Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

#### SRI SAI COLLEGE OF DENTAL SURGERY

#### **PHYSIOLOGY**

1. What is blood? What are the functions of blood? Outline steps of Erythropoiesis

#### **SHORTS**

- 2. Function of platelets
- 3. Homeostasis
- 4. Blood indices
- 5. Blood groups



#### LONG

1. Define carbohydrates, write functions and properties of monosaccharaides.

#### **SHORTS**

- 2. Disaccharides.
- 3. Glycogen and cellulose
- 4. Mucopolysaccharides
- 5. Aromatic amino acids

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **DENTAL ANATOMY & DENTAL HISTOLOGY**

- 1. Describe the chronology and morphology of different aspects of permanent maxillary right central incisor
- 2. Enumerate the stages of tooth development. Write in detail about cap stage.

#### **SHORTS**

- 3. Describe various stages of deglutition
- 4. Histology &functions of maxillary sinus
- 5. Tooth numbering systems
- 6. Differences between deciduous and permanent teeth
- 7. Structure of taste buds

- 8. Dental lamina
- 9. Dental formula for deciduous & permanent teeth
- 10. Cingulum
- 11. Mamelons
- 12. Traits. Types of traits
- 13. Embrasure

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **DENTAL ANATOMY, DENTAL HISTOLOGY & ORAL PHYSIOLOGY**

 ${f 1.}$  Describe in detail the morphological stages in the development of tooth . Add a note on

#### formation of root

2. Discuss in detail about permanent maxillary right central incisor

#### **SHORTS**

- 3. Difference between deciduous and permanent teeth
- 4. Incremental lines of enamel . Dentin and cementum
- 5. Enamel lamellae, tufts and spindles
- 6. Differences between cellular and acellular cementum
- 7. Physiological stages of tooth development
- 8. Types of dentin
- 9. Denticles
- 10.Tooth numbering systems

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- 11. Hyaline layer of hopewell and smith
- 12. Plexus of rashkow
- 13. Cell of serres
- 14. Enamel knot and cord
- 15. Neural crest cells
- 16. DEJ
- 17. Osteodentin
- 18. Fossa
- 19. Functions of pulp
- 20. Cingulum

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **COLLEGE OF DENTAL SCIENCES: DAVANGERE**

#### **ANATOMY**

- 1. Describe the scalp under the following headings
- (a)Location & features
- (b) Blood supply
- (c)Relations
- (d) Development

#### **SHORTS**

- 2. Muscles of mastication
- 3. Internal jugular vein
- 4. Spermatogenesis
- 5. Histology of hyaline cartilage

- 6. Fertilization
- 7. Pterion
- 8. Name the branches of facial artery
- 9. Histology of large size artery
- 10. Name the contents of posterior triangle of neck



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

#### **BIOCHEMISTRY**

1. Define enzymes, classify enzymes ( IUB) Giving examples for each class

#### **SHORTS**

- 2. Heteropolysaccharides
- 3. Watson &crick model of DNA
- 4. Biochemical functions of vitamin D

- 5. Essential fatty acids
- 6. Classifications of proteins based on function
- 7. Phospholipids
- 8. Denaturation of proteins
- 9. Name the biochemical test done for the identification of following compounds
- (a) Cysteine (b) Tryptophan (c) Reducing sugar (d) Fructose

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **KAMINENI INSTITUTE OF DENTAL SCIENCES**

#### **BIOCHEMISTRY**

1. Write about dietary sources, RDA, Biochemical functions and deficiency manifestations of vitamin D. Add a note on vitamin like compounds.

