

**UNIVERSITY OF FORT HARE****DESCRIPTION OF MODULE****Midwifery B****MODULE CODE****NBM422E****DEGREE EXAMINATIONS****November****YEAR 2019****Time: 3 hours****Subject: NBM422E****Marks: 100****This paper consists of 12 pages including the cover page****Internal Examiners****Prof V C Nikodem****External Examiners****Ms Ms H Ekole Chabanga****INSTRUCTIONS**

- 1 All questions are compulsory.
- 2 MCQ counts 1 mark per question
- 3 Choose ONLY one answer for each MCQ
- 4 Answer the MCQ's in your **EXAM SCRIPT** as follow:
  - 1.1 A
  - 1.2 B
  - 1.3 C

**Question 1.1****1**

The midwife is discussing the neonatal blood screening test with a mother. Which one of the following is NOT included in the screening test?

- A) Hypothyroidism
- B) Sickle cell anaemia
- C) Galactosaemia
- D) Cerebral palsy

**Question 1.2****1**

The midwife is careful to wear gloves when admitting neonates into the nursery. Which of the following is the scientific rationale for this action?

- A) Meconium contain enteric bacteria
- B) Amniotic fluid may contain harmful viruses
- C) The high alkalinity of foetal urine is caustic to the skin
- D) The baby is high risk for infection and must be protected

**Question 1.3****1**

To reduce the risk of hypoglycaemia in a full-term neonate weighing 2900 grams, what should the nurse do?

- A) Maintain the infant's temperature above 36.5°C
- B) Feed the infant glucose water every 3 hours until breastfeeding well
- C) Encourage the mother to breastfeed every 4 hours
- D) Assess blood glucose levels every 3 hours for the first twelve hours

**Question 1.4****1**

A mother in the postnatal ward had a precipitated labour of two hours. She ask the midwife why is her baby's face "purple." Upon examination, the midwife notes petechiae over the scalp, forehead, and cheeks of the baby. What would be the best response?

- A) Petechiae are indicative of severe bacterial infections
- B) Rapid deliveries can injure the neonatal presenting part causing petechiae
- C) Petechiae are characteristic of the normal neonate rash
- D) The injuries are a sign that the neonate has been abused

**Question 1.5****1**

A 2-day-old breastfeeding baby born via normal spontaneous vaginal delivery has just been weighed in the neonate nursery. The nurse determines that the baby has lost 3.5% of the birth weight. Which of the following nursing actions is appropriate?

- A) Do nothing because this is a normal weight loss
- B) Notify the neonatologist of the significant weight loss
- C) Advise the mother to bottle feed the baby at the next feed
- D) Assess the baby for hypoglycaemia with a glucose monitor

**Question 1.6****1**

You are doing a postnatal ward round 12 hours after delivery. Which neonate should be reported to the neonatologist?

- A) A baby who has not yet to pass meconium
- B) A baby whose blood glucose is 4 mmol/L
- C) A baby who is breathing irregularly at 70 breaths per minute
- D) A baby who is excreting a milky discharge from both nipples

**Question 1.7****1**

You are doing a postnatal ward round 12 hours after delivery. Which neonate should be reported to the neonatologist? A neonate presented with:

- A) An umbilical cord with three vessels
- B) A diamond-shaped anterior fontanelle
- C) Cryptorchidism
- D) A nevus simplex spot

**Question 1.8****1**

You are doing a postnatal ward round 12 hours after delivery. Which of the following would you reported for further investigation?

- A) Purple-coloured patches on the buttocks
- B) Petechiae on the eyelids
- C) Slight pinkish discharge form the vagina
- D) A deep, hair-covered, dimple at the base of the spine

**Question 1.9****1**

Which baby is at the highest risk to develop complications?

- A) Baby with respiration rate of 42 and oxygen saturation 96
- B) Baby with Apgar 9/10 at 10 minutes with a weight 4660 grams
- C) Baby with temperature of 36.7°C and a length of 54 cm
- D) Baby with glucose of 4 mMol/l and a heart rate of 120 bpm.

**Question 1.10****1**

To check for the presence of Epstein's pearls, the nurse should assess which part of the neonate's body?

- A) Feet
- B) Hands
- C) Mouth
- D) Back

**Question 1.11****1**

The midwife is doing a neonatal examination. Which finding should be reported to the neonatologist?

- A) The eyes cross and uncross when they are open
- B) The ears are positioned in alignment with the inner and outer canthus of the eyes
- C) Axillae and femoral folds of the baby are covered with a white cheesy substance
- D) The nostrils flare whenever the baby inhales

**Question 1.12****1**

The midwife assesses the neonate at 5 minutes after birth and found the following: Pink body with bluish hands and feet; Heart rate 110 bpm; There is grimacing for reflex to stimulation; There is some muscle tone; Respirations are slow or irregular. What was the Apgar score?

