MULTIPLE CHOICE

1. Which of the following is defined as a vaguely outlined area of edematous tissue situated over the portion of the scalp that presents in a vertex delivery?
   a. Caput succedaneum
   b. Hydrocephalus
   c. Cephalhematoma
   d. Subdural hematoma

   ANS:  A
   This is the definition of a caput succedaneum. The swelling consists of serum and/or blood accumulated in the tissues above the bone, and it may extend beyond the bone margin.

   DIF:  Cognitive Level: Knowledge       REF:  Page 244
   MSC:  Area of Client Needs: Health Promotion and Maintenance: Newborn Care

2. Which of the following findings on a newborn assessment should the nurse recognize as suggestive of a clavicle fracture?
   a. Negative scarf sign
   b. Asymmetric Moro reflex
   c. Swelling of fingers on affected side
   d. Paralysis of affected extremity and muscles

   ANS:  B
   An infant with a broken clavicle may have no symptoms. The Moro reflex, which results in sudden extension and abduction of the extremities followed by flexion and adduction of the extremities, will most likely be asymmetric.

   DIF:  Cognitive Level: Analysis       REF:  Page 246
   MSC:  Area of Client Needs: Health Promotion and Maintenance: Newborn Care

3. The parents of a neonate ask the nurse what caused the baby’s facial nerve paralysis. The nurse’s response is based on knowledge that this is caused by which of the following?
   a. Genetic defect
   b. Birth injury
   c. Spinal cord injury
   d. Inborn error of metabolism

   ANS:  B
Pressure on the facial nerve during delivery may result in injury to cranial nerve VII.

DIF: Cognitive Level: Comprehension  REF: Page 246
TOP: Integrated Process: Teaching/Learning
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

4. A mother is upset because her newborn has erythema toxicum neonatorum. The nurse should reassure her that this is which of the following?
   a. Easily treated
   b. Benign and transient
   c. Usually not contagious
   d. Usually not disfiguring

   ANS: B
   Erythema toxicum neonatorum, or newborn rash, is a benign, self-limiting eruption of unknown cause that usually appears within the first 2 days of life. The rash usually lasts about 5 to 7 days.

DIF: Cognitive Level: Comprehension  REF: Page 247
TOP: Integrated Process: Teaching/Learning
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

5. Oral candidiasis (thrush) in the neonate is which of the following?
   a. Bacterial infection that is life threatening in the neonatal period
   b. Bacterial infection of mucous membranes that responds readily to treatment
   c. Yeastlike fungal infection of mucous membranes that is relatively common
   d. Benign disorder that is transmitted from mother to infant only during the birth process

   ANS: C
   Oral candidiasis, characterized by white adherent patches on the tongue, palate, and inner aspects of the cheeks, is not uncommon in infants. *Candida albicans* is the usual causative organism.

DIF: Cognitive Level: Comprehension  REF: Page 248
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

6. Nursing care of the newborn with oral candidiasis (thrush) includes which of the following?
   a. Avoid use of pacifier.
   b. Remove characteristic white patches with a soft cloth.
   c. Continue medication for prescribed number of days.
   d. Apply medication to oral mucosa, being careful that none is ingested.

   ANS: C
   The medication must be continued for the prescribed number of days. To prevent relapse, therapy should continue for at least 2 days after the lesions disappear.
DIF: Cognitive Level: Comprehension    REF: Page 248
MSC: Area of Client Needs: Physiologic Integrity: Pharmacologic and Parenteral Therapy

7. Which of the following is a bright red, rubbery nodule with a rough surface and a well-defined margin that may be present at birth?
   a. Port-wine stain
   b. Juvenile melanoma
   c. Cavernous hemangioma
   d. Strawberry hemangioma

   ANS:  D
   Strawberry hemangiomas or capillary hemangiomas are benign cutaneous tumors that involve only capillaries. They are bright red, rubbery nodules with rough surfaces and well-defined margin. They may or may not be apparent at birth but enlarge during the first year of life and tend to resolve spontaneously by age 2 to 3 years.

DIF: Cognitive Level: Comprehension    REF: Page 249
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

8. The parents of a newborn with a strawberry hemangioma ask the nurse what the treatment will be. The nurse’s response should be based on knowledge that:
   a. excision of the lesion will be necessary.
   b. injections of prednisone into the lesion will reduce it.
   c. no treatment is usually necessary because of the high rate of spontaneous involution.
   d. pulsed dye laser treatments will be necessary immediately to prevent permanent disability.

   ANS:  C
   There is a high rate of spontaneous resolution, so treatment is usually not indicated for hemangiomas.

