

Chapter 2
Biological Development in Infancy and Childhood

EPAS #	EPAS Competency/Practice Behavior	Multiple Choice	True or False	Essay
2.1.1c	Attend to professional roles and boundaries			13
2.1.1e	Engage in career-long learning			12
2.1.2	Apply social work ethical principles to guide professional practice			2, 11-12, 15
2.1.2a	Recognize and manage personal values in a way that allows professional values to guide practice	16-21	20-21	11, 13-14
2.1.2b	Make ethical decisions by applying standards of the National Association of Social Workers Code of Ethics and, as applicable, of the International Federation of Social Workers/International Association of Schools of Social work Ethics in Social Work, Statement of Principles			13-14
2.1.2c	Tolerate ambiguity in resolving ethical conflicts	16-21	21	11, 13-14
2.1.2d	Apply strategies of ethical reasoning to arrive at principled decisions			13-14
2.1.4	Engage diversity and difference in practice		25	
2.1.5	Advance human rights and social and economic justice	17		
2.1.5a	Understand forms and mechanisms of oppression and discrimination		29	5
2.1.5b	Advocate for human rights and social and economic justice		29-30	4
2.1.5c	Engage in practices that advance social and economic justice		29	
2.1.7	Apply knowledge of human behavior and the social environment	1-25	1-30	1-15
2.1.7a	Utilize conceptual frameworks to guide the processes of assessment, intervention, and evaluation	1-25	1-30	1-15
2.1.7b	Critique and apply knowledge to understand person and environment	1-25	1-30	1-15
2.1.10e	Assess client strengths and limitations	7	7, 11	3, 7
2.1.10g	Select appropriate intervention strategies		27-28	15
2.1.10i	Implement prevention interventions that enhance client capacities	3	5	1, 2
2.1.10k	Negotiate, mediate, and advocate for clients			4

Learning Objectives (LO)	Multiple Choice	True/False	Essay
LO 2-1. Describe the dynamics of human reproduction (including conception, diagnosis of pregnancy, fetal development, prenatal influences and assessment, problem pregnancies, and the birth process)	1-8	1-12	1-5
LO 2-2. Explain normal developmental milestones for infants and children	9-15	13-19	6-10
LO 2-3. Examine the abortion controversy (in addition to the impacts of social and economic forces)	16-22	20-25	11-14

LO 2-4. Explain infertility (including the causes, the psychological reactions to infertility, the treatment of infertility, the assessment process, alternatives available to infertile couples, and social work roles concerning infertility)	23-25	26-30	15
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Multiple-Choice Questions

1. Fingerlike projections called _____ at the end of the fallopian tube draw the egg into the tube.
 - A. Cilia
 - B. Blastocyst
 - C. Fimbriae
 - D. Zygote

ANS: C LO: 2-1 PG: 64 EPAS: 2.1.7, 2.1.7a, 2.1.7b

2. The genetic material in the egg and sperm combine to form a single cell called a:
 - A. Blastocyst
 - B. Zygote
 - C. Cilia
 - D. Fimbriae

ANS: B LO: 2-1 PG: 64 EPAS: 2.1.7, 2.1.7a, 2.1.7b

3. Which of the following is true:
 - A. Pregnant women over age forty have about a 1 in 1,000 chance of giving birth to a baby with Down syndrome
 - B. Women age 35 and over account for over 30 percent of all births in the United States
 - C. Teen mothers account for over 10 percent of all U.S. births
 - D. Infants born to women over 35 are more likely to be underweight

ANS: C LO: 2-1 PG: 68 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10i

4. Symptoms of _____ include high blood pressure, rapid weight gain, fluid retention, protein in the urine, and can cause death.
 - A. Toxemia
 - B. Alpha-feto
 - C. Ectopia
 - D. Chorionic poisoning

ANS: A LO: 2-1 PG: 70 EPAS: 2.1.7, 2.1.7a, 2.1.7b

5. The longest stage of labor is the:
 - A. First stage
 - B. Second stage
 - C. Third stage
 - D. None of the above; all stages resemble each other in length

