Memory Test - Embryology_Class Test_Foundation_1

Total Mark: 100
Time: 90 Min

1. At the time of ovulation
A) The first meiotic division has just occurred

B) Expulsion of the first polar body has just occurred
C) The Secondary oocyte is arrested in the second maturation division
D) The zona pellucida has broken down
E) Fertilization is not possible
Answer: T, T, T, F, F
Discussion:
Reference: [Lang/13th/p-34-36]

2. Changes occurs in 3rd week of development

A) Formation of notochord
B) Formation of pericardial bar
C) Formation of cloacal membrane
D) Formation of amniotic cavity
E) Formation of hypoblast
Answer: T, T, T, F, F
Discussion:
Reference: [Langman/13th/P-68]

3. Derivatives of primordial germ cell
A) Primary oocyte
B) Follicular cell
C) Corpus luteal all
D) Spermatozoa
E) Mature ovum
Answer: T, F, F, T, T
Discussion:
Reference: [Langman/13th /P-14]

4. During oogenesis, first meiotic division is completed at the time of
A) Ovulation
B) Fertilization
C) Implantation
D) Gastrulating
E) Modulation
Answer: T, F, F, F, F
Discussion:
Reference: Lang/13th/p-36, 37, 46]

5. Female germ cell
A) Begins to mature at puberty
B) Begins to mature before puberty
C) 2 polar body formed
D) 2 daughter cell is formed
E) Occurs in ovary
Answer: F, F, F, F, T
Discussion: F (Begins at intrauterine life) F(Begins at intrauterine life) F(3 polar body) F(1 daughter cell) T
Reference:

6. Function of sertoli cell
A) Blood testes barrier formation
B) Androgen binding protein formation
C) MIF formation
D) Inhibin formation
E) All of the above
Answer: T, T, T, T, T
Discussion:
Reference: [Ref: Janquiera /15th/448]

7. Implantation
A) Occurs 6-7 days after ovulation
B) Occurs close to the fundus of the uterus
C) Is Completed within about 6days
D) Is associated with decidualisation of the endometrium
E) Zone pellucida disappears before implantation
Answer: T, T, F, T, T
Discussion: TT (Posterior wall near the midline close to the funds of the uterus) F(10-12days) TT
Reference: [Selim/4th /P-61]

8. Regarding barr body
A) Is genetically inactive
B) In mall no barr body
C) In contact with nuclear membrane
D) Found in buccal smear
E) Turner's syndrome- one barr body
Answer: T, T, T, T, F
Discussion:
Reference: Khaleque-77)

9. Regarding endodermal cloaca following statements are correct?
A) Is the caudal end of hindgut.
B) Forms all the epithelium of the rectum
C) Forms all the epithelium of the prostatic urethra
D) Gives origin to the allantois
E) Forms all the epithelium of the bladder
Answer: T, T, F, F, F
Discussion:
Reference: [Selim/4th /P-84]

10. The human spermatozoon
A) Is about 50-55 □m long
B) Has a head which consists mainly of the nucleus
C) Has a neck which contains the Golgi complex
D) Has an acrosomal cap which consists of the centriole
E) Has mitochondria along the whole length of its body and tail
Answer: T, T, F, F, F
Discussion:
Reference: [Selim/4th /P-32]

11. The Mullerian duct
A) Develops medial to the Wolffian duct
B) Is also known as the mesonephric duct
C) Stats to form at 4th week of embryonic life
D) Starts to disappear 6th week of embryonic life in male
E) Opens into the urogenital sinus in the female
Answer: F, F, F, F, F
Discussion: F (Lateral) F(Para mesonephric duct) F(6th week) F(8-9th week) F (not open into sinus)
Reference:

12. The results of fertilization are
A) Restoration of the diploid number of chromosomal
B) Determination of chromosomal sex
C) Capacitation
D) Acrosome reaction
E) Initiation of cleavage
Answer: T, T, F, F, T
Discussion: TTF (Before fertilize) F (Before fertilize) T
Reference: [Selim/4th /P-54-56]

13. Umbilical arteries
A) Distal portions form the medial umbilical ligaments
B) Proximal portions form the medial umbilical ligaments
C) Proximal portions persist as the vesicular arteries
D) Proximal portions persist as the internal iliac arteries
E) The inferior mesenteric arteries are derived from it
Answer: T, F, T, T, T
Discussion:
Reference: [Lang/13th/p-212-215]

14. Derivative of Para mesonephric duct
A) Trigone of urinary bladder
B) Ureteric bud
C) Prostatic utricle
D) Uterus
E) Uterine tube
Answer: F, F, T, T, T
Discussion:
Reference: [Selim/4th /P-227]

15. Development of face
A) Ala of Nose from intermediate nasal prominence
B) Lower lip from mandibular prominence
C) Cheeks from mandibular prominence
D) Lateral portion of upper lip from maxillary prominence
E) Bridge of nose from frontal prominence
Answer: F, T, F, T, T
Discussion:
Reference: [Langman/13th /P-296]

