



**UNIVERSITY OF ESWATINI**

**FACULTY OF HEALTH SCIENCES**

**DEPARTMENT OF MIDWIFERY SCIENCE**

**FINAL EXAMINATION: NOVEMBER 2021**

**TITLE OF PAPER : EMERGENCY OBSTETRICS AND NEONATAL CARE**

**COURSE CODE : MWF404**

**DURATION : TWO (2) HOURS**

**TOTAL MARKS : 75**

**INSTRUCTIONS**

- 1. ANSWER ALL QUESTIONS**
- 2. FIGURES IN BRACKETS INDICATE MARKS ALLOCATED TO EACH PART OF A QUESTION**
- 3. BEGIN EACH QUESTION ON A NEW PAGE**
- 4. QUESTIONS CARRY EQUAL MARKS**
- 5. USE BULLETS FOR EACH POINT IN YOUR ANSWER WHERE APPLICABLE**

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**Question 1: Multiple choice questions**

**Choose the most appropriate response from each of the following statements and write the letter that corresponds with it next to the question number in your answer sheet. For example, 1.30 A**

1.1 A woman presents to a clinic 7 days after normal childbirth with a fever of 37.9 Degrees Celsius and an offensive vaginal discharge. According to the Emergency Obstetrics and Neonatal Care signal functions, where should the woman be managed?

- A. Clinic
- B. Health Centre
- C. Hospital
- D. Intensive Care Unit (ICU)

1.2 Which **ONE** of the following statements best defines a Direct Obstetric Case Fatality Rate?

- A. The proportion of women admitted with major direct obstetric complications, or who develop such complications after admission, and die before discharge
- B. The percent of women admitted with direct obstetric complications, or who develop such complications after admission, and die after discharge
- C. The proportion of women admitted with major direct obstetric complications who die before discharge
- D. The percent of women admitted with direct obstetric complications who die after discharge

1.3 Which is the most common site for an ectopic pregnancy?

- A. Previous caesarean section scar
- B. Abdominal
- C. Cervical

D. Tubal

1.4 What is the dose for Anti-D rhesus prophylaxis that should be given to a Rh-negative woman who had an ectopic pregnancy?

- A. 250IU
- B. 300IU
- C. 500IU
- D. 750IU

1.5 The drug is an anti fibrinolytic agent used in the management of major post- partum haemorrhage. Which drug is that?

- A. Heparin
- B. Tranexamic acid
- C. Platelets
- D. Merthegine

1.6 The drug is a folate antagonist. It prevents DNA replication and affects rapidly proliferating cells like that of a developing embryo. Which drug is that?

- A. Methotrexate
- B. Calcium gluconate
- C. Narcan
- D. Metronidazole

1.7 A 20 year old woman presents to the Gynae clinic reporting vaginal bleeding and amenorrhoea for 8 weeks. Vital signs are within normal ranges. On vaginal examination, the cervix is open and products of conception have not been expelled. What is the diagnosis for the woman?

- A. Complete abortion
- B. Threatened abortion
- C. Incomplete abortion
- D. Inevitable abortion

1.8 After childbirth, Grace, Para 3 is soaked in blood. On examination, pulse- 130 beats per minute, blood pressure- 70/40mmHg, respirations-28beats per minute. A Foley catheter was inserted and is draining 10mls of urine. Which stage of obstetric shock is Grace in?

- A. Stage 0
- B. Stage 1
- C. Stage 2
- D. Stage 3

1.9 In which phase of amniotic fluid embolism (AFE) would a midwife expect a woman present with cardio-vascular collapse?

- A. Phase 1
- B. Phase 2
- C. Phase 3
- D. Phase 4

1.10 Chi is a 20 year old woman who is found to have collapsed 10 minutes after normal childbirth. The midwife makes an assessment and concludes that Chi has suffered cardiac arrest

and requires cardio-pulmonary resuscitation (CPR). How many chest compressions versus ventilations should be given to Chi during the CPR in a minute?

