

# Embryology test bank final material by Sara Masadeh

**1. which of the following uterine layers will degenerate during the menstrual phase?**

- a. myometrium
- b. perimetrium
- c. deep layer of the endometrium
- d. superficial layer of the endometrium

**2. What stimulates the anterior lobe of the pituitary gland to secrete two gonadotrophic hormones?**

- a. Progesterone
- b. Estrogen
- c. Gonadotropin releasing hormone (GnRH)
- d. Luteinising hormone (L.H)

**3. Which hormone induces the final maturation of the Graafian follicle and ovulation?**

- a. Estrogen
- b. Follicle stimulating hormone (F.S.H)
- c. Gonadotropin releasing hormone (GnRH)
- d. Luteinising hormone (L.H)

**4. What is responsible for the proliferative phase of the uterine cycle?**

- a. Progesterone
- b. Estrogen
- c. Follicle stimulating hormone (F.S.H)
- d. Luteinising hormone (L.H)

**5. What hormone is secreted by the corpus luteum if fertilization occurs?**

- a. Estrogen
- b. Progesterone
- c. Gonadotropin releasing hormone (GnRH)
- d. Follicle stimulating hormone (F.S.H)

**6. Which phase of the menstrual cycle is characterized by decreased progesterone and estrogen levels leading to the shedding of the endometrium?**

- a. Menstrual phase
- b. Proliferative phase
- c. Secretory phase
- d. Ovulation

**7. What is the effect of estrogen during the proliferative phase of the uterine cycle?**

- a. Constricts spiral arteries
- b. Expels mucous and unclotted blood

c. Regenerates and thickens the endometrium

d. Maintains corpus luteum

**8. What hormone is mainly responsible for the secretory phase of the uterine cycle?**

a. Estrogen

b. Luteinising hormone (L.H)

c. Gonadotropin releasing hormone (GnRH)

d. Progesterone

**9. What leads to vasoconstriction of spiral arteries in the uterus if fertilization does not occur ?**

a. Decrease in Estrogen

b. Decrease in Progesterone

c. Increase in Luteinising hormone (L.H)

d. Increase in Follicle stimulating hormone (F.S.H)

**10. What is the fate of the corpus luteum if fertilization does not occur?**

a. Becomes corpus luteum of pregnancy

b. Degenerates into corpus albicans

c. Continues to secrete progesterone

d. Stimulates the anterior lobe of the pituitary gland

**11. Which hormone is responsible for digestion of collagen fibers surrounding the Graafian follicle during ovulation?**

a. Estrogen

b. Progesterone

c. Luteinising hormone (L.H)

d. Follicle stimulating hormone (F.S.H)

**12. What leads to the conversion of the ruptured follicle into a corpus luteum?**

a. Estrogen

b. Progesterone

c. Luteinising hormone (L.H)

d. Follicle stimulating hormone (F.S.H)

**13. What hormone stimulates several primordial follicles to develop at the beginning of each ovarian cycle?**

a. Estrogen

b. Progesterone

c. Luteinising hormone (L.H)

d. Follicle stimulating hormone (F.S.H)

**14. Which of the following is NOT a phase of the ovarian cycle?**

a. Menstrual phase

b. Preovulatory (follicular) phase

c. Ovulation

d. Postovulatory (Luteal) phase

**15. Which layer of the endometrium is responsible for reformation of the uterine glands after menstruation?**

- a. Stratum functional
- b. Stratum basalis
- c. Decidua capsularies
- d. Decidua basalis

**16. What is the effect of progesterone on the spiral arteries during the secretory phase of the menstrual cycle?**

- a. Vasoconstriction
- b. Vasodilation
- c. No effect
- d. Bleeding

**17. Decides basalis lies between the fetus and myometrium**

- a.true
- b. False

**18. Which hormone inhibits pituitary LH and is responsible for the secretory phase of the uterine cycle?**

- a. Estrogen
- b. Progesterone
- c. Follicle stimulating hormone (F.S.H)
- d. Luteinising hormone (L.H)

**19. What induces the maturation of the primary follicle into a Graffian follicle?**

- a. Estrogen
- b. Progesterone
- c. Follicle stimulating hormone (F.S.H)
- d. Luteinising hormone (L.H)