16. Fate of yolk sac
A) Primitive gut
B) Germinal epithelium
C) Allantois
D) Primordial germ cell
E) Blood vessels
Answer: T, F, T, T, F
Discussion:
Reference: [Selim/4th/P-67]

17. Following are true
A) 2nd pouch =Auditory tube
B) 1st pouch =Middle ear cavity
C) 4th pouch =superior parathyroid
D) 5th pouch =ultimobranchial body
E) 3rd pouch =thymus
Answer: F, T, F, T, T
Discussion:
Reference: [Langman/13th/P-279]

18. In the fetal circulation-
A) Most of blood from superior vena cava passes directly from right to the left atrium
B) The output of the right ventricle is greater than of the left
C) Blood in the ascending aorta is more oxygenated than the descending aorta
D) Blood in the right ventricle is more oxygenated than the left ventricle
E) Blood in the ductus arteriosus and the right atrium is equally oxygenated
Answer: T, F, T, F, F
Discussion:
Reference: [Lang/13th/p-212-215]

19. Mitosis occurs in the
A) Primary spermatocyte
B) Somatic cells
C) Primary oocyte
D) Primordial germ cell
E) Spermatogonium
Answer: F, T, F, T, T
Discussion:
Reference: [Langman/13th /P-15]

20. Placenta produces following hormone
A) Androgen
B) Testosterone
C) Progesterone
D) Estrogen
E) Somatomammotropin
Answer: F, F, T, T, T
Discussion:
Reference: Langman/13th /P-112-115]

21. Regarding fetal circulation oxygenated & deoxygenated blood mixes
A) Umbilical artery
B) Liver
C) Rt atrium
D) Lt Atrium
E) Umbilical vein
Answer: F, T, T, T, F
Discussion:
Reference:

22. Regarding placenta
A) Diameter: 15-20 cm
B) Thickness: 3 cm at the center
C) Weight: 500gm
D) Feto-placental ratio: 6:1
E) Chorio-desidual organ
Answer: T, T, T, T, T
Discussion:
Reference: [Lang/13th/p-112-115]

23. The ductus venousus:
A) Connects the left branch of portal hepatic vein to the umbilical vein
B) Conveys blood to the inferior venacava before birth
C) After birth becomes ligamentum teres of the liver
D) Becomes the lateral umbilical ligament in adult
E) Runs between the attached layers of the lesser omentum
Answer: F, T, F, F, T
Discussion: F (left umbilical vein with the hepatocardiac vein) T F (Ligamentum venosum) F T
Reference:

24. Umbilical cord contains
A) Two umbilical artery
B) One umbilical vein
C) Allantois
D) Wharton's jelly
E) Fetal membrane
Answer: T, T, T, T, F
Discussion:
Reference: Langman/13th /P-117-118]

25. Vascular changes after birth
A) Closure of umbilical artery
B) Closure of umbilical vein
C) Closure of ductus venousus
D) Opening of pulmonary artery
E) Closure of oval foramen
Answer: T, T, T, F, T
Discussion:
Reference: [Lang/13th/p-214-215]

26. . Sperm maturation occurs
A) Seminiferous tubules
B) Tubule recti
C) Reti testis
D) Efferent ductules
E) Epididymis
Answer: E
Discussion:
Reference: [Ref: Langman/14th/29-31]

27. Appendix of testis is developed from
A) Mesonephric duct
B) Paramesonephric duct
C) Pronephric duct
D) Mesonephric
E) Metanephron
Answer: B
Discussion:
Reference: [Ref: Langman/14th/270]

28. For placental circulation true statement is
A) It consists of independent circulation
B) Basal artery invades myometrium
C) Pressure in umbilical artery 4o mm hg
D) Natural killer cell has role in process of invasion
E) Fetal capillary pressure 50 mm hg
Answer: A
Discussion:
Reference: [Langman/13th /P-215]

29. Hormone of pregnancy
A) Prolactin
B) Estrogen
C) Progesterone
D) Relaxin
E) Inhibin
Answer: C
Discussion:
Reference: [Ref: Langman/14th/34-36]

30. Layers of blood placental barrier are followings except:
A) Cytotrphoblast
B) Syncytiotrophoblast
C) Connective tissue
D) Endothelium of foetal blood vessel
E) Endothelium of maternal blood vessel
Answer: E
Discussion: Explan ation- Placental barrier has four layers- -Syncytotrophoblast -Cytotrophoblast -Connective tissue -Endothelium of fetal blood vessel
Reference: [Sheet 6]

31. Odontoblast is derivative of:
A) Neural tube
B) Neural crest
C) Sclerotome
D) Myotome
E) Surface ectoderm
Answer: B
Discussion:
Reference: [Langman 69]

32. Sphenomandibular ligament develop from
A) 1st pharyngeal arch
B) 2nd pharyngeal arch
C) 3rd pharyngeal arch
D) 4th pharyngeal arch
E) 6th pharyngeal arch
Answer: A
Discussion:
Reference: [Ref: Langman/14th/285]

33. Stylohyoid process is developed from
A) 1st pharyngeal arch
B) 2nd pharyngeal arch
C) 3rd pharyngeal arch
D) 4th pharyngeal arch
E) 6th pharyngeal arch
Answer: B
Discussion:
Reference: [Ref: Langman /14th/ 285]

