

## Section 1

### Head and Neck mcqs

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- 1) Regarding the superior orbital fissure, which is INCORRECT?
  - a) its common tendinous ring binds the SOF content of nerves and muscles to the contents of the optic canal
  - b) the origin of levator palpebrae superioris is its bony upper margin
  - c) lacrimal, frontal and trochlear nerves pass through it
  - d) the oculomotor, abducens and nasociliary nerves lie within the cone of the extraocular muscles
- 2) Regarding the extraocular muscles:
  - a) they all arise from a common tendinous ring around the superior orbital fissure
  - b) the rectus muscles all pass laterally to their point of insertion because of the angle of the orbital apex within the skull
  - c) the superior oblique muscle passes through the trochlear, a fibrocartilage loop attached to the frontal bone lateral margin, just behind the orbital margin
  - d) except for superior oblique, all nerve supply to muscles enter from their optic side
- 3) With regards to eye movement, which is INCORRECT?
  - a) the medial and lateral rectus evoke simple horizontal movement only
  - b) the inferior oblique turns the eye down and out
  - c) the superior rectus turns the eye up and in
  - d) the inferior rectors and superior oblique together produce vertical down gaze
- 4) Which is INCORRECT?
  - a) in a 4<sup>th</sup> cranial nerve paralysis, the affected eye lies slightly inturned
  - b) in a 6<sup>th</sup> cranial nerve palsy, the lateral rectus is affected
  - c) in a 3<sup>rd</sup> nerve palsy, levator palpebrae is affected
  - d) in an oculomotor nerve palsy the eye looks down and out
- 5) With regards to the retina, which is CORRECT?
  - a) the retina covers the inner surface of the choroids and is light sensitive everywhere except at the corneal area
  - b) the optic disc contains retina that is completely free of blood vessels and is yellowish in colour
  - c) the optic disc and fovea are of similar size
  - d) the fovea contains no blood vessels or cones, but a high concentration of rods
- 6) The nasal septum consists of:
  - a) the maxilla
  - b) the vomer and ethmoid bones
  - c) the sphenoid and ethmoid bones
  - d) the frontal, zygoma and maxilla
  - e) the vomer and palatine bones

- 7) The ophthalmic artery:
- is a branch of the ECA
  - enters through the superior orbital fissure
  - does not penetrate the meninges of the optic nerve
  - forms an anastomoses between ECA and ICA
  - is an end artery
- 8) Regarding the carotid sheath:
- arisa cervicalis lies behind the IJV
  - is free to move in the neck
  - contains the vagus and phrenic ????
  - the sympathetic trunk lies outside the sheath
  - the CCA lies lateral to the IJV
- 9) The contents of the jugular foramen include:
- superior petrosal sinus
  - internal jugular vein
  - vagus nerve
  - hypoglossal nerve
  - all of the above
- 10) The sensory innervation of the auricle of the ear includes:
- auriculotemporal nerve ( $V_3$ )
  - great auricular nerve ( $C_2$ )
  - facial nerve via tympanic plexus (VII)
  - auricular branch of vagus (X)
  - all of the above
- 11) Regarding the abducent nerve (CN  $V_1$ ):
- the nucleus lies in the medulla
  - supplies superior oblique muscle
  - enters the orbit ??? superior orbital fissure
  - has no relation to the cavernous sinus
  - carries autonomic fibres from Edinger-Westphal node
- 12) Regarding the face, which is INCORRECT?
- there is no deep fascia on the face
  - the bulk of orbicularis oris muscle comes from buccinator
  - the eyelid muscles are completely supplied by CNVII
  - the parotid duct pierces buccinator opposite the third upper molar tooth
  - the facial nerve supplies the occipital belly of occipitofrontalis
- 13) Regarding the trigeminal nerve:
- branches emerge from the parotid gland
  - the mandibular nerve has three cutaneous branches
  - the supratrochlear nerve supplies midline forehead and scalp
  - the infratrochlear nerve is a branch of the maxillary nerve
  - the bridge of the nose is supplied by the external nasal nerve

