

Practice Exam Questions



RNC-NIC

Neonatal Intensive Care Nursing



EXAMAIDES

PASS YOUR EXAM AT FIRST TRY

Total Question: 175 QAs

Question No: 1

Which of the following is NOT a physical sign of cold stress in a neonate?

- A. Bradycardia
- B. Hypertonia
- C. Lethargy

Answer: B

Explanation: Hypertonia is not present in an infant experiencing cold stress. An infant can actually become hypotonic with lax muscle tone during cold stress situations- especially premature infants who may already exhibit some degree of hypotonia due to their immaturity. Hypotonia can also be seen in hypoxia, so it is important to determine the cause and correct it if possible. If an infant exhibits symptoms of hypertonia, investigation as to its cause and subsequent management is warranted.

Question No: 2

Hyperthermia is defined as a core body temperature above what temperature?

- A. 37.5 °C
- B. 38 °C
- C. 39 °C

Answer: A

Explanation: Normal body temperature range for a neonate is 36.5-37.5 °C (97.7-99.5 °F). According to the World Health Organization, hyperthermia is stated as being a core body temperature greater than 37.5°C. The other answers do indicate a hyperthermic state, but they are not the reference point for determining hyperthermia.

Question No: 3

A 29-week neonate presents with the following arterial blood gas values:

- pH - 7.36
- pCO₂ - 52
- HCO₃⁻ - 30

These values would indicate which of the following?

- A. Compensated metabolic acidosis
- B. Compensated respiratory acidosis
- C. Uncompensated respiratory acidosis

Answer: B

Explanation: In this scenario, a pH that is WNL (within normal limits) does not mean this is a normal blood gas. All measurements must be taken into consideration for proper interpretation. Acidosis or alkalosis has one of three causes: respiratory, metabolic, or mixed. Usually, in an otherwise healthy premature neonate, an abnormal blood gas is due to underdeveloped lungs which leads to a buildup of CO₂ in the bloodstream. The indicator for a respiratory imbalance is pCO₂. High pCO₂ usually indicates a case of respiratory acidosis. When coupled with a high level of HCO₃⁻ (bicarbonate- which is base), it is an indication of the body trying to compensate for the high CO₂ in the bloodstream. Whether an imbalance is compensated or uncompensated is determined solely by the pH. If the pH is within normal range, the state is compensated.

Question No: 4

What is the most common complication of ECMO (extra corporeal membrane oxygenation)?

- A. Bleeding
- B. Infection
- C. Thrombosis

Answer: A

Explanation: Bleeding is the most common complication of ECMO, probably due to the large amounts of heparin that are used to prevent the blood from clotting in the mechanical process. Bleeding can be seen in any internal organ, but is most concerning when it occurs in the brain. For this reason, infants on ECMO are frequently and regularly evaluated for intracranial hemorrhages.

Question No: 5

With regard to oxygen delivery, which of the following scenarios would be an appropriate indication for using a nasal cannula in an infant?

- A. A 32-week-old, gavage-fed infant who requires 2 lpm O₂ to maintain a SpO₂ greater than 90%
- B. A 33-week-old infant who requires FiO₂ of 0.5 (50%) to maintain SpO₂ greater than 90%
- C. A 34-week-old infant who is bottle-feeding and requires 0.5 lpm O₂ to maintain a SpO₂ greater than 90%

Answer: C

Explanation: Nasal cannulas are appropriate for infants that require less than 1 lpm (liter per minute) O₂. Cannulas will also allow for uninterrupted bottle feeding. Infant nasal cannulas will only provide an O₂ flow of less than 1 lpm. Infants that require higher flow rates or concentrations of FiO₂ greater than 0.4 (40%) will require alternate delivery methods.

Question No: 6

Maternal HELLP syndrome is characterized by which set of symptoms?

