Vein
5. Atlas Vertebrae – Features
6. Primitive Streak
7. Otic Ganglion
8. Mandibular Arch – Derivatives
9. Lingual Artery
10. Palatopharyngeus Muscle

**WRITE BRIEFLY ON:** **10x2=20**

11. Draw and label a multipolar neuron structure
12. Mention four structures attached to Hyoid Bone
13. Name the parts of Thyroid Cartilage
14. Enumerate two differences between Skeletal and Cardiac Muscle Histologically
15. Muscles attached to Mastoid process
16. Waldayer's Lymphatic Ring
17. Pterion
18. Development of Upper lip
19. Boundaries of Digastric Triangle
20. Anterior Fontanelle – two import

**Q.P. CODE:416/400**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2018**

FIRST BDS EXAMINATION

**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the Mandibular Nerve under the following headings: **2+4+3=9**
   Extra cranial course, branches and structures supplied by it.

2. Name the paranasal air sinuses. Explain the boundaries, nerve supply, opening and applied anatomy of maxillary air sinus. **2+2+2+1+2 =9**

**<u>WRITE SHORT NOTES ON</u>:** **8x4=32**

3. Buccinator muscle
4. Microscopic structure of lymph node
5. Ramus of mandible
6. Chromosomes
7. Parotid duct
8. Ansa cervicalis
9. Nerve supply of tongue
10. Orbicularis oculi

**<u>WRITE BRIEFLY ON</u>:** **10x2=20**

11. Connections of ciliary ganglion
12. Desiduous Teeth
13. Second pharyngeal arch
14. Suprameatal triangle
15. Microscopic picture of large vein
16. Movements at temporomandibular joint
17. Arterial supply of palatine tonsil
18. Structures passing through internal acoustic meatus
19. Wormian bones
20. Spinal part of accessory nerve

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2017

FIRST BDS EXAMINATION

**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the parotid gland under the following headings: **1+4+2+2=9**
   e) Position
   f) External features
   g) Coverings
   h) Duct system
2. Explain the temporomandibular joint under the following headings: **1+2+4+2=9**
   e) Type
   f) Bones Articulating
   g) Ligaments
   h) Applied Anatomy

**WRITE SHORT NOTES ON:** **8x4=32**

3. Blood supply of Thyroid Gland
4. Sensory nerve supply of face
5. Relations of Hyoglossus
6. Superior Orbital Fissure
7. Development of Tongue
8. Microscopic structure of Sensory Ganglion
9. Nerve supply of Scalp
10. Arytenoid cartilage of larynx

**WRITE BRIEFLY ON:** **10x2=20**

11. Name the parts of inferior constrictor pharyngeal muscle and its nerve supply
12. Components involved in formation of hard palate
13. List out (2) two differences between collagen and elastic fibres
14. Spermiogenesis
15. List out (2) two functions of Paranasal air sinuses
16. Attachments of Pretracheal fascia
17. Enumerate (4) four branches of third part of Maxillary artery
18. Nasolacrimal duct – its extent
19. Sesamoid bone
20. Nerve supply of digastric muscle

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2017**

**FIRST BDS EXAMINATION**

**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**

**(NR & OR)**

Time : 3 Hours Max. Marks : 70

Note: Answer all questions.

Draw neat labeled diagrams wherever necessary.

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1. Describe the blood supply, relations and development of thyroid gland. **3+3+3=9**

2. Describe the lateral wall of the nose under **2+4+2+1=9**
   a) Bones (names only)
   b) Structures in the wall
   c) Nerve supply
   d) Applied aspects

**WRITE SHORT NOTES ON:** **8x4=32**

3. Muscles of the soft palate
4. Carotid sheath
5. Movements of Temporomandibular joint
6. Facial artery
7. Submandibular ganglion
8. Histology of hyaline cartilage
9. Primitive streak
10. Maxillary air sinus

**WRITE BRIEFLY ON:** **10x2=20**

11. Branches of external carotid artery
12. Nerve supply of the larynx
13. Structures in the lateral wall of cavernous sinus
14. Muscles derived from second pharyngeal arch
15. Hare lip
16. Emissary veins
17. Buccinator
18. Structures passing through foramen ovale
19. Superior oblique muscle of eye
20. Spinal accessory nerv

**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2016**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the blood supply, relations and development of Thyroid gland **2+4+3=9**

2. Describe muscles of Mastication under **2+2+2+2+1=9**
   a) Origin
   b) Insertion
   c) Nerve supply
   d) Action
   e) Applied Aspects

**WRITE SHORT NOTES ON:** **8x4=32**

3. Meiosis
4. Otic Ganglion
5. Nerve Supply of Tongue
6. Venous drainage of face
7. Lingual Artery
8. Openings related to lateral wall of nasal cavity
9. Digastric muscle
10. Microscopic picture of Hyaline Cartilage

**WRITE BRIEFLY ON:** **10x2=20**

11. Nerve supply of ocular muscles
12. Name the branches of external carotid artery
13. Name the muscles of larynx
14. Oblique facial cleft
15. Galea Aponeurotica
16. Tympanic membrane
17. Lymphatic drainage of nasal septum
18. Vocal cords
19. Falx cerebri
20. Name tributaries of cavernous sinus

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2015**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the course of Maxillary artery, branches and their distribution. **2+3+4=9**

2. Describe the situation, relations, microscopy and nerve supply of Parotid Gland. **2+3+2+2=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3. Anterior fontanelle
4. Microscopic picture of Kidney
5. Notochord
6. Auditory tube
7. Internal jugular vein
8. Carotid sheath
9. Corpus callosum
10. Development of Tongue

**WRITE BRIEFLY ON:** **10x2=20**

11. Reichert's cartilage
12. Superior orbital fissure
13. Blood supply of nasal septum
14. Contents of sub occipital triangle
15. Hare lip
16. Foramen transversarium
17. Retromandibular vein
18. Cricothyroid muscle
19. Parts of internal capsule
20. Laws of ossification

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2015**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

**Note:** Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the origin, course, relations, branches and applied anatomy of mandibular nerve. **2+2+2+2+1=9**

2. Describe the type, ligaments, relations, movements and muscles causing the movements of temporomandibular joint. **1+2+2+2+2=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3. Relations of ramus of mandible
4. Microscopic structure of pituitary gland
5. Orbicularis oculi muscle
6. Nerve supply to scalp
7. Buccinator muscle
8. Otic ganglion
9. Maxillary air sinus
10. Histological appearance of submandibular gland

**WRITE BRIEFLY ON:** **10x2=20**

11. Derivatives of first pharyngeal cleft
12. Name the contents of suprasternal space
13. Mention any four branches of cervical plexus
14. Name any two muscles of soft palate and their nerve supply
15. Mention any four branches of external carotid artery
16. Name the structures passing through foramen spinosum
17. Nerve supply and actions of superior oblique muscle of the eye ball
18. What are the branches of facial artery in the face?
19. Primary teeth
20. Microscopic picture of skeletal muscle

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JUNE, 2014**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the position, relations, blood supply and development of Parotid gland **1+4+2+2=9**

2. Describe the muscles of mastication under the following headings. **3+3+1+2=9**
   f) Origin
   g) Insertion
   h) Nerve supply
   i) Action

**WRITE SHORT NOTES ON:** **8x4=32**

3. Nerve supply of tongue
4. Derivatives of hyoid arch
5. 4th layer of scalp
6. Mitosis
7. Carotid Sheath
8. Features of axis vertebra
9. Classification of synovial joints
10. Middle meatus of nose

**WRITE BRIEFLY ON:** **10x2=20**

11. Metopic suture
12. Enumerate four structures passing through jugular foramen
13. Attachments and venous sinuses of falx cerebri
14. 4 nerves related to mandible
15. Draw and label structure (Microscopic) of Hyaline Cartilage
16. List out 4 (four) congenital facial anomalies
17. Pterion
18. Vocal cord
19. Formation and termination of external jugular vein
20. Name the pharyngeal constrictors. What is their nerve supply?

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2014**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe mandibular nerve under **1+3+3+2=9**
   a) Origin
   b) Divisions and Branches
   c) Course and Relations
   d) Applied Aspects
2. Describe the position, relations, blood supply and histology of thyroid gland. **1+3+2+3=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3. Microscopic picture of T.S of bone
4. Cavernous sinus
5. Sphenoidal air sinus
6. Development of palate
7. Blood supply of scalp (only arterial supply)
8. Submandibular Ganglion
9. Histology of lymph node
10. Subclavian artery

**WRITE BRIEFLY ON:** **10x2=20**

11. Hyoid bone
12. Sphenomandibular ligament
13. Auditory tube
14. Parotid duct
15. Cricothyroid – origin and insertion
16. Hare lip
17. Articular disc of tempero-mandibular joint
18. Circumvallate papillae
19. Sesamoid bone
20. Name the extrinsic muscles of tongue

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JUNE, 2013**
**FIRST BDS EXAMINATION**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Describe the anatomy, histology, blood supply and nerve supply of submandibular salivary gland. **3+2+2+2=9**

2. Describe the extra cranial course, branches and distribution of facial nerve. Add a note on Bell's palsy. **3+3+2+1=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3. Pharyngeal pouches
4. Fourth ventricle
5. Ciliary ganglion
6. Classification of chromosomes
7. Posterior cricoarytenoid muscle
8. Maxillary air sinus
9. Microscopic picture of trachea
10. Cartilaginous joints

**WRITE BRIEFLY ON:** **10x2=20**

11. Nerve supply and action of sternocleidomastoid muscle
12. Dangerous area of the face
13. Blood supply of thyroid gland
14. Name venous sinuses associated with tentorium cerebella
15. Name any four age changes of mandible
16. Name parts of lacrimal apparatus
17. Name four connective tissue cells and their functions
18. Development of upper lip
19. Bones meeting at pterion
20. Contents of carotid sheath.

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**416 / 400-FIRST B.D.S. DEGREE EXAMINATION – DECEMBER, 2012**

General Anatomy Including Embryology & Histology (Nr & Or)-Time : 3 Hours-Max. Marks : 70-Answer all questions-Draw neat labeled diagrams wherever necessary.

1..Explain the features in the lateral wall of nasal cavity. Add a note on its blood supply and nerve supply=5+2+2=9m

2..Name the boundaries and contents of carotid triangle=6+3=9m

Write Short Notes On: 8 x 4=32m

3..Hyoglossus muscle
4..Blood supply to long bones
5..Microscopic picture of elastic artery
6.Boundaries and contents of sub occipital triangle
7..Orbicularis oculi muscle
8..Superior orbital fissure
9..Relations of lateral lobe of thyroid gland
10.Mandibular nerve

Write Briefly On: 10 x 2=20m

11.Mandibular foramen
12.Name the modifications of cranial dura mater
13.Bell's Palsy
14.Microscopic picture of thyroid gland
15.Pterion
16.Muscles attached to superior nuchal line
17.Distribution of inferior division of oculomotor nerve
18.Development of parathyroid gland
19.Structures pierced by parotid duct
20.Attachment of Sphenomandibular ligament

**416 / 400-FINAL BDS. DEG. EXAM-JUNE, 2012-Gen. Anatomy Including Embry. & Histology**

(NR & OR)-Time:3 Hrs-Max.Mrks :70-Answer all-Draw neat labeled diagrams wherever necessary

1..Describe the mucous membrane of the tongue. Enumerate the muscles, nerve supply and development of the tongue=2+3+2+2=9m

2..Enumerate the Extra ocular muscles. Mention their nerve supply, actions and applied anatomy=2+3+2+2=9m

Write short notes on: 8 X 4=32m

3.Facial artery
4.Nasal septum
5.Development of face
6.Microscopic picture of thin skin
7..Ramus of mandible
8..Otic ganglion
9. Microscopic picture of Liver
10.Cavernous sinus

Write briefly on: 10 x 2=20m

11.Islets of Langerhans Dangerous areas of scalp.
12.Blood supply of Palatine tonsil
13.Muscles supplied by spinal accessory nerve
14.Distribution of Lingual nerve
15.Vocal cord
16.Elastic cartilage
17.Dental formula in adults
18..Blastocyst
19.Parts of brain stem

**416 / 400-FIRST B.D.S.(NR. & OR) DEG. EXAMINATION – DECEMBER,2011/JANUARY, 2012**

GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY-(NR & OR)-Time :3 Hrs-

1..Name the muscles of facial expression. Describe the origin, insertion, nerve supply and actions of Buccinator muscle=9m

2..Explain the boundaries and contents of posterior triangle of neck=9m

Write short notes on: 8 x 4=32m

3..Lymphatic drainage of tongue.
4..Microscopic structure of Hyaline cartilage.
5..Styloid process of temporal bone.
6..Derivatives of mandibular arch.
7..Investing layer of deep cervical fascia.
8..Superior orbital fissure.
9. Notochord.
10.Microscopic structure of pancreas.

Write briefly on:10 x 2=20m

11.Name the structures passing through foramen ovale.
12.Mention the nerve supply of digastric muscle
13.Mention the venous drainage of thyroid gland.
14.Name the contents of sub-occipital triangle.
15.Mention any four tributaries of internal jugular vein.
16.Name the derivatives of third pharyngeal pouch.
17.Parotid Duct.
18.Name four differences between skeletal and cardiac muscles.
19. What is metopic suture?
20.Name four muscles supplied by ansa cervicalis.

**416 / 400-FIRST B.D.S. DEGREE EXAMINATION – JUNE, 2011-GENERAL ANATOMY**
INCLUDING EMBRYOLOGY & HISTOLOGY-(NR & OR)-Time : 3 Hours-Max. Marks : 70-
Answer

1..Classify dural venous sinuses. Describe the cavernous sinus=9m
2. Describe the origin, course and branches of mandibular nerve=9m
Write Short Notes On: 8 x 432m
3. Trochlear nerve. 4. Para nasal air sinuses 5. Rhomboid fossa of fourth ventricle of brain.
6. Microscopic picture of Pituitary gland. 7. Hyoid bone 8. External jugular vein
9. Development of face and its anomalies. 10.Movements of Temporomandibular joint
Write Briefly On: 10 x 2 =20m
11. Nerve supply and action of mylohyoid 12. Premaxilla
13. Inferior alveolar nerve 14. Branches from first part of maxillary artery
15. Sphenomandibular ligament 16. Jugular foramen
17. Temporary Teeth 18. Tonsil 19. Name any four contents of Digastric triangle
20. Little's area

**416/400-FIRST B.D.S. DEG. EXAM – DEC., 2010/JAN., 2011-GENERAL ANATOMY(NR & OR)**

1. Describe the origin, course, relations, branches and applied anatomy of maxillary nerve=2+2+2+2+1
2. Describe the position, relations, blood supply and development of Parotid gland=1+4+2+2=9m
Write Short Notes On: 8 x 4 =32m
3. Tympanic membrane 4. Microscopic structure of compact bone 5. Derivatives of mandibular arch
6. Venous drainage of face 7. Maxillary artery 8. Lateral wall of nasal cavity 9. Maxillary air sinus
10.Histological appearance of peripheral nerve
Write Briefly On: 10 x 2 =20m
11. Structures attached to styloid process of temporal bone 12. Digastric muscle
13. Mention any FOUR branches of cervical plexus
14. Name any TWO muscles of larynx and their nerve supply 15. Hilton's law
16. Name the structures passing through stylomastoid foramen
17. Nerve supply and actions of inferior oblique muscle of the eye ball
18. Name the contents of carotid sheath 19. Microscopic picture of cardiac muscle 20. Blastocyst

**416-B.D.S.FIRST YEAR DEGREE EXAMINATION – JUNE, 2010 (N.R.)**

1. Mention the features of the maxillary artery under the following:- parts, course,&branches=1+3+5
2. Describe the cavernous sinus under the following features:- extent, tributaries, relations and communications=1+2+3+3=9m
Write Short Notes On: 8 x 4 =32m
3. Sternocleido mastoid muscle 4. Carotid sheath 5. Subclavian artery 6. Ramus of the mandible
7. Somites 8. Palatine tonsil 9. Development of the tongue 10.Histology of lymph node
Write Briefly On: 10 x 2 =20m
11. Microscopic structure of large sized artery 12. Nasal septum 13. Vocal Cards
14. Pterygo Maxillary Fissure 15.Parotid fascia 16.Structures supplied by trunk of the mandibular nerve
17. Development of upper lip 18. Name the nerves related to the thyroid gland
19. Name the muscles enclosed by the general investing layer of deep cervical fascia
20. Name any two longitudinal muscles of the pharynx

**418-B.D.S. FIRST YEAR DEGREE EXAMINATION – JUNE, 2010 (N.R.)**

1. Define periodontium. Discuss the principal fibers of periodontal ligaments=9m
2. Discuss the morphology of permanent maxillary canine=9m
Write Short Notes On=3. Non keratinocytes 4. Hematoxylin and eosin stains
5. Cemento-enamel junction 6. Eruption dates of permanent teeth 7. Development of palate 8. Traits
9. Functions of maxillary sinus 10.Hertwig's epithelial root sheath
Write Briefly On=11. Myoepithelial cells 12. Curve of Wilson 13. Enamel Knot
14. Secondary cementum 15. Predentin 16. Reparative Dentin 17. Pulp stones
18. Von ebner's gland 19. Fate of dental lamina 20. Stratum granulosum

**418-B.D.S.FIRST YEAR DEG. EXAM-JANUARY, 2010-DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY-(New Regulations)**

1. Classify oral epithelium and discuss the histology of orthokeratinized epithelium=9m
2. Discuss the morphology of permanent maxillary first molar=9m

Write Short Notes On: 8 x 4 =32m

3. Theories of Tooth eruption 4. Difference between cellular and acellular cementum
5. Bell stage of tooth development. 6. Ground section 7. Deglutition
8. Principal fibres of periodontal ligament 9. Enamel lamellae and enamel tufts
10.Physical and chemical properties of dentin

Write Briefly On: 10 x 2 =20m

11. Mamelon 12. Bundle Bone 14. Berbeck granules 15. Dead tracts 16. Odontoclast
17. IInferior alveolar nerve 18. Ligaments of TMJ 19. Curve of spee 20. Gnarled enamel

**416-B.D.S.FIRST YEAR DEGREE EXAMINATION – JANUARY, 2010**
**GENERAL ANATOMY INCLUDING EMBRYOLOGY & HISTOLOGY-(New Regulations)**

1. Enumerate the contents & boundaries of the carotid triangle. Describe its contents in detail=2+2+5
2. Describe the mandibular nerve under the following headings: Extracranial course, branches, structures supplied by it=1+3+5=9m

Write Short Notes On: 8 x 4 =32m

3. Buccinator muscle 4. Spermatogenesis 5. Microscopic structure of hypophysis cerebri
6. Facial Artery 7. Auditory Tube 9. Lateral wall of the nasal cavity
10.Greater occipital nerve