- 14) Which structure does NOT pass through the parotid gland?
- a) retromandibular vein
  - b) temporozygomatic branch of facial nerve
  - c) cervicofacial branch of facial nerve
  - d) internal jugular vein
  - e) external carotid artery
- 15) Which structure is NOT in the carotid sheath?
- a) internal jugular vein
  - b) hypoglossal nerve
  - c) glossopharyngeal nerve
  - d) external jugular vein
  - e) internal carotid artery
- 16) Which is an intrinsic muscle of the tongue?
- a) superior longitudinal muscle
  - b) genioglossus muscle
  - c) hyoglossus muscle
  - d) styloglossus muscle
  - e) palatoglossus muscle
- 17) Which muscle abducts the vocal cords?
- a) cricothyroid
  - b) oblique arytenoid
  - c) posterior cricoarytenoid
  - d) lateral cricoarytenoid
  - e) thyroepiglottic
- 18) Which laryngeal muscle is NOT supplied by the recurrent laryngeal nerve?
- a) thyroarytenoid
  - b) cricothyroid
  - c) aryepiglottic
  - d) oblique arytenoid
  - e) posterior cricoarytenoid
- 19) The internal laryngeal nerve supplies:
- a) sensation to the vocal folds
  - b) cricothyroid muscle
  - c) sensation above the vocal folds
  - d) transverse arytenoid muscle
  - e) sensation below the vocal folds
- 20) Which nerve does NOT supply skin to the upper eyelid?
- a) lacrimal
  - b) supraorbital
  - c) supratrochlear
  - d) infratrochlear
  - e) infraorbital

- 21) Which extraocular muscle does NOT arise from the tendinous ring of the orbit?
- a) superior rectus
  - b) superior oblique
  - c) inferior rectus
  - d) medial rectus
  - e) lateral rectus
- 22) Which structure passes through the tendinous ring of the orbit?
- a) ophthalmic artery
  - b) inferior rectus muscle
  - c) lacrimal nerve
  - d) trochlear nerve
  - e) superior oblique muscle
- 23) Which bone is not part of the medial wall of the orbit?
- a) maxilla
  - b) lacrimal bone
  - c) sphenoid
  - d) palatine bone
  - e) ethmoid
- 24) Which muscle helps to open the jaw?
- a) medial pterygoid
  - b) lateral pterygoid
  - c) masseter
  - d) temporalis
  - e) buccinator
- 25) Regarding the vertebral column:
- a) ligamentum flava attach adjacent pedicles
  - b) lumbar vertebrae have foramen in their transverse process
  - c) the intervertebral disc is a primary cartilaginous joint
  - d) rotation is greatest in the thoracic region
  - e) the cruciform ligament holds the dens in place
- 26) The middle meningeal artery is a branch of the:
- a) internal carotid artery
  - b) middle cerebral artery
  - c) maxillary artery
  - d) deep temporal artery
  - e) facial artery
- 27) The hyoid bone is at what level?
- a) C2 vertebra
  - b) C3 vertebra
  - c) C4 vertebra
  - d) C5 vertebra
  - e) C6 vertebra

**Section 1**  
**Head and Neck – Answers**

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- |    |   |
|----|---|
| 1  | A |
| 2  | D |
| 3  | B |
| 4  | A |
| 5  | C |
| 6  | B |
| 7  | D |
| 8  | D |
| 9  | C |
| 10 | E |
| 11 | C |
| 12 | C |
| 13 | B |
| 14 | D |
| 15 | D |
| 16 | A |
| 17 | C |
| 18 | B |
| 19 | C |
| 20 | E |
| 21 | B |
| 22 | A |
| 23 | D |
| 24 | B |
| 25 | E |
| 26 | C |
| 27 | B |

## Section 2

### Face, Blood Supply, Nerves etc

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- 1) The parotid gland:
  - a) is the largest of the major salivary glands
  - b) is a mainly mucous gland
  - c) is a well organised, regular gland, clearly divided into lobes
  - d) drains into the parotid duct on its posteromedial surface
  - e) extends from the zygomatic arch to the lower level of the earlobe
  
- 2) Cutaneous sensation to the upper lip is supplied by the:
  - a) zygomaticofacial nerve
  - b) buccal nerve
  - c) infraorbital nerve
  - d) mental nerve
  - e) external nasal nerve
  
- 3) Skin over the upper lateral eyelid is supplied by the:
  - a) lacrimal nerve
  - b) supraorbital nerve
  - c) supratrochlear nerve
  - d) zygomaticofacial nerve
  - e) zygomaticotemporal nerve
  
