

MCQS

1. Failure of the brain to grow may result in:

- A. plagiocephaly
- B. craniostenosis
- C. acrocephaly
- D. scaphocephaly
- E. microcephaly

2. Somitomeres, paraxial mesoderm cranial to the somites, give rise to much of the skeletal muscle in the head EXCEPT:

A. extrinsic muscles of the eye

B. temporalis tongue muscles

C. muscles of facial expression

D. muscles of mastication

E. none of the above

3. The sphenoid bone is derived from which portion of the embryonic skull?

- A. cartilaginous neurocranium
- B. membranous neurocranium
- C. cartilaginous viscerocranium
- D. membranous viscerocranium

4. The notochord is replaced by the:

A. ependyma

B. nucleus pulposus

C. spinal canal

D. dorsal roots

E. spinal cord

5. The intraembryonic coelom located cranial to the oropharyngeal membrane be the:

A. oral cavity

B. cranial foregut

C. stomodeum

D. pericardial cavity

E. nasal cavity

6. After folding of the head region, the structure lying just caudal to the pericardial is the:
- A. developing heart
 - B. connecting stalk
 - C. primitive streak
 - D. liver
 - E. septum transversum

7. The fact that general and special sensory information from the posterior part of tongue is carried by glossopharyngeal nerve indicates that this part of tongue is from branchial arch _____. A. I

B. II

C. III

D. IV

E. VI

8. Myoblasts from the occipital myotomes are believed to give rise to the muscles the:

- A. eye
- B. face
- C. ear
- D. jaw, for mastication
- E. tongue

9. As a resident in pediatrics, you are called to see a newborn who has a unilateral lip and a unilateral cleft of the primary palate. This condition is most likely the result of

A. failure of fusion of the mandibular prominences

B. failure of fusion of the medial nasal processes

C. failure of fusion of the maxillary prominence with the medial nasal prominence

D. failure of fusion of the lateral palatine processes with the nasal septum

E. failure of fusion of the paired lateral palatine processes.

10. Which structures are derived from the intermaxillary segment of the embryonic

A. philtrum

B. anterior portion of the palate

C. anterior portion of the upper jaws

D. upper incisor teeth

E. all of the above

11. The nasolacrimal groove separates the:
- A. mandibular and maxillary swellings
 - B. lateral nasal swelling and maxillary swelling
 - C. medial nasal swelling and maxillary swelling
 - D. first and second branchial arches
 - E. otic and optic vesicles

12. Many facial malformations are believed to be due to:

A. a failure of the oral membrane to rupture

B. a failure to neural crest cells to migrate into the facial processes

C. a failure in growth of the head fold

D. an abnormal persistence of the pharyngeal clefts

E. none of the above

13. The foramen cecum of the adult tongue:

- A. marks the point of embryonic evagination of the thymus gland
- B. divides the tongue into two parts, an anterior one-third and a posterior two-third
- C. marks the point of embryonic evagination of the thyroid gland
- D. develops into taste buds
- E. has no embryologic significance

15. The embryonic origin of the ligamentum arteriosum is from the:

A. second arch artery

B. third arch artery

C. fourth arch artery

D. fifth arch artery

E. sixth arch artery

14. The most superior part of the inferior vena cava is derived from:

A. left vitelline vein

B. right vitelline vein



C. right umbilical vein

D. left umbilical vein

E. sinus venosus

16. Of the following the one most closely associated with the ligamentum teres hepatis is:

- A. umbilical vein
- B. umbilical artery
- C. vitelline vein
- D. 3rd aortic arch
- E. 6th aortic arch

17. The following are true statements with regard to the fetal circulation EXCEPT:

- A. Since the fetal liver is a hemopoietic organ, it is large and well supplied with oxygenated blood.
- B. Fetal brain receives relatively pure arterial blood.
- C. Fetal and maternal blood vessels anastomose in the placenta
- D. In early developmental stages, one pulmonary vein buds from the left atrium of heart.
- E. Foramen primum of the interatrial septum closes after the formation of the foramen secundum.

18. In the development of the midgut:

- A. the superior mesenteric artery is the axis for clockwise rotation of the midgut
- B. the persistence of part of the vitelline duct leads to urachal fistula
- C. a vitelline cyst may result from abnormal remodeling of the vitelline veins
- D. an omphalocele is not synonymous with congenital umbilical hernia

E. none of the above

19. The tracheoesophageal septum separates the:
- A. laryngotracheal tube and nasopharynx
 - B. esophagus and nasopharynx
 - C. laryngotracheal tube and esophagus
 - D. laryngotracheal tube and oropharynx
 - E. esophagus and oropharynx

20. The structure dividing the cloaca into two parts is the:

A. distal retention band

B. transverse septum

C. urogenital sinus

D. urorectal septum

E. cloacal membrane

21. Of the following, the one most closely associated with the oviduct is:

- A. mesonephric tubules
- B. mesonephric duct
- C. paramesonephric duct
- D. genital swellings
- E. urogenital sinus

22. Embryologically, each uriniferous tubule consists of two parts which become confluent at the junction of the:

- A. ascending limb of Henle's loop and the distal convoluted tubule
- B. renal corpuscle and the proximal convoluted tubule
- C. descending and ascending limbs of the loop of Henle
- D. proximal convoluted tubule and the loop of Henle
- E. distal convoluted tubule and the collecting tubule

23. Of the following, the item most closely associated with the regulation of visceral endocrine functions is:

A. telencephalon

B. diencephalon

C. mesencephalon

D. metencephalon

E. myelencephalon

24. In the development of the nervous system:

A. the sulcus limitans is found in the diencephalon

B. the infundibulum is an outgrowth of the telencephalon that develops into the neurohypophysis C. sensory nuclei in the hindbrain lie ventral to the sulcus limitans

D. the inner ear is derived from surface ectoderm

E. None of the above

25. An infant has a small lump on the anterior aspect of thyroid gland near the midline. The infant is diagnosed as pyramidal lobe of thyroid gland. The pyramidal lobe is a remnant of:

- A. Thyrocervical cyst.
- B. First pharyngeal pouch.
- C. Second pharyngeal pouch.
- D. Thyroglossal duct.
- E. Sulcus terminalis.

1. Testosterone is produced by
 - a. Type A spermatogonia.
 - b. Type B spermatogonia.
 - c. Spermatids.
 - d. Sertoli cells.
 - e. Leydig cells