

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MIDWIFERY SCIENCE
FINAL EXAMINATION: NOVEMBER 2021

COURSE TITLE: NEONATE WITH COMPLICATIONS

COURSE CODE: MWF408/MID508

TIME ALLOCATED: 2 HOURS

MARKS ALLOCATED: 75

INSTRUCTIONS:

1. ANSWER ALL QUESTIONS
2. USE THE PROVIDED ANSWER BOOKLET FOR ALL YOUR ANSWERS
3. START ALL QUESTIONS ON A NEW PAGE
4. USE BULLETS TO EXPRESS EACH POINT IN YOUR RESPONSES (DO NOT INVENT YOUR OWN NUMBERING)
5. CHECK THAT YOUR QUESTION PAPER HAS 6 PRINTED PAGES
6. DO NOT OPEN THE QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

QUESTION 1: Multiple Choice Questions

For each of the following questions, in your answer booklet, write clearly only the letter that corresponds with the most appropriate answer e.g. 1.16 D

1.1 Which of the following is a characteristic of a premature neonate?

- A. Large abdomen compared to a normal neonate
- B. Large head circumference compared to a post term neonate
- C. No difference in body size for a premature and full-term neonate
- D. Aligned body size for all neonates irrespective of their gestational age

1.2 Which of the following is characteristic of the breathing pattern of a preterm neonate born before 32 weeks of gestation?

- A. Regular abdominal breathing
- B. Intercostals breathing
- C. Sternal retraction
- D. Cheyne- stroke respirations

1.3 A pregnant woman presents to the Mbabane Government Hospital with spontaneous rupture of membranes and contractions. The obstetrician orders antenatal steroids and antibiotics. Although tocolysis is attempted, her labour progresses and she delivers a preterm infant at 28 weeks' gestation with a birth weight of 1 200g. Which of the following terms best describes this infant?

- A. Low-birth-weight (LBW) infant
- B. Very low-birth-weight (VLBW) infant
- C. Extremely low-birth-weight (ELBW) infant
- D. Micropremie

1.4 Which of following terms refers to a severe form of jaundice?

- A. Kernicterus
- B. Physiological
- C. Pathological
- D. Icterus gravis

- 1.5 A severe infection of the umbilical cord that is diagnosed among women who give birth at home is referred to as:
- A. Omphalitis
 - B. Septicaemia
 - C. Neonatal tetanus
 - D. Skin infection
- 1.6 Which of the following neonatal brachial plexus palsies can result following injury to the roots of the fifth and sixth cranial nerves?
- A. Klumpke's palsy
 - B. Erb's palsy
 - C. Total brachial plexus palsy
 - D. Erb's-Klumpke's palsy
- 1.7 After delivery, a neonate is brought over to a radiant warmer. The midwife begins to dry the baby and provides stimulation. Because the neonate does not have any respiratory effort, the midwife provides bag-mask ventilation and places a pulse oximeter on the neonate's right wrist. The midwife notices that the infant's heart rate is 80 beats per minute. She continues to provide positive-pressure ventilation. At 1 minute of age, she notes that the infant has: a heart rate of 78 beats per minute; an oxygen saturation of 65%; no respiratory effort; no spontaneous movements; no tone; poor perfusion. Which of the following figures corresponds to this neonate's Apgar score at 1 minute?
- A. 0/10
 - B. 1/10
 - C. 2/10
 - D. 3/10
- 1.8 Which of the following is the physiologic reason why premature infants often cannot achieve an Apgar score above 6?
- A. A low resting heart rate
 - B. Neurologic immaturity
 - C. Persistence of fetal circulation
 - D. Poor perfusion

- 1.9 A respiratory therapist administers surfactant through the infant's endotracheal tube. Which of the following is the most likely effect of the synthetic surfactant administered to this neonate?
- A. Decrease/reduce alveolar surface tension
 - B. Increase the pressure needed to keep alveoli open
 - C. Maintain bronchiolar patency
 - D. Preferentially increase the surface tension of collapsed alveoli
- 1.10 Which of the following is a physical characteristic of a post-mature neonate at birth
- A. Large abdomen compared to pre-term neonate
 - B. Hard skull bones compared to a term neonate
 - C. Skin covered with lanugo
 - D. Aligned body size for all neonates irrespective of their gestational age
- 1.11 Which of the following neonates are at risk of developing asphyxia neonatorum?
- A. All neonates irrespective of gestational age
 - B. Neonates who are born at home
 - C. Neonates whose mothers did not attend antenatal care services
 - D. Neonates who were subjected to prolonged labour
- 1.12 A pre-mature neonate was born at home on a rainy cold day. Which of the following pieces of advice would you give to the neonate's mother regarding warming the neonate while she transports her to the neonatal ward?
- A. Warm the neonate using a hot water bottle
 - B. Cover the neonate's entire body with cotton wool and a plastic bag
 - C. Wash the neonate with warm water
 - D. Keep neonate skin to skin contact with mother and cover with warm blankets
- 1.13 Which of the following neonates will have more red blood cells at birth?
- A. Preterm
 - B. Post-term
 - C. Full-term
 - D. Large for gestational age

1.14 Which of the following is/are sign(s) signs of congenital syphilis in the neonate?

- A. Enlarged liver
- B. Failure to thrive
- C. Sores on the palm of hands and feet
- D. All the above responses are relevant

1.15 On the fifth day of life, a neonate has five pauses in breathing, each lasting 15 seconds, and followed by cyanosis and bradycardia. These apneic events occur over a period of 1 hour. The midwife meets with the baby's mother to discuss possible causes for this infant's breathing pattern. Which of the following is the least likely etiology for this infant's apnea?

- A. Anemia
- B. Infection
- C. Prematurity
- D. Reflux

QUESTION 2

Read the following scenario and answer the questions that follow:

A neonate who is 24 hours old is assessed by the midwife before discharge. The neonate initially breastfed well during the first 8 hours of life, but has not had a good feed in the past 12 hours. The infant has been getting fussier and is now inconsolable. The heart rate is 172, respiratory rate 66, and temperature is 37.2°C. The mom states that the baby will not latch and feed, even though he did earlier. The baby has voided but has not passed any meconium. The midwife notices during her assessment that the baby's abdomen is distended, and the skin appears shiny. The rest of the baby's assessment is normal.

2.1 State the condition that the neonate in the above scenario could be having? [2]

2.2 Explain the immediate action by the midwife in the above scenario. Give a rationale for your answer. [3]

[Total: 5 marks]

QUESTION 3

3.1 Explain why the following groups of neonates are at a higher risk of developing severe jaundice:

3.1.1 Premature neonates [8]

3.1.2 Neonates who have acquired infection [5]

3.2 Discuss the midwifery care of a neonate receiving phototherapy. Support your discussion with relevant rationales. [17]

[Total: 25 marks]

QUESTION 4

Preterm babies face multiple risks than their full-term counterparts. Discuss eight (8) risks specifically faced by preterm babies and explain why they face those risks. [25]

[Total: 25 marks]