- 4) The facial nerve:
  - a) marginal mandibular branch supplies muscles of the upper and lower lips
  - b) emerges through the stylomastoid foramen
  - c) has four main branches that exit the parotid gland
  - d) supplies the anterior belly of digastric
  - e) divides into temporofacial and cervicofacial divisions just after it enters the parotid gland
  
- 5) The facial artery:
  - a) is a branch of the internal carotid artery
  - b) crosses the angle of the jaw at the posterior border of masseter muscle
  - c) courses along inferior margin of parotid duct
  - d) lies in front of the facial vein
  - e) none of the above

## Section 2

### Face, Blood Supply, Nerves etc – Answers

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- |   |   |
|---|---|
| 1 | A |
| 2 | C |
| 3 | A |
| 4 | B |
| 5 | D |

## Section 3

### Head / Neck / CNS

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- 1) The cervical sympathetic trunk:
  - a) lies anterior to scalenus anterior
  - b) is enclosed in the carotid sheath
  - c) is lateral to the vertebral artery
  - d) each ganglion gives off a cardiac branch
  - e) disruption causes meiosis, ptosis and increased sweating
  
- 2) The oculomotor nerve:
  - a) does not enter the cavernous sinus
  - b) supplies the ciliary muscle
  - c) emerges from the pons
  - d) contains sympathetic fibres from the Edinger-Westphal nucleus
  - e) does not pass through the tendinous ring
  
- 3) The chorda tympani carries:
  - a) taste fibres for the posterior third of the tongue
  - b) ordinary sensation for the anterior two thirds of the tongue
  - c) taste fibres for the anterior two thirds of the tongue
  - d) cervical sympathetic fibres
  - e) motor fibres to the muscles of mastication
  
- 4) Which is NOT a branch of the facial nerve?
  - a) nerve to stapedius
  - b) chorda tympani
  - c) nerve to levator anguli oris
  - d) greater superficial petrosal nerve
  - e) auriculotemporal nerve
  
- 5) Regarding lymph drainage of head and neck, which is INCORRECT?
  - a) superficial cervical nodes lie along the external jugular veins
  - b) submandibular nodes are lateral to submental nodes
  - c) the left jugular lymph trunk usually drains into the thoracic duct
  - d) the jugulodigastric nodes lie on/near the tendon of omohyoid
  - e) preauricular nodes are outside and within the capsule of the parotid gland
  
- 6) The middle meningeal artery is a branch of the:
  - a) middle cerebral artery
  - b) anterior cerebral artery
  - c) internal carotid artery
  - d) maxillary artery
  - e) superficial temporal artery

- 7) Which is NOT a content of the posterior triangle of the neck?
- a) subclavian artery
  - b) lymph nodes
  - c) transverse cervical vein
  - d) omohyoid muscle
  - e) sternocleidomastoid muscle
- 8) Which laryngeal muscle abducts the vocal cords?
- a) posterior cricoarytenoid
  - b) cricothyroid
  - c) transverse arytenoid
  - d) vocalis
  - e) thyroarytenoid

### Section 3

#### Head and Neck – Answers

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- |   |   |
|---|---|
| 1 | D |
| 2 | B |
| 3 | C |
| 4 | E |
| 5 | D |
| 6 | D |
| 7 | E |
| 8 | A |

## Section 4

### Head and Neck Anatomy

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- 1) Regarding the bones of the skull:
  - a) the middle cranial fossa does not extend to the posterior cranial vault
  - b) the temporal lobe rests on the bony rather than the membranous part of the middle cranial fossa
  - c) the posterior cranial fossa contains the cerebella and lies superior to the tentorium cerebelli
  - d) the floor of the anterior cranial fossa is formed from the orbital plate of the parietal bone
  - e) the cribriform plate lies in the midline and is formed from the roof of the sphenoid bone
  
- 2) Regarding the bones of the skull:
  - a) the anterior clinoid processes are formed by the lesser wings of the sphenoid
  - b) the posterior clinoid processes are formed from the occipital bone
  - c) the dorsum sellae is formed from the anterior part of the occipital bone
  - d) the petious temporal bone forms the floor of the middle cranial fossa, but not the wall of the posterior cranial fossa
  - e) the inferior orbital fissure separates the lesser and greater wings of the sphenoid
  
- 3) Regarding the cervical spine:
  - a) all seven cervical vertebrae have spinous processes
  - b) rotatory movements of the head occur mostly at the atlanto-occipital joints
  - c) the odontoid process (peg) is encased by a bony canal in the axis
  - d) all seven cervical vertebrae have foramina transversaria for the vertebral artery to pass through it
  - e) spinous processes, where present, are all bifid except for C7
  
