

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
FINAL EXAMINATION PAPER: MAY, 2013

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**

THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR

QUESTION 1

Select a single appropriate response

Baby Tom is admitted in a special neonatal ward soon after delivery, his birth weight is 1.3kg. Questions 1-10 relate to this scenario.

1.1 One of the risk neonatal conditions for baby Tom is:

- (a) Postmaturity
- (b) Kernicterus jaundice
- (c) Respiratory distress syndrome
- (d) Neonatal convulsions

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) Increased intracranial pressure

1.3 The midwife in charge of a delivery quickly covers baby Tom in warm towels to prevent heat loss by:

- (a) Conduction
- (b) Evaporation
- (c) Radiation
- (d) Convection

1.4 Baby Tom has difficulty in maintaining respirations and the chest wall is inwardly drawn when breathing, this condition is caused by:

- (a) Immature lung tissues
- (b) Insufficient oxygen in the environment
- (c) Presence of fluid in the lungs
- (d) The collapse of alveoli during expiration

1.5 If baby Tom develops jaundice on the third day of life, what is the most likely cause of jaundice?

- (a) Hyperthermia
- (b) Hyperbilirubinemia
- (c) Hyponatraemia
- (d) Hypercalcaemia

1.6 The neonatal ward should be aseptic in order to prevent infection caused by which one of the listed organisms:

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

1.7 If baby Tom was presenting by face, the neonate may have acquired one of the following characteristics:

- (a) Prominent brow
- (b) Bruised eyelids
- (c) Hyper-extended neck
- (d) Oedematous breech

1.8 If baby Tom was delivered in a rural maternity facility, he is likely to suffer from:

- (a) Hypothermia
- (b) Infection
- (c) Hyponatremia
- (d) Hypothermia

1.9 After Tom's relatives had seen him, the midwife notices that Tom's umbilical stump is covered with cow dung, this situation is likely to cause:

- (a) Meningitis
- (b) Neonatal convulsions
- (c) Neonatal tetanus
- (d) Diphtheria

1.10 Two days later, Tom develops convulsions, the most appropriate intervention by a midwife would be to:

- (a) Quickly refer the neonate to a paediatrician
- (b) Administer phenobarbiton intramuscular
- (c) Nurse the neonate in a dark room
- (d) Abort the fit by giving diazepam syrup

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

- (a) Poor developmental milestone
- (b) 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 12-15 relates to this scenario.

1.12 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

1.13 When a neonate responds to a stroke along the cheek by searching and sucking, he is demonstrating ----- reflex:

- (a) Moro
- (b) Babinsky
- (c) Rooting
- (d) Traction

1.14 A midwife is examining the neonate to rule out dislocated hips. She flexes the hips, rotate and abducts them fully to 90degrees. This test is referred to as the:

- (a) Barrow
- (b) Ortolani
- (c) Knee jack
- (d) Lovset

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

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

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

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

1.17 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

1.18 Varicella-zoster infection during pregnancy can have significant effects on the developing foetus, one of the complications is:

- (a) Hydrocephaly
- (b) Microcephaly
- (c) Anacephaly
- (d) Achondroplasia

1.19 When a baby develops acrocyanosis a midwife should:

- (a) Administer oxygen
- (b) Inform the mother about the physiological adaptation to extra-uterine environment
- (c) Refer the neonate to the paediatrician for advanced care
- (d) Observe the neonate in the neonatal unit for 24 hours

1.20 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

1.21 One of the clinical features for a neonate suffering from foetal alcohol syndrome is:

- (a) HIV infection
- (b) Generalized pyrexia
- (c) Heart defects
- (d) Kidney failure

- 1.22 One of the pre-disposing causes for sudden death syndrome is:
- (a) Breastfeeding practices
 - (b) The gestational stage of the neonate
 - (c) Post maturity
 - (d) Short inter-pregnancy interval
- 1.23 The United Nations Millennium Development Goal 4 addresses a reduction in under-five mortality by 75% in 2015. The status of Swaziland in this regard is:
- (a) The country will achieve this target as there are programmes in place, which address childhood mortality
 - (b) Swaziland is on the road to achieving this target as there is general reduction in child morbidity
 - (c) The country is striving to achieve this target but there are challenges regarding the attainment of young childrens' optimal health.
 - (d) Swaziland will never attain the UN goals because of cultural deterrents to child health.
- 1.24 One of the pillars of childhood health is strengthening midwifery education, how does midwifery education contributes 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 obstetric outcome
- 1.25 One of the health challenges facing young children in Swaziland in vertical transmission of HIV infection. Efforts to control this pandemic includes 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) Identify the characteristics of a neonate diagnosed with cephalhaematoma and one with caput succedaneum

(10 marks)

(b) Discuss the care of a neonate who is receiving phototherapy treatment.

(15 marks)

QUESTION 3

Discuss in detail how a midwife will resuscitate an asphyxiated newborn baby who is 1 minute old under the following sub-headings.

(a) Initiation of respirations (18 marks)

(b) Equipments used for resuscitation (7 marks)

(25 marks)