- A. Hemolysis, elevated liver enzymes, low platelet count
- B. Hemorrhage, episodic liver lesions, pulmonary insufficiency
- C. Hypertension, electrolyte loss, low protein

Answer: A

Explanation: HELLP syndrome is a triad of specific maternal hematologic findings, characterized by hemolysis, elevated liver enzymes, and low platelet count. It is believed that HELLP syndrome occurs in about 1:1500 normal pregnancies and is seen in as much as 20% of women who are exhibiting preeclampsia or eclampsia. The cause is unknown, and it is often misdiagnosed as other illnesses and/or conditions.

The only effective treatment of HELLP syndrome is delivery of the baby; therefore, the chance for premature delivery of the infant is high.

Question No: 7

What diseases comprise TORCH syndrome?

- A. Toxoplasmosis, Ollier disease, rheumatic fever, chlamydia, hepatitis
- B. Toxoplasmosis, other diseases, rubella, cytomegalovirus, herpes simplex
- C. Toxoplasmosis, ochronosis, Rh disease, cholera, histoplasmosis

Answer: B

Explanation: TORCH syndrome includes toxoplasmosis, other diseases, rubella, cytomegalovirus, and herpes

simplex. The "other" category of diseases in TORCH syndrome includes syphilis, coxsackievirus, varicella-zoster, parvovirus, and HIV. TORCH syndrome can cause multiple, devastating effects on the fetus/neonate including jaundice, microcephaly, intellectual disability, deafness, eye problems, autism, and death. Prognosis varies depending of type of infection and the stage of pregnancy when contracted. If the cause is bacterial and the mother is treated early with antibiotics, the prognosis for the infant is good. However, no effective treatment is available if the cause is viral. In the case of viral TORCH syndrome, prevention by way of maternal vaccination is key.

Question No: 8

Which of the following patient scenarios is NOT a candidate for mechanical ventilation?

- A. 27-week infant weighing 980 g, respiratory rate 80/min, mild retractions
- B. 34-week infant weighing 2400 g, respiratory rate 42/ min, in oxyhood at FiO₂ 30%
- C. 38-week infant weighing 3200 g, respiratory rate 60/min, grunting, marked retractions, in oxyhood at FiO₂ 45%, SpO₂ falling

Answer: B

Explanation: Many factors contribute to the need for mechanical ventilation in a neonate. One must take into consideration all aspects of respiratory function to determine if mechanical ventilation is necessary.

General guidelines include signs of impending respiratory failure (respiratory rate greater than 60/min, retractions, grunting, nasal flaring), apnea, and presence of existing respiratory failure. Other factors may also be indications for mechanical ventilation, including certain congenital anomalies that may interfere with respiration, septic infants, and infants weighing less than 1000 g.

Question No: 9

Which of the following infants are at LOW risk for insensible water loss?

- I. 28-week-old infant in an open-bed warmer
- II. 30-week-old infant in closed Isolette incubator
- III. Term infant, born on way to hospital
- IV. 36-week-old infant in open bassinet with respiratory rate 64/min

- A. I
- B. IV
- C. II

Answer: C

Explanation: Insensible water loss is defined as evaporative water loss through the skin and respiratory tract. Open-air warmers and bassinets can pose a risk for increased insensible water loss through the skin via exposure to environmental air currents. This is especially true with open warmers, as infants are either nude or just wearing a diaper, thus exposing a majority of skin to the surrounding air. This is why it's important to position warmers and bassinets out of drafts. Tachypnea (respiratory rate greater than 60/min) increases insensible water loss through rapid respiration. Babies born in uncontrolled environments are subject to greater insensible water loss due to improper drying and swaddling in the field.

Question No: 10

Which of the following is an indication for total parenteral nutrition?

- A. Short-gut syndrome
- B. Transient diarrhea

C. Vomiting

Answer: A

Explanation: Total parenteral nutrition (TPN) is a means of providing essential nutrients to the patient while bypassing the GI tract. Since this often requires long-term IV access, it is considered appropriate only when complete bowel rest is called for. In the neonate, this might include short-gut syndrome, gastroschisis, bowel obstruction, or prolonged diarrhea. TPN administration carries many risks, and must therefore be used only when medically necessary.