DIF: Cognitive Level: Comprehension    REF: Page 250
TOP: Integrated Process: Teaching/Learning
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

9. Which of the following terms refers to an infant born before completion of week 37 of gestation, regardless of birth weight?
   a. Postterm
   b. Premature
   c. Low birth weight
   d. Small for gestational age

   ANS:  B
A premature infant is any child born before 37 weeks of gestation, regardless of birth weight.

DIF: Cognitive Level: Comprehension     REF: Page 250
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

10. Which of the following refers to an infant whose rate of intrauterine growth was slowed and whose birth weight falls below the 10th percentile on intrauterine growth charts?
   a. Postterm
   b. Postmature
   c. Low birth weight
   d. Small for gestational age

ANS: D
A small-for-gestational-age (or small-for-date) infant is any child whose rate of intrauterine growth was slowed and whose birth weight falls below the 10th percentile on intrauterine growth curves.

DIF: Cognitive Level: Comprehension     REF: Page 250
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

11. Which of the following is the most appropriate way for the nurse to obtain an occasional urine sample from a neonate?
   a. Apply a plastic collecting device.
   b. Obtain a suprapubic urine specimen.
   c. Weigh diaper before and after urination.
   d. Aspirate small amount of urine from cotton balls placed in the diaper.

ANS: D
Urine samples obtained from balls of 100% cotton proved to be accurate.

DIF: Cognitive Level: Comprehension     REF: Page 252
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

12. The nurse is caring for a very low–birth-weight (VLBW) infant with a peripheral intravenous infusion. Nursing considerations regarding infiltration include which of the following?
   a. Infiltration occurs infrequently because VLBW infants are inactive.
   b. Continuous infusion pumps stop automatically when infiltration occurs.
   c. Hypertonic solutions can cause severe tissue damage if infiltration occurs.
   d. Infusion site should be checked for infiltration at least once per 8-hour shift.

ANS: C
Hypertonic fluids can damage cells if the fluid leaks from the vein. Careful monitoring is required to prevent severe tissue damage.
13. The nurse is caring for a high-risk neonate with an umbilical catheter in a radiant warmer. The nurse notes blanching of the feet. Which of the following is the most appropriate nursing action?
   a. Elevate feet 15 degrees.
   b. Place socks on infant.
   c. Wrap feet loosely in prewarmed blanket.
   d. Report findings immediately to the practitioner.

   ANS: D
   Blanching of the feet, in a neonate with an umbilical catheter, is an indication of vasospasm. Vasoconstriction of the peripheral vessels, triggered by the vasospasm, can seriously impair circulation. It is an emergency situation and must be reported immediately.

14. The mother of a preterm neonate asks the nurse when she can start breastfeeding. The nurse should explain that breastfeeding can be initiated when her infant:
   a. achieves a weight of at least 3 pounds.
   b. indicates an interest in breastfeeding.
   c. does not require supplemental oxygen.
   d. has adequate sucking and swallowing reflexes.

   ANS: D
   Research supports that human milk is the best source of nutrition for term and preterm infants. Preterm infants should be breast-fed as soon as they have adequate sucking and swallowing reflexes and no other complications such as respiratory complications or concurrent illnesses.

15. Which of the following is the most appropriate nursing action when intermittently gavage feeding a preterm infant?
   a. Allow formula to flow by gravity.
   b. Insert tube through nares rather than mouth.
   c. Avoid letting infant suck on tube.
   d. Apply steady pressure to syringe to deliver formula to stomach in a timely
The formula is allowed to flow by gravity. The length of time to complete the feeding will vary.

ANS:  A

16. A healthy, stable, preterm infant will soon be discharged. The nurse should recommend which of the following positions for sleep?
   a. Prone
   b. Supine
   c. Side lying
   d. Position of comfort

ANS:  B
The American Academy of Pediatrics recommends that healthy infants be placed to sleep in a supine position. The prone position can be used for supervised play.

ANS:  B

17. Which of the following interventions should the nurse implement to maintain the skin integrity of the premature infant?
   a. Cleanse skin with a gentle alkaline-based soap and water.
   b. Cleanse skin with a neutral pH solution only when necessary.
   c. Thoroughly rinse skin with plain water after bathing in a mild hexachlorophene solution.
   d. Avoid cleaning skin.

ANS:  B
The premature infant should be given baths no more than two or three times per week with a neutral pH solution. The eyes, oral and diaper areas, and pressure points should be cleansed daily.

