



1. A newly introduced diagnostic test has been found to produce unacceptably low levels of reliability. The nurse should recognize that the test:
 - A) is impractical to implement in daily practice.
 - B) does not actually measure what it purports to measure.
 - C) yields inconsistent results when repeated.
 - D) does not reflect the status of the population as a whole.

2. A physician is providing care for a number of clients on a medical unit of a large university hospital. The physician is discussing with a colleague the differentiation between diseases that are caused by abnormal molecules and molecules that directly cause disease. Which client most clearly demonstrates the consequences of molecules that cause disease?
 - A) A 31-year-old woman with sickle cell disease who is receiving a transfusion of packed red blood cells.
 - B) A 91-year-old woman who has experienced an ischemic stroke resulting from familial hypercholesterolemia.
 - C) A 19-year-old man with exacerbation of his cystic fibrosis requiring oxygen therapy and chest physiotherapy.
 - D) A 30-year-old homeless man who has pneumocystis carinii pneumonia (PCP) and is HIV positive.

3. A member of the healthcare team is researching the etiology and pathogenesis of a number of clients who are under her care in a hospital context. Which aspect of client's situations best characterizes pathogenesis rather than etiology?
 - A) A client who has been exposed to the mycobacterium tuberculosis bacterium.
 - B) A client who has increasing serum ammonia levels due to liver cirrhosis.
 - C) A client who was admitted with the effects of methyl alcohol poisoning.
 - D) A client with multiple skeletal injuries secondary to a motor vehicle accident.

4. A client has been admitted for exacerbation of his chronic obstructive pulmonary disease (COPD), and a respiratory therapist (RT) is assessing the client for the first time. Which aspect of the client's current state of health would be best characterized as a symptom rather than a sign?
 - A) The client's oxygen saturation is 83% by pulse oximetry.

- B) The client notes that he has increased work of breathing when lying supine.
C) The RT hears diminished breath sounds to the client's lower lung fields bilaterally.
D) The client's respiratory rate is 31 breaths per minute.
5. Nurses are discussing a new blood test that helps establish a differential diagnosis between shortness of breath with a cardiac etiology and shortness of breath with a respiratory/pulmonary etiology. A positive result is known to indicate a cardiac etiology. The marketers of the test report that 99.8% of clients who have confirmed cardiac etiologies test positive in the test. However, 1.3% of clients who do not have cardiac etiologies for their shortness of breath also test positive. Which statement best characterizes this blood test?
A) Low validity, high reliability
B) High sensitivity, low specificity
C) High specificity, low reliability
D) High sensitivity, low reliability
6. As part of a screening program for prostate cancer, men at a senior citizens centre are having their blood levels of prostate-specific antigen (PSA) measured. Which statement would best characterize high positive predictive value but low negative predictive value for this screening test?
A) All of the men who had high PSA levels developed prostate cancer; several men who had low PSA levels also developed prostate cancer.
B) All of the men who had low PSA levels were cancer free; several men who had high levels also remained free of prostate cancer.
C) Men who had low PSA levels also displayed false-positive results for prostate cancer; men with high levels were often falsely diagnosed with prostate cancer.
D) The test displayed low sensitivity but high specificity.
7. A particular disease has a debilitating effect on the ability of sufferers to perform their activities of daily living and is a significant cause of decreased quality of life. However, few people die as a result of the disease's direct effects. There are hundreds of thousands of Canadians living with the disease but relatively few new cases in recent years. This disease has:
A) low mortality, high morbidity, low prevalence, and high incidence.
B) low mortality, high morbidity, high incidence, and low prevalence.
C) high mortality, low morbidity, high incidence, and low prevalence.
D) high morbidity, low mortality, high prevalence, and low incidence.
8. A researcher has recruited a large number of mothers whose infants were born with cardiac defects, as well as mothers whose infants were born with healthy hearts. The researcher is comparing the nutritional habits of all the mothers while their babies were in utero. Which type of study is being conducted?
A) Cohort study
B) Randomized controlled trial (RCT)
C) Case-control study
D) Risk-factor study