Write Briefly On: 10 x 2 =20m

11. Second arch cartilage derivatives 12. Pterion 13. Jugular foramen
14. Contents of supra sternal space 15. Cutaneous nerve supply to anterior half of the scalp
16. Muscles supplied by spinal part of the Accessory nerve
17. Microscopic structure of a medium sized artery 18. Development of parathyroid glands
19. Oblique facial cleft 20. Cricothyroid muscle

**416-B.D.S.FIRST YEAR DEGREE EXAMINATION – JUNE, 2009**

1. Enumerate the muscles of mastication. Mention their attachments, relations, nerve supply and actions in detail=2+2+2+3=9m
2. Name the layers of the scalp. Describe the layers, nerve supply, and arterial supply=2+4+3=9m

Write Short Notes On: 8 x 4 =32m

3. Maxillary air sinus 4. Mylohyoid muscle 5. External jugular vein 6. Submandibular ganglion
7. Vertebral artery 8. Interior of the larynx 9. Ansa cervicalis 10.Chorda tympani nerve

Write Briefly On: 10 x 2 =20m

11. Mastoid process 12. Anterior Fontanelle 13. Stylomandibular ligament
14. Name the cervical branches of the facial artery
15. Name any four tributaries of the internal jugular vein 16. Parotid duct
17. Development of the upper lip 18. Retromandibular vein 19. First cleft membrane
20. Stylomastoid foramen

**416-B.D.S.FIRST YEAR DEGREE EXAMINATION – JANUARY, 2009**

1.. Classify oral mucous membrane and discuss the clinical appearance and histological features of gingival=9
2. Morphology of permanent mandibular first molar=9m

Write short notes on: 3. Bell Stage of tooth development 4. Cemento-Enamel Junction
5. Composition of Saliva 6. Occlusal surface of mandibular second premolar
7. Primary Dentin 8. Pulp stones 9. Ground Section 10. Deglutition

Write Briefly on: 10 x 2 =20m; 11. Tetany 12. Excretory duct of major salivary glands
13. Enamel Lamellea 14. Line angles in a maxillary central incisor 15. Oblique ridge
16. Intermediate plexus in the periodontal ligament 17. Cusp of Carabelli 18. Von Korff's fibres
19. Myoepithelial Cells 20. Formalin

**405-BDS.FIRST YR DEG EXAM-JULY, 2008-ORAL ANATOMY, ORAL PHY. & ORAL HIST.**

PART - A

1. Enumerate the differences between deciduous and permanent dentition=9m

Write short notes on=4x4=2. Alveolar bone 3. Hertwig's epithelial root sheath
4. Muscles of mastication 5. Theories of pain transmission

Write briefly on=5x2=6. Curve of Spee 7. FDI tooth numbering system 8. Calcitonin
9. Cusp of Carabelli 10. Dead tracts

PART - B

11. Classify oral mucous membrane and describe keratinized mucosa=9m

Write short notes on=4x4=12. Functions of saliva 13. Age changes in pulp 14. Cellular cementum 15. Muscles of tongue

Write briefly on=5x2=16. Non keratinocytes 17. Circumpulpal dentin 18. Sharpey's fibers
19. Meckel's cartilage 20. Alkaline phosphatase

**405=B.D.S. FIRST YEAR DEGREE EXAMINATION – MARCH, 2008=ORAL ANATOMY,**

PART - A

1. Describe the morphology of permanent maxillary first molar. Add a note on its chronology=9m

Write Short Notes On:= 4x4=2. Stages of deglutition 3. Cells of periodontal ligament
4. Age changes in dentin 5. Active & Passive eruption

Write Brief Notes On:= 5x2=10

6. Embrasures 7. Centric relation 8. Line angles and point angles 9. Osteoclast 10. Gnarled enamel

PART – B

11. Describe in detail amelogenesis.= 9m

Write Short Notes On = 4x4=12. Theories of eruption 13. Incremental lines 14. Cementogenesis
15. Development of tongue

Write Brief Notes= 5x2=16. Denticles 17. Bundle bone 18. Goblet cell 19. Hunter-sehregger bands 20. Macrophages

**405-NR-B.D.S. DEGREE EXAM – OCTOBER, 2007-SECOND BDS EXAMINATION**

Part-A

1. Composition of dentin and the different types of dentin=2+7

Write short notes on: 4 x 4 =16m; 2. Cap stage of tooth development 3. Gingival fibers
4. Cemento-Enamel junction 5. Pulp stones

Write briefly on: 5 x 2 =10m; 6. Odontoclasts 7. Periodontal ligament traction theory
8. Embrasures 9. Mycoepithelial cells 10.Ligaments of Temporomandibular joint

Part-B

11.Occlusal surface of permanent maxillary first molar and the differences between permanent maxillary first molar and permanent mandibular first molar=5+4=9m

Write short notes: 4 x 4 =12.Cusps 13.Taste bud 14.Cells of the periodontal ligament 15. Bundle bone

Write briefly on: 5 x 2 =10m; 16. Leeway space of Nance 17. Functions of maxillary sinus
18.Hunter-Schreger bands 19. Cell rests of malassez 20.Gingival col

**APRIL, 2007**

PART - A

1. Chemical composition of enamel and the life cycle of ameloblasts. (2+7=9)
2. Write short notes on: 4x4=16=a) Dentinal tubules b) Types of cementum
c) Theories of tooth eruption d) Differences between deciduous and permanent teeth
3. Write briefly on: 5x2=10=a) Raschkow's plexus b) Vonkorff's fibers
c) Incremental lines in hard tissues of tooth d) Anatomical crown and clinical crown of tooth
e) Submerged teeth

PART - B

1. Composition and functions of saliva.=3+6= 9
2. Write short notes on: 4x4=16=a) Lip mucosa b) Theories of dentin sensitivity
c) Occlusal surface of Permanent mandibular first molar d) Epithelial root sheath of Hertwig
3. Write briefly on: 5x2=10=a) Fixatives in tissue processing b) Cementicles c) Cribriform plate
d) Lining of maxillary sinus e) Mast cells

**SEPT- 2006**

Part-A

1. Enumerate the stages of tooth development and write about the bell stage of tooth development=2+7
2. Write short notes on: 4 x 4 =16m; a) Zones of pulp b) Principal fibres of periodontal ligament c) Serous and mucous acini d) Palatal Mucosa (Macroscopic and Microscopic features)
3. Write briefly on: 5 x 2 =10m; a) Osteoclasts b) Gnarled enamel c) Interglobular dentin d) Ridges e) Curve of Spee

Part-B

4. Write the chronology and morphology of maxillary first premolar and the differences between maxillary first premolar and maxillary second premolar =2+5+2=9m
5. Write short notes on: 4 x 4 =16m; a) Tooth numbering systems b) Muscles of Mastication c) Dentogingival junction d) Theories of mineralisation
6. Write briefly on: 5 x 2 =10m; a) Cell rests of Serres b) Enamel lamellae c) Spongy bone d) Curshion hammock ligament e) Line angles & Point angles of tooth

**APRIL-2006**

Part-A

1. Discuss the types of Dentin=9m 2. Write short notes on: 5 x 2 =10marks; a) Age changes in pulp

b) Differences between Maxillary first premolar and mandibular first premolar c) Clinical and microscopic features of palatal mucosa d) Minor salivary glands

3. Write briefly on: 5 x 2 =10marks; a) Stellate reticulum b) Hunter-Schreger bands c) Calcitonin d) Osteoclasis e) Gingival col

Part-B

5. Discuss the theories of Eruption of teeth. Write a note on shedding of deciduous teeth =9marks
6. Write short notes on: 4 x 4 =16marks; a) Ligaments of temporomandibular joint b) Development of mandible c) Sharpey's fibers d) Dental lamina and vestibular lamina
7. Write briefly on: 5 x 2 =10marks; a) Physiological mesial migration b) Curve of Monson c) Sequence of eruption of permanent teeth d) Spillway spaces e) Non keratinocytes

**OCT-NOV-2005**

Part-A

1. Enumerate the stages of tooth development and write about the formation of root =9m
2. Write short notes on: 4 x 4 =16marks; a) Functions of saliva b) Types of cementum c) Serous cells d) Differences between deciduous and permanent teeth
3. Write briefly on: 5 x 2 =10marks; a) Curve of spee b) Meckel's cartilage c) Effect of Vitamin-C deficiency on oral tissues d) Enamel spindle e) Functions of maxillary sinus

Part-B

4. Write about specialized mucosa of the oral cavity =9m
5. Write short notes on: 4 x 4 =16marks; a) Occlusal surface of permanent mandibular first molar b) Zones of pulp c) Supporting Alveolar bone d) Development of tongue
6. Write briefly on: 5 x 2 =a) Dimilunes b) Submerged teeth c) Neonatal line d) Inter tubular dentin e) Transeptal fibres

**MAR/APR.2005**

Part-A

1. Discuss the Hypocalcified structures in Enamel =9marks
2. Write short: 4 x 4 =a) Stages of Deglutition b) Occlusal surface of permanent maxillary first molar c) Theories of Dentine sensitivity d) Alveolar bone proper
3. Write briefly on: 5 x 2 =10marks; a) Embrasures b) Leeway space of Nance c) Subodontoblastic plexus of Raschkow d) Tetany e) Langerhan's Cell

Part-B

4. Discuss the cells and fibers of Periodontal Ligament =9marks
5. Write short notes on: 4 x 4 =16marks; a) Vermilion border of the lip b) Myo-epithelial cells

c) Procedure of Decalcification of the Tooth d) Hypercementosis

6. Write briefly on: 5 x 2 =10marks; a) Interglobular Dentin b) Cell rests of Malassez
c) Active and Passive eruption of Tooth d) Ligaments of Temporomandibular joint
e) Sequence of eruption of Deciduous Teeth

**OCTOBER, 2004(N.R.)**

Part-A

1. Enumerate the difference between cellular and acellular cementum (5+4=9marks)
2. Write short: 4 x 4 =a) Pathways of pain b) Root formation c) Periodontal ligament
d) Howships lacunae
3. Write briefly on: 5 x 2 =10marks; a) Nerve supply of palate b) Hertwig's epithelial rooth sheath
c) Cementicles d) Stratum granulosum e) Pathway of taste

Part-B

4. Enumerate the stages of tooth development and write about the formation of Root(2+7=9marks)
5. Write short notes: 4 x 4 =a) Osteoclast b) Circumvallate papillae c) Alveolar bone d) Cingulum
6. Write briefly on: 5 x 2 =10marks; a) Embrasures and ridges b) Pulp stones
c) Sharpey's fibres d) Leeway space e) Reparative Dentin

**APRIL/MAY, 2004. (N.R.)**

Part-A

1. Describe the structure and functions of pulp (5+4=9marks)
2. Write short answers on: 4 x 4 =16m=a) Effect of hormones on oral tissue b) Theories of eruption
c) Difference between serous and mucous glands d) Calcium homeostasis
3. Write briefly on: 5 x 2 = a) Cellular cementum b) Gingival col. c) Embrasures
d) Shedding of deciduous teeth e) Melanocyte

Part-B

4. Enumerate the stage of tooth development and describe the stages (4+5=9marks)
5. Write short answers on: 4 x 4 =16marks;
a) Functions of saliva b) Sequence of eruption of permanent teeth
c) Chemical composition of enamel d) Bundle fibres of the periodontal membrane
6. Write briefly on: 5 x 2 = a) Incisive papilla b) Fixing of sections c) Stages of deglutination
d) Tubercle of carabelli e) Alkaline phosphatase.

**OCTOBER, 2003. (N.R.)**

Part-A

1. Describe the Calcium and phosphorous metabolism in relation to development of teeth(5+4=9m)
2. Write short answers on: 4 x 4 =a) Theories of eruption b Functions of Saliva
c) Palmar system of notation d) Neural control of deglutition
3. Write briefly on: 5 x 2 =a) Natal and Neonatal teeth b) Bundle bone c) Predentin
d) Circumvallate papillae e) Cellular elements of pulp.

Part-B

4. Give the morphological differences between the permanent maxillary & mandibular first molars.(5+4)
5. Write short answers on: 4 x 4 =a) Cap stage b) Theories of dentine sensitivity c) Wharton's duct
d) Difference between deciduous and permanent dentition.
6. Write briefly on: 5 x 2 =a) Granular layer of Tomes b) Serous acini c) Taste buds
d) Passive eruption e) Defense cells of pulp.

**APRIL 2003.**

Part-A

1. Describe the histology of various types of dentin and their function =9marks
2. Write short notes on: 4 x 4 =16m a) Nerve supply to tongue b) Hertwig epithelial sheath
c) Maxillary sinus d) Cemento-Enamel junction
3. Write short notes on: 5 x 2 =10marks a) Haversian system b) Greater palatine foramen
c) Mylohyoid ridge d) Articular capsule e) Embrassures

Part-B

4. Enumerate the differences between deciduous and permanent teeth =9marks
5. Write short notes on: 4 x 4 =16m=a) Paratharmone b) Marginal ridge c) Tuberosity d) Lymphnode
6. Write=5 x 2 =a) Canine fossa b) Osteoclast c) Zone of well d) Incisive papilla e) Mental foramen

**OCTOBER, 2002**

Part-A

1. Describe the stages in life-cycle of an ameloblast =9marks
2. Write short answers: 4 x 4 =a) Pulp stone b) Functions of Saliva c) Parathormone d) Inter-Globular Dentin
3. Write briefly on: 5 x 2 =a) Taste Bud b ) Contact point C) Rugae d) Mental Foramen e) Cap Stage

Part-B

4. Describe the muscles of Tongue 9marks
5. Write short answers on: 4 x 4=a) Cemento-Enamel Junction b) Nasmyth Membrane c) Centric Occlusion d) Inferior Alveolar Nerve
6. Write briefly on : 5 x 2 =10m=a) Cingulum b) Vitamin C c) Meckel Cartilage d) Uvula e) Ptyalin

**SECOND B.D.S. 10th AUGUST 2001.**

Part-A

1. Define Dentin. Describe various types of Dentin –10marks
2. Short Notes: a) Nasmyth Membrane b) Mekel Cartilage c) Cementicles d) Oblique Ridge e) Maxillary sinus f) Cingulum =6x5=30marks

Part-B

3. Discuss Morphology of Maxillary permanent first molar –10marks
4. Short Notes: a) Cap stage b) Hertwig Epithelial Root sheath c) Papillae of tongue d) Synovial fluid e) Inferior alveolar canal f) Paratharmone =6x5=30marks

**OCTOBER, 2000.**

Part-A

1. Write in detail about the Physiological Tooth movement =10marks
2. Short Notes: a) Stages of Tooth Development b) Hypocalcified Areas of Enamel c) Fixing d) Osteogenic Progenitor cells e)Movements of Tempero Mandibular Joint (TMJ) f) Types of Cementum

Part-B

1. Classify Oral mucous Membrane and write in detail about clinical features and microscopic features of Gingiva
2. Short Notes: a) Cusp of Care Belli & Tubercle of Zuckercandle b) I Branchial arch c) Mastication d) Bonwill's Theory of Occlusion e) Age changes of Dentin f) Ectomesenchymal cells =6x5=30marks

**APRIL, 2000.**

Part-A

1. Write Chronology of both the Dentitions =10m 2. Short notes: a) Cells of the Periodontal Ligament b) Decalcification c) Vitamin C d) Bell Stage e) Myo-epithelial cell f) Theories of Eruption=6x5

Part-B

1. Write in detail about life cycle of an Ameloblast and describe in detail the Amelogenesis =10marks
2. Short Notes: a) Theories of Mineralization b) Embrasures c) Vermilion Border d) Cementicles e) Intra Tubular Dentine f) Gland of Von Ebnor =6x5=30marks

**OCTOBER, 1999.**

Part-A

1. Write in detail the differences between permanent and deciduous teeth and write a note on eruption dates of deciduous teeth =10m
2. Write short notes on: a) Age changes in Enamel b) Clearing c) Alkaline Phsophatase theory of Examination d) Dentine Sensitivity e) Pulp Stones f) Ridges

Par-B

1. Write in detail about functions, Histology and Development of Salivary Gland =10marks
2. Write short notes on: a) Principal Fibres b) Leeway Space of Nance c) Deglutition d) Pain Pathway of Maxillary Permanent First Molar e) Maxillary Sinus f) Palate

**10th APRIL, 1999.**

Part-A

1. Describe Cellular Elements of Pulp =10marks
2. Short Notes: a) Hertwig Epithelial Rooth sheath b) Embrassures c) Masseter Muscle d) Volkman's canal e) Papillae of Tongue f) Vitamin-D =6x5=30marks

Part-B

1. Enumerate the composition and functions of Saliva =10marks
2. Short Notes: a) Ameloblast b) Dental lamina c) Types of Cementum d) Types of Gingiva e) Embrasures f) Osteoclast =6x5=30marks

**OCTOBER, 1998.**

Part-A

1. Describe the Occlusal surface of Permanent Maxillary first molar and write the differences between permanent maxillary first molar and permanent maxillary second molar =10marks
2. Short Notes: a) Meckel cartilage b) Serous Acini c) Ridges d) Eruption time of deciduous teeth e) Age changes in pulp f) Embrasures =6x5=30marks

Part-B

3. Classify oral mucous Membrane. Describe the layers of keratinised mucosa and add a note on gingiva =10
4. Short Notes: a) Cemento-Enamel junction b) Enamel tufts, lamellae and spindles c) Maxillary sinus d) Curve of spee and curve of Monson e) Composition of Saliva f) Development of upper lip =6x5

**APRIL, 1998.**

Part-A

1. Describe Morphological characteristics of Maxillary first premolar and write the differences between maxillary first premolar and maxillary second premolar =10marks
2. Short Notes- a)Embrausers b)Myoepithelial cells c)Cusp of Carabelli d)Nerve supply of maxillary teeth e) Differences between deciduous and permanent teeth f) Supernumerary teeth =6x5=30marks

Part-B

3. Describe the cap and bell stage of tooth development =10marks
4. Short Notes: a) Zones of pulp b) Submerged teeth c) Inter Globular Dentin d) Deglutition e) Hunter-schreger Bands f) Alkaline Phosphatase =6x5=30marks

**10th OCTOBER, 1998.**

Part-A

1. Describe the morphological characteristics of permanent mandibular first molar and write the differences between permanent mandibular first molar and permanent mandibular second molar =15marks
2. Short Notes: a) FDI system of tooth notation b) Grooves c) Minor salivary glands d) Development of the mandible e) Mastered Muscle =5x5=25marks

Part-B

3. Describe the cells and fibers of the periodontal ligament =10marks
4. Short Notes: a) Dead tracts and sclerotic dentin b) COL c) Scurvy d) Alveolar Bone e) Dental Lamina =5x5

**APRIL, 1997.**

Part-A

1. What is chronology of Deciduous and Permanent dentition =10marks
2. Short Notes: a) Mandibular first molar tooth b) Embrasures c) Minor Salivary glands d) Supernumerary teeth e) Arterial supply of Maxillary teeth =5x5=25marks

Part-B

3. Describe briefly the microscopic structure of pulp =10marks
4. Short Notes: a) Development of upper lip b) Lateral pterygoid muscle c) Dentional tubules d) Mesial Drift e) Enamel f) Alkaline Phosphatase =6x5=30marks

**OCTOBER, 1996.**

Part-A

1. Describe briefly the Tempromandibular joint. What are the movements possible in it =15marks
2. Short Notes: a) Dental formula b) Parotid salivary gland c) Wisdom tooth d) Calcification of deciduous teeth e) Root forms of Premolar teeth =5x5=25mark

Part-B

1. Describe the microscopic structure of Enamel =10marks
2. Short Notes: a) Development of Tongue b) Temporalis muscle c) Dental lamina d) Haversian system e) Cementum =5x5=25marks

**APRIL, 1996.**

Part-A

1. What are the major contrast between deciduous and permanent teeth =10marks
2. Short Notes: a) Cemento enamel junction b) Left maxillary first molar tooth c) Proximal contact areas d) Inferior alveolar nerve e) Occlusal Curvature =5x5=25marks

Part-B

1. Describe briefly the microscopic structure and functions of Periodontal ligament =10marks
2. Short Notes: a) Enamel organ b) Massenter muscle c) Odontoblasts d) Simple epithelium e) Lamina dura f) Composition of tooth =6x5=30marks

**18th OCTOBER, 1995.**

Part-A

1. Enumerate the difference between Deciduous and permanent teeth =15marks
2. Short Notes: a) Saliva-Composition and function b) Premolars c) Dead tracts d) Dento gingival function e) Contact Points =5x5=25marks

Part-B

1. Describe theories of Eruption 2. Short Notes: a) Functions of Pulp b) Nasmyth Membrane c) Fordy's spot d) Occlusal surface of permanent MAXILLARY FIRST MOLAR e) Sharpey's Fibers =5x5=25marks

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION –APRIL , 2026**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1) Name the Muscles of Tongue. What are the blood supply, nerve supply and lymphatic drainage of Tongue? (3+3+2+1=9) 2x9= 18

2) Describe the posterior triangle of neck under the following headings (4+1+3+1=09)
   a), Boundaries . c. Contents
   b. Subdivisions d. Applied Anatomy

8x4=32

**WRITE SHORT NOTES ON**:

3) Palatine Tonsil
4) Enumerate the extraocular muscles. Mention their nerve supply action and two applied anatomical aspects
5) Enumerate the derivatives of first pharyngeal arch and mention two applied aspects
6) Describe the branches and distribution of mandibular nerve with a neat labelled diagram
7) Describe the relations, tributaries and applied anatomy of cavernous sinus
   Internal Carotid Artery
9) Maxillary air sinus
10) Submandibular Ganglion .