Question No: 11

Which of the following provides the appropriate daily caloric intake for the associated infant?

- A. Healthy 2500 g infant receiving 55 cc expressed human milk by gavage every 3 hours
- B. Healthy 3400 g infant receiving 3.5 oz fortified preterm formula by bottle every 4 hours
- C. Post-surgical 2800 g infant receiving 60cc half-strength formula by bottle every 3 hours

Answer: A

Explanation: The total daily calorie requirement for a normal, growing preterm infant is between 105-120 kcal/kg/day for enteral feedings. Human milk and regular formula contain 20 kcal/oz. Fortified preterm formulas contain 22-24 kcal/oz. Half-strength human milk or formula contains 10 kcal/oz. Parenteral nutritional requirements are about 20% less at 85-100 kcal/kg/day. Many factors come into play when determining appropriate caloric intake for an infant, including activity, body temperature, and stress level of the infant. Infants under more stress (like those who have just had surgery) will require more calories/day.

Question No: 12

Which of the following findings are associated with fetal alcohol syndrome?

- I. Large head
- II. Cardiac defects
- III. SGA (small for gestational age)
- IV. Delayed development

- A. I, III, IV
- B. I, II, III, IV
- C. II, III, IV

Answer: C

Explanation: Fetal alcohol syndrome (FAS) is characterized by cardiac defects (atrial or ventricular septal defects), small head, growth restriction, developmental delays, and facial abnormalities (small upper jaw, thin upper lip, small eyes with epicanthal folds). Most infants with FAS do not have normal brain development and will require work with many varied health care providers over the course of their life.

Question No: 13

What is a serious sequela regarding meconium aspiration in the infant?

- A. Cardiac anomalies
- B. Gastroschisis
- C. PPHN (persistent pulmonary hypertension of the newborn)

Answer: C

Explanation: The presence of meconium in the amniotic fluid can have dire consequences in the neonate if the neonate inhaled the meconium-stained fluid while in utero or during delivery. Meconium aspiration can

negatively impact an infant's lung function severely, and can cause a pneumothorax or PPHN. The symptoms of meconium aspiration may include cyanosis, respiratory distress with labored/ rapid breathing, slow heartbeat, and a barrel-shaped chest.

Question No: 14

What is the function of pulmonary surfactant in the neonate?

- A. Prevents bronchoconstriction of the smooth bronchial muscles
- B. Prevents alveolar collapse
- C. Increases surface tension in lungs to provide more structure

Answer: B

Explanation: Pulmonary surfactant is composed of proteins and phospholipids. It is a substance that is produced and secreted by the lungs. It reduces surface tension and acts as a lubrication of the alveolar surfaces. This prevents the walls of alveoli from sticking together during exhalation, preventing alveolar collapse. Preterm infants less than 32 weeks' gestation are at greater risk for having surfactant deficiencies, since adequate surfactant production usually occurs later in gestation. The leading cause of respiratory distress syndrome in neonates is pulmonary surfactant insufficiency.

Question No: 15

What is the most common cause of pneumothorax in a neonate?

- A. Atrial/septal defects
- B. RDS (respiratory distress syndrome)
- C. Shock

Answer: B

Explanation: Respiratory distress syndrome is a serious and fairly common problem for preterm neonates due to the lack of pulmonary surfactant needed to maintain alveolar integrity. When RDS is severe, the infant may require mechanical ventilation which significantly increases the air pressure in the neonatal lungs.

It is trauma from this increased air pressure on already-compromised and noncompliant alveoli that can cause them to rupture, thus causing pneumothoraxes in the neonate.

Question No: 16

A neonate presents with cyanotic legs and toes but upper extremities and head are pink.

Respiratory rate is 55/min and heart rate is 120/min with a loud murmur. What is the likely type of cyanosis that is exhibited?