9. A multidisciplinary healthcare team operates a program aimed at the prevention, identification, and treatment of diabetes in a rural community. Which aspect of the program would be most likely to be classified as secondary prevention?
- A) Regularly scheduled wound-dressing changes for clients who have foot ulcers secondary to peripheral neuropathy and impaired wound healing.
 - B) Teaching schoolchildren how a nutritious, traditional diet can lessen their chances of developing adult-onset diabetes.
 - C) Staffing a booth where community residents who are attending a baseball tournament can have their blood glucose levels checked.
 - D) Administering oral antihyperglycemic medications to clients who have a diagnosis of diabetes.
10. An occupational therapist conducts a group therapy program called MindWorks with older adults who have diagnoses of dementia and Alzheimer disease. The goal of the group is to slow the cognitive decline of clients by engaging them in regular, organized mental activity, such as reading maps and solving puzzles. How would the program most likely be characterized?
- A) Primary prevention
 - B) Secondary prevention
 - C) Tertiary prevention
 - D) Prognosis enhancement
11. The clinical educator of a hospital medical unit is establishing evidence-based practice guidelines for the nursing care on the unit. Which statement most accurately captures a guiding principle of the nurse's task?
- A) Evidence-based practice guidelines will be rooted in research rather than nurses' subjective practice preferences and experiences.
 - B) Guidelines are synonymous with systematic research reviews.
 - C) The need for continuity and standardization of guidelines will mean that they will be fixed rather than changeable.
 - D) The guidelines will combine individual expertise with external systematic evidence.
12. To best understand the study of pathophysiology, the nurse must have a clear understanding of the term itself. Of the definitions below, which one best describes the term pathophysiology?
- A) The physiology of altered health
 - B) Any deviation from or interruption of the normal structure or function of any part, organ, or system of the body
 - C) Causes of disease
 - D) Changes in structure or form that is characteristic of a disease

13. A physician is examining a 21-year-old college student who is exhibiting the classic symptoms of schizophrenia. In the course of her evaluation the physician begins developing a treatment strategy based on what she knows about the disease, available therapies, and medications. She also makes the client aware of the consequences of not following the treatment regimen. To accomplish this, what aspect of the disease is the physician using?
- A) Etiology
 - B) Causation
 - C) Natural history
 - D) Morbidity statistics
14. A client has died and the nurse is responsible for filling out the death certificate. In performing this task, the nurse is required to record the client's age, sex, and cause of death, among other factors. What is the purpose of reporting these statistics?
- A) These statistics are recorded so pharmaceutical companies may compile the data to determine future need.
 - B) The government requires the statistics in order to calculate the crude mortality rate.
 - C) These statistics are useful in terms of anticipating healthcare needs, planning public-education programs, directing health research efforts, and allocating healthcare dollars.
 - D) These statistics are required by the hospital to inform the WHO for the coding of the cause of death.
15. Researchers have designed a study where the health of a large group of babies will be followed for several years. What type of study is this?
- A) Repetition
 - B) Double-blind placebo
 - C) Case-control
 - D) Cohort
16. A client has already suffered a heart attack and is placed on β -blockers to reduce the workload on the heart, as well as a statin drug and a low-fat diet to lower cholesterol. This treatment plan is based on multiple levels; one is diet and statin therapy and the other is the use of β -blockers. These therapies can be classified as:
- A) primary and secondary.
 - B) secondary and tertiary.
 - C) primary and tertiary.
 - D) secondary and primary.
17. Which of the nurse's assessment questions most directly addresses the client's level of health, based on the World Health Organization's definition of health?
- A) "Would you consider yourself to be more healthy, less healthy, or average?"
 - B) "What are the things that give you the most joy in your life?"
 - C) "How often have you been sick over the past 12 months?"
 - D) "How would you rate your overall sense of well-being?"