- A) 6
- B) 7
- C) 8
- D) 9

**Question 1.13****1**

Which of the following indicate that the neonate may have Hirshsprung disease (lack of parasympathetic innervation to distal colon)

- A) Tachycardia
- B) Rash
- C) Asymmetrical leg folds
- D) Delayed meconium excretion

**Question 1.14**

1

The mother notes that her baby has a “bulge” on the back of **ONE** side of the head. She calls you and ask what the bulge is. You noticed that bulge covers the right parietal bone but does NOT cross the suture lines. What would you inform the mother?

- A) The bulge is just a sign of moulding which help the baby to fit through her pelvis
- B) Swelling of the tissues of the baby’s head from the pressure during pushing
- C) The position that the baby took in her pelvis during the last trimester of her Pregnancy
- D) Cephalhaematoma or a subcutaneous swelling due to accumulated blood from the trauma of delivery.

**Question 1.15**

1

Twin to twin transfusion may occur in monochorionic twins because they share the same placenta. Which one is correct?

- A) The recipient twin develops intrauterine growth impairment
- B) The recipient twin is at highest risk for possible hyperbilirubinemia
- C) The recipient twin is hypovolemic
- D) The recipient twin is pale and small

**Question 1.16**

1

A neonate has an elevated bilirubin and is slightly jaundiced on day 3 of life. What is the probable reason for these changes?

- A) Haemolysis of neonatal red blood cells by the maternal antibodies
- B) Physiological destruction of foetal red blood cells during the extra-uterine period
- C) Pathological liver function resulting from hypoxemia during the birthing process
- D) Delayed meconium excretion resulting in the production of direct bilirubin

**Question 1.17**

1

Which is the rationale to prescribe Vitamin K 1 mg for a term Neonate?

- A) Is that neonates absorb fat-soluble vitamins poorly
- B) Breast milk contain insufficient quantities of vitamin K
- C) The neonatal gut is sterile
- D) To prevent haemorrhagic disease

**Question 1.18****1**

The midwife observes a healthy woman expressing breast milk into her baby's eyes. Which of the following responses by the nurse is appropriate at this time?

- A) Report the abusive behaviour to the social worker.
- B) Advise the mother that her action is potentially dangerous.
- C) Observe the mother for other signs of irrational behaviour.
- D) Ask the woman about other cultural traditions.

**Question 1.19****1**

The neonate received a vitamin K injection at birth. Which of the following signs/symptoms in the baby would indicate that the treatment was effective?

- A) Skin colour is pink
- B) Vital signs are normal
- C) Blood clots after heel sticks
- D) Glucose levels are stable

**Question 1.20****1**

The recommended room temperature for maintaining warmth for neonates is a \_\_\_\_

- A) 23°C
- B) 24°C
- C) 25°C
- D) 26°C

**Question 1.21****1**

The infant mortality rate in South Africa is estimate to be 37 deaths during 2018. What does it mean?

- A) About 37 babies less than 28 days old per 1000 live births died
- B) About 37 babies less than 1 year old per 1000 live births died
- C) About 37 babies less than 28 days old per 100,000 births died
- D) About 37 babies less than 1 year old per 100,000 births died

**Question 1.22****1**

Which statement is **FALSE** regarding normal birth?

- A) Most babies are cyanosed at birth
- B) Foetal blood oxygen levels can be 30–45 mmHg without causing brain damage
- C) If cord blood is collected, the umbilical arterial pH will be higher than the umbilical vein pH.
- D) The foetal brain can use alternative fuels such as ketones if the supply of glucose

is interrupted

**Question 1.23**

1

Which one of the following statements is **FALSE** in regards to perinatal hypoxia?

- A) If a baby has suffered from in-utero asphyxia and is not breathing at birth, then they will automatically start breathing again
- B) Primary apnoea will normally be followed gasping activity
- C) Terminal apnoea will be preceded by gasping
- D) Primary apnoea will be preceded by an asphyxia insult

**Question 1.24**

1

All **but ONE** of the following maternal infections have been associated with microcephaly in the foetus?

- A) Zikka virus
- B) Cytomegaly virus
- C) Rubella virus
- D) Hepatitis B infection

**Question 1.25**

1

Which of the following is true of small for gestational age (SGA) babies?

- A) Asymmetrical intra uterine growth impairment usually reflects a foetal disease process
- B) Small mothers tend to have small babies
- C) IUGI babies have more respiratory distress at birth
- D) The long-term prognosis for IUGI babies is better than for macrosomic babies

**Question 1.26**

1

Which one of the following is the most likely cause of jaundice presenting in the first 24 hours of life?