ANS: A LO: 2-1 PG: 72 EPAS: 2.1.7, 2.1.7a, 2.1.7b

6. Babies born with their heads emerging first is referred to as a _____ presentation.
- A. Transverse
 - B. Vertex
 - C. Breech
 - D. Caesarean

ANS: B LO: 2-1 PG: 73 EPAS: 2.1.7, 2.1.7a, 2.1.7b

7. The maximum Apgar score possible is:
- A. 10
 - B. 20
 - C. 36
 - D. 50

ANS: A LO: 2-1 PG: 75 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10e

8. Approximately 1 in every _____ babies born in the United States has a low birth weight.
- A. 8
 - B. 12
 - C. 16
 - D. 20

ANS: B LO: 2-1 PG: 75 EPAS: 2.1.7, 2.1.7a, 2.1.7b

9. _____ development refers to the tendency to develop aspects of the body trunk first and then later master manipulation of the body extremities.
- A. Pleiotrodal
 - B. Cephalocaudal
 - C. Cryptorchistal
 - D. Proximodistal

ANS: D LO: 2-2 PG: 78 EPAS: 2.1.7, 2.1.7a, 2.1.7b

10. A child is usually able to crawl well by age:
- A. 4 months
 - B. 6 months
 - C. 8 months
 - D. 1 year

ANS: D LO: 2-2 PG: 80 EPAS: 2.1.7, 2.1.7a, 2.1.7b

11. At _____, children's vocabularies consist of more than three but less than fifty words.
- A. 1 year
 - B. 18 months
 - C. 2 years
 - D. 3 years

ANS: B LO: 2-2 PG: 81 EPAS: 2.1.7, 2.1.7a, 2.1.7b

12. By age _____, children can use the toilet by themselves, although they frequently ask someone to go with them, with accidents only occasionally happening at night.
- A. 18 months
 - B. 2 years
 - C. 2 1/2 years
 - D. 3 years

ANS: D LO: 2-2 PG: 82 EPAS: 2.1.7, 2.1.7a, 2.1.7b

13. _____-year-olds are in the process of separating from their parents and begin to prefer the company of other children over adults.
- A. 2½
 - B. 3
 - C. 4
 - D. 5

ANS: C LO: 2-2 PG: 83 EPAS: 2.1.7, 2.1.7a, 2.1.7b

14. At _____ years old, the pictures children draw, although simple, are finally recognizable. Dominance of the left or right hand becomes well established.
- A. 4
 - B. 5
 - C. 6
 - D. 7

ANS: B LO: 2-2 PG: 83 EPAS: 2.1.7, 2.1.7a, 2.1.7b

15. _____-year-olds can begin to be trusted with an allowance, they are able to go to school or to friends' homes alone, go to bed alone, and get up by themselves during the night to go to the bathroom.
- A. 4 to 5
 - B. 6 to 8
 - C. 9 to 10
 - D. 11 to 12

ANS: B LO: 2-2 PG: 84 EPAS: 2.1.7, 2.1.7a, 2.1.7b

16. In _____ the Supreme Court confirmed that Congress and individual states could legally refuse to pay for abortions.
- A. *Roe v. Wade*
 - B. *Webster v. Wainwright*
 - C. *Harris v. McRae*
 - D. *McHenry v. Smith*

ANS: C LO: 2-3 PG: 88 EPAS: 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b