18. Which clients are exhibiting sequelae of disease? Select all that apply.
- A) A toddler who developed bronchiolitis after being treated for respiratory syncytial virus (RSV).
 - B) A client who has just had a mastectomy to treat stage T3 breast cancer.
 - C) A client who had serologic testing and who has found out that she is positive for human immunodeficiency virus.
 - D) An older adult client who experienced liver failure after overdosing on acetaminophen in a suicide attempt.
 - E) A client with diabetes who has developed a loss of vision.
19. An epidemiologist is working in a rural community that has experienced a sudden and alarming increase in the incidence of HIV/AIDS. What is the main focus of epidemiology in this context?
- A) Developing innovative treatments for HIV
 - B) Examining patterns in the way that HIV is spreading
 - C) Exploring the biochemical characteristics of the HIV virus
 - D) Performing pharmacologic testing of antiretroviral drugs
20. In 2014, an outbreak of Ebola virus disease began in West Africa in which there was a sharp increase in the number of people being diagnosed with this disease. At the same time, a very high proportion of those who were diagnosed died from the disease. The epidemiologic characteristics of this disease include:
- A) high prevalence and increased incidence.
 - B) increased incidence and high mortality.
 - C) high morbidity and mortality.
 - D) increased morbidity and high prevalence.
21. A client has been diagnosed with pancreatic cancer and is meeting with an oncologist for the first time. Which statement best describes the client's prognosis?
- A) "At the stage that your cancer is at, your likelihood of 5-year survival is around 10%."
 - B) "The plan of treatment will be based on the stage of your cancer, your response to therapy and your preferences."
 - C) "I've determined that your cancer is at stage IIB, which I'll explain to you."
 - D) "The formal name for what you have is pancreatic intraepithelial neoplasia III."

Answer Key

1. C
2. D
3. B
4. B
5. B
6. A
7. D
8. C
9. C
10. C
11. D
12. A
13. C
14. C
15. D
16. C
17. D
18. A, E
19. B
20. B
21. A

1. A woman has recently determined that she is pregnant, and her clinician believes that conception occurred around 8 weeks prior. The embryo is in the third stage of embryonic development. The nurse expects that which event and process in growth and development are taking place?
 - A) Transition from a morula to a blastocyst.
 - B) Ossification of the skeleton and acceleration of body length.
 - C) Rapid eye movement and early support of respiration.
 - D) Formation of upper limbs and opening of the eyes.

2. A midwife who is providing care for a woman during her first pregnancy is assessing for intrauterine growth retardation (IUGR) during an early prenatal checkup. Which question best addresses the risks for IUGR?
 - A) “What does your typical diet look like over the course of a day?”
 - B) “What is the highest level of education that you've finished?”
 - C) “Are there many people in your life that you can count on for help and support?”
 - D) “How would you describe your mood and your outlook on life since you've been pregnant?”

3. Which assessment finding of a male infant 14 hours postpartum would be considered abnormal and would require further assessment and possible intervention?
 - A) The baby's first stool appears to contain blood.
 - B) The baby is unable to breathe through his mouth.
 - C) The baby's skin has a yellowish-orange hue.