10x2=20

**WRITE BRIEFLY ON**:

11) Draw a neat labeled diagram of microscopic structure of hyaline cartilage
12) Styloid apparatus
13) Mention the attachements and venous sinuses present in falx cerebri
14) Enumerate any four important features of autosomal recessive inheritance
15) Modiolus
16) Permanent Teeth
17) Karyotyping
18) List any four muscles of larynx with their nerve supply
19) Mention any four types of sutures with one example for each
20) Enumerate any two histological difference between elastic artery and large sized vein .

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION –OCTOBER, 2025**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Classify oral mucous membrane and write about keratinized mucosa 2x9=18

2. Discuss in detail the morphology permanent Maxillary first molar. 8x4=32

**WRITE SHORT NOTES ON**:

3. Tooth numbering systems
4 Physiology of speech production
5 Histology of Temporor mandibular joint
6 Maxillary Sinus
7) Pulp stones
Muscles of mastication
9) Histology of tooth eruption
10) Ground sections of teeth . 10x2=20

**WRITE BRIEFLY ON**:

11) Age changes in pulp
12) Decalcification
13) Leeway Space of Nance
14) Guerncular cord
15) Innervation of the palate
16) Langerhans cells
17) Microtome
18) Dead tracts
19) Gnarled enamel
20) Osteoblasts and osteocytes .

**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION –APRIL , 2025**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Discuss in detail the morphology of permanent maxillary central incisor. Add a note on its chronology 7+2 9

2. Discuss the microscopic structures of pulp and add a note on its functions. 6+3=9

8x4=32

**WRITE SHORT NOTES ON**:

3. Saliva and its composition
4 Bell stage of tooth development
5 Ground section of teeth
6 Orthokeratinized epithellum
7) Deglutition
Development of palate
9) Types of cementum
10) Differences between permanent and deciduous dentition.

10x2=20

**WRITE BRIEFLY ON**:

11) Memelons
12) Col
13) Embrasures
14) Sequence of eruption of permanent maxillary teeth
15) Curve of spee
16) Odontoblast
17) Submersal teeth
18) Bennet movement of mandible
19) Tomes process
20) Reparative dentin.

**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – OCTOBER 2024**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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| | | |
|---|---|---|
| 1 | Discuss in detail the morphology of permanent maxillary first molar | 9 |
| 2 | Discuss in detail the anatomy and physiology of the pulp dentin | 9 |

**WRITE SHORT NOTES ON**: 8x4=32

3) Calcium and phosphorous metabolism
4) Theories of mineralization
5) Microscopic features of oral mucosa and its variations
6) Centric occlusion
7) Teeth nomenclature
8) Blood supply to the tongue
9) Muscles of mastication
10) Pulp calcifications.

10x2=20

**WRITE BRIEFLY ON**:

11) Hydrodynamic theory of dentine hypersensitivity
12) Fluorosis
13) Striae of Retzius
14) Ameloblasts
15) Lymphatic drainage of the tongue
16) Lamina Dura
17) Principal fibers of periodontal ligament
18) Gemination of teeth
19) Complications of tooth shedding
20) Hypercementosis

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – FEBRUARY 2023**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1 Describe the morphology of permanent maxillary first molar 9

2 Discuss in detail the various anomalies in the formation of the hard tissues of the teeth 9

**WRITE SHORT NOTES ON**: 8x4=32

3) Hertwig's epithetial root sheath
4) Physiology of speech production
5) Microscopic features of periodontial tissues
6) Compensatory curves in occlusion
7) Pulp stones
8) Muscles of mastication
9) Histology of tooth eruption
10) Development of mandible.

10x2=20

**WRITE BRIEFLY ON**:

11) Functions of dentin- Pulp complex
12) Sclerotic dentin
13) Gubernacutar cord
14) Odontoblasts
15) Innervation of the palate
16) Functions of temporomandibular joint
17) Composition of saliva
18) Concrescence
19) Dental formula
20) Age changes in oral mucosa

**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE, 2022**

**FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION** (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1. Classify oral mucosa and write in detail about Keratinized mucosa 9
2. Describe the morphology of right permanent mandibular first molar 4+2+3=9
3. **WRITE SHORT NOTES ON**: 8x4=32

4. Mucouis salivary gland
5. Cap stage of tooth development
6. Occlusal surface of Maxillaryi II premolar
7. Mechanism of shedding
7) Functions of maxillary sinus
Taste Pathway
8)
9) Cemento enamel junction
10) Fixation and dehydration in tissue processing.

10x2=20

**WRITE BRIEFLY ON**:

11) Fibroblasts
12) Mamelon
13) Key of Oclusion
14) Osteoclast
15) Ridge
16) Fluorosis
17) Reparative dentin
18) Hypercementosis
19) Physiologic tooth movement
20) Articular disc

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – DECEMBER 2021**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1 Describe in detail the morphology of maxillary firs permanent molar 9

2 Describe the microscopic structure of pulp. Add a note on its function. 4+2+3=9

**WRITE SHORT NOTES ON**: 8x4=32

3) Centric occlusion
4) Differences between maxillary and mandibular premolars
5) Muscles of Mastication
6) Principal fibres of periodontal ligament
7) Composition and functions of saliva
8) Development of Palate
9) Non Keratinocytes
10) Ligaments of temporomandibular joint.

10x2=20

**WRITE BRIEFLY ON**:

11) Embrasures
12) Dead tracts
13) Serous acini
14) Bundle bone
15) Cellular cementum
16) Diffuse calcifications
17) Perikymate
18) Curve of spee
19) Universal system of tooth notation
20) Cell rests of Malassez

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – APRIL 2021**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

---

1) Describe in detail the morphology of permanent mandibular first molar 9

2) Classify oral mucosa. Discuss the histologic fracture of gingiva 9

**WRITE SHORT NOTES ON**: 8x4=32

3) Ductal system of salivary glands
4) Hypo mineralized areas of dentin
5) Theories of tooth eruption
6) Neural crest cells
7) Development of mandible
8) Stages of deglutition
9) Root formation
10) Stages of tooth development

**WRITE BRIEFLY ON**: 10x2=20

11) Cusp of carabelli
12) Nasmyth's membrane
13) Articular disc
14) Fixatives
15) Enamel famellae
16) Odontoclasts
17) Primary cementum
18) Oxytalar fibres
19) Accessory canals
20) Cingulum

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – NOVEMBER 2020**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1) Discus the morphology of permanent maxillary first premolar add a note on its chronology 9

2) Classify oral epithelium, discuss in detail the histology of Masticatory Mucosa. 4+2+3=9

**WRITE SHORT NOTES ON**: 8x4=32

3) Contents of dentinal tubules
4) Histology of Temporo Mandibular joint
5) Difference between adult and infantile waliow
6) FDI system
7) Cemento-enamel junction
8) Age changes in Pulp
9) Difference between Primary and Permanent teeth
10) Ground Section.

10x2=20

**WRITE BRIEFLY ON**:

11) Primate spaces
12) Hertwlg's epithelial root sheath
13) Odland bodies
14) Gubernacular canal and its contents
15) Enamel tufts
16) Canlne fossa
17) Sharprey's fibers
18) Histology of alveolar bone
19) Histology of maxillary sinus
20) Mecke's Cartilage

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/ JULY 2019**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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| | | |
|---|---|---|
| 1) | Write in details about the structure of enamel and add a note on its clinical considerations | 9 |
| 2) | Describe the histology of the temporomandibular joint, Add a note on the ligaments and muscular attachments of the joit along the their functions. | 4+2+3=9 |
| | **WRITE SHORT NOTES ON**: | 8x4=32 |
| 3) | Differences between permanent and deciduous canine | |
| 4) | Structures on the dorsum of the tongue | |
| 5) | Tooth Numbering systems | |
| 6) | Deglutition | |
| 7) | Cemento-enamel junction | |
| 8) | Occlusal surface of the permanent mandibular second premolar | |
| 9) | Physical and chemical properties of dentin | |
| 10) | Meckel's cartilage | |
| 11) | | 10x2=20 |
| | **WRITE BRIEFLY ON**: | |
| 11) | Incremental lines in cementum | |
| 12) | Plexus of reschkow | |
| 13) | Salivvary pellicle | |
| 14) | Cribriform Plate | |
| 15) | Calcium | |
| 16) | Con Ebner's gland | |
| 17) | Mental foramen | |
| 18) | Blood supply and nerve supply to periodontal ligament | |
| 19) | Curve of Spee | |
| 20) | Haematoxylin and Eosin stain | |

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**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANURAY, 2019**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1) Describe the morphology of permanent maxillary Molar. 9

2) Classify oral mucosa. Write in detail about masticatory mucosa. 3+6=9

**WRITE SHORT NOTES ON**: 8x4=32

3) Bell stage of tooth development
4) Composition and functions of Saliva
5) Occlusal surface of mandibular first molar
6) Theories of dentin hypersensitivity
7) Development of Palate
8) Age changes in Dentin
9) Hypercementosis
10) Formation of root

10x2=20

**WRITE BRIEFLY ON**:

11) Mamelon
12) Osteon
13) FDI tooth numbering system
14) Embrasures
15) Submerged teeth
16) Cell Rests of Malassez
17) Bundle bone
18) Dental lamina
19) Primary and secondary cuticle
20) Functions of pulp

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418/405

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2018**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1) Describe the microscopic structure of the pulp. Add a note on its function. 4+5=9

2) Describe in detail the morphology of permanent maxillary canine. 9

**WRITE SHORT NOTES ON**: 8x4=32

3) Types of cementum
4) Principal fibres of Periodontal Ligament
5) Derivatives of the first Branchial Arch
6) Age changes in Dentin
7) Secretory stage of the life cycle of ameloblasts
8) Hertwig's epithelial root sheath
9) Tissue processing
10) Functional and histological differences between keratinized and non-keratinized oral mucosa

10x2=20

**WRITE BRIEFLY ON**:

11) 'Key hole' appearance of enamel
12) Epithelial rests of Malassez
13) Basket cell
14) Lingual nerve
15) Histology of Maxillary sinus
16) Nasmyth's membrane
17) Pit and Fissure
18) Cusp of Carabelli
19) Resting and Reversal lines
20) Alkaline phosphatase

**Q.P. CODE:418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANURAY, 2018**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

---

1) Describe the morphology of permanent mandibular first molar. 9

2) Enumerate the differences between primary and permanent Teeth. 9

**WRITE SHORT NOTES ON**: 8x4=32

3) Compensating curves
4) Keratinized Epithelium
5) Development of Palate
6) Tooth numbering system
7) Principle fibres of periodontal ligament
8) Temporomandibular joint
9) Hypo calcified structures of dentin
10) Theories of dentinal sensitivity

10x2=20

**WRITE BRIEFLY ON**:

11) Bundle bone
12) Histology of circumvallate papilla
13) Transitional structures during tooth development
14) Mamelons
15) Dentogingival junction
16) Remnants of enamel organ
17) Lamina dura
18) Incremental lines of Salter
19) Tertiary dentin
20) Zones of pulp

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**418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2017**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1) Discuss in detail the morphology and histology of Submandibular gland. 4+5=9

2) Describe in detail morphology of permanent Maxillary First Molar. 9

**WRITE SHORT NOTES ON**: 8x4=32

3) Composition of Saliva
4) Differences between maxillary central and lateral incisor
5) Deglutition
6) Gingival fibres
7) Theories of shedding
8) Bell stage of tooth development
9) Functions of Periodontal ligament
10) Histology of Maxillary sinus

10x2=20

**WRITE BRIEFLY ON**:

11) Neonatal lines
12) Sclerotic dentin
13) Embrasures
14) Alveolar bone proper
15) Sharpey's fibres
16) Odontoblastic zone
17) Transverse ridge with examples
18) FDI tooth notation
19) Ugly Duckling Stage
20) Dental Lamina

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**418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2017**
**FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)**
**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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1) Classify oral mucous membrane and write about keratinized mucosa. 2+7=9

2) Write about mandibular first molar. 9

**WRITE SHORT NOTES ON**: 8x4=32

3) Tooth numbering systems
4) Occlusal surface of mandibular first premolar
5) Histology of temporo mandibular joint
6) Muscles of mastication
7) Theories of mineralization
8) Histology of salivary glands
9) Types of dentin
10) Cells of periodontal ligaments

10x2=20

**WRITE BRIEFLY ON**:

11) Age changes in pulp
12) Decalcification
13) Cingulum
14) Gubernacular cord
15) Myoepithelial cells
16) Sequence of eruption of permanent teeth
17) Dead tracts
18) Tomes granular layer
19) Gnarled enamel
20) Osteoblasts and osteocytes

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**418NR/405OR**

**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2016**
**FIRST BDS EXAMINATION(NR) SECOND BDS EXAMINATION (OR)**
**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

Time : 3 Hours Max. Marks : 70

**Note: Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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1) **Describe the morphology of permanent mandibular first molar. Write differences between permanent mandibular first molar and deciduous mandibular first molar** **5+4=9**

2) **Discuss in detail the microscopic features of periodontal ligament and alveolar bone.** **5+4=9**

**WRITE SHORT NOTES ON:** **8x4=32**

3) **Temporomandibular joint anatomy**
4) **Mechanism of deglutition**
5) **Microscopic features of enamel**
6) **Classification of malocclusion**
7) **Theories of tooth eruption**
8) **Processing of hard and soft tissues for microscopic study**
9) **Fluoride metabolism**
10) **Tongue papillae**

**WRITE BRIEFLY ON:** **10x2=20**

11) **Plexus of Raschkow**
12) **Reactionary dentin**
13) **Gnarled enamel**
14) **Osteoclasts**
15) **Blood supply to maxillary sinus**
16) **Lamina Dura**
17) **Hertwig's epithelial root sheath**
18) **Dilaceration**
19) **Dental formula for human dentition**
20) **Functions of tooth**

**418NR/405OR**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2015**

FIRST BDS EXAMINATION (NR) SECOND BDS EXAMINATION (OR)

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer all questions.
Draw neat labeled diagrams wherever necessary.