ANS:  B

18. Which of the following is an important nursing action related to the use of tape and/or adhesives on premature neonates?
   a. Avoid using tape and adhesives until skin is more mature.
   b. Use solvents to remove tape and adhesives instead of pulling on skin.
   c. Remove adhesives with warm water or mineral oil.
   d. Use scissors carefully to remove tape instead of pulling tape off.
ANS:  C
Warm water, mineral oil, or petrolatum can be used to facilitate the removal of adhesive.

DIF:  Cognitive Level: Analysis       REF:  Page 259
MSC:  Area of Client Needs: Physiologic Integrity: Basic Care and Comfort

19. The nurse is caring for a 3-week-old boy born at 29 weeks of gestation. While taking vital signs and changing his diaper after stooling, the nurse observes that his color is pink but slightly mottled, his arms and legs are limp and extended, he has the hiccoughs, there are respiratory pauses and gasping, and his heart rate is regular and rapid. The nurse should recognize these behaviors as manifestations of which of the following?
   a. Stress
   b. Subtle seizures
   c. Preterm behavior
   d. Onset of respiratory distress

ANS:  A
These are signs of stress or fatigue in a newborn.

DIF:  Cognitive Level: Comprehension       REF:  Page 263
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

20. When is the best time for the neonatal intensive care unit (NICU) nurse to initiate an individualized stimulation program for the preterm infant?
   a. As soon as possible after infant is born
   b. As soon as parent is available to provide stimulation
   c. When infant is over 38 weeks of gestation
   d. When developmental organization and stability are sufficient

ANS:  D
Infant stimulation is essential for growth and development. The appropriate time for the introduction of an individualized program is when developmental organization and stability are achieved at approximately 34 and 36 weeks of gestation.

DIF:  Cognitive Level: Analysis       REF:  Page 262
MSC:  Area of Client Needs: Health Promotion and Maintenance: Growth and Development

21. After 8 weeks in the NICU, Chris will soon be discharged. His parents seem apprehensive and worry that he may still be in danger. The nurse should recognize that this is which of the following?
   a. Normal
   b. A reason to postpone discharge
   c. Suggestive of maladaptation
Parents become apprehensive and excited as the time for discharge approaches. They have many concerns and insecurities regarding the care of their infant. A major concern is that they may be unable to recognize signs of illness or distress in their infant.

DIF: Cognitive Level: Application REF: Page 268
MSC: Area of Client Needs: Psychosocial Integrity: Coping Mechanisms

22. The nurse is planning care for a family expecting their newborn infant to die. The nurse’s interventions should be based on knowledge of which of the following?
   a. Tangible remembrances of the infant (e.g., lock of hair, picture) prolong grief.
   b. Photographs of infants should not be taken after the death has occurred.
   c. Funerals are not recommended, since mother is still recovering from childbirth.
   d. Parents should be encouraged to name their infant if they have not done so already.

ANS: D

Naming the deceased infant is an important step in the grieving process. It gives the parents a tangible person for whom to grieve, which is a key component of the grieving process.

DIF: Cognitive Level: Analysis REF: Page 270
MSC: Area of Client Needs: Psychosocial Integrity: Grief and Loss

23. The nurse has been caring for a neonate who just died. The parents are present but say they are “afraid” to hold the dead infant. The most appropriate nursing intervention is which of the following?
   a. Tell them there is nothing to fear.
   b. Insist that they hold infant “one last time.”
   c. Respect their wishes and release body to morgue.
   d. Keep infant’s body available for a few hours in case they change their minds.

ANS: D

When the parents are hesitant about holding and touching their infant, the nurse should keep the infant’s body for a few hours. Many parents change their minds after the initial shock of the infant’s death. This will provide the parents time to see and hold their infant if they desire.

DIF: Cognitive Level: Analysis REF: Page 270
MSC: Area of Client Needs: Psychosocial Integrity: Grief and Loss

24. The nurse is planning care for a low-birth-weight neonate. Which of the following is an appropriate nursing intervention to promote adequate oxygenation?
a. Place in Trendelenburg position periodically.
b. Suction at least every 2 to 3 hours.
c. Maintain neutral thermal environment.
d. Hyperextend neck with nose pointing to ceiling.

ANS: C
A neutral thermal environment is one that permits the infant to maintain a normal core temperature with minimal oxygen consumption and caloric expenditure.

DIF: Cognitive Level: Analysis REF: Page 252 | Page 253
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

25. A preterm neonate has been receiving orogastric feedings of breast milk. The nurse initiates nipple feedings, but the infant tires easily and has weak sucking and swallowing reflexes. The most appropriate nursing intervention is to:
a. encourage mother to breastfeed.
b. try nipple-feeding preterm infant formula.
c. resume orogastric feedings of breast milk.
d. resume orogastric feedings of formula.