- A. Central cardiac cyanosis
- B. Central pulmonary cyanosis
- C. Differential cyanosis

Answer: C

Explanation: There are three main types of cyanosis: central, peripheral, and differential. In differential cyanosis, the infant's lower extremities are usually cyanotic while the upper extremities and head remain pink. The main cause of differential cyanosis (DC) is the presence of a PDA (patent ductus arteriosus). DC occurs when unoxygenated blood is shunted through the PDA opening in the heart and is pumped out into the descending aorta to the lower extremities causing cyanosis in only the lower extremities. Large PDAs can cause very loud, mechanical-sounding murmurs.

Question No: 17

What conditions exist in Tetralogy of Fallot?

- I. Left ventricular hypertrophy
- II. Pulmonary stenosis
- III. Atrial septal defect
- IV. Overriding aorta

A. I, III

B. I, III, IV

C. II, IV

Answer: C

Explanation: Tetralogy of Fallot (ToF) is a congenital cardiac defect that occurs in approximately 1:2000 live births. It is characterized by the presence of four structural defects within and surrounding the heart. The four components are right ventricular hypertrophy, pulmonary stenosis, ventricular septal defect, and overriding aorta. ToF is the major cause of the so-called "blue baby syndrome."

Question No: 18

Being an ethical and responsible nurse requires which of the following?

- A. Keeping knowledge and skills current
- B. Making decisions independently
- C. Subjective charting

Answer: A

Explanation: In an ever-evolving field such as neonatology, it is vitally important to keep current on one's skills and knowledge base as new technologies and treatment modalities are continually being improved upon. It is also crucial to base charting on objective data that can be measured and quantified. Feelings are an important part of nursing, but they do not belong in the charting. Although it is beneficial that a nurse be able to work independently without requiring constant supervision, a nurse should always consult other colleagues in the decision-making process.

Question No: 19

Which of the following could be considered possible signs and symptoms of grief in the parents of an ill neonate?

- I. Palpitations, syncope, and vertigo
- II. Guilt and shame
- III. Nightmares, insomnia, and other sleep disturbances
- IV. Withdrawal from interpersonal relationships
- V. Hostility and agitation

A. I, III, IV

B. I, II, III, IV, V

C. II, IV, V

Answer: B

Explanation: Grief can manifest itself in many diverse ways. It is important to understand that grief can be expressed directly, come out "sideways," or be suppressed or turned inwardly. When grief is turned inward, it can have profound psycho-physiological effects that can manifest themselves in cardiac, respiratory, neuromuscular, or other somatic symptoms. When grief is expressed outwardly, significant changes in

behavior and personality can be observed. It's important to help parents identify and acknowledge their grief so that they might work through it in more positive ways.

Question No: 20

A baby was born at 30 weeks' gestation. She is going home on room air. She does well with bottle feedings and has successfully nursed twice in the NICU. The mother wants to continue breastfeeding at home. Which of the following topics would be important to include in the discharge planning/teaching at this time?

- A. Lactation consult
- B. Physical therapy
- C. Special equipment needs

Answer: A

Explanation: When discharging any infant whose mother plans on breastfeeding at home, it is always good practice to coordinate a lactation consult. This will ensure the best chance for successful home breastfeeding by providing a professional/competent source of evaluation, encouragement, training, and troubleshooting. Since this child is not going home with any special equipment, and is not exhibiting any physical problems that require therapy, it is not necessary to plan for physical/occupational therapy or additional durable medical equipment at this time. It is, however, important to teach the parents/caregivers about the potential developmental challenges associated with prematurity. Encourage the parents to call their healthcare provider if they develop any questions or concerns.

Question No: 21

Which of the following statements regarding anticipatory grieving is FALSE?

- A. It is common for parents to have feelings of guilt, shame, and remorse toward their malformed infant.
- B. It is normal for parents to display emotional withdrawal from a critically ill infant.
- C. It is normal for parents to exhibit persistent emotional detachment from their infant for long after the infant begins to show signs of improvement or survival.