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| | | |
|---|---|---|
| 1) | Describe the morphology of permanent Maxillary first molar. Write differences between permanent maxillary and mandibular molars. | 5+4=9 |
| 2) | Describe the various stages of tooth development and give a note on life cycle of ameloblast. | 6+3=9 |
| | **WRITE SHORT NOTES ON**: | 8x4=32 |
| 3) | Morphology of mandibular second premolar | |
| 4) | Differences between mucous and serous acini | |
| 5) | Intercellular junctions. | |
| 6) | Hypo-calcified structures in enamel | |
| 7) | Endochondral bone formation | |
| 8) | Dentine hypersensitivity | |
| 9) | Gingival fibres | |
| 10) | Theories of mineralization | |
| 11) | | 10x2=20 |
| | **WRITE BRIEFLY ON**: | |
| 11) | Benedict shift | |
| 12) | Histology of Fungiform papilla | |
| 13) | Structures derived from dental papilla | |
| 14) | Curve of Monson | |
| 15) | Myo fibroblasts | |
| 16) | Reparative dentin | |
| 17) | Enumerate ductal system of salivary glands. | |
| 18) | Neural crest cells | |
| 19) | Hertwig's epithelial root sheath | |
| 20) | Embrasures | |

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418NR/405OR

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2015**
**FIRST BDS EXAMINATION(NR) SECOND BDS EXAMINATION (OR)**
# DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY

Time : 3 Hours Max. Marks : 70

**Note: Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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1) **Classify Oral Mucous Membrane. Discuss in detail the histology of gingiva.** **4+5=9**

2) **Discuss the morphology of permanent mandibular first molar.** **9**

**WRITE SHORT NOTES ON:** **8x4=32**

3) **Development of palate**
4) **Differences between maxillary and mandibular canine**
5) **Functions of pulp**
6) **Principal fibres of periodontal ligament**
7) **Functions of saliva**
8) **Bud and Cap shape of tooth development**
9) **Serous and Mucous acini**
10) **Histology of Maxillary Sinus**

**WRITE BRIEFLY ON:** **10x2=20**

11) **Curve of Wilson**
12) **Submerged teeth**
13) **Enamel tufts and spindles**
14) **Secondary and tertiary dentin**
15) **Myoepithelial cells**
16) **Lamina Dura**
17) **Cellular Cementum**
18) **Pulp stones**
19) **Zsigmondy Palmer notation**
20) **Cell rests of Serres**

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE, 2014**

**FIRST BDS EXAMINATION(NR) SECOND BDS EXAMINATION (OR)**

# DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY

Time : 3 Hours Max. Marks : 70

**Note: Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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| | | |
|---|---|---|
| **1)** | **Define enamel and write about life cycle of ameloblasts.** | **9** |
| **2)** | **Describe in detail morphology of maxillary first molar.** | **9** |
| | **<u>WRITE SHORT NOTES ON</u>:** | **8x4=32** |
| **3)** | **Differences between deciduous and permanent teeth** | |
| **4)** | **Deglutition** | |
| **5)** | **Theories of eruption** | |
| **6)** | **Composition of Saliva** | |
| **7)** | **Functions of periodontal ligament** | |
| **8)** | **Classify cementum** | |
| **9)** | **Tooth numbering systems** | |
| **10)** | **Calcium and phosphorous metabolism** | |
| | **<u>WRITE BRIEFLY ON</u>:** | **10x2=20** |
| **11)** | **Enamel knot and cord** | |
| **12)** | **Bundle bone** | |
| **13)** | **Mucous acini** | |
| **14)** | **Predentin** | |
| **15)** | **Neonatal line** | |
| **16)** | **Arch traits** | |
| **17)** | **Embrasures** | |
| **18)** | **Mamelons** | |
| **19)** | **Pit and fissure** | |
| **20)** | **Non keratinocytes** | |

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2014**

**FIRST BDS EXAMINATION(NR) SECOND BDS EXAMINATION (OR)**

**DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY**

Time : 3 Hours Max. Marks : 70

**Note: Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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| | | |
|---|---|---|
| **1)** | **Discuss in detail morphology of mandibular first molar tooth.** | **9** |
| **2)** | **Describe the microscopic structure of pulp. Add a note on its functions.** | **6+3=9** |
| | **<u>WRITE SHORT NOTES ON</u>:** | **8x4=32** |
| **3)** | **Muscles of mastication** | |
| **4)** | **Development of mandible** | |
| **5)** | **Functions of tooth** | |
| **6)** | **Centric occlusion** | |
| **7)** | **Hertwig's epithelial root sheath** | |
| **8)** | **Principal fibers of periodontal ligament** | |
| **9)** | **Morphology of lingual surface of Maxillary central incisor** | |
| **10)** | **Alveolar bone** | |
| | **<u>WRITE BRIEFLY ON</u>:** | **10x2=20** |
| **11)** | **Enamel tufts** | |
| **12)** | **Functions of saliva** | |
| **13)** | **Tertiary dentine** | |
| **14)** | **Anatomical crown and clinical crown of tooth** | |
| **15)** | **Physical properties of enamel** | |
| **16)** | **Neural crest cells** | |
| **17)** | **Striated ducts** | |
| **18)** | **Cementocytes** | |
| **19)** | **Tome's granules layer** | |
| **20)** | **Subodontoblastic capillary plexus** | |

418NR/405OR

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE, 2013**

**FIRST BDS EXAMINATION(NR) SECOND BDS EXAMINATION (OR)**

# DENTAL ANATOMY, EMBRYOLOGY & ORAL HISTOLOGY

Time : 3 Hours Max. Marks : 70

**Note: Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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**1) Enumerate and describe theories of eruption of teeth. Add a note on clinical considerations related to eruption of teeth.** **9**

**2) Classify oral epithelium and discuss in detail the histology of masticatory mucosa.** **9**

**<u>WRITE SHORT NOTES ON</u>:** **8x4=32**

**3) Inferior alveolar nerve**

**4) Deglutition**

**5) Different tooth numbering systems**

**6) Anti microbial properties of saliva**

**7) Stages of tooth development**

**8) Myoepithelial cells**

**9) Sharpey's fibers**

**10) Occlusal surface of permanent Maxillary first molar**

**<u>WRITE BRIEFLY ON</u>:** **10x2=20**

**11) Curve of Wilson**

**12) Pit and Fissure**

**13) Lamina Dura**

**14) Natal and neonatal tooth**

**15) Embrasures**

**16) Perikymata**

**17) Odontoblasts**

**18) Bundle bone**

**19) Accessory canals**

**20) Pulp stone**

**418NR/405OR-FIRST B.D.S. DEGREE EXAMINATION – DECEMBER, 2012**

First bds examination(nr) second bds examination (or)-Dental anatomy, embryology & oral histology

Time : 3 Hours-Max. Marks : 70-Answer all questions-Draw neat labeled diagrams wherever necessary.

1..Describe in detail histology of enamel and add a note on age changes in enamel=9m

2..Morphology of permanent maxillary canine. Add a note on the arch traits of permanent canines=9m

Write Short Notes On: 8 x 4=32m

3..Non-Keratinocytes 4..Centric Occlusion 5..Histology of Maxillary sinus

6..Occlusal surface of permanent mandibular first molar 7..Junctional Epithelium

8..Dentinal Tubules 9..Age changes in pulp 10.Sub Mandibular Salivary Gland

Write Briefly On: 10 x 2=20m

11.Zone of Weil 12.Odontoclasts 13.Enamel Spindles 14.Acellular Cementum

15.Neural Control of Mastication 16.Grooves 17.Epithelial rests of Malassez

18.Hyaline layer of Hopewell-Smith 19.Functions of Saliva

20.Dental formula for the human dentition

**418NR-FIRST B.D.S. DEG. EXAMINATION – JUNE, 2012-Dental Anatomy, Embryology & Oral** Histology-Time : 3 Hours-Max. Marks : 70-Answer all questions.

1..Chronology of Development and Morphology of Permanent Maxillary First Premolar=9m

2..Classification of Oral Mucosa. Description of Microscopic Structure of Keratinized Stratified Squamous Epithelium=9m

Write short notes on: 8 X 4=32m

3..Theories of Eruption of Teeth 4..Enamel Rods 5..Principal fibres of the Periodontal Ligament

6..Tooth Numbering systems 7..Differences between Serous and Mucous Acini

8..Histophysiological Stages of Tooth Development

9..Steps in Processing of Soft Tissues for Microscopic Study 10.Deglutition

Write briefly on: 10 x 2=20m

11.Fossae 12.Dead Tracts 13.Plexus of Raschkow 14.Infantile Swallow 15.Infantile Swallow

16.Sharpey's Fibres 17.Articular Disc of the Temporomandibular Joint

18Robinson's Alkaline Phosphatase Theory of Mineralization 14.Curve of Spee 19.Predentin

20.Embrasures

**418/405-FIRST B.D.S. DEGREE EXAMINATION – DECEMBER,2011/JANUARY, 2012**

1..Describe the morphology of mandibular second premolar. Add a note on its chronology=6+3=9m

2..Describe the fibers of periodontal ligament. Add a note on functions of periodontal ligament=5+4=9m

Write short notes on: 8 X 4=32Mm

3..Development of Tongue. 4..Lining mucosa. 5..Nerve supply of mandibular teeth

6..Enumerate the different types of dentin and describe them briefly.

7..Hypo calcified areas of enamel 8. Development of palate 9. Composition of saliva

10.Theories of calcification

Write briefly on: 10 x 2=20m

11.Curve of Monson 12.Sequence of eruption of deciduous teeth 13.Cingulum

14.Myoepithelial cell 15.Nasmyth's membrane 16.Col 17..Minor salivary gland

18.Langerhan's cells 19.Circumvallate papillae. 20.Enamel knot.

**418/405-FIRST & SECOND B.D.S. DEG. EXAMINATION – JUNE, 2011-DENTAL ANATOMY,**

1..Discuss various types of Dentin=9m

2..Morphology of permanent maxillary first molar=9m

Write Short Notes On: 8 x 4=3..Functions of the pulp. 4..Types of cementum.

5..Theories of Dentinal Sensitivity 6..Tooth numbering systems 7. Surface structure of enamel
8. Cells of periodontal ligament 9. Fixation 10.Histology of TMJ
Write Briefly On: 10 x 2 =20m
11.Basket cell 12.Xylene 13. Ridge 14. Dental Follicle 15. Glands of Blandin and Nuhn
16. Osteocyte 17. Taste bud 18. Histology of anterolateral zone of palate
19. Roots and root canals in permanent mandibular first molar 20. Sequence of eruption of permanent teeth

**418/405-FIRST & SECOND B.D.S. DEG. EXAMINATION – DECEMBER, 2010/JANUARY, 2011**

1..Enumerate the differences between deciduous and permanent dentition=9m
2..Classify oral mucous membrane and describe keratinized mucosa=9m
Write Short Notes On: 8 x 4 =32m
3..Alveolar bone 4..Cap stage of Tooth development 5..Muscles of mastication
6..Theories of pain transmission in dentin 7. Functions of saliva 8. Age changes in pulp
9. Cellular cementum 10.Muscles of Tongue
Write Briefly On: 10 X 2 =20m
11.Curve of spee 12. FDI tooth numbering system 13. Calcitonin 14. Cusp of carabelli
15. Dead tracts 16. Embrasures 17. Circumpulpal dentin 18. Meckel's cartilage
19. Sharpey's fibres 20. Alkaline phosphatase

**400-FIRST B.D.S. DEG. EXAMINATION – JANUARY, 2010-HUMAN ANATOMY INCLUDING** HISTOLOGY AND EMBRYOLOGY-(Old Regulations)

PART – A (35 MARKS)
1..Describe the course, branches and their distribution of maxillary artery=2+7=9m
write short notes on: 4 x 4 =16m
2..Blood supply of palatine tonsil 3..Development of face and its anomalies
4..Microscopic structure of lymph node 5..Inferior alveolar nerve
write briefly on: 5 x 2 =10m
6..Name the muscles of mastication (Major and Minor) 7..Lateral pterygoid muscle
8. Deciduous teeth 9. Sex chromosome 10.Nerves carrying taste sensation from tongue
PART-B (35 MARKS)
11.Describe the constrictors of pharynx. Add a note on the interior of nasopharynx=3+2+2+2=9m
write short notes on: 4 x 4 1=6m
12.Interior of larynx 13.Microscopic structure of spleen 14.Hyoglossus muscle
15. Distribution of facial nerve
write briefly on: 5 x 2 =10m
16.Name four structures passing through superior orbital fissure
17. Branches from posterior division of mandibular nerve 18. Barr body
19. Name the tributaries of internal jugular vein 20.Name the bones meeting at bregma

B.D.S. DEGREE EXAMINATION – JANUARY, 2009
FIRST BDS EXAMINATION
HUMAN ANATOMY INCLUDING HISTOLOGY AND EMBRYOLOGY
*(Old Regulations)*

Time : 3 Hours Max. Marks : 70

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Illustrate your answers with suitable diagrams

## PART – A (35 MARKS)

1. Name the muscles of the tongue. What are the blood supply, nerve supply and lymphatic drainage of the tongue? (2+2+3+2=9)

*WRITE SHORT NOTES ON:* 4x4=16

2. Derivatives of pharyngeal pouches.
3. Lingual Artery.
4. Carotid sheath.
5. Name the extra ocular muscles of eye ball and their nerve supply and action.

*WRITE BRIEFLY ON:* 5x2=10

6. Name the branches of arch of aorta.
7. Mention the branches of anterior division of mandibular nerve.
8. Define Karyotyping.
9. Primary Teeth.
10. Define physical Anthropology.

## PART – B (35 MARKS)

11. Describe the blood supply, relations and development of thyroid gland. 3+3+3=9

*WRITE SHORT NOTES ON:* 4x4=16

12. Fertilization
13. Submandibular ganglion
14. Lingual artery
15. Hyoglossus muscle

*WRITE BRIEFLY ON:* 5x2=10

16. Name the structures in the lateral wall of cavernous sinus.
17. Mention the arteries supplying the scalp.
18. Branches of facial nerve in the face.
19. Nerve supply and action of cricothyroid muscle.
20. Chorda tympani nerve.

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**JUNE, 2008-**

**PART – A (35 MARKS)**

1..Name the muscles of mastication. Describe the attachments, nerve supply and actions of any one of them=(1+5+1+2=9)

WRITE SHORT NOTES ON: 4x4=16

2..Classification of chromosomes. 3. Microscopic structure of spleen. 4. Facial artery.

5. Development of palate and associated anomalies.

WRITE BRIEFLY ON: 5x2=10

6..Nerve supply of septum of nose. 7. Types of epiphyses with examples.

8. Morphology and attachments of sphenomandibular ligament.

9. Name any four tributaries of internal jugular vein. 10.What is metopic suture?

PART – B (35 MARKS)

11.Describe the anatomy, histology, blood supply and nerve supply of Submandibular Salivary Gland. 3+2+2+2=9

WRITE SHORT NOTES ON: 4x4=16

12. Sub-occipital triangle 13. Pharyngeal pouches 14. Paranasal air sinuses

15. Histological appearance of elastic artery

WRITE BRIEFLY ON: 5x2=10

16. Name the muscles forming the floor of carotid triangle. 17. Developmental anomalies of face.

18. What are the branches of third part of maxillary artery?

19. What is the nerve supply and actions of cricothyroid muscle? 20. Name the bones meeting at pterion.

**400=B.D.S. DEGREE EXAMINATION – FEBRUARY, 2008-FIRST BDS EXAM**

**PART – A (35 MARKS)**

1. Describe the position, relations, blood supply and microscopy of Thyroid gland.=(1+3+2+3=9)

2. Write short notes on: =4x4=a) Ansa cervicalis b) Microscopic structure of liver
c) Derivatives of hyoid arch d) Ciliary ganglion

3. Write briefly on:=5x2=10=a) Name the muscles supplied by spinal accessory nerve.
b) Mention the sensory nerves supplying the mucosa of tongue. c) Dangerous area of the scalp.
d) Name any four contents of carotid triangle.
e) Adductor and Abductor of vocal cords and their nerve supply.

**PART – B (35 MARKS)**

4. Describe the boundaries and contents of middle ear.=6+3=9

5. Write short notes on: =4x4=16=a) Development of face b) Hyoglossus muscle c) Cavernous sinus
d) Microscopic picture of pancreas

6. Write briefly on: =5x2=10m=a) Name the structures pierced by parotid duct.
b) Nerve supply and actions sternocleidomastoid muscle c) What are the layers of cervical fascia?
d) What is Bell's Palsy? e) Mention four structures passing through superior orbital fissure.

**400-NR-B.D.S. DEGREE EXAMINATION – AUGUST, 2007-FIRST BDS EXAMINATION**

Part-A

1. Give a gross features, blood supply, Lymphatic drainage and development of Thyroid gland (3+2+2+2)

Write short notes on: 4 x 4 =16m; 2. Histology of spleen 3. First Pharyngeal arch

4. Development of palate 5. Tonsil

Write briefly on: 5 x 2 =10m; 6. Ansa Cervicalis 7. Thyroid Cartilage 8. Parotid duct

9. Falx cerebri 10. Dentate Nucleus

Part-B

11. Write course, relations and branches of occulomotor Nerve. Add a note on ciliary ganglion(2+2+2+3)

Write short notes on: 4 x 4 =16m; 12. Histology of Thymus 13. Maxillary sinus 14. Fourth Ventricle

15.Sternocleido mastoid muscle

Write briefly on: 5 x 2=10m; 16. Filum terminate 17. Epiglottis 18. Galea aponeurotica

19. External Jugular vein 20. Medial wall of the orbit

## APRIL, 2007

PART - A

1. Describe the gross features, blood supply, development of Thyroid gland. Add a note on its histology=9m
2. Write short notes on: a) Tentorium cerebelli b) Histology of lymph node
   c) Recurrent laryngeal Nerve d) Nasal septum=4x4=16m
3. Write briefly on: 5x2=10=a) Facial colliculus b) Tubotympanic recess
   c) Supraclavicular lymph node d) Cisterna magna e) Parotid duct

PART - B

1. Classify Dural Venous Sinuses. Write extent, relations, contents and tributaries of Cavernous Sinus=9m
2. Write short notes on: 4x4=16=a) Development Tongue b) Histology of Kidney
   c) Cervical Lymph Nodes d) Lingual Nerve
3. Write briefly on: 5x2=10=a) Hare lip b) Olivary Nucleus c) Facial vein
d) Vocal cord e) Soft palate – (only its muscles and their Nerve Supply)

**FIRST B.D.S. HUMAN ANATOMY INCLUDING HISTOLOGY & EMBRYOLOGY –SEPT-2006 -(N.R.)**

Part-A

1.Give the anatomy, relations blood and nerve supply of parotid gland. Add a note on parotid duct-
2+2+2+2+1=9m
2. Write short notes on: 4 x 4 =16m; a) Medulla oblongata (Only external features) b) Lateral wall of nasal cavity
   c) Histology of Pituitary d) Sternocleidomastoid
3. Write briefly on: 5 x 2 =10m; a) Erbs point b) Inferior horn of lateral ventricle c) Atypical features of Atlas
   d) Hassall's corpuscle

Part-B

4. Describe the gross features, relations, blood supply and constituent fibres of corpus callosum=2+2+1+4=9m
5. Write short notes on: 4 x 4 =16m; a) Histology of Large artery b) Hyoglossus muscle
   c) Lymphatic drainage of Tongue d) Suboccipital Triangle
6. Write: 5 x 2 =a) Islet of Langerhans b) Quada Equina c) External Jugular vein d) Olive e) Suprasternal space

## FEBRUARY-2006

Part-A

1. Describe origin, course, relations and branches of maxillary artery (1+2+3+3=9marks)
2. Write short notes on: 4 x 4 =16marks; a) Deep cervical lymph nodes b) Histology of liver
   c) Development of the thyroid gland d) Pituitary gland
3. Write briefly on: 5 x 2 =10marks; a) Crico-thyroid muscle b) Muscles drived from first pharyngeal arch
   c) Otic ganglion d) Lingual nerve e) Tonsil

Part-B

4. Describe the attachment, action and nerve supply of intrinsic muscles of the larynx (4+3+2=9marks)
5. Write short notes on: 4 x 4 =16marks; a) Histology of thymus b) Development of the mandible
   c) Boundaries and contents of carotid triangle d) Nerve supply to the scalp
6. Write briefly on: 5 x 2 =10marks; a) Lymphatic drainage of tongue b) Histology of fibro cartilage
   c) Development of thymus d) Blood supply to the heart e) Dangerous area of the face

## AUGUST.2005. (New Regul.)

Answer Parts A and B in **separate** answer-bks.Answer All -Illustrate your answers with suitable diagrams

Part-A

1. Describe the origin, course and branches of mandibular nerve. Add a note on its applied anatomy (2+3+3+1)
   Write short notes on: 4 x 4 =16marks;
2. Histology of kidney 3. Development of face and its anomalies 4. Hyoglossus muscle 5) Carotid sheath
   Write brief answers on: 2 x 5 =10marks;
6. Rima glottidis 7. Histology of elastic cartilage 8. Development and nerve supply of digastric muscles
9. Temporary (milk) teeth 10.Secretomotor supply to Lacrimal gland