#### **SHORTS**

- 2. What are the Isoenzymes ? Give two examples and mention their clinical significance
- 3. Explain the mechanism of blood glucose regulation
- 4. Explain oxidative phosphorylation. Add a note on Inhibitors
- 5. Write the structure and functions of phospholipids

- 6. Active transport
- 7. Explain any two biologically important peptides with functions
- 8. Write the functions of
- (a) Nucleus (b) Endoplasmic reticulum
- 9. Name the essential fatty acids and write 2 functions
- 10. Write serum reference ranges of
- (a) Albumin (b) Total proteins
- (c) FBS (d) PPBS

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **GENERAL PHYSIOLOGY**

1. Describe the composition, functions and regulations of Gastric secretions?

#### **SHORTS**

- 2. Secondary Active Transport
- 3. Excitation Contraction Coupling
- 4. Intrinsic pathway of coagulation
- 5. Draw and label diagram of Neuro Muscular Junction (NMJ)

- 6. Four functions of Plasma Protein
- 7. Define And Classify (Etiological) Anaemia
- 8. Sarcomere
- 9. Apoptosis
- 10. Endoplasmic Reticulum



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### S.N. DENTAL COLLEGE

#### **BIOCHEMISTRY**

1. Define and classify Carbohydrates. Add a note on Functions and Composition of any four mucopolysaccharides.

#### **SHORTS**

- 2. Classify Enzymes with one examples for each class
- 3. Immunoglobulins. Structure and functions
- 4. Structures & functions of t-RNA

#### **VERY SHORTS**

- 5. What are essential Fatty acids? Give examples
- 6. Denaturation of proteins

BDS

- 7. What are therapeutic Enzymes? Give one example
- 8. Chargaff's Rule
- 9. Rancidity

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **PHYSIOLOGY**

1. Describe various stages of Erythropoiesis and describe the factors regulating Erythropoiesis

#### **SHORTS**

- 2. Mention pacemaker tissues of heart. Describe conducting system of the heart with a neat labelled diagram
- 3. Define Homeostasis. Explain negative feed- back mechanism with Example
- 4. Describe the process of neuromuscular transmission with diagram

# VERY SHORTS 5. Neuroglia 6. Facilitated diffusion 7. Gap junction 8. Saltatory conduction 9. Heart sounds

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **PHYSIOLOGY**

1. Define clotting. Name the clotting factors. Explain intrinsic and extrinsic mechanism.

#### **SHORTS**

- 2. Conducting system of heart with neat labelled diagram
- 3. Second phase of deglutition
- 4. Fate of Haemoglobin
- 5. Describe structure and transmission of Neuromuscular junction with neat labelled

diagram

- 6. Phagocytosis
- 7. Saltatory conducting
- 8. Sarcomere with diagram
- 9. Facilitated diffusion
- 10. Erythroblastosis fetalis



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

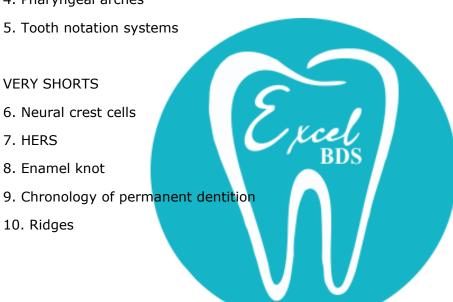
LONG ESSAYS 2 x 10 = 20 Marks

#### **DENTAL ANATOMY & DENTAL HIOSTOLOGY**

1.Enumerate histological stages of tooth development and write in detail about bell stage

#### **SHORTS**

- 2.Development of mandible
- 3. Difference between maxillary and mandibular incisors
- 4. Pharyngeal arches



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

### KAMINENI INSTITUTE OF MEDICAL SCIENCES ANATOMY

- 1.Describe scalp under following headings
- A. Layers B. Blood supply C. Nerve supply D. Applied anatomy
- 2. (a) Name extra ocular muscles
- (b) Write their origin, insertion nerve supply and action

#### **SHORTS**

- 3. Posterior triangle
- 4. Cavernous sinus
- 5. Sutural joints(sutures)
- 6. Histology of lymph node
- 7. Draw neat labelled diagram of Graafian follicle
- 8. Superior orbital fissure
- 9. Styloid process
- 10. Pterion