ANS: C
If a preterm infant tires easily or has weak sucking when nipple feedings are initiated, the nurse should resume orogastric feedings with the milk of mother’s choice.

DIF: Cognitive Level: Comprehension REF: Page 257
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

26. The parents of a neonate who has just died decide, after their infant has gone to the morgue, that they want to hold their infant. The most appropriate nursing intervention at this time is to:
a. explain gently that this is no longer possible.
b. encourage parents to accept the loss of their infant.
c. offer to take a photograph of their infant because they cannot hold infant.
d. get the infant, wrap in a blanket, and rewarm in a radiant warmer so they can hold their infant.

ANS: D
The parents should be allowed to hold their infant in the hospital setting. The infant’s body should be retrieved and rewarmed in a radiant warmer. The nurse should provide a private place where the parents can hold their child for a final time.

DIF: Cognitive Level: Application REF: Page 270
MSC: Area of Client Needs: Psychosocial Integrity: Grief and Loss
27. Which of the following statements best describes the clinical manifestations of the preterm infant?
   a. Head is proportionately small in relation to the body.
   b. Sucking reflex is absent, weak, or ineffectual.
   c. Thermostability is well established.
   d. Extremities remain in attitude of flexion.

   ANS: B
   Reflex activity is only partially developed. Sucking is absent, weak, or ineffectual.

   DIF: Cognitive Level: Comprehension  REF: Page 272
   MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care

28. Physiologic jaundice in a neonate can be caused by which of the following?
   a. Fetal-maternal blood incompatibility
   b. Destruction of red blood cells as a result of antibody reaction
   c. Liver’s inability to bind bilirubin adequately for excretion
   d. Immature kidneys’ inability to hydrolyze and excrete bilirubin

   ANS: C
   Physiologic jaundice is caused by the immature hepatic function of the infant’s liver coupled with the increased load from red blood cell hemolysis. The excess bilirubin from the destroyed red blood cells cannot be excreted from the body.

   DIF: Cognitive Level: Comprehension  REF: Page 275
   MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

29. When should the nurse expect breastfeeding-associated jaundice to first appear in a normal newborn?
   a. 0 to 12 hours
   b. 12 to 24 hours
   c. 2 to 4 days
   d. 4 to 5 days

   ANS: C
   Breastfeeding-associated jaundice is caused by decreased milk intake related to decreased caloric and fluid intake by the infant before the mother’s milk is well established. Fasting is associated with decreased hepatic clearance of bilirubin.

   DIF: Cognitive Level: Comprehension  REF: Page 275
   MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

30. The newborn with severe jaundice is at risk for developing which of the following?
   a. Encephalopathy
   b. Bullous impetigo
c. Respiratory distress
d. Blood incompatibility

ANS: A
Unconjugated bilirubin, which can cross the blood-brain barrier, is highly toxic to neurons. An infant with severe jaundice is at risk for developing kernicterus or bilirubin encephalopathy.

DIF: Cognitive Level: Comprehension  REF: Page 277
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

31. Early clinical manifestations of bilirubin encephalopathy in the neonate include which of the following?
   a. Mental retardation
   b. Absence of stooling
   c. Lethargy or irritability
   d. Increased or decreased temperature

ANS: C
Clinical manifestations of bilirubin encephalopathy are those of nervous system depression or excitation. Prodromal symptoms consist of decreased activity, lethargy, irritability, hypotonia, and seizures.

DIF: Cognitive Level: Comprehension  REF: Page 277
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

32. Where is the best place to observe for jaundice in dark-skinned infants?
   a. Buttocks
   b. Tip of nose and sclera
   c. Sclera, conjunctiva, and oral mucosa
   d. Palms of hands and soles of feet

ANS: C
Assessing for jaundice is part of the routine physical assessment in newborns. In dark-skinned infants, the sclera, conjunctiva, and oral mucosa are the best place to observe jaundice because of the lack of skin pigmentation in these areas.

DIF: Cognitive Level: Comprehension  REF: Page 277
MSC: Area of Client Needs: Health Promotion and Maintenance: Techniques of Physical Assessment

33. A blood sample for measurement of bilirubin is required from a neonate receiving phototherapy. In what environment should this blood sample be drawn?
   a. While phototherapy lights are turned off
   b. While infant remains under phototherapy lights
c. When infant is covered with a blanket

d. When infant has been off phototherapy for 30 to 60 minutes

ANS: A

When blood is drawn, phototherapy lights are turned off, and the blood is transported in a covered tube to avoid a false reading as a result of bilirubin destruction in the test tube.

