

Course Title: Oral Anatomy
physiology 2

Date: 21/05/2014

No. of Questions:

Time: 90 minutes

Using Calculator (No)

University of Palestine



Final Exam
2013/2014

Total Grade: 60

Instructor Name: _____

Student No.: _____

Student Name: _____

College Name: _____

Dep. / Specialist: _____

Using Dictionary (No)

MCQ, PLEASE ANSWER IN THE ANSWER SHEET!

1. The tongue develops from:
 - a. 1st and 2nd pharyngeal arch
 - b. 2nd and 3rd pharyngeal arch
 - c. 1st and 3rd pharyngeal arch
 - d. 1st, 2nd and 3rd pharyngeal arch
2. Which of the following is not a correct pairing of embryonic structure and adult derivative?
 - a. Maxillary processes: secondary palate.
 - b. Primary palate: upper incisor teeth.
 - c. Second pharyngeal arch: mandible.
 - d. Lateral lingual swellings: anterior 2/3 of tongue.
3. Which of the following does contribute to the formation of the upper lip?
 - a. Lateral nasal process.
 - b. Two maxillary processes & medial nasal process.
 - c. Medial nasal process.
 - d. First branchial arch.
4. The palatal shelves (palatine processes):
 - a. Are covered by endoderm.
 - b. Are derived from the primary palate.
 - c. Must assume a horizontal position for palate closure to occur.
 - d. Are derived from the sixth branchial arch.
5. An oblique facial cleft is formed:
 - a. Due to the rupture of the buccopharyngeal membrane.
 - b. When the maxillary process fails to fuse with the mandibular processes.
 - c. When the maxillary process fails to fuse with the lateral & medial nasal process.
 - d. When the medial nasal process fails to fuse with the maxillary process.
6. Which of the following embryonic structures contribute to the formation of lower lip:
 - a. Maxillary process.
 - b. Maxillary & medial nasal processes.
 - c. Medial & lateral nasal processes.
 - d. Two mandibular processes.

7. Palatine processes are derived from:
 - a. Maxillary processes.
 - b. Mandibular processes.
 - c. Copula of His.
 - d. Medial nasal process.
8. The maxillary processes:
 - a. Are covered with endoderm.
 - b. Are derived from the 1st branchial arch.
 - c. Form the primary palate.
 - d. Form the entire upper lip.
9. A unilateral cleft lip is formed when:
 - a. The palatal shelves remain in a vertical position.
 - b. The bucco-nasal membrane ruptures.
 - c. One maxillary process fails to fuse with the medial nasal process.
 - d. One lateral nasal process fails to fuse with the maxillary process.
10. The soft palate develops from:
 - a. Primary palate.
 - b. Palatal processes fused with the nasal septum.
 - c. Medial nasal process.
 - d. Palatal processes which are not fused with nasal septum.
11. The tuberculum impar:
 - a. Is the origin of the inferior portion of the vomer
 - b. appears during the development of the body of tongue
 - c. leads to the development of the sulcus terminalis
 - d. has a relationship to the coronoid process
12. The Stomodeum is lined by
 - a. Endoderm.
 - b. Mesoderm.
 - c. Ectoderm.
 - d. Endoderm & Mesoderm
13. The meckel's cartilage gives rise to:
 - a. Mandibular body
 - b. Mandibular ramus
 - c. Incus and malleus
 - d. Hyoid bone
14. The ossification center of the developing mandible arise between:
 - a. inferior dental and lingual nerves.
 - b. mental and incisive nerves
 - c. mandibular and maxillary nerves.
 - d. superior alveolar and infra-orbital nerves.

15. Tongue begins to develop at:
- 6th w.i.u.
 - 11th w.i.u.
 - 4th w.i.u.
 - 8th w.i.u.
16. The malleus of inner ear originates from:
- Condylar cartilage.
 - Coronoid cartilage.
 - Meckel's cartilage.
 - None of the above.
17. Sulcular epithelium is formed of:
- Nonkeratinized stratified squamous epithelium.
 - Parakeratinized stratified squamous epithelium.
 - Orthokeratinized stratified squamous epithelium.
 - Columnar epithelium.
18. Which of the following is true regarding the dentogingival junction?
- It is derived entirely from ectomesenchyme.
 - It moves apically with age.
 - It moves occlusally with age.
 - Contains clear submucosa.
19. The sulcular epithelium:
- Is ortho-keratinized.
 - Has thick epithelial layer.
 - Has long epithelial ridges.
 - Is nonkeratinized.
20. The mode of attachment of the junctional epithelium is:
- Basement membrane.
 - Basal lamina & hemidesmosome.
 - Enamel cuticle.
 - Odland's bodies.
21. Which of the following is true of the attachment epithelium?
- Its coronal end is found at the bottom of the gingival sulcus.
 - Its apical migration is the major causative factor in active eruption.
 - Is impermeable to dyes and fluids.
 - Can migrate coronally.
22. Glands emptying the saliva into circumvalate trough are:
- Mucous glands.
 - Serous glands.
 - Glands of Nuhn.
 - Mucous and serous mixed glands.

