

**UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MIDWIFERY SCIENCE
FINAL EXAMINATION: MAY 2018**

TITLE OF PAPER: THE NEONATE WITH COMPLICATIONS

COURSE CODE: MID/MWF408/508

DURATION: 2 HOURS

TOTAL MARKS: 75 MARKS

INSTRUCTIONS

- 1. ANSWER ALL QUESTIONS**
- 2. FIGURES IN BRACKETS INDICATES MARKS ALLOCATED FOR EACH OR PART OF QUESTION**
- 3. START EACH SECTION ON A NEW PAGE**
- 4. KINGLY USE BULLETS FOR EACH POINT IN YOUR ANSWER WHERE POSITION**

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SECTION A

MULTIPLE CHOICE QUESTIONS: CHOOSE THE CORRECT ANSWER. INDICATE IN YOUR ANSWER BOOK e.g. 1. A

1. Miss Zama Mavuso a 24 years old G1P0 at 40 weeks gestation who came complaining of strong labour pain with urge to push. On vaginal exam the cervix was fully dilated. Labour progressed to a male neonate with Apgar score of 2/10 in 1 minute with very poor breathing patterns in 60 seconds. The baby's birth weight was 1.8 kg. Use the above statement to answer the question 1 to 6. What is the possible diagnosis for the neonate?
 - A. Neonatal sepsis
 - B. Prematurity
 - C. Meconium aspiration
 - D. Neonoturum asphyxia
2. Which of the following is the possible cause of the neonatal condition identified in question 1?
 - A. Prematurity
 - B. Foetal distress
 - C. Placenta Praevia
 - D. Intrauterine growth restriction (IUGR)
3. Using the above Apgar scoring how severe is the diagnosis identified in question 1
 - A. Moderate
 - B. Mild
 - C. Severe
 - D. None of the above
4. With the understanding of the physiology of when a neonate is deprived of oxygen identify in which category can the above neonate fall into?
 - A. Primary apnoea
 - B. Secondary apnoea
 - C. Secondary anoxia
 - D. None of the above
5. In the management of the above neonate the objective of resuscitation is all **Except**
 - A. Obtain a normal respiratory rate and pattern
 - B. To decrease heart rate
 - C. To obtain a normal general activity level
 - D. None of the above

6. The following statements are true for WHO guidelines for neonatal resuscitation **Except**
- A. When a neonate continues to have a heart rate of less than 60/minute after 1 minute of positive pressure ventilation, chest compressions in addition to PPV should be considered.
 - B. Chest compression should be done at a ratio of 90 compressions and 30 breaths to achieve approximately 120 events per 1 second
 - C. It is better to use 2-thumbs than 2-fingers when doing chest compressions
 - D. Neonates with no detectable heart rate after 10 minutes of effective ventilation, resuscitation should be stopped
7. Which of the following characteristics will a preterm neonate display?
- A. Lanugo abundant, planter creases poorly defined
 - B. Well curved pinna, readily to recoil
 - C. Raised breast areola, wrinkled skin
 - D. Lanugo mostly bald, testicles penbulous with deep rugae
8. Lack of hyaline membrane in the alveoli is a common condition in neonates born at which gestation age
- A. At term
 - B. Post mature
 - C. Premature
 - D. All of the above is correct
9. Which of the following symptoms does a neonate born with hyaline membranous disease typically present with?
- A. Difficult in expiration
 - B. Difficult in inspiration
 - C. Difficult in both inspiration and expiration
 - D. Breathing failure
10. Identify one of the following risk conditions common to immature neonates
- A. Physiologic jaundice
 - B. Respiratory distress syndrome
 - C. Calcaemia
 - D. Enlarged adrenal gland
11. From the list provided, identify one sign that can be demonstrated by a neonate who has sustained cerebral injury.
- A. Feeble cry
 - B. Convulsions
 - C. Bleeding
 - D. Thriving
12. Which one of the following is regarded as quality improvement care for maintaining warmth on premature neonates?
- A. Nursing neonates in an incubator
 - B. Keeping neonates in mother's bed (bedding in)
 - C. Kangaroo Mother care (KMC)
 - D. Nurse neonate in incubator