34. The cloaca is divided into the rectum and urogenital complex by the
A) Cloacal membrane
B) Urorectal septum
C) Urogenital ridge
D) Sinus bulbs
E) Genital ridge
Answer: B
Discussion:
Reference: [Ref: Langman /13th/ 89]

35. The ectoderm is the outer most of the germ layer of the embryo. Which of the following organ is a derivative of the ectoderm?
A) Adrenal cortex
B) Gonad
C) Kidney
D) Adrenal medulla
E) Mesothelium
Answer: D
Discussion:
Reference: [Ref: Langman/14th/73-76]

36. The following are developed from hindgut except
A) Left □ rd of transverse colon
B) Descending colon
C) Sigmoid colon
D) Rectum upto middle transverse fold
E) Anorectal canal
Answer: E
Discussion:
Reference: [Ref: Langman ,14th , 248-252]

37. The following substance crossing placenta by active transport except
A) Amino acid
B) Calcium
C) Phosphorus
D) Iron
E) Zink
Answer: E
Discussion:
Reference: [Ref: Langman/14th/117]

38. The gland developed from endoderm
A) Parotid
B) Sebaceous
C) Mammary
D) Kidney
E) Thyroid
Answer: E
Discussion:
Reference: [Ref: Langman/14th/231]

39. The notochord is replaced by the
A) Ependyma
B) Nucleus pulposus
C) Spinal canal
D) Dorsal roots
E) Spinal cord
Answer: B
Discussion:
Reference: [Langman /13th /p-81]

40. The ovulated mammalian oocyte is arrested at
A) Prophase of meiosis-1
B) Metaphase of meiosis-1
C) Prophase of meiosis-2
D) Metaphase of meiosis-2
E) None of the above
Answer: D
Discussion:
Reference: [Langman/13th /P-25-29]

41. Trigone of urinary bladder in case of female develops from:
A) Pronephros
B) Pronephric duct
C) Mesonephros
D) Mesonephric duct
E) Metanephros
Answer: D
Discussion: Explanation- Trigone of urinary bladder develops from mesonephric duct andRest of the bladder develops from urogenital sinus.
Reference: [Sheet 35]

42. 36. From which germ layer somites are formed -
A) Intermediate mesoderm
B) Somatopleuric mesoderm
C) Splanchnic mesoderm
D) Paraxial mesoderm
E) Ectoderm
Answer: D
Discussion:
Reference: [Selim/4th /p-82]

43. A new born baby is noted to have a left unilateral cleft behaving no abnormalities –At the palate. The developmental defect accountable is
A) Failure of the lateral palatine process to fuse with the median palatine process
B) Failure of the left maxillary prominence to unit with left medium nasal prominence
C) Failure of the right & left medial nasal prominence to merge
D) Failure of the left maxillary process to fuse with the medial nasal process
E) Lip muscle to divide completely
Answer: B
Discussion:
Reference: [Ref: Langman/14th/ 303]

44. Chaismata appears in the following phase
A) Leptotene
B) Zygotene
C) Pachytene
D) Diplotene
E) Diakinesis
Answer: C
Discussion:
Reference: [Ref: Langman/14th/17]

45. Composition of menstrual blood except
A) Plasmin
B) Mucous
C) Glycogen
D) Unclotted blood
E) Fertilized ovum
Answer: E
Discussion:
Reference: [Ref: Langman/14th/46-48]

46. Derivatives of 6th pharyngeal arch all except

A) Superior laryngeal nerve of vagus
B) Recurrent laryngeal nerve of vagus
C) Pulmonary artery
D) Ductus arteriosus
E) Cricoids cartilage
Answer: A
Discussion:
Reference: [Langman/13th /P-279]

47. Maturation of the lung period except
A) Pseudo alveolar period
B) Alveolar period
C) Terminal sac period
D) Canalicular period
E) Pseudo glandular period
Answer: A
Discussion:
Reference: [Ref: Langman/14th/228]

48. Maxillary artery is derived from:
A) 1st aortic arch
B) 2nd aortic arch
C) 3rd aortic arch
D) 4th aortic arch
E) 6th aortic arch
Answer: A
Discussion:
Reference: [Langman 187]

49. Uncinate process of pancreas is developed from:
A) Dorsal bud
B) Ventral bud
C) Both from ventral and dorsal bud
D) Mainly from ventral bud with a little contribution from dorsal bud
E) Mainly from dorsal bud with alittle contribution from ventral bud
Answer: B
Discussion:
Reference: [Langman 221]

50. Which of the following statements regarding the development of the tongue is correct?
A) The copula and hypobranchial eminence give rise to the oral part of the tongue
B) The epithelial and mucosal tissues of the tongue develop from the occipital cervical somites
C) The median tongue bud appears in the fifth week of development
D) The mesenchyme of the pharyngeal arches forms connective tissue, and lymphatic and blood vessels of the tongue
E) The tongue is fully covered with ectodermal epithelium
Answer: D
Discussion:
Reference: [500 SBA Anatomy/Embryology]