

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
FINAL EXAMINATION PAPER: MAY, 2014

TITLE OF PAPER : **THE NEONATE**
COURSE CODE : **MID 105**
DURATION : **TWO (2) HOURS**
TOTAL MARKS : **75**

INSTRUCTIONS:

- 1. ANSWER ALL QUESTIONS**
- 2. FIGURES IN BRACKETS INDICATE MARKS ALLOCATED TO EACH OR PART OF A QUESTION**
- 3. ANSWER EACH QUESTION ON A NEW PAGE**

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QUESTION 1

Select a single appropriate response

Baby Chamkile is large for dates, delivered by a mother who was diagnosed diabetes mellitus, her birth weight is 4.8 kg and gestational period is 32 weeks. Questions 1-10 relates to this scenario.

1.1 Baby Chamkile had problems in initiating and maintaining respirations, which condition is she likely to develop:

- (a) Meconium aspiration syndrome
- (b) Kernicterus jaundice
- (c) Respiratory distress syndrome
- (d) Neonatal pneumonia

1.2 The condition diagnosed in 1.1 is caused by:

- (a) Meconium in the respiratory system
- (b) Insufficient development of the hyaline membrane in the alveoli
- (c) Inefficient conjugation of bilirubin
- (d) Lung infection

1.3 The neonate requires resuscitation soon after birth due to depression of the respiratory center caused by one of the following:

- (a) Cerebral hypoxia
- (b) Severe anaemia
- (c) A congenital abnormality
- (d) Narcotic drugs

1.4 Why is it important to keep baby Chamkile warm during resuscitation?

- (a) Glucose is diverted from vital organs to create heat for survival
- (b) Hypothermia exacerbates hypoxia
- (c) Oxygen is necessary for generating heat
- (d) Both A and B are correct responses

1.5 When clearing baby Chamkile's air passage, the midwife should follow this order:

- (a) Clear nose first because the neonate is a nose breather
- (b) Clear the mouth first to allow the baby to cry
- (c) Clear the mouth and nose simultaneously to enhance gasping
- (d) Clear the mouth before the nose to prevent aspiration of fluid

1.6 One of the complications that may occur to a neonate as a result of hypoxia is:

- (a) Bronchopneumonia
- (b) Increased intracranial pressure
- (c) Hypotonia
- (d) Hyperglycaemia

1.7 Baby Chamkile is at risk of which birth trauma?

- (a) Fracture of the clavicle
- (b) Erbs paralysis
- (c) Facial paralysis
- (d) Depressed skull fracture

1.8 Explain to a student midwife why baby Chamkile is at risk of developing jaundice

- (a) Jaundice is a complication of hypoxia
- (b) Excessive red blood cell break down
- (c) Poor/delayed feeding
- (d) All of the above is relevant responses

1.9 Kernicterus jaundice is defined as:

- (a) Encephalopathy caused by deposition of unconjugated bilirubin in the basal nuclei of the brain
- (b) A condition characterized by a serum bilirubin level of less than 340 $\mu\text{Mol/L}$
- (c) Physiologic jaundice occurring to term gestation neonates
- (d) Severe jaundice noted on the face and mucus membranes

1.10 If baby Chamkile develops jittery movements and irritability within the first hour of birth, she may be suffering from which metabolic condition?

- (a) Hyperglycaemia
- (b) Hyponatremia
- (c) Hypoglycaemia
- (d) Hyponatraemia

1.11 One of the signs and symptoms of umbilical cord infection is:

- (a) Fresh bleeding from the cord
- (b) Foul smelling cord
- (c) Discoloration of the cord
- (d) All of the above responses

1.12 Neonates who have received long term antibiotic treatment are likely to be diagnosed with:

- (a) Thrush
- (b) Herpes simplex
- (c) Bullous impetigo
- (d) Purpura rash

1.13 A term used to describe respiratory rate above 60 per minute is called:

- (a) Apnoea
- (b) Hypotonia
- (c) Tachypnoea
- (d) Tachycardia

1.14 Which of the following signs does not pose a danger to the neonate:

- (a) Convulsions
- (b) Fever
- (c) Abdominal distention
- (d) Thriving

1.15 Failure to thrive is a condition associated with neonates who have acquired one of these conditions:

- (a) Rhesus incompatibility
- (b) Tuberculosis
- (c) HIV infection
- (d) Septicaemia

1.16 Neonatal wards should be scrupulously clean to prevent infection caused by which organisms:

- (a) Staphylococcus aureus
- (b) Streptococcus pneumoniae
- (c) Haemophilus influenza
- (d) Escherichia coli

1.17 A neonate who is delivered on the way to a maternity centre is likely to suffer from:

- (a) Common cold
- (b) Hypothermia
- (c) Hypomagnasia
- (d) Hypothermia

1.18 An orphaned neonate is at risk of developing one of the following paediatric problems:

- (a) Poor developmental milestone
- (b) Systemic infection
- (c) Abuse and exploitation
- (d) Grief and bereavement

A midwife is conducting a quick assessment of the general condition of the neonate at birth. Question 19-22 relates to this scenario.

1.19 What is the significance of an APGAR score?

- (a) It determines the health of a neonate at birth
- (b) A tool used before resuscitating a neonate
- (c) A tool used to assess the gestational stage of the neonate
- (d) It identifies neonates at risk for growth retardation

1.20 Cyanosis in the newborn baby generally originates from four major organ systems which are:

- (a) Nervous, cardiac, haematologic or abdominal
- (b) Cardiac, respiratory, neurologic and neuro-muscular
- (c) Neurologic, haematologic, respiratory or muscular
- (d) Respiratory, cardiac, haematologic or neurologic

1.21 See-saw respirations are commonly diagnosed on babies suffering from:

- (a) Diabetic babies
- (b) Hyperpyrexia
- (c) Respiratory distress syndrome
- (d) Asthma

1.22 One of the first physiologic compensation for illnesses that impair oxygenation to a newly-born baby is:

- (a) Nasal flaring
- (b) Intercostal retractions
- (c) Grunting respirations
- (d) Cyanosis

1.23 Foetal alcohol syndrome occurs as a consequence of:

- (a) Excessive intake of alcohol during pregnancy
- (b) Pica related to high consumption of beverages
- (c) Genetic predisposition to alcohol abuse
- (d) Paternal alcohol intake

1.24 One of the pillars of childhood health is strengthening midwifery education, how does midwifery education contribute to child health?

- (a) The midwife enforces health practices to mothers and families
- (b) The midwife changes the attitudes of childbearing women
- (c) The midwife conducts birth in a clean environment
- (d) The midwife renders evidence-based practice which has good outcome to young children

1.25 One of the health challenges facing young children in Swaziland in vertical transmission of HIV infection. Efforts to control this pandemic include one of the following:

- (a) Vaccinate all neonates against HIV
- (b) Give prophylactic ARVs to eligible pregnant mothers and neonates
- (c) Treat all neonates as soon as signs for AIDS appear
- (d) Promote alternative feeds to all neonates at risk of HIV infection

QUESTION 2

(a) Compare and contrast the characteristics of a preterm and a post term neonate

(10 marks)

(b) Discuss the care of a neonate who is having a convulsion.

(15 marks)

QUESTION 3

Discuss how a midwife can prevent infection among neonates in a nursery

(25 marks)