Answer: C

Explanation: After delivery of a critically ill or malformed infant, parents often exhibit emotional withdrawal or detachment from the infant. This is a normal coping mechanism in which the parents are attempting (subconsciously) to shield themselves from feelings of sadness, guilt, disappointment, or shame. This behavior becomes pathologic and dysfunctional when it persists despite improvement in the infant's condition and subsequent imminent survival of the infant.

Question No: 22

Which of the following does NOT usually present a barrier to parent/infant interaction?

- A. Adolescent parents
- B. Involved, large extended family
- C. Well-educated parents

Answer: C

Explanation: Being well educated does not seem to negatively affect the parent/child interaction. In fact, it is the opposite that is the case. In parents who are of low-education levels (especially if the parents are also of a low intelligence level), a general lack of knowledge or decreased capacity for learning can cause significant problems with healthy parent/child interaction. The same holds true for young parents or parents with very large, overly involved families. The intentions of these families may be good, but often times can hinder

appropriate parent/child interactions.

Question No: 23

Which of the following genetic diseases is the common name for trisomy 18?

- A. Down syndrome
- B. Edwards syndrome
- C. Patau syndrome

Answer: B

Explanation: Edwards syndrome is a fairly common genetic condition that occurs in about 1:5000 live births. It is not an inherited disease. The chance of having a child with Edwards syndrome increases as the mother's age increases. Most children with Edwards syndrome are female (at a ratio of about 3:1).

Trisomy 18 is a devastating condition in which about 50% of all infants die in utero. Of those who survive, 95% die within the first year. It causes significant and devastating malformations and failures in multiple organ systems.

Question No: 24

What is the leading cause of hearing loss in infants?

- A. Congenital cytomegalovirus infection
- B. Intraventricular hemorrhage
- C. Side effect from maternal medication ingestion

Answer: A

Explanation: Congenital cytomegalovirus (CMV) occurs when an infected mother transmits the disease to her fetus.

It is estimated that the transmission rate from primarily infected mothers to their fetus is between 30- 50%. Of those infants born with congenital CMV, the vast majority will be asymptomatic and will not suffer any problems related to CMV later in their life. However, 10-15% of infants will exhibit symptoms that may include seizures, hepatosplenomegaly, hearing loss, and microcephaly.

Question No: 25

A boy was born at 35 weeks' gestation an hour ago. His mother was in labor for 26 hours and was running a fever of 38.5 °C during labor. During labor the mother had an intrauterine fetal monitoring device in place. The baby now has respiratory distress, cyanosis, a core body temperature of 36 °C, and is very lethargic. Which of the following is the most likely cause of his condition?

- A. Candidiasis
- B. Group B streptococcus
- C. MRSA (methicillin-resistant Staphylococcus aureus)

Answer: B

Explanation: Many factors put an infant at risk for developing group B Strep infections including a maternal fever greater than 38 °C, prolonged labor lasting over 18 hours, use of internal fetal monitoring devices, prematurity, and a mother who is positive for group B Strep. Mothers are now routinely screened for group B Strep between 37+0 to 37+6 weeks gestation. Treatment for group B Strep includes antibiotics, respiratory/ventilatory support, IV fluids, and oxygen therapy.

Question No: 26

Which of the following statements is usually associated with neonatal abstinence syndrome (NAS)?

- A. NAS can be caused by iatrogenic exposure of opiates to the neonate for the purpose of sedation and/or analgesia.
- B. Lethargy, hypotonia, and decreased reflexes are hallmark signs of NAS.
- C. Symptoms of withdrawal always appear immediately after birth and last 1-3 days.

Answer: A

Explanation: There are two causes of NAS: passive exposure to opioids and non-opioids in utero from a "using" mother through the placenta and iatrogenic exposure by the direct administration of opiates to the neonate. When the umbilical cord is cut, passive exposure immediately ends. Withdrawal symptoms can occur within hours after birth to up to 2 weeks of age. The majority of symptoms occur within 72 hours. NAS causes a host of symptoms including CNS hyperirritability, GI dysfunction, respiratory distress, increased and exaggerated reflexes, marked sleep disturbance, tremors, and restlessness.