13. Which of the following increases the risk of early onset of sepsis in neonates?
- Group B streptococcus infection during pregnancy
 - Preterm delivery and low birth weight baby
 - Infection of placental tissue and amniotic fluid
 - All of the above statements are relevant responses
14. Which of the following increases the neonate's risk of developing late onset of septicaemia?
- Lack of breastfeeding
 - Infection of placental tissue and amniotic fluid
 - Multiple per vaginal examination
 - All of the above statement are relevant
15. Which of the following conditions does a male neonate become more at risk to suffer from?
- Neonatal sepsis
 - Respiratory distress syndrome
 - Meconium aspiration
 - All of the above
16. Assisted ventilation should be delivered at what rate of breaths per minute to promptly achieve or maintain a heart rate 100 per minute
- 10 to 30 breaths/minute
 - 40 to 60 breaths/minute
 - 70 to 90 breaths/minute
 - None of the above
17. Which statement is **true** about pathologic neonatal jaundice
- Appears within 24 hours of age.
 - It appears after 24 hours of age
 - Maximum intensity by 4th-5th day in term & 7th day in preterm.
 - All of the statements are relevant
18. _____ is the most important cause of pathological jaundice in neonates.
- Haemoglobin destruction in neonates
 - Isoimmunisation
 - Blood from the gastrointestinal tract
 - All of the above
19. What is the normal levels for unconjugated bilirubin?
- 0.0mg/dl to 0.1mg/dl
 - 0.2 mg/dl to 1.4mg/dl
 - 1.4mg/dl to 1.6mg/dl
 - None of the above
20. Which of the following statements is **true** about late onset neonatal jaundice
Except
- It is bilirubin concentrations that remains raised from 3 to 5 days
 - There is no effective treatment for late onset neonatal jaundice
 - It is caused by conditions that has significant long term implications when untreated
 - All of the above statements are true

21. Which statement is **true** about neonatal care for infants who are HIV exposed?
- A. All neonates should be considered infected unless the mother status is know
 - B. All newborn should receive standard immediate care and usual immunization
 - C. HIV positive mothers need specific advice on their infant feeding choices
 - D. All of the above statements are relevant
22. Which HIV test can be used to distinguish a positive test due to maternal antibodies and a true HIV positive results 6 weeks?
- A. PCR Test
 - B. ELISA Test
 - C. Determine
 - D. All of the above
23. What is the best treatment option for an asymptomatic neonate born to a mother with tuberculosis and?
- A. The baby needs to be given isoniazid 10 mg/kg/day for six months
 - B. The baby should receive the initial BCG vaccination after 1 month of treatment
 - C. There is no need to refer the baby to a hospital at birth if asymptomatic
 - D. Tuberculin test should be done at three weeks of INH treatment
24. Which of the following is a category of congenital malformation in neonates?
- A. Atresias
 - B. Mitochondrial deoxyribonucleic acid
 - C. Trisomy 21
 - D. Turner syndrome
25. Which statement is **not true** about prenatal screening and diagnostic techniques for congenital abnormality?
- A. Have led to increased recognition of malformations during early pregnancy
 - B. It provides time to for the couple to adjust and come to terms with the news of a congenitally malformed baby
 - C. All foetal malformations can be identified prenatally
 - D. None of the above

[25]

SECTION B: TRUE/ FALSE AND SHORT ESSAYS ANSWERS

1. Sodium bicarbonate 4% is given to a neonate in order to treat hypoglycaemia. (1)
2. One side effect of giving IV dosages of dextrose is that intracellular dehydration and circulatory overload may occur. (1)
3. Babies with late neonatal sepsis get infected after delivery by the organism thriving in the internal environment of the home or hospital. (1)
4. All babies who are 6 months and less who have neonatal sepsis are admitted into the ward for close observation (1)
5. A new-born with a heartbeat of less than 100 bpm requires intubation and ventilation. (1)
6. In newborn babies drugs can be administered either intravenous (through the umbilicus), endotracheal and per mouth. (1)
7. Naloxone 0.01 should always be given to neonates when respirations are controlled. (1)
8. The cord should always be clamped in one minute after birth for all preterm babies. (1)
9. Positive-pressure ventilation should be initiated in 2 minute after birth for newly-born babies who do not start breathing despite thorough drying and additional stimulation. (1)
10. Chest compressions are done when the neonate continues to have a heart rate of less than 60 beats per minute after 1 minute of positive pressure ventilation. (1)

[10]

11. Bonsile who delivered through normal vaginal delivery an alive male neonate 7 hours ago reports that her baby's eyes and nails looks yellowish.
 - 11.1. What is the possible diagnosis for the neonate and explain your answer? (2)
 - 11.2. What are the causes of the neonatal condition identified in question 11.1? (3)
12. Discuss the routine management of the baby who is under phototherapy. (10)

[15]

[25]

SECTION C: SHORT WORDS AND ESSAY ANSWERS

1. Baby Sarah has been born at 33 weeks of gestation and her birth weight is 1.8kg and her mother is HIV positive on antiretroviral treatment.
 - 1.1. Discuss how you can assess the level of maturity of the neonate. (10)
 - 1.2. Explain the early problems of prematurity that the newborn may experience. (5)
 - 1.3. Discuss the HIV management of the neonate for the first 6 months of life. (8)
2. Describe the differences between transient tachypnoea syndrome and hyaline membrane disease. (2)

[25]