Part-B

11. Describe the blood supply, relations and development of thyroid gland (3+3+3)
    Write short answers on: 4 x 4 =16marks;
12. Histology of lymph node 13. Cricoid cartilage 14. Development of tooth 15. Sternocleidomastoid muscle

**Write brief answers on: 2 x 5 =10marks**

16. Atlanto axial joint 17.Lungs 18. Chorda tympani nerve 19.Parotid duct 20.Lymphatic drainage of tongue

**MAR/APR, 2005**

Part-A

1. Describe the nerve supply and blood supply to the face. Add a note on facial palsy. (4+3+2=9marks)

Write short answers on: 4 x 4 =16marks; 2. Histology of pancreas 3. Development of palate and its anomalies

4. Paranasal air sunus 5. Mylohyoid muscles

Write brief answers on: 2 x 5 =6. Rima vestibuli 7. Nerve supply to the auricle (pinna)

8. Bones derived from second pharyngeal arch 9. Spinomandibular ligament 10. Platysma

Part-B

11. Describe the relations, blood supply, nerve supply and development of parotid gland (3+2+2+2=9marks)

Write short answers on: 4 x 4 =16marks

12. Histology of bone 13.Development of tongue 14.Ansa cervicalis 15. Thyroid Cartilage

Write brief answers on: 2 x 5 =10marks

16. Molar teeth 17. Styloid process 18. Histology of tonsil 19.Vocal cards 20.Zygomaticus major

**OCTOBER, 2004. (New Regul.)**

Part-A

1. Describe the anatomy, histology, blood supply and nerve supply of submandibular salivary gland (3+2+2+2=9m)

2. Write short notes on: 4 x 4 =16m; a) Thyroid gland follicle b) Adrenal cortex zone fasiculatum c) Deglutination d) Bells Palsy

3. Write briefly on: 5 x 2 =10marks; a) Write any four structures passing through the jugular foramen b) Pterion c) Development of upper lip d) Sensory nerve supply of tongue e) Histology of lymph node

Part-B

4. Describe the relations, tributaries and connections of cavernous sinus. Add a note on applied anatomy (2+2+2+3)

5. Write short notes on: 4 x 4 =16marks; a) Carotid sheath b) Facial artery c) Derivatives of first pharyngeal arch d) Meckel's cartilage

6. Write briefly on: 5 x 2 =10marks; a) Suprasternal space (Burn's) b) Atlanto-occipital joint c)Graafian follicle

d) Muscles attached to the ramus of the mandible e) Extrinsic and intrinsic muscle of eye

**APRIL/MAY, 2004.**

Part-A

1. Write the origin, course and branches of facial nerve. Write a note on dangerous area of the face (2+3+2+2)

2. Write short answers on: 4 x 4 =16marks

a) Development of Tongue b) Foramens of Middle cranial fossa c) Pyriform recess d) Histology of liver

3. Write briefly on: 5 x 2 =10marks; a) Vocal cords b) Branches of Trigeminal nerve c)Derivative of second branchial arch d)Circle of Willis e)Name the muscles of mastication (Major and Minor)

Part-B

4. Give the anatomy, position and relations of TMJ. Write briefly about the movements of Temporomandibular Joint (TMJ0 (2+2+2+3)

5. Write briefly on: 4 x 4 =16marks; a) Haversian system b) Lymphatic drainage of head and neck c) Functions of saliva d) Sphenoidal sinus.

6. Write short notes on: 5 x 2=10marks; a) Microscopic structure of Trachea b) Histology of Hyaline cartilage

c) Anatomy of Parotid gland d) Development of oral mucosa e) Spinal cord.

**OCTOBER, 2003. (N.R.)**

Part-A

1. Describe the anatomical features of the lateral wall of the nose and nasal septum. 5+4=9marks

2. Write short answers on: 4 x 4 =16marks; a) Otic ganglion b) Hypoglossal nerve c) Derivatives of second pharyngeal arch d) Developmental anomalies of the lip

3. Write briefly on: 5 x 2 =10marks; a) Mention the paranasal air sinuses b) Chambers of heart c) Down's syndrome d) Cervical sympathetic chain e) Barr bodies

Part-B

4. Describe the different types of scalp and their nerve supply. (5+4=9marks)
5. Write short notes on: 4 x 4 =16marks;
   a) Derivatives of first to fourth endodermal pouches of pharynx and ultimobranchial bodies.
   b) Attachment and relations of hyoglossus muscle c) Meckel's cartilage
   d) Histological features of a medium sized artery.
6. Write briefly on: 5 x 2 =10m; a) Histology of anterior pituitary b) Name the branches of External carotid artery
   c) Four structures attached to styloid process d) Different papillae present on the tongue e) Auditory tube.

**APRIL, 2003. (N.R.)**

Part-A
1. Describe the temporo-mandibular joint under the following:
   Headings: Bones talking part, Ligaments and Muscles producing movements. (2+3+4=9marks)
2. Write short notes on: 4 x 4 =a) External jugular vein b) Blood supply and development of thyroid gland
   c) Microscopic structure of medium sized artery d) Nasopharynx
3. Write briefly on: 5 x 2 =a) Erb's point b) Name four paired dural venous sinuses c) Contents of carotid sheath
   d) Nerve supply of tensor palati and levator palati muscles e) Enumerate paranasal air sinuses

Part-B
4. Describe the gross anatomy, microscopic structure and nerve supply of parotid salivary gland (3+3+3=9marks)
5. Write short notes on: 4 x 4 =a) Circle of Willis b) Derivatives of second branchial arch c) Lingual nerve d) Microscopic structure of bone
6. Write briefly on: 5 x 2 =a) Name the cranial nerves which are sensory and motor to the face.

b) Mastoid process c) Vocal cord d) Transitional epithelium e) Nerve supply and action of buccinator muscle

**OCTOBER, 2002.**

Part-A
1. Describe the course, branches and distribution of mandibular division of Trigeminal nerve (3 + 3 +3=9m)
2. Write short answers on: 4 x 4 =16marks a) Lacrimal Apparatus b) Cleft Lip c) Lingual Artery
   d) Microscopic structure and development of parathyroid glands
3. Write briefly on: 5 x 2 =10marks a) Ansa Cervicalis b) Hernia c) Dangerous area of Scalp
   d) Name the cartilages of larynx e) Styloid Apparatus

Part-B
4. Describe the anatomy, nerve supply and lymphatic drainage of tongue =9marks
5. Write short answers on: 4 x 4 =16 a) Pterygoid plexus of veins b) Microscopic Structure of Lymph Node
   c) Development of Hypophysis Cerebri d) Supra Sternal Space
6. Write briefly on: 5 x 2 =10m a) Structures pierced by the Parotid Duct b) Meckel's Cartilage
   c) Central artery of Retina d) Pharyngeal Plexus e) Name the bones ossified in membrane

**11th February,2002 - (New Regulations) -** Time:3hours - Marks:70 Answer all

Part-A
1. Describe the attachments, actions and nerve supply of muscles of mastication (4+4+1=9marks)
2. Write short answers on: 4 x 4 =16marks
   a) Facial artery b) Microscopic anatomy and development of Tonsil c) Subclavian Triangle
   d) Microscopic structure of Hyaline cartilage
3. Write briefly on: 5 x 2 =10 a) Oral diaphragm b) Spheno Mandibular Ligament

c) Conducting system of heart d) Four components of deep cervical fascia e) Processes of duramater of Brain

Part-B
4. Describe the position, relations, microscopic structure & applied anatomy of thyroid gland = 9marks)
5. Write short notes on: 4 x 4 =16m a) Oblique Facial Cleft b) Inferior Alveolar Nerve
   c) Maxillary Air Sinus d) Middle Meningeal Artery
6. Write briefly on: 5 x 2 =10m a) Derivatives of third Pharyngeal Pouch b) Types of Synovial Joints

c) Middle ear Ossicles d) Significance of Pyriform Fossa e) Pre maxilla

**FIRST B.D.S. 11th February, 2002 (Old Regulations)** Time: 3hours - Marks: 80 - Answer all

Part-A
1. Describe the origin, insertion, nerve supply and action of muscles of mastication =10marks
2. Write short notes on: 6 x 5 =30marks

a) Naso Pharynx b) Development of Palate c) Microscopic appearance of Parotid Salivary Gland
d) Circle of Willis e) Epithelium f) Auditory tube

Part-B

3. Classify Dural Venous Sinuses. Write in detail about the Cavernous sinus =10marks
4. Write short notes on: 6 x 5 =30m a) Microscopic appearance of Thyroid Gland b) Nasal Septum
c) Development of Tooth d) Lingual Artery e) Cervical Plexus f) Waldeyer's Ring

**FIRST B.D.S.– 6th AUGUST 2001. -** Time-3hrs - Marks: 80 -Answer all questions

Part-A

1. Enumerate contents of Infratemporal Fossa. Write in detail about the mandibular nerve =10marks
2. Short Notes: a) Thyroglossal Duct b) Microscopic structure of Bone c) Facial Artery d) Falx Cerebri
e) Danger area of scalp f) Palatine Tonsil =6x5=30marks

Part-B

3. Name the para nasal air sinuses and write in detail about the Maxillary sinus =10marks
4. Short Notes: a) Meckel's cartilage b) Spinal cord c) Microscopic structure of pancreas
d) Mylohyoid muscle e) Trachea f) Piriform recess =6x5=30marks

**FEBRUARY, 2001.**

Part-A

1. Describe the Temporo-mandibular Joint in detail –10marks
2. Short Notes:a) Lingual Artery b)Tympanic membrane c) Microscopic structure of Parotid salivary gland
d) Digastric muscle e) Dangerous area of scalp f) Nerve supply and development of Tongue-6x5=30m

Part-B

3. Describe the cavernous sinus and its applied Anatomy –10marks
4. Short notes: a) Buccinator b) Microscopic Anatomy of Elastic cartilage c) Nasopharynx
d) Subclavian triangle e) Carotid sheath f) Pterygopalatine Ganglion =6x5=30marks

**14th FEBRUARY, 2000.**

Part-A

1. Discuss the development of face and mention the developmental anomalies of the face =10marks
2. Write short notes on: 6x5=a) Inferior constrictor muscle b) Vocal cords c) Emissery veins
d) Lingual nerve e) Lymphatic drainage of Tongue f) Microscopic structure of skeletal muscle

Part-B

3. Describe the gross anatomy, blood supply and development of pituitary gland =10marks
4. Write short notes on: 6x5=30marks
a) Superior sagittal sinus b) Microscopic structure of Thymus c) Tympanic membrane
d) Middle cerebral artery e) Thyroid cartilage f) Derivities of the second pharyngeal arch

**OCTOBER, 1999.**

Part-A

1. Classify the dural venous sinuses. Describe the Cavernous sinus =10marks
2. Write short notes on: 6x5=a) Pretracheal fascia b) Maxillary Sinus c) Development of Palate
d) Buccinator muscle e) Internal features of Nasopharynx f) Microscopic structure of large artery

Part-B

3. Describe the gross anatomy, blood supply and nerve supply of parotid gland =10marks
4. Write short notes on: 6x5=a) Trochloear Nerve b) Thyrohyoid membrane
c) Microscopic structure of suprarenal gland d) Periosteum e) Enlargements of spinal cord f) Facial vein

**6th APRIL, 1999.**

Part-A

1. Define muscles of mastication. Describe attachements, relations and actions of Pterygoid muscles =10marks
2. Write short notes: 6x5=a) Vertebral artery b) Ciliary ganglion c) Carotid sheath d) Nerve supply of soft palate
e) Tentorium cerebelli f) Microscopic structure of Tonsil

Part-B

3. Describe the Temporomandibular joint =10marks
4. Write short notes on: 6x5= a) Right recurrent laryngeal nerve b) Blood supply of thyroid gland
c) Floor of the fourth ventricle of Brain d) Microscopic structure of Bone e) Derivatives of Pharyngeal pouches
f) Mastoid process

## OCTOBER, 1998.

Part-A

1. Describe the gross anatomy, applied anatomy and microscopic structure of the parotid salivary gland =10m
2. Write short notes on: 6x5=a) Epiglottis b) Lateral pterygoid muscle c) Development of the thyroid gland d) Microscopic structure of Bone e) Maxillary air sinus f) Sensory nerve supply of face

Part-B

3. Describe the nerve supply of the face =10marks
4. Write short notes on: 6x5=30 a) Microscopic structure of Thymus b) Development of Deciduous teeth c) Internal Jugular vein d) Maxillary artery e) Soft Palate f) Tympanic membrane

## APRIL, 1998.

Part-A

1. Describe the gross and applied anatomy of the Thyroid gland =10marks
2. Short Notes: a) Digastric muscle b) External Jugular vein c) Pharyngotympanic tube(Auditory tube) d) Development of tongue e) Microscopic structure of lymph node f) Sensory nerve supply of face-6x5

Part-B

3. Describe the lateral wall of the Nasal Cavity =10marks
4. Short notes: a) Facial artery b) Developmental anomalies of the Face c) Hypoglossal nerve in the neck d) Microscopic structure of Hyaline cartilage e) Suboccipital triangle f) Cricoid cartilage =6x5

## OCTOBER, 1997.

Part-A

1. Describe the blood supply and nerve supply of the Scalp =10marks
2. Short Notes: a) Vocal folds b) Cervical part of Trachea c) Orbicularis Oculi muscle d) Hyoid arch e) Microscopic structure of Hypophysis cerebri =5x5=25marks

Part-B

3. Describe the deep cervical Fascia =10marks
4. Short Notes: a) Extracranial part of Facial nerve b)Carotid triangle c)Emissary veins d)Lingual papillae e) Gross anatomy and development of palatine tonsil f) Deciduous teeth =6x5=30marks

## APRIL, 1997.

Part-A

1. Describe origin, course and distribution of mandibular nerve =10marks
2. Short Notes: a) Hyoglossus muscle b) Piriform fossa c) Development of upper lip d) Sensory nerve supply of face e) Microscopic structure of artery =5x5=25marks

Part-B

3. Describe the origin, course and distribution of the maxillary artery =10marks
4. Short notes: a) Maxillary air sinus b) Microscopic structure of thyroid c) Development of tongue d) Vocal cords e) Lateral pterygoid f) Trachea –6x5=30

## OCTOBER, 1996.

Part-A

1. Describe the relations, tributaries and connections of the cavernous sinus =10marks
2. Short Notes: a) Meckel's cartilage b) Histology of a mixed peripheral nerve c) Lymphatic drainage of tongue d) Styloid apparatus e) Nasal septum -5x5=25marks

Part-B

3. Describe the temporomandibular joint. What are the movements possible in this joint? Name the muscle causing the movements =10marks
4. Short Notes: a) Microscopic structure of the tonsil b) Superior oblique muscle of the eye ball c) Carotid sheath d) Nerve supply of the submandibular gland e) Thyroid cartilage f) Development of parathyroids –6x5

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**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – APRIL, 2026**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. Explain briefly about the Neural regulation of Blood pressure 1x9=9

**WRITE SHORT NOTES ON:** 4x4=16

2. Explain active transport
3. Explain the stages of Blood Clotting
4. Functions of Liver
5. What is GFR? Explain the factors affecting GFR

**WRITE BRIEFLY ON:** 5x2=10

6. What is Residual volume? What is its normal value
7. Mention two functions of Plasma protein
8. Types of Muscles
9. Define fertilization and implantation
10. Features of Acromegaly

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. Define & classify carbohydrates with examples and add a note on sucrose 1x9=9

**WRITE SHORT NOTES ON:** 4x4=16

12. Enzyme inhibition
13. Vitamin A deficiency manifestations
14. DNA
15. Synthesis of Thyroid Hormone

**WRITE BRIEFLY ON:** 5x2=10

16. Steroid hormones- Name 2 hormones
17. Jaundice
18. Collagen and scurvy
19. Random Blood glucose value
20. Name two high energy compounds

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – OCTOBER, 2025**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1 What is the normal calcium level? Name the hormones involved in calcium homeostasis. Describe the functions of each hormone 1x9=9

**WRITE SHORT NOTES ON:** 4x4=16

2 Hypoxia
3 Female contraceptive measures
4 Deglutition
5 Erythroblastosis foetalis

**WRITE BRIEFLY ON:** 5x2=10

6 Define Haemostasis
7 Composition of Pancreatic Juice
8 Types of Nephrons and its types
9 Gastric juice
10 Define reflex and components of reflex arc

**PART-B - BIOCHEMISTRY(35 MARKS)**

11 Define & classify enzymes with examples and adda note on active site of an enzyme 1x9=9

**WRITE SHORT NOTES ON**: 4x4=16

12 Polysaccharides
13 Phospholipids
14 t-RNA
15 Basal Metabolic Rate

**WRITE BRIEFLY ON:** 5x2=10

16 Fluorosis
17 Essential fatty acids
18 Cellulose is not digested by our body
19 Gout
20 Rickets

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – APRIL, 2025**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued. Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1 Name anterior pituitary hormones. Discuss about growth hormone 9

**WRITE SHORT NOTES ON:** 4x4=16

2 Passive transport
3 Synapse and its properties
4 Glomerular Filtration Rate (GFR)
5 Spermatogenesis

**WRITE BRIEFLY ON:** 5x2=10

6 Peristalsis
7 Define gigantism and acromegaly
8 Define cardiac cycle and its normal value
9 Surfactant and its uses
10 Myopia and its correction

**PART-B - BIOCHEMISTRY(35 MARKS)**

11 Define and classify carbohydrates with examples and a note on its Biological importance 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12 Essential amino acids
13 Ketone body formation
14 Nucleosides and Nucleotides
15 Coenzymes

**WRITE BRIEFLY ON:** 5x2=10

16 Sucrose is not invert sugar
17 Scurvy
18 Bile salts
19 Clearance
20 Functions of albumin

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – OCTOBER,2024**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1) Explain the stages of erythropoiesis. Add a note on factors required for erythropoiesis 9

**WRITE SHORT NOTES ON:** 4x4=16

2) Jaundice
3) Functions of Saliva"
4) Abnormal bladder functions"
5) Formation and functions of Cerebrospinal Fluid (CSF)

**WRITE BRIEFLY ON:** 5x2=10

6) Define active transport Give an example
7) Mention two maternal changes during pregnancy
8) Draw and label the diagram of the sarcomere
9) Name the four types of Hypoxias
10) Trace normal ECG

**PART-B - BIOCHEMISTRY(35 MARKS)**

11) What is Beta oxidation of fatty acids, mention the steps and its energetic?. 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12) Buffers
13) Urea Cylce?
14) Vitamin D
15) Difference between DNA and RNA.

