



**MASINDE MULIRO UNIVERSITY OF**

**SCIENCE AND TECHNOLOGY**

**(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2023/2024 ACADEMIC YEAR**

**THIRD YEAR, FIRST TRIMESTER EXAMINATIONS**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN HEALTH PROFESSIONS EDUCATION,**

**COURSE CODE: HCM 464**

**COURSE TITLE: REPRODUCTIVE HEALTH III**

**DATE: 6<sup>th</sup> DECEMBER 2023**

**TIME: 2:00pm – 4:00pm**

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**INSTRUCTIONS TO CANDIDATES**

- a. All questions are compulsory
- b. Read additional instructions under each subsection
- c. Enter all answers in the answer booklet provided
- d. Write the university registration number on each piece of paper used

**TIME: 2 Hours**

### **MCQS (20 MARKS)**

1. Signs of impending eclampsia include all the following except.
  - a. HELLP syndrome
  - b. Blood pressure of 170/112 mmHg
  - c. Urine output of 32mls/hour
  - d. Severe anaemia with jaundice
2. Regarding malaria in pregnancy, pick the true statement;
  - a. Many of the adverse effects are due to direct infection of the fetus
  - b. Sulfonamide/pyrimethamine combination is the first line of treatment
  - c. Transplacental infection of the fetus is common
  - d. Multiparity offers some protection in malaria endemic areas
3. When should you start cardio-pulmonary resuscitation (CPR) in an adult?
  - a. When heart rate is less than 72.
  - b. When not breathing
  - c. When the heartbeat is less than 60
  - d. When unconscious
4. A primigravida at 34 weeks is diagnosed to have severe malaria today. This is the 3<sup>rd</sup> episode in this pregnancy. The following are likely complications EXCEPT.
  - a. Low birth weight
  - b. Freys syndrome.
  - c. Black water fever
  - d. Premature labor
5. True statement about DVT in pregnancy
  - a. Homan's sign is routinely elicited
  - b. The kinin-kallikrein system is important in initiating of the extrinsic clotting cascade.
  - c. Protein C and protein S are less functional in HIV patients thus DVT is worse in such patients
  - d. White clot syndrome is a common complication of warfarin overdose
6. What is the ratio of CPR, in maternal resuscitation?
  - a. 15 compressions and 5 breaths
  - b. 30 compressions and 2 breaths
  - c. 3 compressions and 1 breath
  - d. 30 compressions and 1 breath
7. What is the depth of chest compressions during neonatal resuscitation?
  - a. 1/3
  - b. 2/3
  - c. 5/6
  - d. 4/6
8. During resuscitation once the heart rate is 80 beats per minute in a neonate, what is the next management?
  - a. Restart compression at 3 in 1
  - b. Continue ventilation at 30 to 50 breaths per minute
  - c. Give the bay to the mother
  - d. Give 50% dextrose
9. True about eclampsia except
  - a. The best mode of treatment is delivery of the placenta

- b. 40-50% of convulsions occur 24-48 hours after delivery
- c. Can be a complication of hydatidiform mole
- d. Phenytoin can be used in case of magnesium sulphate toxicity

10. False statement about ABO hemolytic disease

- a. Blood group A is the commonest blood group worldwide.
- b. Mothers are usually blood group O while babies with blood group A are most affected.
- c. Onset of jaundice in the baby is within 24 hours
- d. Indirect bilirubin levels in the baby tend to be negative

11. In UTI in pregnancy, the following statement is true

- a. About 60% of all acute pyelonephritis occur on the right kidney.
- b. Colonization of the urinary tract by more than 10000 bacteria
- c. Early morning midstream urine is the best sample to be collected.
- d. Commonest bacteria causing UTI are E.coli, Proteus and Haemophylus.

12. A patient has twins. The following are steps to undertake in active management of 3<sup>rd</sup> stage labour (AMSTL).

- a. After delivery of the first baby, give 10IU of oxytocin
- b. After delivery of the second baby, ensure no third baby then give 10IU of oxytocin
- c. AMSTL is contraindicated in twin delivery
- d. IV 20 IU oxytocin in normal saline can be used instead of intramuscular

13. Which of the following is a RARE complication of multiple pregnancy

- a. Preterm labour
- b. Pre eclampsia
- c. Post datism
- d. Maternal anemia

14. You are called to review a para 1+0 now who has just delivered. It has been confirmed that she is rhesus negative. Concerning her condition

- a. Take cord blood for indirect Coombs test, bilirubin levels and Rhesus factor
- b. Take maternal blood for direct Coombs test, bilirubin levels, blood group and Rhesus factor
- c. Take cord blood for direct Coombs test, bilirubin levels and Rhesus factor.
- d. Bilirubin levels, Hb levels, blood group and Rhesus factor shows severity of the disease

15. Infants of diabetic mothers are at an increased risk of the following except

- a. Perinatal death
- b. Microsomia
- c. Congenital anomalies
- d. hypoglycemia

16. About a patient diagnosed with cardiac disease stage 3 according to New York Disease classification. The following is NOT TRUE.