- 4) Regarding the triangles of the neck:
  - a) the posterior triangle is bound by trapezius, sternocleidomastoid and the middle quarter of clavicle
  - b) the anterior triangle is further divided into two smaller triangles, the carotid and submandibular triangles
  - c) the posterior belly of digastric (and stylohyoid) separates the carotid and submandibular triangles
  - d) the accessory nerve (CNXI) divides the posterior triangle into approximately two halves, and of these the lower contains little of importance
  - e) the investing fascia splits to enclose the sternomastoid and trapezius, but the parotia and submandibular glands lie deep to the fascia, in the anterior triangle
  
- 5) Regarding anatomy of the neck, landmarks:
  - a) the arch of the cricoid cartilage is palpable as it protrudes forward of the trachea
  - b) the cricoid cartilage marks the level of C5
  - c) the transverse process of the axis is the most prominent of the cervical transverse processes, and is palpable between angle of mandible and mastoid
  - d) the body of hyoid is not palpable because it is hidden behind the thyroid cartilage
  - e) the coracoid process of scapula is palpable within the deltopectoral triangle

- 6) Regarding fascia and sheaths in the neck:
- the pretracheal fascia contains both trachea and oesophagus, and also splits to envelop the lobes of the thyroid gland
  - the prevertebral fascia encloses vertebrae and muscles acting on the vertebrae, but does not contribute to the investment over the brachial plexus as it passes between scalene muscles
  - the investing fascia encloses trapezius sternomastoid and platysma muscles
  - the structures contained within the carotid sheath include carotid artery, sympathetic chain and jugular vein, but not phrenic nerve or vagus
  - infection may track in the pretracheal space to mediastinum
- 7) For sternocleidomastoid, which is TRUE?
- contraction of one muscle rotates the head to the ipsilateral shoulder
  - it is crossed superficially by the external jugular vein
  - it is supplied by the transverse cervical nerve
  - its clavicular fibres mainly insert into the superior nuchal line
  - it is superficial to the deep cervical fascia
- 8) Which is not considered a content of the posterior triangle of the neck?
- subclavian artery
  - trunks of the brachial plexus
  - internal jugular vein
  - branches of the cervical plexus
  - accessory nerve
- 9) For the thyroid, which is TRUE?
- the thyroid isthmus crosses the thyroid cartilage
  - the superior thyroid arteries are branches off the internal carotid arteries
  - the posterior surface lies on the carotid sheaths
  - the inferior thyroid arteries are branches off the external carotid arteries
  - the recurrent laryngeal nerves pass anteriorly to each lateral lobe
- 10) For the great neck vessels, which is TRUE?
- the carotid sheath contains the ansor cervicalis, vagus and recurrent laryngeal nerves
  - the external carotid artery has three branches
  - the internal carotid artery has six branches
  - the internal jugular vein lies lateral to the carotid artery throughout its course
  - the carotid sinus lies at the commencement of the common carotid artery

### Head and Neck Anatomy – Answers

- |    |   |
|----|---|
| 1  | B |
| 2  | A |
| 3  | E |
| 4  | C |
| 5  | A |
| 6  | A |
| 7  | B |
| 8  | C |
| 9  | C |
| 10 | D |

1. The blood supply of Little's area (anteroinferior part of the septum) is best described by
- Anterior and posterior ethmoidal arteries from the ophthalmic artery
  - The sphenopalatine branch of the maxillary artery
  - Sphenopalatine artery and septal branch of the superior labial branch of the facial artery
  - All of the above
  - None of the above

2. the septum of the nasal cavity is innervated by
- nasopalatine nerve from cranial nerve V2
  - posterior ethmoidal nerve from V1
  - greater palatine nerve from V2
  - lesser palatine nerve from V2
  - none of the above

3. The posterior cricoarytenoid muscles
- Abduct the vocal cords
  - Adduct the vocal cords
  - Tensor of the vocal cords
  - Relaxors of the vocal cords
  - Act as a sphincter

4. The superior laryngeal nerve
- Divides into internal and recurrent laryngeal nerves
  - Supplies the cricothyroid muscle via an external laryngeal branch
  - Supplies all the intrinsic muscles of the larynx
  - Is sensory to larynx below the vocal cords
  - None of the above