Question No: 27

Which of the following are true regarding physiologic signs of pain in the neonate?

- I. Increased heart rate
- II. Increased oxygenation
- III. Changes in muscle tone
- IV. Different from those of adults
- V. Feeding difficulties

A. I, II, IV

B. I, II, III

C. I, III, V

Answer: C

Explanation: Physiologic signs of pain in the neonate are the same as they are in adults. Pain causes an increase in many metabolic processes including heart rate, blood pressure, ICP, and respiratory rate. It causes a decrease in oxygenation. It can manifest as hyper- or hypotonicity and can cause disturbances in sleeping and feeding patterns.

Question No: 28

What nonpharmacologic methods can be effective in reducing pain in the neonate?

- I. Swaddling
- II. Placing neonate in tucked, flexed, side lying position for procedures
- III. Subdued lighting
- IV. Music
- V. Use of white noise

A. I, III

B. I, II, V

C. I, II, III, IV, V

Answer: C

Explanation: There are many nonpharmacologic interventions that can lessen the severity of pain in the neonate. Comfort measures play an important role in pain management and may prevent the intensification of pain in the neonate. Comfort measures are effective in the alleviation of mild pain but, alone, they may be inadequate in cases of moderate to severe pain. Controlling the neonate's environment to decrease sensory

stimulation is a major component in providing effective comfort measures.

Question No: 29

What is the proper placement position of the neonate in kangaroo care?

- A. Swaddled tightly, cradled on caregiver's chest
- B. Unclothed (diaper is acceptable), placed vertically on caregiver's bare chest
- C. Unclothed, cradled on caregiver's lap

Answer: B

Explanation: Kangaroo care is a method of providing noninvasive, non-painful touch that is not associated with caregiving activities. Its purpose is to promote social contact between caregiver and neonate by providing a positive touch experience. This can help prevent the neonate from developing touch aversion. In kangaroo care, the infant is naked (with or without diaper) and is placed vertically on the bare chest of the caregiver between his/her breasts. This provides skin-to-skin full body contact which can have marked calming effects of the neonate. It may also promote parent/child bonding.

Question No: 30

A 6-day-old boy was born at 36 weeks' gestation. He weighs 6 lbs. He just underwent circumcision. What is the most appropriate dose of acetaminophen for pain control?

- A. 1 cc pediatric acetaminophen liquid, orally every 6 hours
- B. ½ of a 120 mg acetaminophen suppository, per rectum every 8 hours
- C. 0.3 cc concentrated infant acetaminophen drops, orally every 6 hours

Answer: A

Explanation: FDA guidelines recommend a dose of 10-15mg/kg of acetaminophen every 6 hours for neonates. For the infant in the given scenario, the dose range would be 27-41 mg. Using partial suppositories is not recommended because the exact dosing cannot be accurately determined. Though answer C used to be correct, the FDA has pulled the concentrated infant drops (80 mg/0.8 cc) off the market as of 2011. It is no longer available and has been replaced by pediatric-strength (160 mg/5 cc) liquid.

Question No: 31

Which of the following characteristics are most common in the average infant abductor?

- I. Female
 - II. Criminal record
 - III. Visits the nursery prior to the abduction
 - IV. Appears suspicious and paranoid
 - V. Desires to replace a lost infant or is unable to conceive
- A. I, II, V
 - B. I, III, IV
 - C. I, III, V

Answer: C

Explanation: Infant abductors are usually women around 30 years of age. They are often overweight with low self-esteem. Most have no prior criminal records. The majority of them exhibit normal behavior and will often visit the nursery prior to the abduction in order to learn about the security measures that are in place and to choose their target/targets. The motive for many of these abductors stems from wanting to either replace a child they've lost or because they are not able to conceive.

Question No: 32

What is one of the purposes of HIPAA regulations?

