

DENTAL GROSS ANATOMY
SECOND EXAMINATION
MARCH 4, 2003

Name _____

Questions 1 - 32 of this examination are multiple choice questions worth 2.5 points each. These questions will be graded by computer and must be answered on the accompanying computer answer sheet. On the computer answer sheet your name and social security number must be PRINTED in the boxes indicated and the appropriate black marks made for the computer format of your name and social security number in the spaces below.

Write "OXBERRY" in the space provided for instructor.

Record your answer for each question on the answer sheet. Mark each correct response on the data sheet using numbers 1 through 32 with a HEAVY BLACK MARK with a #2 PENCIL. (If you erase, be sure to erase fully.)

Note that words or statements in brackets are only used to clarify or give an alternate name; they are NOT meant to change the nature of the question.

There is just ONE CORRECT ANSWER for each question.

Questions 33 - 42 of this examination are short answer questions that require you to fill in the blank or blanks with the correct missing word or words and are worth 2 points each. The answers should be written directly in the blank spaces provided on the last two pages of the exam. Be sure to PRINT your name and social security number in the spaces provided on each of these pages. Be sure to tear off and turn in these pages at the end of the exam.

FOR QUESTIONS 1 THROUGH 32 SELECT THE SINGLE BEST ANSWER (2.5 points each)

1. Which of the following nerves innervate buccolabial gingiva of the maxillary incisors thru premolars?

A. Infraorbital
B. Mandibular division of V
C. Posterior superior alveolar nerve
D. Greater palatine

2. The corneal reflex is a neurological test for a sensory and motor component of 2 cranial nerves. These nerves are respectively the...

A. maxillary division of V and facial nerve
B. ophthalmic division of V and oculomotor nerve
C. maxillary division of V and mandibular division of V
D. ophthalmic division of V and facial nerve

3. The ostium of the parotid duct opens

A. at the sublingual caruncle
B. into the oral vestibule adjacent to the 2nd maxillary molar tooth
C. into the oral vestibule adjacent to the 2nd mandibular molar tooth
D. into the oral vestibule adjacent to the maxillary canine tooth

4. A lesion of which of the following nerves could result in a decrease of the volume of parotid gland secretion?

A. Deep petrosal
B. Lingual v_3
C. Auriculotemporal v_3
D. Vagus x

5. Under normal conditions the condyle of the mandible articulates with what structure?

A. Intermediate zone of the articular disc
B. Posterior band of the articular disc
C. Retrodiscal pad

D. Anterior band of the articular disc

6. During opening of the mouth, all the following muscles could participate in generating rotation of the mandible around the neurovascular hub, **EXCEPT**?

- D
- A. Anterior belly of the digastric
 - B. Inferior head of the lateral pterygoid
 - C. Mylohyoid
 - D. Medial pterygoid

7. A lesion of the inferior alveolar nerve just inferior to the foramen ovale could result in all the following, **EXCEPT**?

- A
- A. Paralysis of the anterior belly of the digastric muscle
 - B. Loss of sensation of the buccal gingiva of the mandibular molar teeth
 - C. Loss of sensation of the lower lip
 - D. Loss of sensation of the mandibular teeth

8. A closed lock jaw is a sign of ...

- A
- A. an anteriorly dislocated articular disc.
 - B. a dislocated jaw.
 - C. a destructive lesion of V₃.
 - D. an anteriorly displaced articular disc.

9. All of the following fascial spaces communicate at the confluence of fascial spaces, **EXCEPT**?

- A
- A. Masticator Space
 - B. Parapharyngeal Space
 - C. Sublingual Space
 - D. Submandibular Space

10. Severing the right inferior laryngeal nerve during the surgical removal of a thyroid tumor would paralyze all of the following muscles **EXCEPT** the ...

- A
- A. right posterior cricoarytenoid.
 - B. right lateral cricoarytenoid.
 - C. right cricothyroid.
 - D. right transverse arytenoid.

11. A severe fracture of the cribriform plate of the ethmoid bone would most likely interrupt which of the following special senses?
- A. Sight
 - B. Hearing
 - C. Taste
 - D. Smell
12. The function of which of the following muscles is **LEAST LIKELY** to be affected by an infection in the cavernous sinus?
- A. Superior oblique IV
 - B. Inferior oblique III
 - C. Medial pterygoid V
 - D. Medial rectus II
13. Which of the following dural sinuses does **NOT** drain either directly into or out of the confluence of sinuses?
- A. Superior sagittal
 - B. Straight
 - C. Inferior sagittal
 - D. Transverse
14. A space-taking lesion (tumor) within the jugular foramen would **LEAST LIKELY** affect which of the following cranial nerves?
- A. Vestibulocochlear
 - B. Glossopharyngeal
 - C. Vagus
 - D. Spinal Accessory
15. All of the following are branches of the external carotid artery **EXCEPT** the...
- A. lingual artery.
 - B. facial artery.
 - C. superficial temporal artery.
 - D. inferior thyroid artery.