5. The surface markings of the trachea include
- Origin at lower end of the cricoid at C4 vertebra
  - Origin at C6 vertebra level
  - Termination at T2 at expiration
  - Termination at T4 level at maximal inspiration
  - 3rd to 5th rings covered anteriorly by isthmus of the thyroid

6. What runs through the foramen spinosum?
- Internal carotid artery
  - Maxillary branch of the trigeminal nerve
  - Mandibular branch of the trigeminal nerve
  - Middle meningeal artery
  - Meningeal nerve

7. The internal jugular vein
- Drains into the subclavian vein on the left
  - Lies in the carotid sheath with the carotid artery and the sympathetic trunk
  - Lies lateral to the internal carotid artery at the base of the skull
  - Lies lateral to the carotid artery in the lower neck
  - Lies anterior to the sternocleidomastoid

8. The seventh cervical vertebra

- a. Is typical
- b. Has a bifid spinous process
- c. Transmits the vertebral artery through the foramen in the transverse process
- d. Has the supra-pleural membrane attached to the anterior tubercle
- e. Has a short spinous process

9. The atlas

- a. Has no foramen in the transverse process
- b. Is the narrowest cervical vertebra
- c. Has a body
- d. Has a posterior arch grooved by the vertebral artery
- e. Has a short spinous process

10. Branches of the carotid artery include

- a. Inferior thyroid artery
- b. Ascending pharyngeal artery
- c. Internal thoracic
- d. Superficial cervical
- e. Thymic artery

11. The blood supply to the nasal cavity

- a. Is only from the external carotid
- b. Mainly enters through the nostril
- c. Does not communicate with intracranial vessels
- d. Mainly enters the sphenopalatine foramen
- e. Arrives to Little's area from ophthalmic artery branches

12. Protection of the airway during swallowing is not facilitated by

- a. The sphincteric action of the aryepiglottic muscles
- b. closure of the glottis
- c. Elevation of the larynx
- d. Contraction of the cricothyroid muscle
- e. Posterior bulging of the tongue assisting closure of the larynx

13. Structure of the larynx includes

- a. The inlet being bounded posteriorly by the epiglottis
- b. The posterior cricoarytenoid being an adductor of the vocal cords
- c. The aryepiglottic fold contains the cuneiform cartilage
- d. The rima of the vestibule being the fissure between the two vocal cords
- e. The cricoid cartilage not being circumferential

14. The trachea

- a. Commences below the cricoid at the level of C5
- b. Enters the thoracic inlet slightly to the left
- c. Is marked at its lower end by the level of the sternal angle
- d. Is supplied by the glossopharyngeal nerve
- e. Drains to axillary lymph nodes

15. All of the following are branches of the external carotid artery EXCEPT:

- a. Superior thyroid artery
- b. Hypoglossal artery
- c. Facial artery
- d. Lingual artery
- e. Ascending pharyngeal artery

16. Regarding triangles of the neck all of the following structures are boundaries of the triangle named EXCEPT:

- a. Submental triangle, mandible
- b. Anterior triangle, mandible
- c. Digastric triangle, mandible
- d. Carotid triangle, sternocleidomastoid
- e. Anterior triangle, sternocleidomastoid

17. All of the following are contents of the posterior triangle of the neck EXCEPT:

- a. Occipital lymph nodes
- b. Accessory nerve
- c. Cervical plexus
- d. Inferior belly of omohyoid
- e. Transverse cervical vessels

18. Which one of the following opens into the inferior meatus of the nose

- a. Frontal sinus
- b. Ethmoidal sinus
- c. Maxillary sinus
- d. Nasolacrimal duct
- e. Auditory tube

19. A fracture through the roof of the maxillary sinus might result in sensory loss to the

- a. Tympanic membrane
- b. Lacrimal gland
- c. Upper molar teeth
- d. Skin overlying the zygomatic bone
- e. Upper incisors and canine teeth

20. All of the following structures pass through the jugular foramen EXCEPT:

- a. Jugular vein
- b. Glossopharyngeal nerve
- c. Hypoglossal nerve
- d. Accessory nerve
- e. Vagus nerve

21. Regarding the basilar artery, all the below are true EXCEPT:

- a. Gives off branches to the anterior spinal artery
- b. Divides to give off both posterior cerebral arteries
- c. Supplies branches to the pons
- d. Formed by the union of the vertebral arteries
- e. Lies on the ventral aspect of the cerebral peduncle