17. Which one of the following countries prohibits abortions?
- A. Portugal
 - B. Nicaragua
 - C. France
 - D. Poland
- ANS: D LO: 2-3 PG: 90 EPAS: 2.1.2a, 2.1.2c, 2.1.5, 2.1.7, 2.1.7a, 2.1.7b
18. Which of the following is true regarding embryonic stem cell research:
- A. Individual states have the authority to pass laws to permit research using state funds
 - B. The first fetal cell transplant for Parkinson's disease was performed for the first time in 2002
 - C. They are taken from an 8-day-old embryo
- ANS: A LO: 2-3 PG: 93 EPAS: 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b
19. Approximately _____ percent of abortions are performed at or before 12 weeks gestation.
- A. 58
 - B. 68
 - C. 78
 - D. 88
- ANS: D LO: 2-3 PG: 94 EPAS: 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b
20. Which of the following is true:
- A. Non-Hispanic women are 60 percent more likely to have abortions than Hispanic women
 - B. Twenty-five percent of women who have abortions had used a contraception method during the month they became pregnant
 - C. Approximately 33 percent of all abortions are performed on teenage girls
 - D. Less than twenty percent of women having abortions have incomes below the federal poverty line
- ANS: D LO: 2-3 PG: 95 EPAS: 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b
21. The following is true about vacuum aspiration:
- A. This is considered a second trimester abortion
 - B. The procedure is used up to 16 weeks after a missed period
 - C. The entire procedure takes approximately one hour
 - D. Most are performed in a hospital under general anesthesia
- ANS: B LO: 2-3 PG: 96 EPAS: 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b
22. _____ (formerly referred to as RU-486), triggers a deterioration of the uterine lining, and was approved by the U.S. Federal Drug Administration for use as an abortion drug in 2000.
- A. Mifepristone
 - B. Laminaria
 - C. Methotrexate
 - D. Misoprostol
- ANS: A LO: 2-3 PG: 96 EPAS: 2.1.7, 2.1.7a, 2.1.7b

23. _____ is a condition where a fertilized egg implants itself somewhere other than in the uterus.
- A. Pelvic implant
 - B. Miscarriage
 - C. Ectopic pregnancy
 - D. Intrauterine insemination

ANS: C LO: 2-4 PG: 101 EPAS: 2.1.7, 2.1.7a, 2.1.7b

24. _____ is an infection of the female reproductive tract that can cause inflammation and scar tissue that blocks tubes.
- A. Endometriosis
 - B. Intracytoplasmia
 - C. Ectopia
 - D. Pelvic inflammatory disease

ANS: D LO: 2-4 PG: 102 EPAS: 2.1.7, 2.1.7a, 2.1.7b

25. In the _____ procedure, eggs and sperm are first combined in a laboratory dish and then immediately transferred to the fallopian tube.
- A. Zygote Intrafallopian Transfer
 - B. Gamete Intrafallopian Transfer
 - C. Embryo Transplant
 - D. Direct Sperm Injection

ANS: A LO: 2-4 PG: 106 EPAS: 2.1.7, 2.1.7a, 2.1.7b

True or False Questions

1. The typical ejaculate contains a maximum of 90 million sperm.

ANS: F LO: 2-1 PG: 64 EPAS: 2.1.7, 2.1.7a, 2.1.7b

2. It is possible for sperm to remain viable for up to 72 hours.

ANS: T LO: 2-1 PG: 64 EPAS: 2.1.7, 2.1.7a, 2.1.7b

3. Lab pregnancy tests can detect HCG in urine as early as 8 days after conception.

ANS: T LO: 2-1 PG: 65 EPAS: 2.1.7, 2.1.7a, 2.1.7b

4. Viability is an especially important concept during the first trimester of pregnancy.

ANS: F LO: 2-1 PG: 66 EPAS: 2.1.7, 2.1.7a, 2.1.7b

5. Symptoms of folic acid deficiency are anemia and fatigue.

ANS: T LO: 2-1 PG: 67 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10i

6. Umbilical cord assessment involves using high frequency sound waves to produce an actual picture of the fetus within the womb.