DIF: Cognitive Level: Comprehension  REF:  Page 279
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

34. The nurse is preparing the parents of a newborn for home phototherapy. Which of the following statements made by the parent would indicate a need for further teaching?

a. “I should change the baby’s position many times during the day.”

b. “I can dress the baby in lightweight clothing while under phototherapy.”

c. “I should be sure that the baby’s eyelids are closed before applying patches.”

d. “I can take the patches off the baby during feedings and other caregiving activities.”

ANS: B

The baby should be placed nude under the lights.

DIF: Cognitive Level: Application  REF:  Page 280
TOP: Integrated Process: Teaching/Learning
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

35. The nurse is caring for an infant with hyperbilirubinemia who is receiving phototherapy. Which of the following is an appropriate nursing intervention for this infant?

a. Apply lotion as prescribed to moisturize skin.

b. Maintain nothing-by-mouth (NPO) status to prevent nausea and vomiting.

c. Monitor temperature to prevent hypothermia or hyperthermia.

d. Keep eye patches on for at least 8 to 12 of every 24 hours.

ANS: C

Infants who are receiving phototherapy are at risk for thermoregulation issues. The nurse must monitor the infant’s temperature closely to rapidly detect either hypothermia or hyperthermia.

DIF: Cognitive Level: Application  REF:  Page 280
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

36. Hemolytic disease is suspected in a mother’s second baby, a son. Which of the following factors is important in understanding how this could develop?

a. Her first child was Rh positive.

b. Her first child was a girl.

c. Both parents have type O blood.

d. She was not immunized against hemolysis.
Hemolytic disease of the newborn results from an abnormally rapid rate of red blood cell (RBC) destruction. The major causes of this are Rh and maternal-fetal ABO incompatibility. If an Rh-negative mother has previously been exposed to Rh-positive blood through pregnancy or blood transfusion, antibodies to this blood group antigen may develop so that she is isoimmunized. With further exposure to Rh, the maternal antibodies will agglutinate with the red cells of the fetus who has the antigen and destroy the cells. Hemolytic disease caused by ABO incompatibilities can be present with the first pregnancy.

When should the nurse expect jaundice to be present in a newborn with hemolytic disease?

a. At birth
b. During first 24 hours after birth
c. 24 to 48 hours after birth
d. 48 to 72 hours after birth

ANS: B
In hemolytic disease of the newborn, jaundice is usually evident within the first 24 hours of life.

To prevent Rh isoimmunization, Rh\textsubscript{o}(D) immune globulin (such as RhoGAM) is administered to all:

a. Rh-negative women who deliver an Rh-positive infant.
b. Rh-positive women who deliver an Rh-negative infant.
c. Rh-negative infants whose mothers are Rh positive.
d. Rh-positive fathers before conception of second infant when first infant was Rh positive.

ANS: A
Rh\textsubscript{o}(D) immune globulin, a human gamma globulin concentrate of anti-D, is administered to all unsensitized Rh-negative women after delivery or abortion of an Rh-positive infant or fetus.
39. The nurse is caring for a neonate receiving an exchange transfusion for hemolytic disease. Assessment of the infant reveals slight respiratory distress and tachycardia. The nurse’s first action should be which of the following?
   a. Notify practitioner.
   b. Stop the transfusion.
   c. Administer calcium gluconate.
   d. Monitor vital signs electronically.

ANS: B
When signs of cardiac or respiratory problems occur, the procedure is stopped, and the infant’s cardiorespiratory status is allowed to stabilize.

DIF: Cognitive Level: Analysis
REF: Page 284
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

40. Which of the following is the primary treatment for hypoglycemia in neonates?
   a. Oral glucose feedings
   b. Intravenous (IV) infusion of glucose
   c. Short-term insulin therapy
   d. Feedings (formula or breast milk) at least every 2 hours

ANS: B
IV infusions of glucose are indicated when the glucose level is very low and when feedings are not tolerated.

DIF: Cognitive Level: Comprehension
REF: Page 285
MSC: Area of Client Needs: Physiologic Integrity: Pharmacologic Therapies

41. Which of the following is the most appropriate nursing intervention for the neonate who is jittery and twitching and has a high-pitched cry?
   a. Monitor blood pressure closely.
   b. Obtain urine sample to detect glycosuria.
   c. Obtain serum glucose and serum calcium levels.
   d. Administer oral glucose or, if infant refuses to suck, IV dextrose.

ANS: C
These are signs and symptoms of hypocalcemia and hypoglycemia. A blood test is useful to determine the treatment.