- 11. Anterior fontanelle
- 12. Blood supply of thyroid gland
- 13. Name the meninges
- 14. Diaphragm sellae
- 15. Name two muscles enclosed by deep cervical fascia
- 16. Ramus of mandible
- 17. Steps of spermatogenesis
- 18. Five branches of facial nerve in face
- 19. Name unpaired Dural venous sinuses
- 20. Epidermis layer

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

### AL-BADAR RURAL DENTAL COLLEGE PHYSIOLOGY

1. Define haemostatic. Describe intrinsic pathway of blood coagulation. Add a note on haemophilia

#### **SHORTS**

- 2. Describe molecular basis of skeletal muscle contraction
- 3. Describe oxygen- haemoglobin dissociation curve and factors affecting it
- 4. Classify modes of transport across the cell membrane. Describe active transport Vital capacity and physiological

- 5. Draw well labelled diagram showing lung volumes and capacities
- 6. Differentiate between cortical nephrons and juxta medullary nephrons
- 7. Draw well labelled diagram of juxta glomerular apparatus
- 8. Refractory period
- 9. Functions of cell membrane

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

#### **BIOCHEMISTRY**

1.Define primary , secondary , tertiary and quaternary structure of proteins. What are the bonds required to maintain structure of protein ?

#### **SHORTS**

- 2. Essential fatty acids and mention their importance
- 3. Describe the structure and biomedical importance of homopolysaccharides
- 4. Structure and function of DNA

- 5. RNA Types and functions
- 6. Biologically active peptides
- 7. Invert sugar
- 8. Name two phospholipids and mention its composition
- 9. What are Epimers? Give examples

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **DENTAL ANATOMY AND HISTOLOGY**

- 1. Enumerate the stages of tooth development in detail. Add a note on Development of root.
- 2. Discuss the morphology of permanent maxillary central incisor. List the important differences between permanent maxillary central incisor and maxillary lateral incisor.

#### **SHORTS**

- 3. Tooth numbering system
- 4. Clinical considerations of enamel
- 5. Theories of tooth eruption
- 6. Clinical and histological differences between primary dentition and permanent dentition
- 7. Amelogenesis
- 8. Development of tongue
- 9. Landmarks of teeth
- 10. Hypocalcified structures of enamel

- 11. Line angles and Point angles
- 12. Neural crest cells
- 13. Fate of dental lamina
- 14. Neonatal line
- 15. Reduced enamel epithelium



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **GDCRI**

- 1. Describe maxillary central incisor in following headings
- (a) Measurements
- (b) Chronology
- (c) All the 5 aspects
- 2. Histophysiology stages of tooth development

#### **SHORTS**

- 1. Difference between primary and permanent dentition
- 2. All elevations and depression of tooth
- 3. Tooth numbering system
- 4. Functions of tooth

- 1. Clinical consideration of lateral maxillary incisor
- 2. Primary epithelial band
- 3. Neural crest cells
- 4. Line angle and point angle
- 5. Dental formulae

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

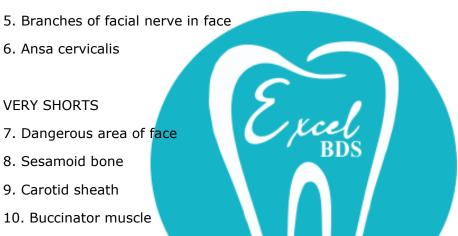
#### **ANATOMY**

- 1.Describe the branchial plexus under following headings:
- (a) Formation (b) Trunks (c) Divisions (d) Cords (e) Branches (f) Applied anatomy

#### **SHORTS**

11. Oogenesis

- 2.Describe synovial joints with examples
- 3. Superior Orbital fissure and passing structures
- 4. Microscopic Structures of lymph nodes



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **AL AMEEN DENTAL COLLEGE**

#### **PHYSIOLOGY**

1. Define blood pressure . Describe factors determining blood pressure

#### **SHORTS**

- 2. Define and classify anaemia. Add a note on pernicious anaemia
- 3. Counter current exchanger system

4.ESR

- 5. Four properties of cardiac muscle.
- 6.Strength duration curve
- 7.Reabsorption of glucose in kidney.
- 8. Functions of surfactant.
- 9. Thalassaemia



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

#### **BIOCHEMISTRY**

1.Describe TCA cycle and add a note on its energetics.