- A) Prematurity
- B) Haemolysis
- C) Breastfeeding
- D) Physiological jaundice

**Question 1.27**

1

Which one of the following is the **MAJOR** contributor to the development of physiological jaundice?

- A) Breastfeeding
- B) Decreased hepatic bilirubin excretion
- C) Immature hepatic enzymes
- D) Increased bilirubin production



**Question 1.33**

1

**Which one of the following statements is TRUE of maternal substance abuse?**

- A) The commonest drugs to cause neonatal withdrawal are opiates.
- B) All infants born to mothers who used cocaine should have a brain scan.
- C) Withdrawal from methadone typically occurs sooner than withdrawal from heroin.
- D) Mothers who are on a methadone should breastfeed.

**Question 1.34**

1

**An infant is born at 36 weeks gestation with an Apgar score of 3/10 at one minute, and 4 /10 at five minutes and 6/10 at 10 Minutes. Which of the following is NOT part of the treatment regime for neonatal resuscitation for this neonate?**

- A) Glucose
- B) Dexamethasone
- C) Sodium Bicarbonate
- D) Plasma Volume Expander

**Question 1.35**

1

**Physiological jaundice is the most likely cause of an infant that presents with;**

- A) Jaundice at 14 days of age
- B) A serum bilirubin of 18 mg/dL at 2 days of age
- C) Yellow colouring of cornea and mucus membranes 6 hours after birth
- D) A serum bilirubin level increasing first 2-4 days

**Question 1.36**

1

**Which one of the following statements is FALSE**

- A) Women who smoke during pregnancy are more likely to have a baby with an orofacial cleft.
- B) Women with diabetes diagnosed before pregnancy have been shown to be an increased risk of having a child with a cleft lip.
- C) Cleft lip and cleft palate are thought to be caused by a combination of genes and other factors, such as exposures in the environment, maternal diet, and medication use.
- D) The use of folic acid and vitamin B12 before and during pregnancy may increase the risk of cleft lip and palate.

**Question 1.37****1****Apnoea is diagnosed when**

- A) An infant stops breathing for 5 seconds
- B) An infant stops breathing for 15 seconds but remains pink.
- C) An infant becomes cyanosed but does not stop breathing
- D) An infant stops breathing for 20 seconds and develops cyanosis & bradycardia

**Question 1.38****1**

Blueberry muffin appearance in neonates is the characteristic distributed purpura occurring as a result of:

- A) Extramedullary haematopoiesis
- B) Bacterial lesions
- C) Vit K deficiency
- D) None of these

**Question 1.39****1**

Transient tachypnoea of the neonate occurs most frequently in ...

- A) Term neonates who were delivered vaginally
- B) Premature neonates who were delivered vaginally
- C) Premature neonates who were delivered by caesarean section
- D) Term neonates who were delivered by caesarean section

**Question 1.40****1**

Which one is the rarest manifestation of zinc deficiency in breastfeed infants?

- Alopecia
- Diarrhoea
- Failure to thrive
- Rash

**Question 2****2**

**Baby Alexa was born via a vacuum extraction and has a 'chignon'. Differentiate between a Chignon and a cephalohaematoma**

**Question 3****4**

**Explain the difference between foetal hypoxaemia and asphyxia neonatorum**

**Question 4****4**

**Baby Apheleni, born at 40 weeks gestation, weighs 2 100 grams. Considering these details:**

**4.1) Identify and define the possible disorder (2)**

**4.2) Mention two possible neonatal complications that baby Apheleni may experience (2)**

**Question 5****10**

**Prematurity remains a major problem as it is associated with significant morbidity and mortality rates and is often preventable. Many of the causes remain unknown although several factors are considered to predispose to premature labour.**

**Explain known maternal, foetal and placental factors associated with prematurity.**

**Question 6****[16]**

Hypoglycaemia in the first few days after birth is defined as blood glucose <40 mg/dL. In preterm infants, repeated blood glucose levels below 50 mg/dL may be associated with neurodevelopmental delay.

**6.1) List the signs and symptoms of hypoglycaemia (3)**

**6.2) Describe the possible etiology / conditions associated with an increased risk for neonatal hypoglycaemia. (5)**

**6.3) Discuss the management of a SEVERE hypoglycaemic neonate (8)**

**Question 7****24**

The asphyxiated infant has low oxygen levels, elevated carbon dioxide and low blood pH. This condition contributes to vasospasm of the pulmonary arterioles and increased resistance to blood flow to the lungs after birth. The weak gasp of the asphyxiated neonate cannot overcome this resistance. As hypoxia continues, the heart rate slows down and the myocardium contracts ineffectively.

**Apply your knowledge and explain in detail how you would resuscitate the infant.**