- a. At 28 weeks gestation, admit her for close monitoring.
- b. At term, allow her to labour, partograph her progress and vacuum extraction in second stage
- c. Give haematinics to prevent anaemia
- d. Prepare for elective cesarean section or emergency if she presents in labour.

17. In DVT pregnancy, which of the following statement is FALSE.

- a. Heparin monitoring is done via APTT
- b. Enoxaparin is teratogenic.

- c. Both warfarin and heparin can be given in the third trimester
- d. Warfarin is not indicated after 36 weeks gestation

18. In cardiac diseases in pregnancy, which statement is true?

- a. Diastolic murmurs are common
- b. Haemic murmurs are rare
- c. Pansystolic murmurs occur in mitral valve stenosis
- d. Bilateral basal crepitations occur in cor pulmonale

19. Mature breast milk;

- a. Has higher concentration of proteins than the initial milk
- b. Has a high concentration of IgA
- c. Has a higher temperature than the body temperature
- d. Progesterone has a role in its production

20. The following drugs have tocolytic effects except;

- a. Dobutamine
- b. Nifedipine
- c. Terbutaline.
- d. Phenobarbitone

#### **SHORT ESSAY QUESTIONS (40 MARKS)**

1. A woman presents to the hospital at 38 weeks gestation with a HB of 6.8g/dl and a full hemogram picture shows normocytic normochromic anaemia.
  - a. State 2 causes of normocytic normochromic anaemia (2 marks)
  - b. Briefly describe the management of the patient (2 marks)
  - c. State the complications of anaemia in pregnancy. (3 marks)
  - d. What is the best mode of delivery to this patient? (3 marks)
2. A 22 year old patient at 38 weeks gestation presents to the labour room at 6 cm dilated with contractions increasing in frequency and intensity. She is a known rheumatic disease patient since she was 16 years old and this is her first pregnancy
  - a. What are the expected complications in this patient? (4 marks)
  - b. What are the steps to be taken before delivery of this patient? (4 marks)
  - c. What is the best mode of delivery for this patient? (2 marks)
3. in Rhesus isoimmunisation
  - a. Briefly describe the pathophysiology of rhesus isoimmunisation (4 marks)
  - b. State at least three complications of rhesus incompatibility to the mother and three complications to the fetus (3 marks)
  - c. How would you manage a first term pregnant mother who is rhesus negative? (3 marks)
4. Pauline, a 19 year old primigravida has been having complaints of frequency of micturition, urgency and pain on urination for the past 2 weeks. Today she comes complaining of the same but with general body malaise, hotness of the body and right costovertebral angle tenderness on examination. She is at 22 weeks gestation.
  - a. State the three classifications of UTI in pregnancy (3 marks)
  - b. What is the probable diagnosis for the above patient (1 mark)
  - c. Why is acute pyelonephritis common in the right kidney than the left? (2 marks)
  - d. Definitive management for the patient (4 marks)

#### **LONG ESSAY QUESTION (20 MARKS)**

1. Julia, 20 year old woman is brought to casualty semi-conscious by well-wishers who gives a history of having convulsed 10 minutes prior. She is febrile, not pale with a fundal height of 38 weeks. Her BP is 220/150 mmHg.

- a. What is the probable diagnosis (1 mark)
- b. Differentiate between gestational hypertension and pre eclampsia (1 marks)
- c. Briefly discuss 4 signs and symptoms of impending eclampsia (2 marks)
- d. State at least three drugs that can be used to stabilize her BPS back to mild pre eclampsia and give clear instructions to the nurse how the drugs should be administered. (6 marks)
- e. In case of convulsion, describe how you will administer Magnesium sulphate. (6 marks)
- f. Describe how you will administer fluids to this patient. (1 marks)
- g. What are the signs of magnesium sulphate toxicity? (3 marks)

2. A 28 year old patient, now para 1+0, 3 days post CS operation due to TRANSVERSE LIE complains of painful left leg swelling and inability to use the limb. O/E it is noted to be shiny.

- a. What is the most likely diagnosis? (1 mark)
- b. State at least 4 differential diagnoses (2 marks)
- c. List 4 predisposing factors (2 marks)
- d. Outline in detail her plan of management ( 5 marks)
- e. The patient above develops sudden onset of severe chest pain, difficulty in breathing and hemoptysis. Ct Pulmonary angiogram confirms she has thrown a thrombi to the lungs. How would you manage the patient? (10 marks)