- A. 20: 2
- B. 30: 2
- C. 40: 2
- D. 45: 2

1.11 When is CPR indicated in neonatal resuscitation?

- A. When the neonate is breathing with difficulty
- B. When the heart rate is less than 100 beats per minute
- C. When the heart rate is less than 60 beats per minute
- D. When the heart rate is more than 60 beats per minute

1.12 After childbirth, the midwife has to ask three questions which inform him or her whether the neonate requires resuscitation or not. What are those three questions?

- A. What is the skin colour, is the neonate breathing, what is the heart rate?
- B. Does the neonate have a good muscle tone, what is the skin colour, is the neonate breathing?
- C. What is the gestational age, is the baby breathing, does the neonate have a good muscle tone?
- D. What is the gestational age, what is the heart rate, is the neonate breathing?

1.13 Gigi presents to the antenatal clinic for her initial ANC at 22 weeks gestational age. She informs the midwife that she has been on anti-hypertensive medications for the past two years. Today, her blood pressure is 148/98 mmHg, proteinuria-2+. What is Gigi's diagnosis?

- A. Gestational hypertension
- B. Chronic hypertension
- C. Chronic hypertension with superimposed pre-eclampsia
- D. Pre eclampsia with proteinuria

1.14 Which **ONE** of the following predisposes a woman to have a uterine inversion after childbirth?

- A. A short umbilical cord
- B. Performing Active Management of the Third Stage of Labour well
- C. A long umbilical cord
- D. A non-adherent placenta

1.15 For a woman who presents with puerperal sepsis, which broad spectrum antibiotics should be administered?

- A. Gentamycin IV (8mg/kg) divided in 6 hours, Ampicillin 1g IV 6hrly, Metronidazole 500mg 8hrly
- B. Gentamycin IV (8mg/kg) divided in 8 hours, Ampicillin IV 8hrly, Metronidazole 500mg 6 hrly
- C. Gentamycin IV (8mg/kg) divided in 6 hours, Ampicillin IV 8hrly, Metronidazole 500mg 12 hourly
- D. Gentamycin IV (8mg/kg) divided in 8 hours, Ampicillin 1g IV 6hrly, Metronidazole 500mg 8hrly

1.16 Which **ONE** of the following **BEST** describes the role of McRobert's Manoeuvre in the delivery of shoulder dystocia?

- A. It pushes the impacted shoulder back in the chest direction so that the shoulder can dislodge.
- B. It increases the width of the impacted foetal shoulder
- C. It widens the pelvic outlet by flattening the sacral promontory and increasing the lumbo sacral angle
- D. It increases the Antero- Posterior diameter of the pelvic inlet to allow for more room in the pelvic cavity

1.17 Which of the following signs and symptoms are suggestive of infection in the neonate?

- A. Septic shock, renal failure
- B. Cardiac failure, bronchopneumonia
- C. DIC, multi organ failure
- D. Feeding problems, lethargy

1.18 Which of the following causative organisms is associated with early sepsis in the neonate?

- A. Escherichia coli
- B. Klebsiella
- C. Candida
- D. Enterobacter

1.19 Zuzu is a 2 day old neonate whose weight is 4 kilograms. She is brought in the clinic by her mother who reports that the baby seems to be sick. The midwife performs a Random Blood Sugar, among other tests and the results show a blood sugar of 2 mmol/L. How much D10% should the midwife give the neonate before referral?

- A. 8mls
- B. 12mls
- C. 16mls
- D. 18mls

1.20 Baby Joy had an Apgar score of 3/10 at 1 minute and 6/10 at 5 minutes after resuscitation and a birth weight of 3kg. The neonate was admitted into the neonatal unit. Two days after birth, the neonate presents with generalized seizures which were observed only once. What is the appropriate initial antiepileptic therapy for baby Joey?