23. The terminal secretory units of the salivary gland contain:
- Serous cells
 - Mucous cells
 - Myoepithelial cells
 - All of the above
24. Typical serous cells of salivary glands are:
- Hexagonal in shape
 - Ovoid in shape
 - Rectangular in shape
 - Pyramidal in shape
25. The neural tube is formed through the fusion of
- The neural folds
 - The notochords
 - The spinal cord
 - The spinal bones
26. In humans, which pharyngeal arch is rudimentary?
- 5th
 - 6th
 - 2nd
 - 4th
27. Every branchial arch contains:
- Branchial artery
 - Branchial nerve
 - Branchial cartilage
 - All of the above
28. The philtrum of the upper lip is formed by:
- Maxillary process
 - Lateral nasal process
 - Palatal shelves
 - None of the above
29. Which statement about major salivary gland is true?
- Parotid gland is purely serous
 - Submandibular gland is mixed, but predominantly serous
 - Sublingual gland is mixed, but predominantly mucous
 - All of the above
30. The parotid gland empties its saliva intraorally via:
- Stensen's duct
 - Bartholins duct
 - Whartons duct
 - Boltons duct

31. Which salivary glands are purely serous?
- Parotid and von Ebner glands
 - Langerhans glands
 - Palatine minor salivary glands
 - Buccal minor salivary glands
32. The mandible:
- Is derived from the first pharyngeal arch
 - Ossifies medial to Meckel's cartilage
 - On average follows the growth pattern of the maxilla
 - Does not grow after age 18 in males
33. The mandible:
- Develops through the union of four ossification centers
 - The major one is the coronoid cartilage
 - Develops around the mandibular nerve and its branches
 - Lack of fusion between the processes leads to cleft mandible.
34. Which statement is **wrong** about Myoepithelial cells:
- They are contractile cells associated with the secretory end pieces and the intercalated ducts.
 - They have many similarities to smooth muscle cells but are derived from epithelium.
 - They support the active secretion of saliva from the acini into the ductal system.
 - They cells absorb Na from the lumen, secrete K into the lumen, and produce an increasingly hypertonic fluid.
35. Which statement is **wrong** about striated ducts:
- Are well developed in mucous glands
 - Their main function is the modification of the primary saliva by re-absorption and secretion of electrolytes
 - They form the largest portion of the ductal system.
 - Their lumina are larger than that of the acini.

True and False, correct the false statements:

- Salivary enzymes such as alpha-amylase and lipase begin the digestion of fats in the oral cavity.
- The Stomatodeum is located between the frontal prominence and the pericardial swelling.
- The muscles of the tongue are originated from the third pharyngeal arch.
- The inhibition of fusion between the medial and lateral nasal processes lead to cleft palate.
- The soft palate develops through the fusion of the lateral nasal swellings.

6. The ossification of the mandibular body is intramembranous.
7. All minor salivary glands are pure mucous.
8. The Submandibular gland is ectodermal origin.
9. The parasympathetic innervation of the parotid gland salivation is ultimately caused by the glossopharyngeal nerve.
10. Increased sympathetic activity in the submandibular gland leads to the production of an enzyme rich saliva.
11. Minor salivary glands found at the superior pole of the tonsils are called von Ebner's glands.
12. Salivary bicarbonate plays an important role by the buffering function of saliva, which protects the teeth from demineralization.
13. Saliva contains a spectrum of proteins with antimicrobial activity such as histatins, lysozymes.
14. In purely mucous salivary glands the serous demilunes surrounds the mucous acini in form of spheres.
15. The intercalated ducts produce a small amounts of saliva.
16. Sympathetic stimulation of salivary glands in stress situations increases secretion.
17. Ptyalism is mainly caused by excessive salivary flow.
18. 80-90% of salivary gland stones occur in the Sublingual gland because of the very small ducts of Rivinus.

Write a short essay about:

1. Development of the tongue
2. Development of the maxilla
3. Histological structure of a mixed salivary gland.
4. Blood supply of the gingiva
5. Production and modification of Saliva

Good Luck