#### **SHORTS**

- 2. Classification of proteins with examples.
- 3.Plasma proteins.
- 4. Factors affecting enzyme activity. (any three)

# VERY SHORTS 5. Anomers 6. Cofactors 7. Isoenzymes 8. Competitive inhibition 9. Essential amino acids

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **SB PATIL DENTAL COLLEGE**

Classify oral mucus membrane?

- 1. Write in detail the microscopic and macroscopic features of gingiva.
- 2.Describe the chronology and morphology aspects of maxillary lateral incisors?

#### **SHORTS**

- 3.Bell stage of tooth development
- 4. Non-keratinocytes.
- 5. Difference between maxillary and mandibular incisor.
- 6.Define ridge, fossa < Groove and mamelons
- 7. Hertwigs epithelial root sheath.
- 8.Tooth numbering system.
- 9.Bud ∩ stage of tooth development.
- 10. Composition and histology of bone.

- 11.Gingival coI
- 12. Membrane protein granules.
- 13. Cell rest of serrae.
- 14. Gingival sulcus

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **AL AMEEN DENTAL COLLEGE**

#### **DENTAL ANATOMY DENTAL HISTOLOGY**

- 1.Described details all aspects of permanent maxillary central incisor add a short note on chronology.
- 2.Describe advance bell stage of the tooth development?
- 3. Describe tooth numbering system
- 4. Write the difference between deciduous and permanent teeth.
- 5. Write dental lamina.
- 6. Write cusp and dental formula?
- 7. Write ridge and its types.
- 8. Functions of maxillary sinus.
- 9. Write derivatives of pharyngeal arches?



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS 2 x 10 = 20 Marks

#### **GDCRI**

#### **DENTAL ANATOMY DENTAL HISTOLOGY**

- 1.Describe maxillary central incisor and write arch traits.
- 2. Enumerate the morphological stages of tooth development and write in detail about advance bell stage.

#### **SHORTS**

- 1.Ridges
- 2.Dental lamina
- 3.Tooth numbering system



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **MRIDS**

#### **BIOCHEMISTRY**

1.Describe the various types of classification of amino acids.

#### SHORTS

- 2. Enumerate the glycosaminoglycans and write their functions.
- 3. Biochemical functions and deficiency disorders of vitamin C.
- 4. Enumerate the factors affecting enzyme actions.
- 5. Secondary structure of proteins

- 6.Beri Beri
- 7.Essential fatty acids.
- 8. Deficiency disorders of vitamin D
- 9. Define isoenzymes . Give examples
- 10. Functions of phospholipids.

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### MALLA REDDY INSTITUTE OF DENTAL SCIENCES

#### **PHYSIOLOGY**

1.Define cardiac output &Mention its normal value? How is it determined? What are the factors affecting cardiac output?

#### **SHORTS**

- 2.Active transport
- 3. Mechanism of skeletal muscle contraction.
- 4.Cell mediated immunity
- 5. What are baroreceptors? How baroreceptors regulate blood pressure

- 6. Give two examples each for positive & negative feedback mechanisms.
- 7.Draw a neat labelled diagram of neuromuscular junction(NMJ)
- 8.Draw and label normal ECG.
- 9. Define anti coagulants? Name any two anticoagulants?
- 10. What is Rh factor & What is its importance?

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **ANATOMY**

#### LONG

- ${f 1.Class}$  ify Dural venous sinus and describe cavernous sinus in detail . Add a note on surgical importance
- 2.Describe scalp under the following headings
- (a)Extent and layers
- (b)Blood supply
- (c)Nerve supply
- (d)Applied importance

#### **SHORTS**

- 3.Boundaries and contents of sub occipital triangle
- 4. Pretracheal fascia.
- 5. Histology of Endochondral ossification.
- 6. Blood supply of a long bone
- 7.Tentorium cerbelli.

