

UNIVERSITY OF ESWATINI

FACULTY OF HEALTH SCIENCES

MIDWIFERY SCIENCE

MAIN EXAMINATION QUESTION PAPER, NOVEMBER 2019

TITLE OF PAPER: EMBRYOLOGY AND NEONATAL SCIENCE

COURSE CODE: MWF 603

DURATION: THREE (3) Hours

TOTAL MARKS: 100

INSTRUCTIONS:

- 1. ANSWER ALL QUESTIONS**
- 2. ALL QUESTIONS CARRY EQUAL MARKS**
- 3. START EACH QUESTION ON A FRESH PAGE**
- 4. TOTAL NUMBER OF PAGES THREE (3)**

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QUESTION 1

Nathi is aged 25 years old has just delivered a baby at the Mbabane Maternity Hospital at 32 weeks gestation. Birth weight 1500 grams. The baby at birth does not show any signs of distress or obvious congenital abnormalities.

- 1.1 What immediate action should the midwife take to prevent hypothermia in baby Nathi? **(5marks)**
- 1.2 Describe the role of the midwife in preventing or minimising nosocomial infections to baby Nathi while the baby is admitted in the Special baby care unit (SBCU). **(5marks)**
- 1.3 What are the short term and long term complications baby Nathi is likely to develop? Give rationale for each. **Consider 7 short term complications and 8 long term complications. (15marks)**

[25marks]

QUESTION 2

Circulatory collapse usually occurs in the newborn and the doctors have to resuscitate the babies. Midwives are supposed to provide support and assist doctors during the resuscitation process and in managing neonates presenting with severe illness requiring ventilation.

- 2.1 Which intravenous fluids are usually administered to neonates; including the reasons for administration? **(5 marks)**
- 2.2 Describe the following three broad categories of ventilator support which are used to optimize both gas exchange and clinical status during neonatal ventilation.
 - 2.2.1 Continuous positive airway pressure (CPAP) ventilator. **(4 marks)**
 - 2.2.2 Conventional or intermittent mechanical ventilation (IMV). **(4 marks)**
 - 2.2.3 High frequency oscillating ventilation (HFOV) **(3 marks)**.
- 2.3 What are the goals of initiating a neonate on CPAP? **(4marks)**.
- 2.4 What are the indications for starting a neonate on CPAP? **(5 marks)**.

[25marks]

QUESTION 3

Neonatal sepsis is one of the main contributory factors to neonatal deaths in Eswatini.

3.1 Define neonatal sepsis. **(3 marks)**

3.2 Discuss the risk factors associated with neonatal sepsis. **(20 marks)**

3.3 What are the clinical manifestations of neonatal infection/sepsis under the gastrointestinal system? **(2marks)**

[25marks]

QUESTION 4

Baby Nothando was delivered a few hours ago. On physical examination, the midwife notes that Baby Nothando has a neural tube defect.

4.1 Outline the possible contributory factors to Baby Nothando's congenital abnormality. **(5marks)**

4.1 Discuss the management of baby Nothando. **(20 marks)**

[25marks]