

A systems-level view of a pregnancy with medical complications



**ASSIGN
BUSTER**

Complete these questions for Parts I, II, and III:

Part I:

1. What is the anatomical relationship between the cervix and the uterus?
2. What are the current statistics on the frequency of occurrence of cervical cancer? Does a women's race affect her chances of developing this cancer? What is the standard test for detecting cervical cancer?
3. Most cases of cervical cancer result from human papillomavirus (HPV) infection. What information can you find about transmission, contraction, and consequences of HPV from valid medical sources?
4. The success of the new HPV vaccine (approved in June 2006) will rely on parents' willingness to vaccinate their prepubescent daughters. Discuss your own willingness to do so were you a parent of a young girl.
5. Yvonne faces a potentially life-changing decision—to have a child now or wait until after a surgical procedure. Help her weigh the pros and cons as you see them.

Part II:

1. What is the range of normal gestation for humans? What are the current guidelines for good prenatal care beyond those mentioned here? For example, why do pregnant women need extra calcium, iron, and folic acid?
2. In cases of severe morning sickness, are prescription medicines advised? If so, what is the mechanism of action of these drug(s)?

3. What hormone(s) in the urine do over-the-counter ovulation predictor kits, fertility monitors, and early pregnancy tests (EPTs) measure? How soon after conception can EPTs be performed?

4. How does ultrasound technology allow image capture of the fetus in utero? When is an ultrasound performed during pregnancy? When is an amniocentesis warranted and how is it analyzed?

5. Up to 5% of all pregnant women are diagnosed with gestational diabetes, and women who have had gestational diabetes have an increased risk of developing Type 2 diabetes later on in life. Distinguish between gestational diabetes and Type 2 diabetes in terms of cause, management, and consequences/outcomes.

Part III:

1. When a newborn is delivered, an Apgar score is determined. What is the scale for such a score and what information does it provide the medical practitioner?

2. Diagram the anatomy of the urinary tract from kidney to urethra.

3. What are the common causes of premature births? What sort of medical care in the hospital immediately post birth is necessary for a premature baby, one born much earlier than Andrea?

4. Research the incidence rates of the more common birth defects. How common are ureteroceles? What is the long-term outcome for surgical treatment to repair a ureterocele?

5. Yvonne is faced with making a decision on behalf of her infant that would involve surgical treatment. There are inherent risks with surgery, regardless of age. Research the condition malignant hyperthermia, the most common cause of death related to general anesthesia.