ANS: F LO: 2-1 PG: 69 EPAS: 2.1.7, 2.1.7a, 2.1.7b

7. Spina bifida is a condition in which the spinal column has not fused shut.
ANS: T LO: 2-1 PG: 70 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10e
8. Chorionic villi sampling is a method for diagnosing defects in the developing fetus.
ANS: T LO: 2-1 PG: 70 EPAS: 2.1.7, 2.1.7a, 2.1.7b
9. Babies are actually born during the third stage of labor.
ANS: F LO: 2-1 PG: 72 EPAS: 2.1.7, 2.1.7a, 2.1.7b
10. Babies born with their heads emerging first is referred to as a breech presentation.
ANS: F LO: 2-1 PG: 73 EPAS: 2.1.7, 2.1.7a, 2.1.7b
11. The Brazelton Neonatal Behavioral Assessment Scale is administered immediately after birth.
ANS: F LO: 2-1 PG: 75 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10e
12. The Babinski reflex involves the stretching, fanning movement of the toes whenever the infant is stroked on the bottom of his or her feet.
ANS: T LO: 2-1 PG: 77 EPAS: 2.1.7, 2.1.7a, 2.1.7b
13. One of the major concepts involved in understanding the process of human development is the importance of individual differences.
ANS: T LO: 2-2 PG: 78 EPAS: 2.1.7, 2.1.7a, 2.1.7b
14. Very few theorists believe that the environment is a crucial influence on development.
ANS: F LO: 2-2 PG: 78 EPAS: 2.1.7, 2.1.7a, 2.1.7b
15. Four-month-old babies are able to sit alone without being supported.
ANS: F LO: 2-2 PG: 79 EPAS: 2.1.7, 2.1.7a, 2.1.7b
16. By age 18 months, a baby can walk and descend stairs by crawling down backwards.
ANS: T LO: 2-2 PG: 81 EPAS: 2.1.7, 2.1.7a, 2.1.7b
17. At age 2, children tend to play alongside of each other, but not with each other in a cooperative fashion.
ANS: T LO: 2-2 PG: 82 EPAS: 2.1.7, 2.1.7a, 2.1.7b
18. Three-year-olds tend to pay close attention to the adults around them and are eager to please.
ANS: T LO: 2-2 PG: 82 EPAS: 2.1.7, 2.1.7a, 2.1.7b

19. Age 6 to 8 is the period that frequently becomes the finale of the games and play of childhood.
ANS: F LO: 2-2 PG: 84 EPAS: 2.1.7, 2.1.7a, 2.1.7b
20. The National Association of Social Workers' (NASW) position concerning abortion services is based on the principle of self-determination.
ANS: T LO: 2-3 PG: 87 EPAS: 2.1.2a, 2.1.7, 2.1.7a, 2.1.7b
21. Congress has passed a law that makes blocking access to women's clinics a federal crime.
ANS: T LO: 2-3 PG: 92 EPAS: 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b
22. President Obama issued an executive order in 2009 that limits stem cell research to already established stem cell lines.
ANS: F LO: 2-3 PG: 93 EPAS: 2.1.7, 2.1.7a, 2.1.7b
23. Second-trimester abortions are more complicated and involve greater risks than first-trimester abortions.
ANS: T LO: 2-3 PG: 96 EPAS: 2.1.7, 2.1.7a, 2.1.7b
24. Dilation and evacuation is an abortion method which must be performed in the first trimester of pregnancy.
ANS: F LO: 2-3 PG: 96 EPAS: 2.1.7, 2.1.7a, 2.1.7b
25. Research has shown that serious psychological distress is far more prevalent after having an abortion than the occurrence of postpartum depression in women who carry their pregnancies to term.
ANS: F LO: 2-3 PG: 97 EPAS: 2.1.4, 2.1.7, 2.1.7a, 2.1.7b
26. The primary cause of infertility in women involves difficulties with ovulation.
ANS: T LO: 2-4 PG: 102 EPAS: 2.1.7, 2.1.7a, 2.1.7b
27. Direct sperm injections are seldom used when men have exceptionally low sperm counts or large numbers of abnormal sperm.
ANS: F LO: 2-4 PG: 106 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10g
28. A woman may function as a surrogate without using her own genetic material.
ANS: T LO: 2-4 PG: 106 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10g
29. Fertilization enhancement techniques are now relatively inexpensive processes.
ANS: F LO: 2-4 PG: 108 EPAS: 2.1.5a, 2.1.5b, 2.1.5c, 2.1.7, 2.1.7a, 2.1.7b

30. The first level involved in the feminist treatment of infertility addresses the general social attitudes about infertility and expectations about what infertile women should do.