22. In the circle of Willis

- a. The basilar artery divides into right and left posterior cerebellar arteries
- b. The middle cerebral arteries branch off and supply the motor but not sensory cortex
- c. The anterior communicating artery unites the middle cerebral artery to the internal cerebral artery
- d. It encircles the inferior brainstem at C2-3 level
- e. The internal carotid artery gives off the ophthalmic artery before dividing into anterior and middle cerebral arteries

23. Regarding the facial vein, all of the following are true EXCEPT:

- a. It drains into the internal jugular vein
- b. It has no valves
- c. It communicates with the cavernous sinus via the ophthalmic vein
- d. It runs inferoposteriorly anterior to the facial artery
- e. It communicates with the pterygoid plexus via the deep facial vein

24. The 2nd cervical vertebra

- a. Has a very small spinous process
- b. Articulates with the occiput
- c. Has a bifid spinous process
- d. It referred to as the atlas
- e. Has a dens that occupies the posterior 1/3 of the canal

25. Regarding the larynx

- a. All muscles are supplied by the recurrent laryngeal nerve
- b. Thyroarytenoid muscle alters the tension of the vocal cord
- c. Recurrent laryngeal nerve passes anterior to the cricothyroid joint
- d. During swallowing, the epiglottis acts as a passive flap
- e. All of the larynx is covered by pseudostratified columnar epithelium

26. Regarding the vertebral column all are correct EXCEPT:

- a. The facet joints in the lumbar spine lie in an anteroposterior plane
- b. The vertebral arteries ascend through the foramen in the transverse processes of the upper six cervical vertebrae
- c. The spinous processes of the cervical vertebrae are usually bifid
- d. Thoracic vertebrae I, II and XII have single costal facets on their pedicles
- e. The sacrum has 5 sets of anterior and posterior sacral foramina, one corresponding to each of the sacral segments

27. The internal jugular vein

- a. Is surrounded by the thickest portion of carotid sheath
- b. Receives drainage from all the parathyroid glands
- c. Is crossed posteriorly by the accessory nerve
- d. Is crossed anteriorly by the thoracic duct
- e. Contains valves within its lumen

28. Venous drainage of the face

- a. Is both deep and superficial
- b. Empties ultimately into the internal jugular vein alone
- c. Communicates indirectly with the cavernous sinus via the deep facial vein
- d. Communicates directly with the cavernous sinus via the supraorbital veins
- e. All of the above

29. The larynx

- a. Is a respiratory organ whose essential function is phonation
- b. Extends from the anterior upper border of the epiglottis to the level of C6
- c. Consists of two single cartilages, the thyroid and cricoid
- d. Is hauled up beneath the tongue with the epiglottis tilted anterior and upwards during swallowing
- e. Is supplied by the external laryngeal nerve except for the cricothyroid muscle which is supplied by the recurrent laryngeal nerve

30. Regarding the larynx

- a. The external laryngeal nerve supplies the posterior cricoarytenoid muscle
- b. The internal laryngeal nerve supplies cricothyroid
- c. The blood supply above the vocal cords is by a branch of the internal carotid
- d. Normal vocal cords are always covered by stratified squamous epithelium
- e. The recurrent laryngeal nerve lies immediately behind the cricoarytenoid joint

31. In the skull

- a. The anterior fontanelle usually closes by 2 months
- b. The pterion overlies the middle meningeal artery
- c. The round foramen transmits the mandibular branch of the fifth cranial nerve
- d. The cribriform plate is part of the sphenoid bone
- e. All of the above are correct

32. The orbit contains all of the following EXCEPT:

- a. Branches of the facial nerve
- b. The optic nerve
- c. The third cranial nerve
- d. A subarachnoid space
- e. The inferior rectus muscle

33. Which is true of the trachea?

- a. Begins at the level of C7
- b. Isthmus of the thyroid lies anterior to the 2nd, 3rd and 4th rings
- c. Has 15-20 complete cartilaginous rings
- d. Receives its blood supply from the inferior thyroid artery alone
- e. Pulmonary artery bifurcates anterior to its lower end

34. Which does not travel through the jugular foramen?

- a. Hypoglossal nerve
- b. Accessory nerve
- c. Inferior petrosal sinus
- d. Glossopharyngeal nerve
- e. Vagus nerve

35. Regarding veins in the skull

- a. Do not follow arteries
- b. Lie subdurally
- c. Great cerebral vein drains into cavernous sinus
- d. ?
- e. ?