- 8. Jugular foramina.
- 9. Name the muscles of upper lip.
- 10.Ramus of the mandible
- 11. Histology of transitional epithelium
- 12. Stylo mandibular ligament

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **ANATOMY**

- 1.Describe scalp under the following headings
- (a)layers
- (b)Blood supply
- (c)Nerve supply
- (d)Applied anatomy
- 2.Describe the deep cervical fascia

# 3.Microscopic structure of cardiac muscle. 4. Spermatogenesis 5.Anterior fontanelle 6.Facial artery 7. Buccinator muscle 8.Synovial joint 9.Name the bones of face. 10.Carotid sheath VERY SHORTS 11.Facial vein

- 12.Primitive streak
- 13. Microscopic structure of medium size artery
- 14.Branches of external carotid artery
- 15.External jugular vein.
- 16. Nerve supply of digastric muscle.
- 17. Arterial supply of thyroid gland.
- 18. Dangerous area of face
- 19.Transitional epithelium
- 20. Floor of carotid triangle.

Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

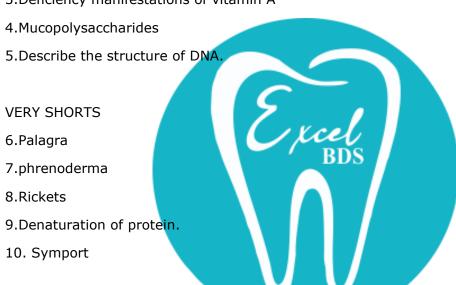
#### **BIOCHEMISTRY**

#### LONG

1.Explain in detail factors affecting the velocity of an enzymatic reactions.

#### **SHORTS**

- 2. Phospholipids and their functions
- 3. Deficiency manifestations of vitamin A



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

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

**LONG ESSAYS**  $2 \times 10 = 20 \text{ Marks}$ 

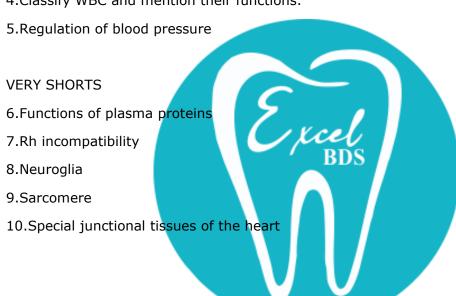
#### **PHYSIOLOGY**

#### LONG

1.Define cardiac output. Explain the factors determining and measuring cardiac output.

#### **SHORTS**

- 2.Draw a labelled diagram of neuromuscular junction.
- 3. Anticoagulants.
- 4. Classify WBC and mention their functions.



Time: Three Hours Max. Marks: 70 Marks

Your answers should be specific to the questions asked

Draw neat, labelled diagrams wherever necessary

LONG ESSAYS  $2 \times 10 = 20 \text{ Marks}$ 

#### **DENTAL ANATOMY & DENTAL HISTOLOGY**

- 1. Enumerate in detail morphological stages of tooth development
- 2. Write in detail about life cycle of ameloblast and amelogenesis.

#### **SHORTS**

- 3. Physical and chemical properties of enamel.
- 4. Pharyngeal arch derivatives
- 5. Hypocalcified structures of enamel
- 6. Morphology of maxillary permanent central incisor.
- 7. Transient structures of tooth development
- 8. Development of tongue
- 9.Tooth numbering system.
- 10.Enamel rods structures

- 11.Oblique ridge
- 12.HERS
- 13.Cingulum, mamelons, lobe.
- 14.Dental lamina and Vestibular Lamina
- 15. Stellate Reticulum.
- 16.Perikymata
- 17. Define cusp
- 18. Incremental lines & Neonatal lines
- 19. Neural crest cells
- 20. Enamel cuticle

