Chapter 17

1. The series of events that brings the egg nucleus and the sperm nucleus together is called:

   A. ovulation  
   B. oogenesis  
   C. fertilization  
   D. gastrulation  
   E. None of the choices are correct.

2. The fertilized egg is called:

   A. an acrosome  
   B. a zygote  
   C. a blastula  
   D. a spermocyte  
   E. None of the choices are correct.

3. The cap of enzymes upon the head of a sperm is called the:

   A. acrosome  
   B. zygote  
   C. zona pellucida  
   D. corona radiata  
   E. None of the choices are correct.

4. The plasma membrane of the egg is surrounded by an extracellular matrix called the:

   A. corona radiata  
   B. zona pellucida  
   C. flagellum  
   D. follicle
5. The umbilical blood vessels arise within the:

A. amnion  
B. yolk sac  
C. chorion  
D. allantois

6. Pregnancy occurs when:

A. the sperm and the egg combine  
B. the fertilized egg implants in the ovary  
C. the developing embryo embeds itself in the endometrial lining  
D. sperm are in the vagina  
E. sperm are in the uterus

7. Which membrane contains fluid?

A. yolk sac  
B. allantois  
C. amnion  
D. umbilical cord

8. If an embryo implants in the oviduct, this is called a/an:

A. placental pregnancy  
B. chorionic pregnancy  
C. ectopic pregnancy  
D. oviductal pregnancy

9. The presence of this hormone in the blood and urine indicates that a woman is pregnant:

A. estrogen  
B. progesterone  
C. HCG  
D. prostaglandin

10. The first mitotic divisions of the fertilized ovum are called:

A. cleavage  
B. morphogenesis  
C. differentiation
11. The process by which cells take on a specific structure and function is called:

   A. cleavage  
   B. morphogenesis  
   C. differentiation

12. The nervous system and the epidermis of the skin are derived from:

   A. ectoderm  
   B. mesoderm  
   C. endoderm

13. The extraembryonic membrane formed from the chorion and uterine tissues and forms the membrane of fetal blood exchange is:

   A. amnion  
   B. yolk sac  
   C. allantois  
   D. placenta  
   E. umbilical cord

14. The first stage of embryonic development is:

   A. formation of organs  
   B. formation of tissues  
   C. cell division  
   D. implantation

15. Which system develops first in the embryo?

   A. reproductive  
   B. cardiovascular  
   C. digestive  
   D. respiratory  
   E. nervous
16. Which of the following stimulates genital formation in males?

A. Y chromosome  
B. testosterone  
C. androgenic hormones  
D. All of the choices are correct.

17. The hormone that directly stimulates the contraction of the uterine smooth muscle is:

A. progesterone  
B. HCG  
C. prolactin  
D. oxytocin  
E. estrogen

18. As we age, the:

A. skin becomes more elastic  
B. heart increases in size  
C. blood vessels become harder  
D. production of gametes continues in both sexes  
E. liver receives increased blood flow

19. Which of the following is NOT associated with osteoporosis?

A. cigarette smoking  
B. heavy alcohol intake  
C. poor diet  
D. lack of sunlight

20. Which of the following may pass from the mother to the embryo by way of the placenta?

A. alcohol/poisons  
B. disease organisms  
C. medications  
D. All of the choices are correct.
21. Which of the following is the most likely the cause for the loss of teeth seen in elderly people?

A. osteoporosis  
B. cross-linking of collagen  
C. decreased FSH  
D. decreased metabolic rate  
E. long-term neglect

22. All of the following happen to the skin with aging except:

A. less adipose tissue in subcutaneous layer  
B. fewer sweat glands  
C. fewer hair follicles  
D. collagen elasticity increases

23. Choose the following condition associated with aging:

A. inability to empty the bladder completely  
B. loss of skeletal muscle mass  
C. glaucoma  
D. decline in bone density  
E. All of the choices are correct.

24. The study of aging is called:

A. genealogy  
B. gerontology  
C. geotropism  
D. gerundology of animals

25. Choose the correct sequence of events during childbirth.

A. cervical dilation, birth, placenta delivered  
B. placenta delivered, birth, cervical dilation  
C. placenta delivered, cervical dilation, birth  
D. birth, cervical dilation, placenta delivered
26. During which stage of labor does the cervix dilate?

A. stage 1  
B. stage 2  
C. stage 3  
D. stage 4 

27. During which time period are males and females still indistinguishable?

A. first month  
B. third month  
C. fifth to seventh month 

28. Which of the following ducts connects the pulmonary artery to the aorta in the fetus?

A. oval opening  
B. venous duct  
C. arterial duct  
D. umbilical artery  
E. umbilical vein 

29. In the fetal circulatory system, the oval opening (foramen ovale) is located between the:

A. pulmonary artery and aorta  
B. umbilical vein and inferior vena cava  
C. umbilical artery and placenta  
D. atria  
E. ventricles 

30. By the end of the __________ month, all major organs have appeared in the fetus.

A. first  
B. second  
C. third  
D. fourth
Chapter 17 Key

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# Chapter 17 Summary

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