- A. Ensure patient confidentiality
- B. Provide a safe working environment for hospital employees
- C. Regulate hospital policies and procedures

Answer: A

Explanation: HIPAA is an acronym that stands for Health Insurance Portability and Accountability Act. It was established in 1996. Part 1 of the act protects the health care insurance coverage of workers and their families when they change job statuses. Part 2 of the act addresses many areas regarding the security and privacy of health information and data.

Question No: 33

Which of the following factors have been linked to SIDS?

- I. Prematurity
- II. Sleeping in prone position
- III. Being born to an older (over 35 years) mother
- IV Exposure to cigarette smoke while in the womb and after birth
- V. Hard mattresses

- A. I, II, IV
- B. I, II, III, V
- C. II, III, V

Answer: A

Explanation: According to the American Academy of Pediatrics, there are several known precipitating or contributing factors which have been linked with sudden infant death syndrome (SIDS). In addition to the factors listed, others include being born to a teenage mother, living in poverty conditions, soft bedding/mattresses, multiple birth babies (twins, triplets, etc.), the absence of prenatal care, and sleeping in the same bed as parents. It is important for the neonatal nurse to not only know these factors, but also to teach these to new parents.

Question No: 34

A couple expecting their first child seeks genetic counseling for a maternal family history of cystic fibrosis. The woman is a carrier of the cystic fibrosis gene but the man is not. What are the chances that their child will have cystic fibrosis disease?

- A. 1:2
- B. 25%
- C. 0%

Answer: C

Explanation: Cystic fibrosis (CF) is an autosomal recessive disease. This means that both parents must have the CF gene in order to possibly pass it on to their children. If only one parent possesses the CF gene, the chance that their child will have the disease is 0. The chance that their child will be a carrier of the CF gene is 1:2. The chance that their child will be completely normal is also 1:2.

Question No: 35

Which of the following symptoms are associated with an infant of a diabetic mother (IDM)?

- I. LGA
- II. Hyperglycemia
- III. Hypoglycemia
- IV. SGA
- V. Jaundice

A. I, II, III

B. I, III, V

C. I, IV, V

Answer: B

Explanation: The hallmark sign of an infant of a diabetic mother is that they are usually large for gestational age (LGA). They are also at great risk for developing hypoglycemia so it is important to monitor all IDM for hypoglycemia regardless of whether they are exhibiting symptoms or not. Newborn jaundice is also a common complication of IDM.

Question No: 36

An infant girl was born at 38 weeks by NSVD. Shortly after birth she presents with retractions and cyanosis at rest, but these symptoms resolve when she cries vigorously. She is also unable to nurse. What is a likely cause of this?

- A. Aspiration pneumonia
- B. Choanal atresia
- C. Respiratory distress syndrome

Answer: B

Explanation: Choanal atresia is a congenital condition in which the nasal passages are extremely narrowed or completely blocked by tissue. Since babies are obligate nose-breathers, they will attempt breathing through their nose. When this is not possible, retractions and cyanosis will ensue as the baby attempts nose-breathing. Because of the size/configuration of the infant tongue and soft palate, the oral airway is easily obstructed when the infant is at rest. When the infant cries, the palate raises and the tongue moves enough to temporarily open the airway. Bilateral choanal atresia can be life-threatening. It can be corrected surgically through the insertion of nasal stints.

Question No: 37

What are common risks associated with post-term infants?

- I. Meconium aspiration
- II. Cord compression
- III. Shoulder dystocia
- IV. Transient hypoglycemia
- V. Seizures

A. I, III, IV

B. I, II

C. I, II, III, IV, V

Answer: C

Explanation: Post-term infants (born at greater than 41 weeks' gestation) are at risk for developing a host of problems. First and foremost, they are at risk for meconium aspiration since a large number of post-term

infants pass meconium in utero. Umbilical cord compression is a potentially serious problem as a result of oligohydramnios, which can occur post-term. Since most post-term babies are large, there is the possibility for macrosomia-related problems and subsequent birth injuries. Other potential problems include hypoglycemia, seizures, and respiratory insufficiency.