**WRITE BRIEFLY ON:** 5x2=10

16) Name four steroid hormones
17) Uses of enzymes
18) Hyperglycermic hormones
19) Acids & Bases
20) Nitrogen balance

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – FEBRUARY 2023**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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## PART-A-PHYSIOLOGY (35 MARKS)

1) Define erythropolesis, write briefly the stages of eryth 9

**WRITE SHORT NOTES ON:** 4x4=16

2) Write about the lectrical events of neuromuscular junction
3) What are the actions of Growth hormone
4) Trace the pathway for Taste
5) What are the factors affecting cardiac output

5x2=10

**WRITE BRIEFLY ON:**

6) Define peristalsis
7) Name the hormone of posterior pituitary gland
8) What is Myopla ? How it can be corrected
9) What is deglutition? What are its stages
10) What is refractory period? Mention its types

## PART-B - BIOCHEMISTRY(35 MARKS)

11) Define enzymes, How are they classified ? explain the factors affecting enzyme activity 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12) Classification of carbohydrates
13) Digestion and absorption of proteins
14) Basal metabolic rate (BMR)
15) Vitamin C

**WRITE BRIEFLY ON:** 5x2=10

16) Buffers
17) Two examples of detoxification by conjugation
18) Difference between DNA and RNA
19) Functions of hemoglobin
20) Renal function tests.

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE 2022**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1 Give the normal fasting blood glucose level, List four hormones regulating blood glucose level. List four features of diabetes mellitus, explain why hyperglycemia and hypoglycemia are both harmful. 9

**WRITE SHORT NOTES ON:** 4x4=16

2. Pain and touch pathways from face
3. Steps in urine formation and the significance of each step
4. Phase of gastric juice secretion and basis of peptic ulceration
5. Hemophilia

**WRITE BRIEFLY ON:** 5x2=10

6. Define hypoxia and give two causes
7. Functions of inner ear
8. Taste bud
9. Tests to diagnose jaundice
10 Features of acromegaly

**PART-B - BIOCHEMISTRY(35 MARKS)**

11 What is glycolysis, explain the reactions and regulation of glycolysis 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12 Classification of lipids
13 Write functions of calcium, add a note on its deficiency manifestations
14 Write the types of RNA and their functions
15 Role of kidney in regulating PH of blood

**WRITE BRIEFLY ON:** 5x2=10

16 Fluoride is double edged sword
17 Essential amino acids
18 Scurvy
19 Role of fiber in diet
20 Thyroid function tests.

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – DECEMBER 2021**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1) Describe the mechanisms which brings about the natural arrest of bleeding after injury. List two disorders of bleeding and tests done to differentiate them. 9

**WRITE SHORT NOTES ON:** 4x4=16

2) Actions of insulin
3) Hormonal basis of phases of menstrual cycle
4) Role of nerves in the body and methods to block nerve function
5) Labelled diagram of electrocardiogram (ECG) and list four uses of ECG

**WRITE BRIEFLY ON:** 5x2=10

6) Referred pain
7) Role of proximal convoluted Tubules (PCT) of kidney
8) Cause and features of Cushing's syndromes
9) Definition and normal values of Vital capacity and tidal Volume
10) State site of spermatogenesis and factors inhibiting it.

**PART-B - BIOCHEMISTRY(35 MARKS)**

11) Define Enzymes, Classify with examples, Mention the factors affecting enzyme activity. 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12) Name the plasma proteins and write the functions of albumin
13) Genetic code
14) Gout
15) Structure of DNA

**WRITE BRIEFLY ON:** 5x2=10

16) Transamination
17) Ammonia is toxic to the brain
18) Glucose Alanine cycle is activated in starvation
19) Deficiency of Vitamin #12 leads to homocyatimuria
20) Phototherapy is given to newborns with jaundice.

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – APRIL 2021**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1) Describe the origin and condition of cardiac impulse. Draw and label a normal electrocardiogram 9

**WRITE SHORT NOTES ON:** 4x4=16

2) Exocrine pancreatic secretion
3) Hypoxia
4) Juxtaglomerular apparatus
5) Diabetes mellitus

**WRITE BRIEFLY ON:** 5x2=10

6) Conductive deafness
7) Resting membrane potential
8) Importance of Rh blood group
9) Motor cortex
10) Ovulation

**PART-B - BIOCHEMISTRY(35 MARKS)**

11) Explain how ketone bodies are synthesized and used in the body 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12) Isoenzymes with one example
13) Regulation of cholesterol synthesis
14) Structure of immunoglobulin
15) Function of vitamin D

**WRITE BRIEFLY ON:** 5x2=10

16) Vitamin A deficiency
17) Inhibitions of election transport chain
18) Biochemical functions in hemolytic jaundice
19) Mechanism of action of steroid hormones
20) Types of RNA

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – NOVEMBER 2020**
FIRST BDS EXAMINATION
**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part' B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1) Describe the composition, functions and regulation of secretion of gastric juice 9

**WRITE SHORT NOTES ON:** 4x4=16

2) Conducting system of heart
3) Spirogram
4) Cretinism
5) Renal circulation

**WRITE BRIEFLY ON:** 5x2=10

6) Myopla
7) Myosin
8) Parkinson diseases
9) Referred pain
10) Spermatozoon

**PART-B - BIOCHEMISTRY(35 MARKS)**

11) Explain how fatty acids are metabolized in the body for energy 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12) Regulation of serum calcium level
13) Second messengers in horinone action
14) Trans methylation reactions with one example
15) Genetic code

**WRITE BRIEFLY ON:** 5x2=10

16) Importance of pentose phosphate pathway
17) Allosteric enzymes with one example
18) Biochemical findings in obstructive jaundice
19) Biochemical important peptides
20) Importance of Iodin

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/ JULY 2019**

**FIRST BDS EXAMINATION**

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1) Give the composition of Saliva and explain the functions of saliva 9

**WRITE SHORT NOTES ON:** 4x4=16

2) Baro receptors
3) Carbon dioxide transport in blood
4) Digestion and absorption of carbohydrates in gastrointestinal tract
5) Functions of proximal convoluted tubules of kidney

**WRITE BRIEFLY ON:** 5x2=10

6) Olfactory receptors
7) Muscle stretch reflex
8) Types of Sleep
9) Anticoagulants
10) Early Diagnosis of pregnancy

**PART-B - BIOCHEMISTRY(35 MARKS)**

11) Explain how blood glucose level is regulated in the body 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12) Classification of Lipids
13) Regulation of Heme synthesis
14) Structure of DNA
15) Classify enzymes with one example for each class.

**WRITE BRIEFLY ON:** 5x2=10

16) Vitamin K deficiency leads to bleeding
17) Ammonia is toxic to the body
18) Cellulose is not digested by our body
19) Optimum level of fluoride is needed for healthy teeth
20) Cholesterol cannot be transported free in blood.

**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2019**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1 Describe the Physiology of Neuro-Muscular transmission in skeletal Muscle. 9

**WRITE SHORT NOTES ON:** 4x4=16

2 Renin Angiotensin System
3 Composition and functions of "Bile Juice"
4 Draw a labeled diagram of "Juxta-Glomerular Apparatus"
5 Lung Surfactant

**WRITE BRIEFLY ON:** 5x2=10

6 Acromegaly
7 Menopause
8 Functions of Middle Ear
9 Astigmatism
10 Functions of Hypothalamus

**PART-B - BIOCHEMISTRY(35 MARKS)**

11 Write the dietary sources, daily requirements and functions of Calcium. How Serum Calcium is regulated? 2+2+2+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12 Diagnostic importance of enzymes
13 Absorption, transport and storage of Iron
14 Classification of Jaundice
15 Essential fatty acids and their importance.

**WRITE BRIEFLY ON:** 5x2=10

16 Electrophoretic pattern of plasma proteins
17 Ketosis
18 Salient features of Genetic Code
19 Haemoglobinopathies
20 Write any two reactions involved in detoxification process

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**
**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2018**
**FIRST BDS EXAMINATION**
**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**
**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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## PART-A-PHYSIOLOGY (35 MARKS)

1. Define Erythropoiesis. Describe the different stages. Add a note on Maturation factors. 2+4+3=9

**WRITE SHORT NOTES ON:** 4x4=16

2. Actions of Estrogens
3. Refractive errors
4. Functions of Saliva
5. Actions of Insulin

**WRITE BRIEFLY ON:** 5x2=10

6. Parkinsonism
7. Two actions of Testosterone
8. Asphyxia
9. Ovulation
10. Name Muscle Proteins

## PART-B - BIOCHEMISTRY(35 MARKS)

11. What are the sources, requirements, biochemical functions and deficiency manifestations of Vitamin D? 2+2+3+2=9

**WRITE SHORT NOTES ON:** 4x4=16

12. Functions of HMP shunt pathway
13. Digestion of proteins
14. Role of Kidney in regulating pH of blood
15. Vitamin A

**WRITE BRIEFLY ON:** 5x2=10

16. Protein denaturation
17. Jaundice
18. Plasma lipoproteins
19. Beriberi
20. Reference values for fasting blood glucose and blood urea

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**Q.P. CODE:417/401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2018**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. Define cardiac output. Explain the factors influencing cardiac output. 1+8=9

**WRITE SHORT NOTES ON:** 4x4=16

2. Secondary sexual characters in female
3. Nerve action potential
4. Control of gastric secretion
5. Micturition reflex

**WRITE BRIEFLY ON:** 5x2=10

6. Hypermetropia
7. Calcitonin
8. Hypoxia
9. Functions of hypothalamus
10. Acromegaly

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. Write the dietary sources, daily requirements, functions of calcium and regulation of serum calcium. 2+1+2+4=9

**WRITE SHORT NOTES ON:** 4x4=16

12. Metabolic changes in diabetes mellitus
13. Abnormal haemoglobins
14. Immunoglobulins
15. Competitive enzyme inhibition and its importance in medicine

**WRITE BRIEFLY ON:** 5x2=10

16. Give the coenzyme form and deficiency manifestations of Vitamin $B_{12}$
17. Different types of RNAs and their functions
18. Biochemical Functions of Copper
19. Enzymes of diagnostic importance in Liver disease
20. What are the normal levels of
    a) Serum Creatinine
    b) Serum Uric Acid

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2017**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. Describe nervous and chemical regulation of respiration 9

**WRITE SHORT NOTES ON:** 4x4=16

2. Short term blood pressure regulating mechanisms
3. Composition and functions of Gastric Juice
4. Visual Pathway
5. Cushing's syndrome

**WRITE BRIEFLY ON:** 5x2=10

6. Taste buds
7. Functions of Lymph
8. Rh blood group
9. Female contraceptives
10. Saltatory conduction in nerve fibres

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. Outline the steps of urea cycle. Indicate the reference range for blood urea. 9

**WRITE SHORT NOTES ON**: 4x4=16

12. Digestion of carbohydrates
13. Functional and Nutritional classification of Proteins
14. Functions of Calcium
15. Ketosis

**WRITE BRIEFLY ON:** 5x2=10

16. Glycogen
17. Functions of plasma albumin
18. Hormones in blood glucose regulation
19. Source and deficiency manifestations of Vitamin C
20. Function and deficiency of Iodine

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**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2017**

FIRST BDS EXAMINATION

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

Time : 3 Hours Max. Marks : 70

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. Explain stages of Erythropoiesis. Add a note on factors required for erythropoiesis. 5+4=9

**WRITE SHORT NOTES ON:** 4x4=16

2. Progesterone
3. Properties of smooth muscle
4. Functions of bile
5. Factors influencing glomerular filtration rate

**WRITE BRIEFLY ON:** 5x2=10

6. Myopia
7. Forms of oxygen transport
8. Functions of CSF
9. Insulin
10. Components of a reflex arc

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. Outline the Glycolytic pathway for the oxidation of glucose in the body. What its energetics? 9

**WRITE SHORT NOTES ON:** 4x4=16

12. Biochemical functions of Vit. A
13. Competitive inhibition
14. Beta oxidation of fatty acids
15. Characteristics of genetic code

**WRITE BRIEFLY ON:** 5x2=10

16. Significance of HMP pathway
17. Essential Amino acids
18. Biochemically important products from cholesterol
19. Factors regulating plasma calcium
20. Basal metabolic rate and its importance

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**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2016**
**FIRST BDS EXAMINATION**
**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

**Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.**
**Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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## PART-A-PHYSIOLOGY (35 MARKS)

1. **Give the composition of Saliva and explain the functions of Saliva** **4+5=9**

**WRITE SHORT NOTES ON:** **4x4=16**

2. **"Sino - Aortic reflex"**
3. **Composition and functions of "Gastric Juice"**
4. **Plasma proteins**
5. **"Oxygen- Hemoglobin dissociation Curve"**

**WRITE BRIEFLY ON:** **5x2=10**

6. **Dwarfism**
7. **Puberty**
8. **Rhesus Factor**
9. **Hypermetropia**
10. **Stages of spermatogenesis**

## PART-B - BIOCHEMISTRY(35 MARKS)

11. **How do you classify enzymes? What is the effect of pH, temperature and substrate concentration on enzyme activity?** **2+1+2+4=9**

**WRITE SHORT NOTES ON:** **4x4=16**

12. **Plasma Lipoproteins**
13. **Metabolic changes in Diabetes Mellitus**
14. **Explain the biochemical role and deficiency manifestations of Vitamin C**
15. **Glycolysis**

**WRITE BRIEFLY ON:** **5x2=10**

16. **Essential fatty acids**
17. **Gout**
18. **Transamination**
19. **Factors affecting Calcium absorption**
20. **What are the normal levels of the following?**
    a) **Serum Potassium** b) **Serum cholesterol**

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**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**

**B.D.S. DEGREE EXAMINATION – JANUARY, 2015**

**FIRST BDS EXAMINATION**

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

Time : 3 Hours Max. Marks : 70

**Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.**

**Answer all questions.**

**Draw neat labeled diagrams wherever necessary.**

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. **Describe the nervous regulation of respiration. Add a note on Herring – Breuer's reflex.** **9**

**WRITE SHORT NOTES ON:** **4x4=16**

2. **Physiological changes in pregnancy**
3. **Visual pathway**
4. **Functions of lymph**
5. **Functions of blood**

**WRITE BRIEFLY ON:** **5x2=10**

6. **Taste buds**
7. **Neuron**
8. **3 hormones regulating plasma calcium**
9. **Functions of Saliva**
10. **Peristalsis**

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. **Outline the pathway of aerobic glycolysis. Add a note on its energetics.** **9**

**WRITE SHORT NOTES ON:** **4x4=16**

12. **Name the ketone bodies. How are they formed?**
13. **Functions of Vitamin A**
14. **Name the types of ribonucleic acid (RNA), mention their important structural features and functions.**
15. **Explain the diagnostic importance of plasma enzymes with any three examples.**

**WRITE BRIEFLY ON:** **5x2=10**

16. **Functions of albumin**
17. **Mention the normal blood levels of : Calcium, cholesterol, urea and creatinine**
18. **Function and deficiency of iodine**
19. **Essential fatty acids**
20. **Name any two disaccharides and give their composition**

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**417 / 401**

**DR. NTR UNIVERSITY OF HEALTH SCIENCES::AP::VIJAYAWADA-520 008**

**B.D.S. DEGREE EXAMINATION – JUNE/JULY, 2015**

**FIRST BDS EXAMINATION**

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

**Time : 3 Hours** **Max. Marks : 70**

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.
Draw neat labeled diagrams wherever necessary.

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. What is Blood? What are the functions of Blood? Outline stages of Erythropoiesis. 2+3+4=9

**WRITE SHORT NOTES ON:** 4x4=16

2. Chemical Regulation of Respiration
3. Actions of Cortisol
4. E.C.G. and its waves and causes
5. List the different types of Hypoxia. Explain any one of them.

**WRITE BRIEFLY ON:** 5x2=10

6. Packed Cell Volume
7. Two family planning methods
8. Name the phases of Gastric Secretion
9. Define cardiac output and Blood Pressure
10. Two functions of Liver

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. How provitamin D is converted to its active form? Give the biochemical role and deficiency manifestations of Vitamin D. 3+3+3=9

**WRITE SHORT NOTES ON:** 4x4=16

12. Write the components of electron transport chain. Indicate the sites of ATP formation during electron transport.
13. Enumerate the functions of Albumin. Mention the causes of hypoalbuminemia.
14. Name the derivatives of cholesterol. Give the biomedical importance of three derivatives of cholesterol.
15. What are isoenzymes? Give two examples and mention their clinical significance.

**WRITE BRIEFLY ON:** 5x2=10

16. What are essential amino acids? Name them
17. Heparin
18. What is renal glycosuria?
19. Name two competitive inhibitors of enzyme
20. Mention the conditions arising due to the deficiency and excess of Fluoride in the body

**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**
**B.D.S. DEGREE EXAMINATION – JUNE, 2014**
**FIRST BDS EXAMINATION**
**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

**Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.**
**Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. **Mention the names of clotting factors in proper order. Explain the intrinsic mechanism of blood clotting.** 4+5=9

**WRITE SHORT NOTES ON:** 4x4=16

2. **Chemoreceptors**
3. **Regulation of gastric juice secretion**
4. **Actions of growth hormone**
5. **Functions of hypothalamus**

**WRITE BRIEFLY ON:** 5x2=10

6. **Feto placental unit**
7. **Stretch reflex**
8. **All or None law**
9. **Taste pathway**
10. **Male contraceptive methods**

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. **Enumerate the sources, daily requirement and functions of calcium. Explain the regulation of serum calcium level.** 2+1+2+4=9

**WRITE SHORT NOTES ON:** 4x4=16

12. **Digestion and absorption of Carbohydrates.**
13. **Significance of citric acid cycle**
14. **Salient features of double helical structure of DNA**
15. **Influence of any four factors on enzyme activity.**

**WRITE BRIEFLY ON:** 5x2=10

16. **Name any two glycosaminoglycans, mention their functions.**
17. **Von-Gierke's disease**
18. **Give the normal pattern of serum protein electrophoresis**
19. **Name the biologically important compounds formed from cholesterol**
20. **Salient features of genetic code.**

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**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**
**B.D.S. DEGREE EXAMINATION – JANUARY, 2014**
**FIRST BDS EXAMINATION**
**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**
**(NR & OR)**

Time : 3 Hours Max. Marks : 70

**Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.**
**Answer all questions.**
**Draw neat labeled diagrams wherever necessary.**

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. **Define blood pressure. What are the factors affecting blood pressure? Describe the regulation of blood pressure.** 2+3+4=9

**WRITE SHORT NOTES ON:** 4x4=16

2. **Estrogen**
3. **Properties of Cardiac muscle**
4. **Composition and functions of saliva**
5. **Functions of kidney**

**WRITE BRIEFLY ON:** 5x2=10

6. **Functions of Rods and Cones**
7. **Mass reflex**
8. **Secretions of anterior pituitary**
9. **Composition of pancreatic juice**
10. **Deglutition**

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. **Outline the steps of Glycolysis.** 9

**WRITE SHORT NOTES ON:** 4x4=16

12. **Classify enzymes**
13. **Electron transport chain**
14. **Vitamin A**
15. **Ketogenesis**

**WRITE BRIEFLY ON:** 5x2=10

16. **Basal Metabolic Rate (BMR)**
17. **Rickets**
18. **Biologically important peptides**
19. **Essential fatty acids**
20. **Normal values of blood urea and serum creatinine**

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**DR NTR UNIVERSITY OF HEALTH SCIENCES :: VIJAYAWADA :: AP**

**B.D.S. DEGREE EXAMINATION – JUNE, 2013**

**FIRST BDS EXAMINATION**

**GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY**

**(NR & OR)**

Time : 3 Hours Max. Marks : 70

**Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.**

**Answer all questions.**

**Draw neat labeled diagrams wherever necessary.**

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**PART-A-PHYSIOLOGY (35 MARKS)**

1. **Explain the various phases of gastric secretion. Describe the nervous and hormonal regulation of gastric secretion.** **9**

**WRITE SHORT NOTES ON:** **4x4=16**

2. **Testosterone**
3. **Functions of middle ear**
4. **Non-Respiratory functions of lung**
5. **Homeostasis**

**WRITE BRIEFLY ON:** **5x2=10**

6. **Functions of skin**
7. **Muscle tone**
8. **Define stroke volume and cardiac output**
9. **Functions of liver**
10. **Mastication**

**PART-B - BIOCHEMISTRY(35 MARKS)**

11. **Outline the steps of urea cycle.** **9**

**WRITE SHORT NOTES ON:** **4x4=16**

12. **Classify lipids**
13. **Oxidative Phosphorylation**
14. **Mucopolysaccharides**
15. **Vitamin C.**

**WRITE BRIEFLY ON:** **5x2=10**

16. **Functions of Albumin**
17. **Metabolic acidosis**
18. **Transcription.**
19. **Role of fibre in the diet**
20. **Normal values of fasting blood glucose and serum cholesterol**

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**417 / 401-FIRST B.D.S. DEGREE EXAMINATION – DECEMBER, 2012**

General Human Physiology & Biochemistry-(NR & OR)-Time : 3 Hours-Max. Marks : 70-Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued-Answer all questions-Draw neat labeled diagrams wherever necessary.