**20. How long is the average duration of the entire ovarian cycle?**

- a. 28 days
- b. 30 days
- c. 25 days
- d. 35 days

**21. The follicle stimulating hormone is secreted by the hypothalamus?**

- a.true
- b.false

**22. which of the following will form the maternal part of placenta?**

- a. decidua capsularis
- b. decidua functionalis
- c. decidua parietalis
- d. decidua basalis

**23. which of the following statements is correct?**

- a. decidua capsularis lines the uterine cavity.
- b. corpus luteum of pregnancy will secrete progesterone in the third trimester
- c. decidua parietalis covers the rest of the fetus
- d. the placenta secretes progesterone in the 5th month of pregnancy

**Answer key**

- 1. d. superficial layer of the endometrium
- 2. c. Gonadotropin releasing hormone (GnRH)
- 3. d. Luteinising hormone (L.H)
- 4. b. Estrogen
- 5. b. Progesterone
- 6. a. Menstrual phase
- 7. c. Regenerates and thickens the endometrium
- 8. d. Progesterone
- 9. b. Progesterone
- 10. b. Degenerates into corpus albicans
- 11. c. Luteinising hormone (L.H)
- 12. c. Luteinising hormone (L.H)
- 13. d. Follicle stimulating hormone (F.S.H)
- 14. a. Menstrual phase
- 15. b. Stratum basalis
- 16. b. vasodilation
- 17. a. true
- 18. b. Progesterone
- 19. c. Follicle stimulating hormone (F.S.H)
- 20. a. 28 days
- 21. b. false
- 22. d. decidua basalis
- 23. d. the placenta secretes progesterone in the 5th month of pregnancy

**1. When does the germinal period occur during intra-uterine life?**

- a. 3-8 weeks
- b. 1st 2 weeks
- c. From beginning of 9th week to birth
- d. Mid-pregnancy

**2. What characterizes the embryonic period of intra-uterine life?**

- a. Growth of organs & systems.
- b. Formation of 2 germ layers.
- c. From beginning of 9th week to birth.
- d. Differentiation of 3 germ layers to organs & systems (organogenesis)

**3. What process occurs during fertilization to remove the glycoprotein coat covering the acrosome of the sperm?**

- a. Crossing over
- b. Zygote formation
- c. Capacitation of the sperms
- d. Formation of male and female pronuclei

**4. What effect does fertilization have in the uterus regarding ovulation?**

- a. Ovulation stops
- b. Ovulation increases
- c. Ovulation becomes irregular
- d. Ovulation remains unchanged

**5. How is the sex of the offspring determined during fertilization?**

- a. By the number of chromosomes
- b. By the mother's hormone levels
- c. By multiple factors
- d. By the type of sperm fertilizing the ovum

**6. What stops the menstrual cycles ?**

- a. Fertilization
- b. Hormonal changes
- c. Uterine contractions
- d. Endometrial shedding

**7. What is the chromosomal anomaly represented by trisomy of chromosome 21?**

- a. Edwards syndrome
- b. Down syndrome
- c. Patau syndrome
- d. Klinefelter syndrome

**8. What mechanisms are involved in the transport of the zygote to the uterine cavity?**

- a. Hormonal signals
- b. Spontaneous movement
- c. Muscular peristalsis of the uterine tube
- d. Immune system response

**9. In which body part does the formation of the morula occur?**

- a. Uterus
- b. Ovary
- c. Vagina
- d. Uterine tube

**10. What is the process of implantation?**

- a. Fusion of male and female pronuclei
- b. Penetration of the superficial layer of the endometrium by the blastocyst
- c. Formation of the morula
- d. Ovulation

**11. Which part is NOT an abnormal site of implantation ?**

- a. Ovary
- b. Uterine tube
- c. Abdominal cavity
- d. Uterine wall

**12. What is the term for the process of fusion between a single sperm and an ovum?**

- a. Meiosis
- b. Fertilization
- c. Implantation
- d. Cleavage

**13. At what stage is the zygote restored to the diploid number of chromosomes?**

- a. Blastocyst
- b. Implantation
- c. Penetration
- d. Zygote formation

**14. In which site do the zona reactions occur?**

- a. Zygote
- b. Morula
- c. Blastocyst
- d. Uterine tube

**15. Which anomaly results in a male with rudimentary testes?**

- a. Down syndrome
- b. Turner syndrome
- c. Klinefelter syndrome
- d. Patau syndrome