ANS: F LO: 2-4 PG: 109 EPAS: 2.1.5b, 2.1.7, 2.1.7a, 2.1.7b

Discussion Topics or Essay Questions

1. Discuss the prenatal factors that can influence the health and development of the fetus.

ANS: N/A LO: 2-1 PG: 66 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10i

2. Should a pregnant woman who consumes illegal drugs that damage her child be punished as a criminal? Should her child be taken from her? If so, with whom should the child be placed?

ANS: N/A LO: 2-1 PG: 67 EPAS: 2.1.2, 2.1.7, 2.1.7a, 2.1.7b, 2.1.10i

3. List the advantages and disadvantages of each of the following prenatal tests: (a) ultrasound, (b) amniocentesis, (c) chorionic villi sampling.

ANS: N/A LO: 2-1 PG: 69-70 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10e

4. Describe how social work practitioners can help low income women overcome the obstacles in the macro environment for greater access to prenatal care.

ANS: N/A LO: 2-1 PG: 71 EPAS: 2.1.5b, 2.1.7, 2.1.7a, 2.1.7b, 2.1.10k

5. How does the United States compare to other nations in regard to low-birth-weight infants? What are the reasons?

ANS: N/A LO: 2-1 PG: 76 EPAS: 2.1.5a, 2.1.7, 2.1.7a, 2.1.7b

6. Explain the Nature-Nurture controversy in human development.

ANS: N/A LO: 2-2 PG: 78 EPAS: 2.1.7, 2.1.7a, 2.1.7b

7. Why is knowledge of human development and developmental milestones relevant to social work?

ANS: N/A LO: 2-2 PG: 79 EPAS: 2.1.7, 2.1.7a, 2.1.7b, 2.1.10e

8. Describe the major normal developmental milestones attained by a 4-month old child.

ANS: N/A LO: 2-2 PG: 79 EPAS: 2.1.7, 2.1.7a, 2.1.7b

9. Cite the major normal developmental milestones attained by a 1-year-old child.

ANS: N/A LO: 2-2 PG: 80-81 EPAS: 2.1.7, 2.1.7a, 2.1.7b

10. Explain the major normal developmental milestones attained by a 5-year-old child.

ANS: N/A LO: 2-2 PG: 83 EPAS: 2.1.7, 2.1.7a, 2.1.7b

11. Summarize and discuss the arguments for pro-choice and for anti-abortion. Where do you stand on this issue?

ANS: N/A LO: 2-3 PG: 85-89 EPAS: 2.1.2, 2.1.2a, 2.1.2c, 2.1.7, 2.1.7a, 2.1.7b

12. Describe the positive developments and the concerns regarding stem cell research. What is your opinion about using embryonic stem cells for research?

ANS: N/A LO: 2-3 PG: 92-94 EPAS: 2.1.1e, 2.1.2, 2.1.7, 2.1.7a, 2.1.7b

13. Identify and describe the roles social workers can assume when helping women with unwanted pregnancies.

ANS: N/A LO: 2-3 PG: 98 EPAS: 2.1.1c, 2.1.2a, 2.1.2b, 2.1.2c, 2.1.2d, 2.1.7, 2.1.7a, 2.1.7b

14. Consider the following situation:

A 32-year-old woman with a severe cognitive disability becomes pregnant. She is unable to take care of herself independently. However, she has been easy prey to men as she seeks attention and has a history of numerous sexual encounters. Her genetic background indicates that she would probably have a child with a cognitive disability. It is clear that she would be unable to care for any child herself.

How would you apply the hierarchy of ethical principles described in the text to determine what might be done in this situation?

ANS: N/A LO: 2-3 PG: 99 EPAS: 2.1.2a, 2.1.2b, 2.1.2c, 2.1.2d, 2.1.7, 2.1.7a, 2.1.7b

15. Discuss and assess the pros and cons of the options available to infertile couples today.

ANS: N/A LO: 2-4 PG: 104-107 EPAS: 2.1.2, 2.1.7, 2.1.7a, 2.1.7b, 2.1.10g