- D) The baby's suck is weak when placed at his mother's breast.
4. A nurse is performing a 5-minute Apgar score on a newborn. Which characteristic of the infant's current condition would not be reflected in the infant's Apgar score?
- A) The baby's heart rate is 122 beats per minute.
 - B) The infant is crying.
 - C) The child's temperature is 35.0°C (95°F) by axilla.
 - D) The infant's skin is pink in tone.
5. The first-time parents of an infant girl 2 days postpartum are distressed at the jaundiced appearance of her skin and are eager for both an explanation and a treatment for the problem. Which response by their physician is **most** accurate?
- A) "Your daughter's young liver is unable to get rid of the waste products from old red blood cells."
 - B) "Because your daughter's kidneys are so small, they have a hard time getting rid of the wastes that are always accumulating in her blood."
 - C) "Nearly half of all infants have this problem, and while it is distressing to look at, it is largely harmless and will resolve in time."
 - D) "This is a sign that your baby needs more milk than she is currently getting, and increased breastfeeding will act to flush these pigments out of her system."
6. Which infant most likely requires medical intervention?
- A) A 2-day-old baby boy who has caput succedaneum.
 - B) An infant 4 hours postpartum who has visible coning of his head following his vaginal delivery.
 - C) A girl 3 days postpartum with noticeable unilateral cephalhematoma.
 - D) A male infant whose vertex delivery resulted in a brachial plexus injury.
7. A nurse who works in a neonatal intensive care unit is providing care for an infant who was born at 26 weeks' gestation. Which assessment should be the nurse's highest **priority**?
- A) Regular measurement of the baby's blood pressure and temperature.
 - B) Assessment of the infant's respiratory status and oxygen saturation levels.
 - C) Assessment of the child's motor skills and limb mobility range of motion.
 - D) Assessment of the child's neurologic status.
8. A premature infant who is receiving care on a neonatal intensive care unit has just been identified as having necrotizing enterocolitis (NEC). During the differential diagnosis, what possible contributing factor would his care providers be most likely to rule out first?
- A) Impaired immune function secondary to the child's premature status.
 - B) Bowel obstruction following the introduction of enteral feeding.
 - C) Infectious microorganisms.
 - D) Intestinal ischemia due to circulatory priority of the heart and brain.

9. The exasperated parents of a 4-month-old infant with colic have asked their primary care physician what they can do to alleviate their child's persistent crying. What should the physician tell the parents?
- A) "The exact cause of colic hasn't really been identified, which makes it hard to treat."
 - B) "Reducing the amount of commercial formula and increasing breastfeeding is likely to help."
 - C) "Colic is a result of excess gas, and the antiflatulent medication I'll prescribe will probably help."
 - D) "Even though it's hard to live with, colic is a normal part of infancy and will resolve with time."
10. During a prenatal education class, a participant has told how her friend's infant died of sudden infant death syndrome (SIDS). What can the educator tell the group about preventing SIDS when they have their babies?
- A) "The best sleeping position for your baby is on his or her abdomen."
 - B) "Children are at particular risk of SIDS when they have a cold or flu, so these times require extra vigilance."
 - C) "Using drugs during pregnancy has been shown to have no association with SIDS after birth, so mothers should not concern themselves with their medications."
 - D) "It's important if anyone in your home smokes to make sure he or she only does it outside."
 - E) "The exact cause of SIDS still isn't known, so there's little that you can do to prevent this tragic event."
11. What topic should health-promotion initiatives emphasize if the target audience is parents of preschoolers and the goal is to minimize mortality?
- A) Hand washing as an infection-control measure
 - B) Accident and injury prevention
 - C) Identifying signs of child abuse and neglect
 - D) The importance of good nutrition
12. A 13-year-old boy has a body mass index that places him in the 96th percentile for his age and gender. To which health problem does his weight predispose him?
- A) Scoliosis
 - B) Respiratory infections
 - C) Gastrointestinal disorders
 - D) Type 2 diabetes
13. A 14-year-old boy has experienced a pronounced growth spurt over the last several months. Which components of his endocrine system are most likely responsible for this phenomenon? Select all that apply
- A) Thyroid hormones
 - B) Adrenocorticotrophic hormone
 - C) Gonadal steroids