16. A lesion in the facial nerve proximal to the geniculate ganglion could produce all of the following symptoms **EXCEPT**?
- A. diminished taste
 - B. ptosis
 - C. hyperacusis
 - D. dry cornea
17. Which of the following is **NOT** a function of CN IX?
- A. sensory to middle ear cavity
 - B. motor to pharyngeal constrictors
 - C. sensory to posterior 1/3 of tongue
 - D. secretomotor to parotid gland
18. In order to anesthetize **ONLY** the mandibular premolars, canine and incisor teeth, anesthetic solution would have to be deposited at the:
- A. infraorbital foramen
 - B. mandibular foramen
 - C. mental foramen
 - D. tip of root of the canine
19. A periapical abscess of a right, anterior mandibular tooth has eroded medially thru the bone and enlarged such that it has now elevated the floor of the oral cavity on the right side and displaced the tongue to the left side. This enlarged infection is now located in the...
- A. submandibular fascial space.
 - B. parapharyngeal fascial space.
 - C. sublingual fascial space.
 - D. retropharyngeal fascial space.
20. During a difficult third molar extraction, damage to the lingual nerve could produce all of the following deficits **EXCEPT**?
- A. diminished salivary secretion
 - B. diminished sense of taste in the anterior 2/3 of the tongue
 - C. diminished sensation in the lingual gingiva
 - D. diminished sensation in the lower lip

21. Following a palatine tonsillectomy, a patient complains of taste deficits. Damage to which of the following nerves is most likely responsible for this problem?
- A. lingual
 - B. hypoglossal
 - C. chorda tympani
 - D. glossopharyngeal
22. The posterior 1/3 of the tongue is derived from the:
- A. 1st pharyngeal arch
 - B. 2nd pharyngeal arch
 - C. 3rd pharyngeal arch
 - D. 4th pharyngeal arch
23. Which of the following congenital malformations would be found along the anterior border of the sternocleidomastoid?
- A. external branchial fistulas
 - B. lateral cervical cysts
 - C. thyroglossal cysts
 - D. A and B
24. Failure of the lateral palatine processes to properly fuse in the midline during development would result in a newborn with a...
- A. cleft lip.
 - B. posterior cleft palate.
 - C. cleft jaw.
 - D. anterior cleft palate.
25. If a wooden tongue depressor is touched to the wall of the oropharynx it should elicit a gag reflex. This can be done to test the integrity of which of the following pair of cranial nerves?
- A. glossopharyngeal and hypoglossal
 - B. hypoglossal and vagus
 - C. glossopharyngeal and vagus
 - D. glossopharyngeal and facial

26. Which of the following statements about the larynx is **INCORRECT**?

- A. The posterior cricoarytenoid muscle is innervated by the external branch of the superior laryngeal nerve.
- B. The laryngeal mucosa superior to the vocal folds receives sensory innervation from the internal branch of the superior laryngeal nerve.
- C. A laryngostomy is a procedure in which an incision is made between the cricoid and thyroid cartilages to establish an emergency airway.
- D. During swallowing, the epiglottis closes down over the laryngeal inlet (aditus).

27. Which of the following statements about the nasal cavity and/or paranasal sinuses is **INCORRECT**?

- A. The nasal cavity mucosa receives sensory innervation from branches of the maxillary division of the trigeminal nerve.
- B. Parasympathetic nerves to the nasal cavity mucosa have their preganglionic origins within the facial nerve.
- C. The opening of the nasolacrimal duct is in the middle meatus.
- D. The mucosa of the maxillary sinus receives sensory innervation from the maxillary division of the trigeminal nerve.

28. Which of the following muscle – nerve pairings is **INCORRECT**?

- A. superior oblique – trochlear
- B. lateral rectus – abducens
- C. sphincter pupillae – sympathetics
- D. levator palpebrae superioris – oculomotor

29. Infections on the superficial upper face can pass through the orbit and into the cavernous sinus by way of the

- A. pterygoid plexus of veins.
- B. superior ophthalmic vein.
- C. central vein of the retina.
- D. infraorbital vein.

30. Which of the following muscles is **NOT** innervated by the vagus nerve?

- A. stylopharyngeus
- B. palatopharyngeus
- C. levator veli palatini.
- D. palatoglossus

31. A lesion of the nerve of the pterygoid canal (Vidian nerve) could result in which of the following findings?

- A. reduced salivation from glands in the floor of the mouth
- B. reduced tearing
- C. reduced parotid gland function
- D. reduced sensation from the palate

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21
13
12

32. Which of the following symptoms would NOT be observed in a patient with a complete Horner's syndrome?

- A. flushing of skin on the face
- B. loss of accommodation
- C. drooping upper eyelid
- D. constricted pupil

MORE QUESTIONS ON NEXT TWO
PAGES

(**PRINT**) NAME _____ SS# _____

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33. The mental foramen is found on a vertical line that passes thru the 2nd mandibular premolar tooth.
34. The Facial nerve and Superficial Temporal artery pass thru the parotid gland.
35. A cancerous tumor erodes thru the anterior wall of the wall of the masticator fascial compartment. This would result in the tumor spreading into the oral cavity - LMS maxillary sinus - LMS
36. The Middle meningeal Artery artery is the major supplier of arterial blood to the meninges of the brain.
37. The basilar artery is formed by the vertebral arteries.

MORE QUESTIONS ON NEXT PAGE

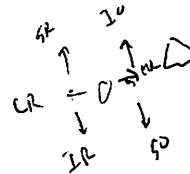
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38. If an infection in the middle ear cavity were to erode thru its superior wall (roof) it could cause damage to the middle cranial fossa / petrous portion of temporal bone
39. An infection in the medial portion of the anterior tongue or medial portion of the lower lip would **first** drain into the submental lymph nodes pg 49
lymph nodes.
40. Upon protrusion, your patient's tongue deviates to the right side. This finding suggests that your patient has a lesion in their right hypoglossal nerve? (Be sure to include the specific side in your answer!)
41. The frontal and anterior ethmoidal air sinuses drain into which space within the nasal

cavity? Semilunar hiatus

42. Testing the elevation-depression functions of the rectus muscles is best accomplished when the eyeball is placed in the abduction position.



END OF QUESTIONS