PART-A-PHYSIOLOGY (35 MARKS)

1..What are the pathways of coagulation blood? Explain intrinsic pathway. Name a laboratory anti coagulant=9m

Write Short Notes On: 4 x 4=16m

2..Stages of Spermatogenesis 3..Actions of Thyroxine

4..Composition of Pancreatic Juice 5..Errors of Refraction

Write Briefly On: 5 x 2=10m

6..Types of muscles 7..Types of Neurons 8..Ovarian Hormones

9..Forms in which $CO_2$ is transported 10.Two family planning methods

PART-B - BIOCHEMISTRY(35 MARKS)

11.Enumerate the sources, daily requirement and deficiency manifestations of Vitamin D. Explain its functions=1+2+3+3=9m

Write Short Notes On: 4 x 4=16m

12.Define gluconeogenesis. Name the key enzymes and mention the significance of this pathway for the skeletal muscle.

13.Protein Energy Malnutrition 14.Structure and function of any two homopolysaccharides

15.Any four functions of Calcium.

Write Briefly On: 5 x 2=10m

16.Any two functions of phospholipids 17.Prostacyclin

18.What is calorific value? Mention the calorific values of carbohydrates and fats.

19.Functions of Vitamin K 20.Give the normal levels of blood cholesterol and blood urea.

**417 / 401-FIRST B.D.S. DEGREE EXAMINATION – JUNE, 2012**

PART-A-PHYSIOLOGY (35 MARKS)

1..Explain the stages of erythropoiesis. Add a note on factors required for erythropoiesis=9m

Write Short Notes On: 4 x 4=6m

2..Draw a labelled diagram of spirogram and give normal values of any two lung volumes and any two lung capacities.

3..Compare and contrast actions of Epinephrine and norepinephrine.

4..What is referred pain? Explain any one theory of referred pain.

5..Explain the renin-angiotensin mechanism of regulation of blood pressure.

Write Briefly On: 5 x 2=10m

6..Pavlov's pouch 7..Arterial pulse 9..Neuroglia 9..Inulin clearance 10..Cyanosis

PART-B - BIOCHEMISTRY(35 MARKS)

11.Outline the Reactions of Citric Acid Cycle. What are it's Energetics?=9m

Write Short Notes On: 4 x 4=16m

12.Role of kidney in regulating PH of blood 13.Urea Cycle 14.Plasma Proteins and their functions

15.Glycogen Storage Disorders

Write Briefly: 5 x 2=16.Hormones involved in the regulation of Blood Glucose 17. Essential Amino acids

18.Differences Between DNA & RNA 19.Metabolic acidosis 20.Factors Influencing Iron Absorption

**417 / 401-FIRST B.D.S. DEGREE EXAMINATION – DECEMBER,2011/JANUARY, 2012**

General human physiology & biochemistry=(nr & or)-Time : 3 Hours-Max. Marks : 70

PART-A-PHYSIOLOGY (35 MARKS)

1..Enumerate Respiratory centers. How the respiration is regulated by these centers?=9m

Write Short Notes On: 4 x 4=16m

2..Peristalsis. 3..Functions of hypothalamus. 4..Functions of Red blood cells. 5..Oestrogen.

Write Briefly On: 5 x 2=10m

6..Babinski's sign 7.Dwarfism 8.Presbyopia 9.Second Heart Sound 10.Glomerular filtration rate

PART-B - BIOCHEMISTRY(35 MARKS)

11.How do you classify enzymes? Describe the various factors affecting enzyme activity=9m
Write Short Notes On: 4 x 4=16m
12.Immunoglobulins 13.Electron Transport Chain. 14.Van den Bergh Test and its importance.
15.Glycolysis.
Write Briefly On: 5 x 2=10m
16.Essential fatty acids. 17.Gout. 18.Transamination. 19.Factors affecting Calcium absorption.
20.What is the normal range of the following?: a) Blood Glucose b) Blood Urea

**417 / 401-FIRST B.D.S. DEG. EXAM– JUNE, 2011-GEN. HUMAN PHY. & BIOCH.=**(NR & OR)

PART-A-PHYSIOLOGY (35 MARKS)
1..Explain Intrinsic and Extrinsic mechanism of blood Clotting=9m
Write Short Notes On: 4 X 4 =16m
2..Functions of Liver. 3..Composition and Functions of Saliva
4..Draw a labeled diagram of "Neuro-Muscular junction". 5..The Chloride-shift mechanism
Write Briefly On: 5 X 2 =10m
6..Goitre 7..Ovulation 8..Erythropoietin 9..Myopia 10.Functions of skin
PART-B - BIOCHEMISTRY(35 MARKS)
11.What are the sources, requirement, biochemical functions and deficiency manifestations of Vitamin D=9m
Write Short Notes On: 4 X 4=12.Competitive inhibition 13.Structure of Deoxyribonucleic acid (DNA)
14.Functions and deficiency symptoms of Vitamin C 15.Iron deficiency anaemia.
Write Briefly On: 5 X 2 =10m
16.Basal metabolic rate (BMR) 17.Blood buffer 18.Tests for urinary bile salts and bile pigments
19. Beriberi
20.What are the normal values of : (a) Sodium (b) Potassium
(c) Chloride (d) Bicarbonate in plasma

**417 / 401-FIRST B.D.S. DEGREE EXAMINATION – DECEMBER, 2010/JANUARY, 2011**

PART-A-PHYSIOLOGY (35 MARKS)
1..Define blood pressure. Explain the short term mechanisms of regulation of blood pressure=9m
Write Short Notes On:4 X 4 =16m
2..Explain the role of peripheral chemoreceptors in regulation of respiration.
3..Explain the stages of spermatogenesis. List the factors regulating it.
4..Referred pain. 5..Name the phases of deglutition. Explain second phase of deglutition
Write Briefly On: 5 X 2 =10m
6..Bohr's effect 7..Immunoglobulin 8..Glomerular filtration rate 9..Haemophilia
10.Sarcomere
PART-B - BIOCHEMISTRY(35 MARKS)
11.Describe Hexose-monophosphate shunt pathway and its biological significance=9m
Write Short Notes On: 4 X 4 =16m
12.Diagnostic importance of enzymes 14.Jaundice 15.Vitamin D deficiency disorders
Write Briefly On: 5 X 2 =10m
16.Electrophoretic pattern of plasma proteins 17.Ketosis 18.Purine salvage pathway
19.Role of kidney in regulation of blood pH 20.Replication of DNA

**417-FIRST B.D.S. DEG. EXAM – JUNE, 2010-GEN. HUMAN PHY. &** BIOCHEMISTRY-(N.R.)

PART-A-PHYSIOLOGY (35 MARKS)
1..Enumerate the hormones of Anterior pituitary. Describe the functions of any one of them=9m
Write Short Notes On: 4 X 4 =16m
2..Plasma proteins 3..Dead space 4..Astigmatism 5..Artificial respiration
Write Briefly On: 5 X 2=6..Functions of haemoglobin 7..Gastric juice
8..Cerebrospinal fluid 9..Glomerular filtration rate 10.Dehydration shock

PART-B - BIOCHEMISTRY(35 MARKS)
11.What is urea? Discuss the steps of urea synthesis and its significance=9m
Write Short Notes On: 4 X 4 =16m
12.Role of hormones in regulation of serum calcium level 13.Balanced diet

14.Synthesis of thyroid hormone 15.Synthesis and uses of glucuronic acid
Write Briefly On: 5 X 2 =10m
16.What is transmethylation? Give two examples 17.Substrate level phosphorylation
18.Give two examples of detoxification by conjugation
19.Enzyme marker in myocardial infarction 20.Difference between DNA and RNA

**417-FIRST B.D.S. DEG. EXAM – JANUARY, 2010-GEN. HUMAN** PHY. & BIOCH.-(N.R.)

PART-A-PHYSIOLOGY (35 MARKS)
1..Name the respiratory centers. Explain the neural regulation of respiration=9m
Write Short Notes On: 4 X 4 =16m
2.Explain the reabsorption of water in renal tubules. 3.Functions of liver
4.Define cardiac output. Explain any one method of measuring it.
5.Explain the mechanism of secretion of hydrochloric acid in the stomach.
Write Briefly On: 5 X 2 =10m
6.P C V 7.Landstiner's Law 8.Taste bud 9.Haemophilia 10.Sarcomere
PART-B - BIOCHEMISTRY(35 MARKS)
11.What are the biochemical basis of various types of Jaundice. How will you distinguish different types of jaundice using biochemical tests for urine and blood?=9m
Write Short Notes On: 4 X 4 =16m
12.Name the essential fatty acids and their importance. 13.Calcium homeostasis
14.Isoenzymes and their clinical significance. 15.Structures of protein
Write Briefly On: 5 X 2 =10m
16.Biological functions of Vitamin C 17.Structure of t-RNA 18.Benedicts test
19.Metabolic alkalosis 20.Ketone bodies

**401-FIRST B.D.S. DEG. EXAMINATION – JAN., 2010-HUMAN PHY. & BIOCHEMISTRY-** O.R.

PART-A-PHYSIOLOGY (35 MARKS)
1..Mention the names of the clotting factors in proper order. Explain the intrinsic mechanism of blood clotting
Write Short Notes On: 4 X 4 =16m
2.Give the composition of pancreatic juice 3.List the functions of middle ear. Explain any one of them
4..List the different types of Hypoxia and explain any one of them.
5..Draw a labelled diagram of stretch reflex arc and explain the function of stretch reflex arc.
Write Briefly On: 5 X 2 =10m
6.Haldane's effect 7.Bile salts 8.Saltatory conduction 9.Corpus luteum 10.Erythroblastosis Foetalis
PART-B - BIOCHEMISTRY(35 MARKS)
11.What are enzymes? Give an account of the effect of substrate concentration, pH and temperature on enzyme activity=9m
Write Short Notes: 4 X 4=12.Digestion and absorption of carbohydrates 13.Classification of lipids
14.Functions of Proteins in body 15.Harmones that regulate blood sugar
Write Briefly On: 5 X 2 =10m
16.Name the purine bases 17.Heparin 18.Scurvy 19.Name the buffer systems of the body
20.Maple Syrup Disease

**417-FIRST B.D.S. DEG. EXAM – JUNE, 2009-GEN. HUMAN PHY. & BIOCHEMISTRY(N.R.)**

PART-A-PHYSIOLOGY (35 MARKS)
1..Name the anterior pituitary hormones. Explain the functions of growth hormone=9m
Write Short Notes On: 4 X 4 =16m
2..Explain the consequences of mismatched blood transfusion
3..Draw a labeled diagram of visual pathway
4..List the different types of Hypoxia and Explain any one of them
5..Explain any four functions of hypothalamus

Write Briefly On: 5 X 2 =10m
6..Bohr's effect 7..Gastrin 8..MCV 9..Oral contraceptives 10.Anticoagulants
PART-B - BIOCHEMISTRY(35 MARKS)
11.What are the sources and daily requirement of calcium in the body? What is the normal serum calcium level and how is it regulated?=9m
Write Short Notes On: 4 X 4 =16m
12.Respiratory acidosis 13.Absorption and transport of Iron
14.Regulation and energetics of glycolytic pathway. 15.Genetic code
Write Briefly On: 5 X 2 =10m
16.Transamination 17.Essential amino acids 18.Enzyme inhibition 19.Fluorosis
20.Renal glycosuria

**401-FIRST B.D.S. DEG.EXAMINATION-JUNE, 2009-HUMAN PHY. & BIOCHEMISTRY(O.R.)**

PART-A-PHYSIOLOGY (35 MARKS)
1..Give the composition of saliva and explain the functions of saliva=9m
Write Short Notes On: 4 X 4 =16m
3..Explain the baroreceptor mechanism of regulation of blood pressure.

4..Explain the fate of haemoglobin after haemolysis.
5..Explain taste pathway with the help of a labeled diagram.
Write Briefly On: 5 X 2 =10m
6..Tetany 7..Brain – bridge reflex 8..Neuroglia 9..Plasma proteins 10.Haemophilia
PART-B - BIOCHEMISTRY(35 MARKS)
11.How is ammonia formed and detoxified in liver?=9m
Write Short Notes On: 4 X 4 =16m
12..Classify enzymes with one example for each class
13.Name any four heterpolysaccharides and their functions
14.Name Ketone bodies. How are they synthesized? 15.Electron transport chain
Write Briefly On=15 X 2 =10m
16.Name the pyrimidine bases 17.Sickel cell anemia 18.Rickets 19.Metabolic acidosis
20.Any four functions of calcium

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# B.D.S. DEGREE EXAMINATION – JANUARY, 2009
## FIRST BDS EXAMINATION
## GENERAL HUMAN PHYSIOLOGY & BIOCHEMISTRY
(*New Regulations*)

Time : 3 Hours Max. Marks : 70

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.

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## PART – A (PHYSIOLOGY) – 35 MARKS)

1. Write in detail formation of urine. 9

WRITE SHORT NOTES ON: 4x4=16

2. Vital capacity.
3. Gigantism.
4. Taste buds.
5. Reflex arc.

WRITE BRIEFLY ON: 5x2=10

6. Fever.
7. Anticoagulants.
8. Hypoxic hypoxia.
9. Myxedema.
10. All or none law.

## PART – B (BIOCHEMISTRY) -35 MARKS)

11. Define glycogenesis and glycogenolysis. Describe metabolism of glycogen. 9

WRITE SHORT NOTES ON: 4x4=16

12. Synthesis and functions of calcitriol.
13. Electron transport chain and its inhibitors.
14. Lipoproteins and their functions.
15. Role of kidney in regulating pH of blood.

WRITE BRIEFLY ON: 5x2=10

16. Heparin
17. Metabolic functions of coenzymes of vit. $B_{12}$ (cyanocobalamine).
18. Oncogenes.
19. Fluorosis.
20. Name four important compounds derived from cholesterol.

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# B.D.S. DEGREE EXAMINATION – JANUARY, 2009
## FIRST BDS EXAMINATION
## HUMAN PHYSIOLOGY AND BIOCHEMISTRY
*(Old Regulations)*

Time : 3 Hours Max. Marks : 70

Note: Answer Part A & B in separate answer books. Questions in Part'A' should not be answered in Part'B' and vice versa. Otherwise they will not be valued.
Answer all questions.

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## PART – A (PHYSIOLOGY) – 35 MARKS)

1. What are the phases of Gastric Secretion? Write the composition? Explain how gastric secretion is regulated. 9

*WRITE SHORT NOTES ON*: 4x4=16

2. Name the transport mechanisms in cell membrane.
3. Actions of Insulin.
4. Neuro-muscular transmission.
5. Lung volumes and capacities.

*WRITE BRIEFLY ON*: 5x2=10

6. Types of Muscles.
7. Two actions of Testosterone.
8. Two Errors of Refraction.
9. Anticoagulants.
10. Write values for M.C.H., M.C.V. MCHC.

## PART – B (BIOCHEMISTRY) -35 MARKS)

11. Write the dietary sources, daily requirements, functions of Calcium. How serum calcium level is regulated? 9

*WRITE SHORT NOTES ON*: 4x4=16

12. Metabolic changes in diabetes mellitus.
13. Abnormal haemoglobins.
14. Functional and nutritional classification of proteins.
15. Competitive enzyme inhibition and its importance in medicine.

*WRITE BRIEFLY ON*: 5x2=10

16. Give coenzyme form and deficiency manifestations of Vitamin B 12.
17. Name the stages of transcription.
18. Biochemical Functions of Copper.
19. Hemoglobinopathies.
20. Give two examples of substrate level phosphorylation.

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**401-FIRST B.D.S. DEGREE EXAMINATION – JUNE, 2008--HUMAN PHYSIOLOGY AND** BIOCHEMISTRY-(OLD REGULATIONS)

PART – A (PHYSIOLOGY) – 35 MARKS)

1..Enumerate the events of cardiac cycle. Describe the pressure changes in the left ventricle of the heart=9m

Write Short Notes On:= 4x4=16m

2..Anticoagulants. 3. Gastrin. 4. Oral contraceptives. 5. Myopia.

Write Briefly On:= 5x2=10m

6..Vital capacity 7. Heat loss mechanism in the body 8. Functions of Bile 9. Micturition reflex 10.Brown sequard syndrome

PART – B (BIOCHEMISTRY) -35 MARKS)

11.What is urea? Enumerate the steps of urea cycle and mention its significance=9m

Write Short Notes On: 4x4=16

12.Lipoproteins and their functions.

13.Name the components of electron transport chain mentioning the site of ATP generation and its inhibitors.

14. Role of carnitine in B-oxidation. 15. Glycogen storage disorders

Write Briefly On: 5x2=10

16. Define gluconeogenesis and name the key enzymes of gluconeogenesis.

17. Metabolic acidosis. 18. Structure of animal starch.

19. Phenylketonuria 20. Give normal levels of the followings: a) Serum amylase. b) Serum inorganic phosphorus

**401-B.D.S. DEG. EXAM – FEB, 2008-FIRST BDS EXAM-HUMAN PHY. & BIOCHEMISTRY**

**PART – A (PHYSIOLOGY) – 35 MARKS)**

1. What sensations arise from the skin? How are they carried to the brain?=9m

2. Write short notes on=4x4=16m=a) Aldosterone b) Colour blindness c) Narmoblast d) Rh. Factor

3. Write briefly on:= 5x2=10m=a) Movements of Small Intestines b) Pacemaker of the heart c) Taste buds c) Artificial breathing d) Dehydration shock

**PART – B (BIOCHEMISTRY) -35 MARKS)**

4. Mention the liver function tests. Write in detail the van den Bergh test and its importance.=9m

5. Write short notes on:= 4x4=16m= a) Role of kidney in regulating the pH of blood. b) Galactosemia c) Define coenzyme. Classify them with suitable examples. d) Fate of glucose-6-phosphate.