DIF: Cognitive Level: Analysis
REF: Page 285
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

42. The nurse is planning care for a newborn receiving IV calcium gluconate for treatment of hypocalcemia. Which of the following interventions is the most appropriate during the acute phase?
a. Allow infant to sleep with pacifier to decrease stimuli.
b. Keep infant awake to monitor central nervous system changes.
c. Encourage parents to hold and feed infant to facilitate attachment during illness.
d. Awaken infant periodically to assess level of consciousness.

ANS:  A

For infants with hypocalcemia, the nurse should manipulate the environment to reduce stimuli that might precipitate a seizure or tremors.

DIF:  Cognitive Level: Application    REF:  Page 285
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

43. Which of the following is the central factor responsible for respiratory distress syndrome?
   a. Deficient surfactant production
   b. Overproduction of surfactant
   c. Overdeveloped alveoli
   d. Absence of alveoli

ANS:  A

The successful adaptation to extrauterine breathing requires numerous factors, which most term infants successfully accomplish. Preterm infants with respiratory distress are not able to adjust. The most likely central cause is the abnormal development of the surfactant system.

DIF:  Cognitive Level: Comprehension    REF:  Page 285
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

44. A preterm infant of 36 weeks of gestation is admitted to the NICU. Approximately 2 hours after birth, the neonate begins having difficulty breathing, with grunting, tachypnea, and nasal flaring. The nurse should recognize that:
   a. this is a normal finding.
   b. this is not significant unless cyanosis is present.
   c. improvement should occur within 24 hours.
   d. further evaluation is needed.

ANS:  D

These are clinical manifestations of respiratory distress syndrome and require further evaluation.

DIF:  Cognitive Level: Analysis    REF:  Page 286
MSC:  Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

45. The nurse is caring for a preterm neonate who requires mechanical ventilation for treatment of respiratory distress syndrome. The nurse should recognize that, because of the mechanical ventilation, there is an increased risk of which of the following?
a. Alveolar rupture  
b. Meconium aspiration  
c. Transient tachypnea  
d. Retractions and nasal flaring  

ANS: A  
Positive pressure introduced by mechanical apparatus has created an increase in the incidence of ruptured alveoli and subsequent pneumothorax and bronchopulmonary dysplasia.

DIF: Cognitive Level: Comprehension  
REF: Page 287  
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

46. The nurse is caring for a neonate with respiratory distress syndrome. The infant has an endotracheal tube. Nursing considerations related to suctioning should include which of the following?  
a. Suctioning should not be carried out routinely.  
b. Infant should be in Trendelenburg position for suctioning.  
c. Routine suctioning, usually every 15 minutes, is necessary.  
d. Frequent suctioning is necessary to maintain patency of bronchi.  

ANS: A  
Suctioning is not an innocuous procedure and can cause bronchospasm, bradycardia, hypoxia, and increased ICP. It should never be carried out routinely.

DIF: Cognitive Level: Comprehension  
REF: Page 288  
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

47. Which of the following are possible complications of the oxygen therapy and mechanical ventilation a premature infant often requires?  
a. Bronchopulmonary dysplasia  
b. Anemia, necrotizing enterocolitis  
c. Cerebral palsy, persistent patent ductus  
d. Congestive heart failure, cerebral edema  

ANS: A  
Oxygen therapy, although lifesaving, is not without hazards. The positive pressure created by mechanical ventilation creates an increase in the number of ruptured alveoli and subsequent pneumothorax and bronchopulmonary dysplasia.

DIF: Cognitive Level: Comprehension  
REF: Page 289  
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

48. Meconium aspiration syndrome is caused by which of the following?  
a. Hypoglycemia
b. Carbon dioxide retention  
c. Bowel obstruction with meconium  
d. Aspiration of meconium in utero or at birth  

ANS:  D  
Meconium aspiration syndrome is caused by the aspiration of amniotic fluid containing meconium into the fetal or newborn trachea in utero or at first breath.

DIF:  Cognitive Level: Comprehension  
REF:  Page 291  
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

49. Which of the following is the most common cause of anemia in preterm infants?  
a. Frequent blood sampling  
b. Respiratory distress syndrome  
c. Meconium aspiration syndrome  
d. Persistent pulmonary hypertension  

ANS:  A  
The most common cause of anemia in preterm infants is frequent blood-sample withdrawal and inadequate erythopoiesis in acutely ill infants. Microsamples should be used for blood tests, and the amount of blood drawn should be monitored.