- A. Phenobarbitone 20mg IV bolus then 5mg daily for 3 days
- B. Phenobarbitone 20mg IV bolus then 15mg daily for 3 days
- C. Phenobarbitone 60 mg IV bolus then 5 mg daily for 3 days
- D. Phenobarbitone 60mg IV bolus then 15mg daily for 3 days

1.21 Which of the following statements describes complete uterine rupture?

- A. Tearing of uterine wall, excluding the perimetrium
- B. Tearing of the uterine wall including endometrium
- C. Tearing of the perimetrium with or without expulsion of the foetus
- D. Tearing of the myometrium

1.22 Which statement describes the Rubin manoeuvre used for delivering shoulder dystocia?

- A. The midwife inserts her fingers into the woman's vagina. She then identifies the most accessible shoulder and pushes the shoulder to chest direction, thereby reducing the bisacromial diameter



B. The midwife inserts her hand inserted into woman's vagina, identifies the foetal chest and exerts pressure on posterior foetal shoulder to rotate the shoulder to a more favourable diameter

C. The midwife passes one hand upwards along the sacral curve behind the posterior shoulder towards elbow. Using two fingers, she grasps the wrist of posterior arm, flexes the elbow and sweeps forearm over chest.

D. The midwife fractures the new-born's clavicles to reduce the bisacromial diameter.

**The following questions 1.23-1.25 are matching items. Match each description of intravenous fluid in column B to the best solution in column A. No items may be used more than once.**

Column A	Column B
1.23 Hypertonic crystalloid (1)	A. Concentration the same as body plasma
1.24 Isotonic crystalloid (1)	B. Concentration less than the body plasma
1.25 Hypotonic crystalloid (1)	C. Contain large protein and molecules that tend to stay within the vascular space
	D. Concentration greater than the body plasma

(25)

## Question 2

2.1 Identify one neonatal complication associated with neonatal hypothermia (1)

**2.2 Read the following scenario and answer the questions that follow.**

Nono is a 28 year old Para 5 Gravida 6 who is brought in the labour ward by her family, with history of labour pains for 14 hours ago. Nono then has an urge to bear down. Upon assessment, the midwife notices that she is in the second stage of labour. Whilst attending to Nono, she states that she cannot breathe. The midwife observes breathlessness. She also observes that Nono is cyanotic, is sweating and with uterine hypertonus. Vital signs: blood pressure 70/30mmHg, pulse-130 beats per minute, oxygen saturation- 70%.

2.2.1 State the possible diagnosis for Nono (1)

2.2.2 Explain your response for the possible diagnosis mentioned in 2.2.1 above (3)

2.2.3 Discuss the management for Nono (11)  
**(16)**

2.3 Differentiate between uterine rupture and placental abruption, with specific reference to haemorrhage (3)

2.4 On ventilation of an asphyxiated newborn, the midwife notices that the chest is not rising with each ventilation. Using the "MR SOPA" approach, explain how the midwife can correct the ventilation errors she identified (6)

**(25)**

## Question 3

3.1 Identify the condition whereby the umbilical cord is seen protruding on the woman's vagina after rupture of membranes (1)

3.2 Identify two (2) prostaglandins, one (1) uterotonic and one (1) temporary measure that can be used in the management of post partum haemorrhage due to uterine atony (4)

**3.3 The following short questions are on neonatal seizures**

3.3.1 Define neonatal seizures (1)

3.3.2 Identify a drug used in the second line of treatment of neonatal seizures (1)

3.3.3 Describe subtle and generalised seizures in the newborn (4)

**3.4 Read the following scenario and answer the questions that follow**

Lulu is a 30 year old woman who gave birth normally six hours ago. During her pregnancy, Lulu was on treatment for pre-eclampsia. In the postpartum ward, the midwife notices that Lulu is experiencing convulsions. Blood pressure is 170/100mmHg.

Describe the intravenous or intramuscular pharmacological management for Lulu, including precautions where applicable (14)

(25)

**Total [75 Marks]**