36. The submandibular ganglion receives fibres from

- a. Superior salivatory nucleus
- b. ?
- c. ?
- d. ?
- e. ?

37. Which muscle controls vocal cord abduction in the larynx

- a. Aryepiglottic
- b. Posterior cricoarytenoid
- c. Transverse arytenoids
- d. Lateral cricoarytenoid
- e. Cricothyroid

38. Lumbar vertebrae are distinguishable from thoracic because:

- a. They have transverse foramina
- b. The bodies are concave from above down
- c. Their bodies are kidney shaped and flatter posteriorly
- d. They have costal facets
- e. Their spinous processes project inferiorly with the tip lying at the body two vertebrae inferiorly

39. Contents of the digastric triangle include all of the following EXCEPT:

- a. Facial artery
- b. Submandibular lymph nodes
- c. Hypoglossal nerve
- d. Glossopharyngeal nerve
- e. Nerve to mylohyoid

40. The internal carotid artery

- a. Is medial to the external carotid artery at its origin
- b. Gives rise to the superior thyroid artery
- c. Lies outside the carotid sheath
- d. Passes through the carotid canal in the base of the skull
- e. Lies in the anterior part of the cavernous sinus

41. The C7 cervical vertebra is atypical in that

- a. It has bifid spinous process
- b. The foramen in the transverse process does not transmit the vertebral artery
- c. The anterior tubercle is large
- d. It has kidney shaped facets
- e. The posterior tubercle gives origin to scalenus anterior

42. Regarding the mandible:

- a. The coronoid process is the attachment of temporalis and is posterior to the head of the mandible
- b. It is a U-shaped bone without a symphysis
- c. The facial artery can be palpated crossing the lower border just posterior to masseter
- d. It has a mandibular foramen on its lateral surface
- e. Buccinator is attached to the external oblique line

43. The thyroid gland

- a. Is penetrated by the recurrent laryngeal nerve
- b. Is supplied by the middle thyroid artery
- c. Has its isthmus adherent to the 3rd, 4th and 5th tracheal rings
- d. Originates from the caudal end of the thyroglossal duct
- e. Is contained within the prevertebral fascia

44. Which of the following combinations is correct regarding the paranasal sinuses and where they drain to?

- a. Maxillary sinus; middle meatus
- b. Anterior ethmoidal air cells; inferior meatus
- c. Posterior ethmoidal air cells; oral cavity
- d. Sphenoid sinus; frontonasal recess
- e. Frontal sinus; lacrimal duct

45. The inferior oblique

- a. Arises from the maxilla on the floor of the orbit, near the anterior margin
- b. Is attached to the posterosuperior medial quadrant of the sclera
- c. Is supplied by the abducent nerve (CN VI)
- d. Turns the eye upwards and in
- e. Is supplied by the posterior ciliary artery

46. The most important mechanism for airway protection is

- a. Depression of larynx
- b. Adduction of vestibular folds
- c. Elevation of larynx
- d. Movement of epiglottis
- e. Abduction of vocal cords

47. The recurrent laryngeal nerve

- a. Lies in front of the pretracheal fascia
- b. Approaches the thyroid gland from above
- c. Runs in the groove between the trachea and oesophagus
- d. Passes behind the cricothyroid joint
- e. Contains only sensory fibres

48. Larynx

- a. Continues with the trachea at C6
- b. Its major role is for phonation
- c. Lies behind the thyroid gland
- d. All the muscles are supplied by the recurrent laryngeal nerve
- e. Blood supply is from the inferior thyroid artery

49. Which muscle abducts the vocal cords?

- a. Transverse arytenoids
- b. Cricothyroid
- c. Lateral cricoarytenoid
- d. Posterior cricoarytenoid
- e. Thyroarytenoid

50. The cricoid cartilage

- a. Articulates with the thyroid cartilage via fibrocartilage joints
- b. Is an incomplete cartilaginous ring
- c. Projects anteriorly as a quadrangular flat part
- d. Provides attachment for anterior cricoarytenoid muscle
- e. Articulates superiorly with the inferior horn of the thyroid cartilage

51. The carotid triangle contains

- a. Subclavia artery
- b. Omohyoid muscle
- c. Occipital artery
- d. Internal laryngeal nerve
- e. Anterior jugular vein