6. Write briefly on: =5x2=10m-a) Oxidative deamination b) Prostacycline c) Important compounds derived from cholesterol d) Essential amino acids e) Give normal levels of the following: -i) Blood glucose ii) Blood urea

**401-NR-AUGUST, 2007-FIRST BDS EXAMINATION-HUMAN PHYSIOLOGY AND BIOCHEMISTRY**

Part-A (Physiology)

1. How is respiration regulated? Mention the neural centres and its regulation=9m

Write short notes on: 4 x 4 =16m; 2. Referred pain 3. Functions of Bile 4. Erythropoiesis 5. Micturition reflux

Write briefly on: 5 x 2 =10m; 6. S.A.Node 7. Anti coagulants 8. ADH and its function 9. Movements of Small Intestine 10.Bone and its functions

Part-B (Biochemistry)

11. Enumerate the steps of HMP-shunt pathway and mention the significance of the pathway=9m

Write short notes on: 4 x 4 =16m; 12. Essential fatty acids and their importance 13. Enzyme markers of liver disease 14.Deficiency symptoms of Vit. C 15.Blood buffers

Write briefly on: 5 x 2 =10m; 16. Electrophoresis and its applications 17.Functions of phosphorus 18.Metabolic functions of coenzymes of Niacin and thiamine 19.Substrate level phosphorylation 20.Give normal levels of the following: a) Serum sodium b) Serum potassium:

**APRIL, 2007**

PART – A (PHYSIOLOGY)

1. Describe the mechanism of coagulation of blood=9m

2. Write short notes: 4x4=16=a) Functions of Saliva b)G.F.R. c)Heart Sounds d)Functions of Ovary

3. Write briefly on: 5x2=10=a) Stages of Deglutition b) Proteolytic Enzymes
c) Functions of Oxytocin d) Neuron e) Mechanics of Respiration

PART – B (BIOCHEMISTRY)

4. Describe β-oxidation of fatty acids with energetics involved=9m
5. Write short notes on: 4x4=16=a) Plasma proteins b) Effect of temperature and pH on enzyme activity
c) Glycosuria d) Metabolism of copper
6. Write briefly on: 5x2=10=a) Fibrous proteins b) Enzyme inhibition c) Transcription d) Galactosemia
e) Factors affecting calcium absorption

**SEPTEMBER-2006**

Part-A

1. What is Micturition Reflex? Describe the process of urine formation=9m
2. Write short answers on: 4 x 4 =16m; a) Composition and functions of blood b) Taste pathway
c) Rh group d) Pancreatic Juice
3. Write briefly on: 5 x 2 =10m; a) Cardiac Muscle b) Cretinism c) Muscles of Respiration
d) Functions of C.S.F. e) Autonomic Nervous System

Part-B

4. What is the normal fasting blood sugar level? Describe the various processes involved in its regulation=9m
5. Write short answers on: 4 x 4 =16m; a) Enzymes of diagnostic importance b) Fatty liver
c) Diagrammatic representation of urea cycle d) Ketosis
6. Write briefly on: 5 x2=10m; a) Essential amino acids b) Phenylketonuria
c) Characteristic of Genetic code d) Factors affecting absorption of iron e) Biochemical functions of Phosphorous

**FEBRUARY-2006**

Part-A

1. Define arterial blood pressure and describe the regulation of blood pressure=9m
2. Write short notes on: 4 x 4 =16m; a) Deglutition b) Surfactant
c) What hormone regulates calcium absorption in the intestine? d) Reflex action
3. Write briefly on: 5 x 2 =10m; a) Movements of small intestines and its physiological significance
b) How many Heart sounds are there? Explain briefly its mechanism
c) Factors involved in the interchange of gases in alveoli d) Calcitonin e) Lower motor Neuron lesion

Part-B

4. What is normal blood glucose level? Discuss the role of hormones in regulating blood glucose level=9
5. Write short notes: 4 x 4 =; a) Regulation of serum calcium level b) Lipoproteins and their functions
c) Role of kidney in regulating pH of blood d) Deficiency symptoms of Vit.A
6. Write briefly: 5 x 2 =; a)Glycosuria b)Conezyme forms of Nicotinic acid and their metabolic functions
c) Bile salts and their functions d) Provitamins

**AUGUST-2005 – N.R.**

Part-A (Human Physiology)

1. What is hemostasis? Describe the factors regulating hemostasis. Name two bleeding disorders=9m
2. Write short notes on: 4 x 4 =16marks; a) Functions of liver b) Processing of pain in the spinal cord
c) Regulation of blood pressure d) Glucocorticoids
3. Write briefly on: 5 x 2 = a) Hypoxia b) Neuromuscular transmission c) Rods and cones d) Rickets

e) Functions of proximal tubule

Part-B (Biochemistry)

4. Write the dietary sources, daily requirements, functions of calcium. How serum calcium level is regulated?=9m
5. Write short notes on: 4 x 4 =16marks; a) Essential fatty acids and their functions
b) What are isoenzymes? Give two examples and their diagnostic importance
c) Give the functional classifications of proteins with examples d) Glycogen storage disorders
6. Write briefly on: 5 x 2 =10m= a) What is gluconeogenesis? Name the key enzymes of gluconeogenesis.
b) Ketone bodies c) Coenzyme forms of Vit.B12 and their metabolic functions d) Vit. D resistant rickets
e) What is calorie? Give the calorific values of foodstuff.

**MAR/APR.2005. (NEW REGUL.)**

Part-A (Human Physiology)

1. Describe the different phases of deglutition and their regulation =9marks
2. Write short note: 4 x 4 =a) Coagulation of blood b) Temperature regulation c) Ovulation d) Insulin
3. Write briefly on: 5 x 2 =10marks; a) Anemia b) Venous retum c) Baroreceptors
d) Tetany e) Functions of distal convoluted tubule

Part-B (Biochemistry)
4. Describe the formation and fate of ammonia=9marks
5. Write short notes on: 4 x 4 =16marks; a) Biologically important peptides
b) IUB Classification of enzymes c) Glycolysis d) Calcium homeostasis
6. Write briefly on: 5 x 2 =10marks; a) Enzymes of diagnostic importance in liver diseases
b) Significance of HMP pathway c) Formation of ketone bodies d) Atherosclerosis
e) Biochemical functions of Selenium

**OCTOBER, ,2004. (NEW REGUL.)**

Part-A (Human Physiology)
1. What are the hormones that regulate the Calcium metabolism. Describe regulation of one hormone in detail =9m
2. Write short notes on: 4 x 4 =16marks; a) Regulation of Salivary secretion
b) Regulation of muscle tone c) Electrocardiograph d) Antidiuretic hormone
3. Write briefly =a) Functions of platelets b)Vital capacity c)Chemoreceptors d)Goiter e)Glomerular Filtration
Part-B (Biochemistry)
4. Define glycosis. Describe anaerobic glycolysis mentioning the bio-energetics=9m
5. Write short notes on: a) Absorption and transport of iron b) Oral glucose tolerance test
c) Functions of plasma proteins. d) Synthesis and functions of 1,25 Dihydroxy cholecalci-ferol
6. Write briefly on: a) Pellagra b) Give the sources and functions of Iodine c) Renal Glycosuria d) Semi essential amino acids e) Give normal values for the following: I) Serum Calcium II) Serum Cholesterol.

**APRIL/MAY,2004.**

Part-A
1. Write in detail the formation of urine =9marks
2. Write short answers on: 4 x 4 =16marks; a) Pathway for pain b) Phases of gastric secretion
c) Conduction of Cardiac Impulse d) Testosterone and its actions.
3. Write briefly on: 5 x 2 =10marks; a) Taste Buds b) Blood groupsc) Anticoagulants
d) Centres for respiration e) Hormones of Posterior Pituitory.
Part-B
4. What is the normal blood urea level. Describe the synthesis and fate of urea in our body =9marks
5. Write short answers on: a) Hormones that regulate Blood sugar b) Iso Enzymes c) Transamination d) Deficiency of Vitamin 'D'
6. Write briefly: 5 x 2 =a) Galactosemia b) Bile Pigements c) Serum Cholesterol d) Blood buffers e) Heparin

**OCTOBER, 2003. (N.R.)**

Part-A (Human Physiology)
1. What is the normal blood pressure? How is it regulated in human body =9marks
2. Write short answers on: 4 x 4 =16marks;
a) List the hormones secreted by the anterior pituitary. How are they released.
b) What is the importance of papillary reaction? What is your interpretation if the pupil is dilated and fixed.
c) What is the role played by Juxta Medullary Apparatus.
d) Where do you find receptors for taste and how are they stimulated. Give their function.
3. Write briefly on: 5 x 2 =10marks; a) What are the components of Reflex arc?
b) List four functions of Saliva c) Mention the types of movements observed in the small intestine.
d) Explain the role of the alveolar surfactant in the normal functioning of the lung
e) What are the effects of mismatched blood transfusion.
Part-B (Biochemistry)
4. Describe the factors affecting the activity of Enzymes. Write a note on clinical importance of Enzymes
5. Write short answers on: 4 x 4 =16marks; a) Riboflavin b) Mucopolysaccharides
c) Detection of Ketone Bodies in the urine d) Creatine Phosphokinase
6. Write briefly on: 5 x 2 =10marks; a) Bile salts b) Normal pH of Serum
c) Importance of Electrophoresis d) Met Hemoglobin e) Differences between CPS-I and CPS-II

**APRIL,2003.**

Part-A (Human Physiology)
1. What are the stages in Deglutition? Describe them, in detail with a note on Dysphagia =9marks
2. Write short : 4 x 4 =a) Functions of Placenta b) Rh.Incompatability c) J.G.apparatus d) Artificial respiration

1. Write briefly on: 5 x 2 =a) Types of lymphocytes b) Heart Sounds c) Neuron d) Types of synapse e) Functions of cerebellum

Part-B

2. Name the abnormal constituents of urine and the pathological conditions where they are seen ? How will you detect sugar in the urine =9marks
3. Write short answers on: 4 x 4=a) Name the aromatic amino acids and inborn errors in any One of them. b) Glycogen c) Enzymes related to myocardial infarction d) Deficiency manifestations of thiamine
4. Write brief answers on: 5 x 2 =10marks=a) Name the non-reducing sugar. What are the components?
   b) What is 'good' cholesterol? Why ios it so called
   c) What are polyunsaturated fatty acids? Give examples and mention its clinical importance
   d) Name two antioxidants and their functions
   e) What is the normal serum level of Bilirubin? Name the pathological conditions where it is raised.

## OCTOBER, 2002

Part-A ( Human Physiology )

1. Give the composition of blood and explain the importance of plasma =9marks
2. Write short answers on: 4 x 4 =16marks
   a) Respiratory muscles b) Functions of Liver c) Parathyroid hormone d) Enumerate the functions of Skin.
3. Write briefly on: 5 x 2 =10marks
   a) Name the ovarian Hormones b) Receptors for vision c) Hormones regulating Blood Glucose
   d) Muscles of Inspiration e) Properties of Cardiac Muscle

Part-B

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## FIRST B.D.S. – 08th AUGUST, 2001.

Time-3hrs, Marks.80 – Answer all questions – Answer Part-A & B in separate answer books

Part-A – Physiology

1. Where are the Respiratory centers located. How is respiration regulated by neural and chemical mechanism=10m
2. Short Notes: a) Blood groups b) Composition and functions of saliva c) ECG
   d) Pain Pathway e) Myxodema f) Functions of kjdney 6x5=30marks

Part-B – Biochemistry

1. Describe the sources, biochemical functions, daily requirement &deficiency manifestations of Vitamin-D =10m
2. Short Notes: a) Blood buffers b) Poly unsaturated fatty acids c) Renal glycosuria
   d) Serum cholesterol e) Enzyme action f) Detection of sugar in the urine

## 6th FEBRUARY 2000.

Part-A – Physiology

1. Draw and describe the neural regulation of respiration =10marks
2. Short notes: a) Functions of Gall bladder b) Antidiuretic hormone on renal tubule
   c) Functions of plasma proteins
   d) Mention three distinctive properties of the cardiac muscle. Explains the basis of anyone.
   e) Accommodation by the eye f) Draw and label pyramidal pathway -6x5=30marks

Part-B – Biochemistry

1. Name the hormones that increase the blood glucose level. Explain the mechanism in any one of them =10m
2. Short Notes: a) Lipilytic enzymes of the alimentary tract. B) Citric acid cycle
   c) Explain Van Den bergh test d) Mention reactions where reduced NADP is required
   e) Vitamin A deficiency symptoms f) Normal pH of blood =6x5=30marks

## 6th OCTOBER, 1999.

Part-A (Human Physiology)

1. What is cardiac output? Enumerate the methods of determining it in man =10marks
2. Write short notes on: 6x5=a) Reticulocyte b) Seat of fatigue c) Vital capacity d) Parathormone e) Pregnancy test f) Cerebro-spinal fluid

Part-B (Biochemistry)

3. Give an account of the steps of the Citric Acid cycle. Explain why it is known as Terminal Oxidative Pathway =10marks
4. Write short notes on: 6x5=a) Bile salts b) What is the role of gastric juice in protein digestion
   c) Standard urea clearance d) Renal threshold for glucose e) Absorption of fat f) Vitamin-B12

## 8th APRIL, 1999.

Part-A (Physiology)

1. Describe the phase of gastric secretion. What is the composition of gastric juice =10marks
2. Write short notes on: 6x5=30m=a) Neutrophil leucocyte b) Safe period c) Role of calcium d) Changes in one cardiac cycle e) Functions of cerebro spinal fluid f) Organ of Corti

Part-B (Biochemistry)

3. Name the Polysaccharides present in your diet. Describe the digestion, absorption of any one of them in the body. How will you detect sugar in the urine =10marks
4. Write short notes on: 6x5=a) Cerebrosides b) Prostaglandins c) Ceruloplasmin d) Pyridoxal phosphate e) S.G.O.T. f) Bile salts

## OCTOBER, 1998.

Part-A (Physiology)

1. Give an account of the nervous control of respiration =10marks
2. Write short: 6x5=a) Special junctional tissues of the heart b) Mismatched blood transfusion reaction c) Functions of the middle ear d) Cretin e) Synapse f) Role of bile salts in digestion

Part-B (Biochemistry)

3. What are bile salts and bile pigments? How are they identified in the urine? Describe the Biochemical tests done in a case of jaundice. What is the normal level of serum bilirubin =10m
4. Write short notes on: 6x5=a) Ketone bodies b) Good cholesterol c) Transamination d) Deficiency manifestations of Vitamin-A e) Heparin f) Serum Alkaline phsophatase

## APRIL, 1998.

Part-A (Physiology)

1. Define blood pressure. Mention the important factors controlling it. =10marks
2. Write short notes on: 6x5=30marks a) Nephron b) Reflex arcc) Taste Receptors d) Chemical regulation of respiration e) Oxytocin f) Rigor Mortis

Part-B (Biochemistry)

3. What are disaccharides. Give examples how will you identify them in the laboratory. What is the normal level of Glucose in Blood =10marks
4. Write short notes on: 6x5=30marks a) Amylose and Amylopectin b) Colloid and Emulsion c) Saturated and unsaturated Fat d) Albumin and Globulin e) DNA & RNA f) Ascrobic acid

## OCTOBER, 1997.

Part-A – Physiology

1. Describe the mechanism of coagulation. Name two anti-coagulants =10marks
2. Short Notes: a) Hoeostasis b) Describe the phases of Menstrual cycle c) Myopia d)Functions of Frontal lobe e) Draw and label a normal Electro Cardio gram. What is P-R interval f) Peristalsis =6x5=30marks

Part-B – Biochemistry

3. Give an account of the source, metabolic functions, daily requirement, deficiency manifestations of Vitamin-C
1. Write briefly on: a) Enzyme poisons b) Ketone bodies c) Fate of Bilirubin in the body d) Structure and properties of cholesterol e) Detection of Fructose in the urine f) Lactic acid dehydrogenase=5x5

## APRIL 1997.

Part-A – Physiology

1. Give an account of mechanism of regulation of arterial blood pressure =10marks
2. Short Notes: a) How are white blood corpules (W.B.C.) classified? What are the functions? b) What is the function of gall bladder c) Describe a nephron and enumerate the functions of each part d) Draw and label the taste pathway e) Describe the functions of placenta =5x5=25marks

Part-B – Biochemistry

1. Outline the steps ( schematically) involved in TCA cycle with enzymes and cofactors =10marks
2. Short Notes:a) Gastric Hcl b) Starch Hydrolysis c) Deficiency manifestations of Vitamin D d) Bile salts e) Polyunsaturated Fatty acids f) Serum Alkaline Phosphates =6x5=30marks

## OCTOBER, 1996.

Part-A (Physiology)

1. Describe the structure & functions of voluntary muscle (skeletal muscle).How does it differ from cardiac muscle
2. Write briefly on the following: 6x5=30marks a) Cartoid sinus b) Describe the stages of deglutition

c) What is the physiological basis of contraceptive pill method?

d) What is the role played by platelets e) Organ of Corte f) Describe the neurone & enumerate the functions

Part-B (Biochemistry)

3. How is urea formed in the body? =10marks

4. Write short notes on: 6x5=a) Serum cholesterol b) Abnormal constituents of urine c) Role of iron in the body d) NADP e) Mention the normal level of: 1. Serum calcium and serum phosphorous 2. Serum Na & K

3. SGOT and SGPT 4. Serum creatinine and serum cholesterol 5. Blood sugar and urea.

**APRIL, 1996.**

Part-A

1. Give an account of the structure and functions of skin =10marks

2. Write short notes on: 5x5=25marks=a) Discuss briefly the functions of plasma proteins

b) Define stroke volume. Mention the factors regulating cardiac output

c) Briefly give the composition and functions of pancreatic juice

d) Outline the chemical factors controlling respiration e) Write a briefly on parathormone.

Part-B

3. How are proteins digested. Indicate the specific site at which protealytic enzymes act. Add a note on Amino acid pool =10marks

4. Write short notes on: 6x5=30marks=a) Various lipoproteins circulating in human plasma and their function.

b) Draw and normal G.T.T.Curve and compare it with different diabetic conditions.

c) Name two reactions in which the following Coenzymes participate: a) NADPH b) BIOTIN

d) What is the normal calcium level in blood? How is it regulated?

e) Components of electron transport chain and sites of ATP formation.

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