DIF:  Cognitive Level: Comprehension  
REF:  Page 292  
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

50. A newborn is diagnosed with retinopathy of prematurity. The nurse should know that:  
a. blindness cannot be prevented.  
b. no treatment is currently available.  
c. cryotherapy and laser therapy are effective treatments.  
d. long-term administration of oxygen will be necessary.  

ANS:  C  
Cryotherapy and laser photocoagulation therapy can be used to minimize the vascular proliferation process that causes the retinal damage.

DIF:  Cognitive Level: Comprehension  
REF:  Page 293  
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

51. Several types of seizures can occur in the neonate. Which of the following is characteristic of clonic seizures?  
a. Apnea  
b. Tremors  
c. Rhythmic jerking movements  
d. Extensions of all four limbs

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ANS:  C
Clonic seizures are characterized by slow rhythmic jerking movements that occur approximately 1 to 3 per second.

DIF:  Cognitive Level: Comprehension    REF:  Page 294
MSC:  Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

52.  Neonates are highly susceptible to infection as a result of which of the following?
   a.  Excessive levels of immunoglobulin A (IgA) and immunoglobulin M (IgM)
   b.  Diminished nonspecific and specific immunity
   c.  Increased humoral immunity
   d.  Overwhelming antiinflammatory response

ANS:  B
Neonates have diminished inflammatory (nonspecific) and humoral (specific) immunity. They are unable to mount a local inflammatory reaction at the portal of entry to signal infection, and the resulting symptoms are vague and nonspecific, delaying diagnosis and treatment.

DIF:  Cognitive Level: Analysis    REF:  Page 296
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

53.  Which of the following is most descriptive of the clinical manifestations observed in neonatal sepsis?
   a.  Seizures and sunken fontanels
   b.  Sudden hyperthermia and profuse sweating
   c.  Decreased urinary output and frequent stools
   d.  Nonspecific physical signs with hypothermia

ANS:  D
The clinical manifestations of neonatal sepsis are usually characterized by the infant generally “not doing well.” Poor temperature control, usually with hypothermia, lethargy, poor feeding, pallor, cyanosis or mottling, and jaundice, may be evident.

DIF:  Cognitive Level: Application    REF:  Page 297
MSC:  Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

54.  The nurse is caring for a neonate whose mother is diabetic. Which of the following clinical manifestations would the nurse expect to see?
   a.  Hypoglycemic, large for gestational age
   b.  Hyperglycemic, large for gestational age
   c.  Hypoglycemic, small for gestational age
   d.  Hyperglycemic, small for gestational age

ANS:  A
The clinical manifestations of an infant born to a mother with diabetes include being large for gestational age, being plump and full faced, having abundant vernix caseosa, being listless and lethargic, and having hypoglycemia. These manifestations appear a short time after birth.

DIF: Cognitive Level: Comprehension  REF: Page 299
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

55. The nurse is caring for a male infant who was born 24 hours ago to a mother who received no prenatal care. The infant is a poor feeder but sucks avidly on his hands. Clinical manifestations also include loose stools, tachycardia, fever, projectile vomiting, sneezing, and generalized sweating. The nurse should suspect which of the following?
   a. Seizure disorder
   b. Narcotic withdrawal
   c. Placental insufficiency
   d. Meconium aspiration syndrome

ANS: B
Infants exposed to drugs in utero usually show no untoward effects until 12 to 24 hours for heroin or much longer for methadone. The infant usually has nonspecific signs that may coexist with other conditions such as hypocalcemia and hypoglycemia. In addition, these infants may have loose stools, tachycardia, fever, projectile vomiting, sneezing, and generalized sweating, which is uncommon in newborns.

DIF: Cognitive Level: Comprehension  REF: Page 300 | Page 302
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

56. Which of the following should the nurse anticipate in the infant whose mother used cocaine during pregnancy?
   a. Seizures
   b. Hyperglycemia
   c. Cardiac and respiratory problems
   d. Neurobehavioral depression or excitability

ANS: D
The nurse should anticipate neurobehavioral depression or excitability and implement care directed at the infant’s manifestations.

DIF: Cognitive Level: Comprehension  REF: Page 303
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

57. Which of the following genetic terms refers to the transfer of all or part of a chromosome to a different chromosome after chromosome breakage?
   a. Trisomy
b. Monosomy  
c. Translocation  
d. Nondisjunction  

ANS: C  
A translocation occurs when a part of a chromosome breaks off and attaches to another chromosome. When this occurs in the germ cells, the translocation can be transmitted to the next generation.  

DIF: Cognitive Level: Comprehension  
REF: Page 309  
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation  

58. Trisomy 13, trisomy 18, and trisomy 21 have which of the following in common?  
   a. Viability is rare.  
   b. They are considered deletion syndromes.  
   c. Diagnosis is difficult, time-consuming, and expensive.  
   d. Diagnosis can be made early, based on physical characteristics.  