52. The cervical sympathetic trunk

- a. Descends from the upper posterior triangle to the first rib
- b. Runs lateral to the vertebral artery
- c. Lies behind the carotid sheath
- d. Lies behind the prevertebral fascia
- e. Ends at the inferior cervical ganglion

53. The carotid sheath

- a. Extends from the base of the skull to the bifurcation of common carotid
- b. Contains the stylohyoid ligament
- c. Contains only three cranial nerves
- d. Is attached to the aorta
- e. Contains the sympathetic trunk

54. Regarding the vertebrae

- a. Spinal nerves emerge through foramina between the vertebral laminae
- b. The anterior longitudinal ligament extends from the anterior tubercle of the atlas to the upper part of the lumbar spine
- c. Articular processes are joined to adjacent vertebrae by synovial joints
- d. The ligamentum flavum joins borders of adjacent spinous processes
- e. A typical thoracic vertebra has foramina in the transverse processes

55. When performing a lumbar puncture the spinal needle should not pass through the

- a. Ligamentum flavum
- b. Posterior longitudinal ligament
- c. Supraspinous ligament
- d. Inerspinous ligament
- e. Skin

56. All the following are branches of the external carotid artery EXCEPT:

- a. Lingual artery
- b. Facial artery
- c. Ascending pharyngeal artery
- d. Hypoglossal artery
- e. Superior thyroid artery

57. The alar ligaments connect the

- a. Bodies of the axis to foramen magnum
- b. Dens to foramen magnum
- c. Adjacent vertebral bodies posteriorly
- d. Tips of adjacent spinous processes
- e. Adjacent laminae

58. All the following are boundaries of the named triangle except:

- a. Mandible and submental triangle
- b. Mandible and anterior triangle
- c. Mandible and digastric triangle
- d. Sternocleidomastoid and carotid triangle
- e. Sternocleidomastoid and anterior triangle

59. All the following are contents of the posterior triangle EXCEPT:

- a. Accessory nerve
- b. Cervical plexus
- c. Inferior belly of omohyoid
- d. Transverse cervical vessels
- e. Occipital lymph nodes

60. Which of the following enters into the inferior meatus of the nose?

- a. Frontal sinus
- b. Ethmoidal sinus
- c. Maxillary sinus
- d. Nasolacrimal duct
- e. Auditory tube

61. A fracture through the roof of the maxillary sinus might result in sensory loss to the

- a. Tympanic membrane
- b. Lacrimal gland
- c. Upper molar teeth
- d. Upper incisors and canine teeth
- e. Skin overlying the zygomatic bone

62. All the following structures pass through the jugular foramen EXCEPT:

- a. Jugular vein
- b. Glossopharyngeal nerve
- c. Hypoglossal nerve
- d. Accessory nerve
- e. Vagus nerve

63. Which is true of swallowing?

- a. It is entirely voluntary
- b. The oropharyngeal portion is voluntary
- c. Peristalsis speeds as the bolus descends
- d. The voluntary stage commences as food enters the oesophagus
- e. It is initially voluntary then involuntary

64. Which muscle controls vocal cord abduction?

- a. Aryepiglottic
- b. Transverse arytenoids
- c. Lateral cricoarytenoid
- d. Posterior cricoarytenoid
- e. Cricothyroid

65. What exits the stylomastoid foramen?

- a. Middle meningeal artery
- b. Accessory nerve
- c. Facial nerve
- d. Artery to stapedius
- e. Hypoglossal nerve

66. Which vessel supplies a branch which passes through the foramen spinosum?

- a. ?
- b. ?
- c. maxillary artery
- d. ?
- e. ?

67. submandibular ganglion

- a. ?
- b. ?
- c. ?
- d. ?
- e. ?

1. c?
2. a
3. a
4. b
5. b
6. d
7. d
8. d
9. d
10. b
11. d
12. d
13. d
14. c
15. b
16. a
17. ?
18. d
19. e
20. c
21. a
22. e
23. d
24. c
25. b
26. e
27. c
28. c
29. b
30. d
31. ?
32. a
33. ?
34. ?

35. ?
36. ?
37. b
38. ?
39. ?
40. ?
41. ?
42. ?
43. ?
44. a
45. a
46. ?
47. d and ?c
48. a
49. d
50. e
51. d
52. c
53. d
54. c
55. b
56. d
57. b
58. a
59. e
60. d
61. d
62. c
63. e
64. d
65. c
66. c
67. ?