## **UNIVERSITY OF SWAZILAND**

# **FACULTY OF HEALTH SCIENCES**

# **FINAL EXAMINATION PAPER, MAY 2016**

TITLE OF PAPER: REPRODUCTIVE HEALTH DYNAMICS

COURSE CODE: GNS 320

DURATION: TWO (2) HOURS

TOTAL MARKS: 75

# **INSTRUCTIONS:**

- 1. ANSWER ALL QUESTIONS
- 2. ALL QUESTIONS CARRY EQUAL MARKS
- 3. FIGURES IN BRACKETS INDICATE MARKS ALLOCATED TO A QUESTION OR PART OF A QUESTION
- 4. START EACH QUESTION ON A FRESH PAGE

THIS PAPER SHOULD <u>NOT</u> BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR

#### **INSTRUCTION:**

1. IN EACH OF THE MULTIPLE CHOICE QUESTIONS, SELECT THE **MOST** CORRECT RESPONSE. IN YOUR ANSWER SHEET WRITE THE LETTER AGAINST THE CORRESPONDING NUMBER e.g., 1.6 – D.

#### **QUESTION 1.1**

The mucus which lubricates the vagina originates from the:

- A. Cervical glands
- B. Endometrial glands
- C. Bartholin's glands
- D. Vaginal glands
- E. A and C

#### **QUESTION 1.2**

The fallopian tubes are lined with:

- A. Ciliated mucus membrane and goblet cells
- B. Mucus membrane
- C. Endometrium
- D. Stratified epithelium

## **QUESTION 1.3**

Spermatogenesis takes place in the seminiferous tubules under the influence of:

- A. Follicle stimulating hormone and testosterone
- B. Testosterone hormone only
- C. Follicle stimulating hormone and oestrogen
- D. Follicle stimulating hormone and progesterone

## **QUESTION 1.4**

The two primary functions of the testes are:

- A. Erection and ejaculation
- B. Production of spermatozoa and secretion of hormones
- C. Regulation of protein anabolism and fluid electrolyte metabolism
- D. Production of spermatozoa and semen

## SITUATION:

Thoko, a twenty four years old married female comes to the antenatal clinic because she suspects that she is pregnant. She gives her last menstrual period date as 04/02/2016, which was two months ago. On talking to Thoko, you learn her menses began at thirteen years of age. She has had no major illness during her childhood or adult years.

(The next six questions refer to the above situation)

#### **QUESTION 1.5**

Thoko says "If I am pregnant, when will my baby be due"? You respond, I will teach you how to calculate dates according to Naegele's rule. You then explain that to estimate the date, from the day of her menstrual period;

- A. Subtract 3 months and add 7 days
- B. Add 8 days and subtract 4 months
- C. Subtract 7 months and add 8 days
- D. Subtract 7 days and add 5 months

#### **QUESTION 1.6**

Upon examining Thoko, you find a Chadwick's sign, Chadwick's sign is:

- A. Wavy steaks that appear on the abdomen, breast and thighs during pregnancy
- B. Thin yellowish fluid present in the breasts during pregnancy
- C. Separation of the muscles due to abdominal distension during pregnancy
- D. Deep reddish or purplish discolouration of the vagina due to increased vascularity

## **QUESTION 1.7**

When teaching Thoko about her body, she should be told that changes in the uterus during pregnancy include all of the following EXCEPT:

- A. Increase in size and number of blood vessels
- B. Atrophy of muscle cells
- C. Hypertrophy of lymphatic system
- D. Development of elastic tissue increasing contractibility

You tell Thoko to expect changes in the breast during pregnancy. Which of the following would you **NOT** expect to observe:

- A. Increase in size and firmness
- B. Superficial veins grow more prominent
- C. Montgomery's glands decrease in size
- D. Nipples become more prominent and areola deepens in colour

#### **QUESTION 1.9**

Thoko says "I feel so different since I am pregnant". Which of the following is an expected characteristic of the altered emotional changes that take place during pregnancy?

- A. Quick mood changes
- B. Violent outbursts
- C. Complete reject of pregnancy
- D. Emotionally insecure

#### **QUESTION 1.10**

In giving antenatal instructions to Thoko, you would tell her that:

- A. It is alright to take drugs during pregnancy
- B. Smoking has little effect on the developing fetus
- C. Sports should always be avoided during pregnancy
- D. Frequent rest periods should be planned to avoid needless fatigue

#### **QUESTION 1.11**

Constipation in pregnancy is best treated by:

- A. Regular use of laxatives such as milk of magnesia
- B. Increased cellulose and fluid in the diet
- C. Regular use of glycerine suppositories in the rectum
- D. Regular use of soap enema

Which statements can make a midwife believe that the mother-to-be has accepted her pregnancy:

- A. I am pregnant
- B. I had to be pregnant because my husband wants a baby
- C. I am pregnant, however, it is alright
- D. I am doing nothing this year that is why I fell pregnant

#### **QUESTION 1.13**

During the menstrual cycle, the effect of oestrogen on the uterus is:

- A. To thicken and lengthen the myometrial fibres
- B. To hypertrophy the endometrium
- C. To stimulate the endometrial glands to increase their secretions
- D. To stimulate the cervical glands to increase their secretions

#### **QUESTION 1.14**

In the normal presentation, the part of the fetus that the nurse-midwife uses to determine the position is:

- A. The fetal head
- B. The vertex
- C. The occiput
- D. The posterior part of the anterior bones

#### **QUESTION 1.15**

Which of the following is **NOT** an aim of the FIRST VISIT to the antenatal clinic:

- A. To begin building a trusting relationship in which realistic plans of care are discussed
- B. To ensure that the woman reaches the end of pregnancy physically and emotionally prepared for childbirth
- C. To assess levels of health by taking a detailed history and to employ appropriate screening tests
- D. To provide an opportunity for the woman and her family to express any concerns they may have

Which of the following statements is NOT relevant to the hormone testosterone?

- A. It increases growth at puberty
- B. It increases growth of the larynx
- C. It is secreted by the intestitial cells of the testes
- D. It is absent in old age

## **QUESTION 1.17**

The earliest stage of pregnancy at which a multiparous woman notices quickening is:

- A. 12 Weeks
- B. 16 Weeks
- C. 18 Weeks
- D. 20 Weeks
- E. 22 Weeks

#### **QUESTION 1.18**

In normal pregnancy, the cardio-vascular dynamics alter in order to meet the demands of the feto-placental unit. The major cardiac changes include the following EXCEPT:

- A. An increase in cardiac output
- B. An increase in total blood volume
- C. An increase in total peripheral resistance
- D. A decrease in total peripheral resistance

#### **QUESTION 1.19**

Rest is necessary during pregnancy because:

- A. It assists in increasing uterine perfusion
- B. It assists in improving renal perfusion and diuresis
- C. It decreases the woman's metabolic rate and therefore decreases demand for protein
- D. It does all of the above

Of the following developmental tasks during pregnancy, which one is of the third trimester?

- A. To accept the biologic fact of pregnancy
- B. To accept the growing fetus as distinct from self and as a person to nuture
- C. To prepare realistically for the birth and parenting of the child
- D. All of the above

#### **QUESTION 1.21**

Involuntary testing of HIV/AIDS on a woman during pregnancy is:

- A. Acceptable because the woman is supposed to know even the status of the powerless inborn
- B. A violation of rights and is not acceptable
- C. Ideal since it promotes joint responsibility and decision making regarding sexual practices
- D. A positive measure in reproduction, maternal care and infant care

## **QUESTION 1.22**

A pregnant woman who experiences leg cramps may be advised to:

- A. Elevate the legs during bed time
- B. Increase the intake of fresh milk
- C. Do some leg exercises before bed time
- D. All of the above

# **QUESTION 1.23**

Which of the following statements on medication in pregnancy is NOT true?

- A. Most clients will know about the dangers on the fetus and need hardly any health education about it.
- B. Drugs taken by the mother may reach the fetus by trans-placental passage
- C. The use of drugs in pregnancy needs to be reduced to emergency and short time use
- D. Our knowledge of the effect of drugs on the fetus is far from complete especially regarding the long term effects

The developing conceptus is called a fetus from the:

- A. End of the second week to the onset of labour
- B. Implantation of the fertilized ovum
- C. Time the fetal heart is heard
- D. Ninth week to the time of birth

## **QUESTION 1.25**

The hormone that plays part in mobilizing glucose that is necessary for fetal growth is:

- A. Cortisone
- B. Oestriol
- C. Human chorionic gonadotrophin
- D. Human placental lactogen

## INSTRUCTION:

State whether the following statements are TRUE or FALSE

#### **QUESTION 2**

- 2.1 Placental cotyledons are composed of chorionic villi
- 2.2 The umbilical cord contains two veins and one artery
- 2.3 Amniotic fluid contains fetal urine
- 2.4 Semen is acidic in nature

#### INSTRUCTION:

Complete the following sentences with the appropriate word(s)

2.6 In the second half of the menstrual cycle, the endometrium is de	escribed as	
, at this time it is extremely vascular and se	ecretes	
to nourish a possible fertilized ovum.		
2.7 Write about the ideal clothing in pregnancy		(8)
2.8 Gentle exercise is vital for maternal and fetal health in pregnance	cy. Address a	
group of expectant women on the benefits of exercise during pregna	ancy (1	10)
(EACH CORRECT STATEMENT WILL EARN ONE MARK)	(Total marks 2	!5)

# **QUESTION 3**

3.1 Describe the anatomy of the fully developed placenta and state its functions (25)