ANS: D  
Each of these disorders, trisomy 13, 18, and 21, has unique physical characteristics. A presumptive diagnosis can often be made soon after birth and later confirmed by chromosomal analysis.  

DIF: Cognitive Level: Comprehension  
REF: Page 390  
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation  

59. Which of the following is characteristic of infants whose mothers smoked during pregnancy?  
   a. Large for gestational age  
   b. Preterm, but size appropriate for gestational age  
   c. Growth retardation in weight only  
   d. Growth retardation in weight, length, and head circumference  

ANS: D  
Infants born to mothers who smoke had growth failure in weight, length, and chest circumference when compared with infants of mothers who did not smoke. A dose-effect relation exists.  

DIF: Cognitive Level: Comprehension  
REF: Page 311  
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation  

60. Which of the following is an important nursing consideration in preventing the complications of congenital hypothyroidism (CH)?  
   a. Assess for family history of CH.  
   b. Assess mother for signs of hypothyroidism.
c. Be certain appropriate screening is done prenatally.
d. Be certain appropriate screening is done on newborn.

ANS: D

Early diagnosis and treatment are essential to prevent the complications of CH. Neonatal screening is mandatory in all 50 United States and territories and is usually obtained in the first 24 to 48 hours of birth.

DIF: Cognitive Level: Analysis       REF: Page 312
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

61. Phenylketonuria (PKU) is a genetic disease that results in the body’s inability correctly to metabolize:
   a. glucose.
   b. phenylalanine.
   c. phenylketones.
   d. thyroxine.

ANS: B

PKU is an inborn error of metabolism caused by a deficiency or absence of the enzyme needed to metabolize the essential amino acid phenylalanine.

DIF: Cognitive Level: Comprehension       REF: Page 313
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

62. The commonly used Guthrie blood test is performed on newborns to diagnose:
   a. Down syndrome.
   b. isoimmunization.
   c. PKU.
   d. congenital hypothyroidism (CH).

ANS: C

The Guthrie blood test is an assay commonly used to diagnosis PKU. The test should be performed after the infant has received postnatal feedings.

DIF: Cognitive Level: Comprehension       REF: Page 314
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

63. The screening test for PKU is most reliable if the blood sample is:
   a. from cord blood.
   b. taken 14 days after birth.
   c. taken before oral feedings are initiated.
   d. fresh blood from the heel.

ANS: D
Fresh heel-stick blood is the preferred source for the test.

DIF: Cognitive Level: Comprehension  REF: Page 314
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

64. Which of the following is an important nursing consideration in the care of the infant with PKU?
   a. Suggest ways to make formula more palatable.
   b. Teach proper administration of phenylalanine hydroxylase.
   c. Encourage the breastfeeding mother to adhere to low-phenylalanine diet.
   d. Give reassurance that dietary restrictions are a temporary inconvenience.

ANS: A
To achieve optimal metabolic control, a restricted phenylalanine diet will probably be required for virtually all individuals with classic PKU throughout life. The nurse and nutritionist should work with families to make the formula more palatable for the infant.

DIF: Cognitive Level: Comprehension  REF: Page 315
MSC: Area of Client Needs: Physiologic Integrity: Physiologic Adaptation

MULTIPLE RESPONSE

1. The nurse needs to obtain blood for ongoing assessment of a high-risk newborn’s progress. Select all the tests that the nurse would likely be monitoring.
   a. Blood glucose
   b. Complete blood count (CBC)
   c. Calcium
   d. Serum electrolytes
   e. Neonatal prothrombin time (PTT)

ANS: A, C, D
The most common blood tests done on high-risk newborns are blood glucose, bilirubin, calcium, hematocrit, serum electrolytes, and blood gases.

DIF: Cognitive Level: Comprehension  REF: Page 252
MSC: Area of Client Needs: Physiologic Integrity: Reduction of Risk Potential

2. Which of the following is a clinical manifestation of postmaturity in the neonate? (Select all that apply.)
   a. Excessive lanugo
   b. Increased subcutaneous fat
   c. Absence of scalp hair
   d. Parchment-like skin
   e. Minimal vernix caseosa
f. Long fingernails

ANS: D, E, F

In postmature infants, the skin is often cracked, parchment-like, and desquamating; there is little to no vernix caseosa; and fingernails are long.

DIF: Cognitive Level: Comprehension
REF: Page 273
MSC: Area of Client Needs: Health Promotion and Maintenance: Newborn Care