**16. What happens to ovulation after fertilization?**

- a. Increases
- b. Stops
- c. Decreases
- d. Remains the same

**17. Which part of the blastocyst forms the fetal membranes?**

- a. Embryoblast
- b. Outer cell layer
- c. Blastocoel
- d. Abembryonic pole

**18. How does the motion of cilia aid in zygote transport?**

- a. Attracts gametes
- b. Prevents transport
- c. Provides nutrients
- d. Moves zygote along the uterine tube to the uterus

**19. What is the significance of the fusion of male and female pronuclei?**

- a. Determines sex
- b. Initiates cleavage
- c. Completes implantation
- d. Forms organs
- e. There is more than one answer

**20. The completion of the second meiosis results in the changing of the \_\_.**

- a. Ovum to a zygote
- b. Morula to a blastocyst
- c. Sperm binding sites
- d. secondary oocyte to mature ovum

**21. the second stage of the interuterine life is:**

- a. Embryonic period
- b. Germinal period
- c. Fetal period
- d. Postnatal period

**22. Capacitation of the sperms occurs in :**

- a. Epididymis
- b. Uterine tube
- c. vas deference
- d. Ovaries

**23. The result of fertilization in a zygote that contains haploid number of chromosomes.**

- a. True
- b. False

**24. The morula is a mass formed of ..... blastomeres?**

- a. 8
- b. 4
- c. 16
- d. 32

**25. Which of the following is the normal site of implantation?**

- a. Upper part of the posterior wall of the body of the uterus
- b. Lower part of the anterior wall of the body of the uterus
- c. Upper part of the anterior wall of the body of the uterus
- d. Lower part of the posterior wall of the body of the uterus

**26. The floor of the amniotic cavity is formed by the epiblast**

- a. True
- b. False

**27. Secondary chorionic villi formed of**

- a. Syncytiotrophoblast
- b. Core of mesoderm
- c. Cytotrophoblast
- d. All of the above

**28. Chorion frondosum lies adjacent to the decidua basalis**

- a. True
- b. False

**29. The embryonic disc remains bilaminar at :**

- a. Cloacal membrane
- b. Prochordal membrane
- c. All of the above
- d. None of the above

**30. Which of the following is a derivative of the ectoderm?**

- a. Biceps muscle
- b. Urinary bladder
- c. Vertebral Column
- d. Epidermis of the skin



**31. The cardiac muscle is developed from:**

- a. Mesoderm
- b. Ectoderm
- c. Endoderm
- d. The notochord

**32. The proximal end of the allantois form the apex of urinary bladder :**

- a. True
- b. False

**33. The part of the gut found in the head fold is called the foregut:**

- a. False
- b. True

**34. Which of the following is considered a normal male fetus :**

- a. a fetus formed by an Y carrier oocyte and X sperm
- b. a fetus formed from 45 autosomal chromosome and XY sex chromosomes
- c. a fetus formed from 44 autosomal chromosomes and XXY sex chromosomes
- d. a fetus formed by an X oocyte and Y sperm

### **Answer key**

- 1. b. 1st 2 weeks
- 2. d. Differentiation of 3 germ layers to organs & systems (organogenesis)
- 3. c. Capacitation of the sperms
- 4. a. Ovulation stops
- 5. d. By the type of sperm fertilizing the ovum
- 6. a. Fertilization
- 7. b. Down syndrome
- 8. c. Muscular peristalsis of the uterine tube
- 9. d. Uterine tube
- 10. b. Penetration of the superficial layer of the endometrium by the blastocyst
- 11. d. Uterine wall
- 12. b. Fertilization
- 13. d. zygote
- 14. d. Uterine tube
- 15. c. Klinefelter syndrome
- 16. b. Stops
- 17. b. Outer cell layer
- 18. d. Moves zygote along the uterine tube
- 19. e. There is more than one answer

20. d.secondary oocyte
21. a. Embryonic period
22. b. Uterine tube
23. b. False
  
24. c.16
25. a. Upper part of the posterior wall of the body of the uterus
26. a. True
27. d. All of the above
28. a. True
29. c. All of the above
30. d. Epidermis of the skin
31. a. Mesoderm
32. a. True
33. b. True
34. d. a fetus formed by an X oocyte and Y sperm