- D) Parathyroid hormone (PTH)
 - E) Growth hormone
14. A pregnant client has been smoking for 10 years and was unable to quit during her pregnancy. As a result, her infant is smaller than normal. What is the pathologic process that results in the low birth weight?
- A) Small for gestational age
 - B) Hypoplastic growth
 - C) Intrauterine growth retardation
 - D) Oligohydramnios
15. The nurse is providing care for a 15-year-old boy. His parents are concerned about recent changes in his behaviour and are asking for help. Which recommendation would be the **best** response?
- A) A full neurologic assessment because their son may be experiencing a pathologic brain change.
 - B) A full psychological evaluation, as depression and schizophrenia often develop in mid to late years of adolescence.
 - C) A drug test, as young people are known to experiment with drugs.
 - D) They remain calm. Slight changes in behaviour are normal, and incongruencies can result from discrepancies between physical and cognitive levels of development.
16. The father of a 13-year-old son is unaware of the normal developmental level his son should be attaining, so he asks the nurse for guidance. The nurse should tell the father that the son should:
- A) experience a steady growth rate.
 - B) begin to seek independence, adopt peer codes, and make personal-lifestyle choices.
 - C) start to display secondary sexual characteristics by age 11, his voice will change at age 13, and he will begin to grow taller when he turns 16.
 - D) begin his changes before any female friends that he may have.
17. A social worker arrives at a clinic with a 10-month-old infant who is 20% underweight for her age. The initial workup shows no signs of hypoxia, her temperature is normal, and her blood glucose level is 4.2 mmol/l. In the infant's history it is written that her mother recently died due to complications of severe alcoholism. The infant shows no signs of fetal alcohol syndrome, and she was born healthy. What could explain her low body weight?
- A) The infant is suffering from hypoglycemia.
 - B) The infant is suffering from the complications of jaundice.
 - C) The infant was misdiagnosed with caput succedaneum.
 - D) The infant is suffering from nonorganic failure to thrive.

18. A neonate was born 2 hours ago with a healthy Apgar score. Over the past 30 minutes, the infant has exhibited decreased muscle tone and just experienced suspected seizure activity. Which assessment should the nurse prioritize?
- A) Obtaining a STAT serum bilirubin level
 - B) Checking the infant's blood glucose level
 - C) Assessing the infant for congenital dysplasia of the hip
 - D) Assessing the infant deep tendon reflexes
19. In the care of a pregnant client, a nurse practitioner is using the Nägele rule to determine gestational age and calculate the estimated day of birth. The client states that the first day of her last menstrual period was February 12, and today is March 29. What is the expected date of birth?
- A) October 29
 - B) November 5
 - C) November 12
 - D) November 19
20. The nurse is assessing a 5-year-old boy who has presented with bruising to his face and arms as well as signs of a concussion. He is accompanied by his mother and stepfather who state that he fell off a trampoline in the same way that he did 8 weeks ago. The boy remains silent during the assessment and is reluctant to make eye contact with the nurse. What is the nurse's **most** appropriate action?
- A) Refer the family to a parenting skills course.
 - B) Ask a social worker to accompany the nurse during the assessment.
 - C) Assess for indications of child abuse.
 - D) Teach the family about the greatest threats to health during early childhood.
21. A pediatric nurse practitioner is performing a comprehensive assessment of a 9-year-old girl. What assessment finding most warrants further assessment and follow-up?
- A) The girl has gained 7 kg over the past 6 months.
 - B) The girl has grown 4 cm over the past 12 months.
 - C) The girl has not been to the dentist in 5 months.
 - D) The girl has not received her annual influenza vaccination.
22. A neonate's Apgar scores were 5 at 1 minute and 7 at 5 minutes. What is the obstetrical nurse's **most** appropriate action?
- A) Reassess the infant's Apgar score every 30 minutes until it is greater than 6.
 - B) Assess the infant's blood glucose levels and cranial nerve functions.
 - C) Continue to participate in efforts to alleviate the infant's distress.
 - D) Document the infant's Apgar scores and recognize them as normal.
23. A neonate has been diagnosed with caput succedaneum following a vaginal birth with no notable complications. How should the health problem be addressed in the infant's plan of nursing care?
- A) The infant's scalp should be regularly assessed and the appearance documented.