Question No: 38

What is the recommended dose of naloxone in neonates who are exhibiting moderate respiratory depression?

- A. 0.01 mg/kg
- B. 0.1 mg/kg
- C. 1 mg/kg

Answer: A

Explanation: The usual dose of naloxone in an infant who is showing moderate respiratory depression from exposure to narcotic analgesics is 0.01 mg/kg given IM, IV, or SC. If the infant is in severe respiratory distress and requires mechanical ventilation from a narcotic overdose, a high dose of naloxone (0.1 mg/kg) is indicated.

Question No: 39

With regard to resuscitation, chest compressions (cardiac massage) should be initiated in a neonate when heart rate dips below what value (assuming adequate and effective ventilation is in place)?

- A. 60 bpm
- B. 90 bpm
- C. 120 bpm

Answer: A

Explanation: Per the American Heart Association, the current recommendation is that external chest compressions be given if the heart rate is sustained below 60 bpm if adequate assisted ventilation with oxygen is in place. The rate of compressions should be about 90/min with 30 coordinated breaths per minute.

Question No: 40

What is the Kleihauer-Betke test used to determine?

- A. Apnea of prematurity
- B. Fetal blood loss
- C. Respiratory insufficiency

Answer: B

Explanation: The Kleihauer-Betke test is a blood test that determines the presence and quantity of fetal hemoglobin in the mother's bloodstream. Fetal hemoglobin retains its red staining while adult hemoglobin becomes very pale after fixing. The presence of 10 fetal hemoglobin cells per microscope field is equivalent to approximately 1 cc of fetal blood. This is an effective method in determining the extent of fetal blood loss.

Question No: 41

Which pathogen is responsible for most nosocomial infections in the NICU?

- A. Group B Streptococci
- B. Rotavirus
- C. Staphylococcus aureus

Answer: C

Explanation: Methicillin-resistant Staphylococcus aureus (MRSA) is the primary strain of bacteria that is

responsible for most cases of hospital-acquired infection/illness. MRSA has become the most prevalent and potentially dangerous pathogen found in hospitals today. It has evolved to the point where it has become resistant to many, if not most, antibiotics.

Question No: 42

Which of the following is NOT an effective method in preventing nosocomial infections in the NICU?

- A. Frequent handwashing
- B. Keeping infants on ventilators as long as possible to maintain a closed sterile system of ventilation
- C. Starting enteral feedings as soon as possible

Answer: B

Explanation: Hospital-acquired pneumonia is a common nosocomial infection in the NICU. By rapidly weaning infants off mechanical ventilators as quickly as is medically safe, the risk for developing nosocomial pneumonia is greatly reduced because the pathogen's method of entry into the host is eliminated at the time of extubation.

Question No: 43

Which of the following factors would interfere with the measurement of oxygen saturation (SpO₂)?

- I. Bright ambient lights
- II. Shivering
- III. Cold extremities
- IV. Vasodilation
- V. Placing probe on lower extremities

A. I, II, III

B. I, II, IV

C. I, II, V

Answer: A

Explanation: SpO₂ is the percent of hemoglobin that is saturated with oxygen. The pulse oximeter is a device used to measure SpO₂. The pulse oximeter uses a noninvasive probe that is attached to a finger or toe. It works by emitting light and calculating the absorption of specific wavelengths of light to determine how much of the hemoglobin is saturated. Because the machine utilizes a light source, any bright external light could potentially interfere with its functioning. Factors like vasoconstriction or shivering can interfere with the probe's ability to accurately measure the hemoglobin. This is why it's important to make certain the patient's peripheral perfusion is adequate and that the patient is kept calm and still if possible.

Question No: 44

Which of the following initial stabilization measures should be instituted during the delivery of an infant with a known omphalocele in the NICU?

- I. Place infant in supine position.
- II. Cover exposed organs with saline-soaked gauze.
- III. Insert orogastric tube.
- IV. Insert UAC/UVC lines.
- V. Closely monitor temperature and urine output.

A. I, II, III, V

B. II, III, V