

**UNIVERSITY OF SWAZILAND  
FACULTY OF HEALTH SCIENCES  
MAIN EXAMINATION QUESTION PAPER; DECEMBER 2017**

**TITLE OF PAPER:   NORMAL PREGNANCY AND ANTENATAL CARE**

**COURSE CODE:     MWF 407**

**DURATION:         Two (2) Hours**

**TOTAL MARKS:     75**

- INSTRUCTIONS:    1. THE PAPER CONSISTS OF THREE (3) QUESTIONS**
- 2. ANSWER ALL QUESTIONS**
- 3. ALL QUESTIONS CARRY EQUAL MARKS IN TOTAL**
- 4. READ THE QUESTIONS CAREFULLY**
- 5. FIGURES IN BRACKETS INDICATE MARKS ALLOCATED  
TO A QUESTION OR PART OF A QUESTION**
- 6. START EACH QUESTION ON A FRESH PAGE**

**THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN  
GRANTED BY THE INVIGILATOR.**

**MWF 407: MAIN EXAMINATION QUESTION, DECEMBER, 2017**

**QUESTION 1**

Answer all questions. Choose the most appropriate response e.g. 1.26 D. Each correct answer carries one (1) mark.

**Read the following scenario and answer questions 1.1 to 1.10.**

Pholile is Para 2 Gravida 3 aged 25 years, presents at Mbabane Public Health Unit for the first time at 12 weeks gestation. You are the midwife on duty. **Questions 1.1 to 1.10 refer to this scenario.**

1.1 Pholile is a Para 2 Gravida 3. This means that Pholile has had

- a) Two babies and one pregnancy
- b) Two pregnancies plus one
- c) Two children and three pregnancies.
- d) Three pregnancies

1.2 Which semester is Pholile currently in?

- a) First trimester
- b) second trimester
- c) Third trimester
- d) Fourth trimester

1.3 According to the World Health Organization (WHO) focused antenatal care model (approach), on which of the following periods will the midwife advise Pholile to return for the second antenatal visit?

- a) 36-40 weeks
- b) 28-32 weeks
- c) 18-26 weeks
- d) 10-18 weeks.

1.4 Which of the following anti tetanus vaccine will the midwife give Pholile during this first antenatal visit?

- a) TT<sup>1</sup> in the absence of evidence of previous immunizations.
- b) TT<sup>2</sup> in the absence of evidence of previous immunizations.
- c) TT<sup>3</sup> in the absence of evidence of previous immunizations.
- d) TT<sup>4</sup> in the absence of evidence of previous immunizations.

1.5 At 32 weeks gestation, which of the following changes are likely to be noted on Pholile?

- a) Pholile is likely to present with oedema of the lower limbs
- b) Pholile is likely to present with glycosuria.
- c) Pholile is likely to have a slight drop in Blood Pressure.
- d) Pholile is likely to experience heartburn.

1.6 Which of the following may Pholile present with during this first antenatal visit?

- a) Early morning polyuria
- b) Backache
- c) Morning sickness
- d) Constipation.

1.7 The condition in 1.6 above is likely due to the effect of which of the following hormones?

- a) The effect of the Lactogen hormone.
- b) The effect of the Human chorionic gonadotrophin hormone
- c) The effect of Oestrogen.
- d) The effect of progesterone.

1.8 Which of the following is true about the World Health Organization focused antenatal care (FANC) model (approach)?

- a) Pholile must be initiated on antiretroviral drugs.
- b) Pholile must always be accompanied by her partner when attending antenatal care.
- c) Pholile is carrying a high risk pregnancy.
- d) Pholile should attend at least 4 antenatal care visits for the duration of her pregnancy.

1.9 Ideally, which of the following tests should be done on Pholile during this current ANC visit?

- a) Antibody screening
- b) Rhesus factor , antibody screening, HIV and RPR
- c) Total Blood count, HIV and RPR
- d) Haemoglobin.

1.10 Which of the following baseline observations will be checked on Pholile during this first ANC visit?

- a) Pulse, Temperature and Blood Pressure (BP).
- b) The fundal height, BP, Pulse, Urinalysis and weight.
- c) The fundal height, lie, presentation, position and total blood count.
- d) The height, weight, urinalysis and BP.

**Questions 1.11 to 1.13 relate to following statement.**

**The female pelvis (gynaecoid pelvis) is considered to be “normal” as all the measurements of the gynaecoid pelvis are suitable for vaginal birth of a “normal sized” baby.**

1.11 Which of the following landmarks are found on the pelvic brim?

- a) The sub pubic angle
- b) The alae
- c) The obturator foramen
- d) The sacrum.

- 1.12 Which of the following is an important obstetric landmark on the female pelvis to facilitate engagement of the fetal head?
- a) The parietal diameter
  - b) The hollow of the sacrum
  - c) The promontory of the sacrum.
  - d) The ischial spines.
- 1.13 Which of the following is the location of the ischial spines?
- a) The true pelvis
  - b) The pelvic brim
  - c) Between the two innominate bones
  - d) The pelvic outlet.

**Questions 1.14 to 1.17 refer to development of the embryo, fetus, placenta and membranes.**

- 1.14 The embryonic stage is regarded as the most critical time in the development of fetal organs. Which of the following statements applies to this stage?
- a) Congenital malformations are common
  - b) Congenital malformations may be associated with rapid cell division.
  - c) Congenital malformations may result from poor maternal nutrition.
  - d) Environmental teratogens are responsible for most of the congenital malformations.
- 1.15 Which of the following is/are considered the function(s) of the amniotic fluid?
- a) Maintenance of fluid and electrolyte homeostasis
  - b) Cushions maternal abdomen from pressure
  - c) Allows for efficient fetal respirations.
  - d) Allows for interchange of gases between the maternal and fetal circulation.

1.16 When is the placenta fully developed?

- a) By 8 weeks
- b) By 10 weeks
- c) By 12 weeks
- d) By 14 weeks.

1.17 How much weight on average should a pregnant woman have gained by 32 weeks?

- a) 8kgs
- b) 10kgs
- c) 12kgs
- d) 14kgs

**Questions 1.18-1.21 refer to the fetus and other events around the fetus.**

1.18 Which of the following is true about the state of blood in the fetal circulation?

- a) The blood is dark red in colour
- b) Most of the blood is partially de-oxygenated
- c) The blood is rich in carbon dioxide
- d) Most of the blood is 65% deoxygenated.

1.19 Which of the following structure does the ductus venosus connect to?

- a) The ductus venosus connects the two atria
- b) The ductus venosus connects the two arteries to the placenta
- c) The ductus venosus connects the umbilical vein to the inferior vena cava
- d) The ductus venosus connects the umbilical vein to the maternal circulation.

1.20 Which of the following is the function of the foramen ovale?

- a) Allows the most of the blood to pass from the right atrium to the left atrium
- b) Supplies maternal lungs with blood for the process of oxygenation
- c) Allows most of the blood to by-pass the fetal lungs
- d) Allows for the flow of fetal blood to the ventricles to supply the rest of the body.

1.21 What is the main function of the sutures of the fetal skull?

- a) Allows for development of the fetal skull bones
- b) Allows for moulding during labour.
- c) Sutures are made from membranes so allows for the squashing of the fetal skull to during labor.
- d) Sutures are centres of ossification during development of the bones of the fetal skull.

**Questions 1.22 to 1.25 refer to some of the physiological changes and minor disorders a pregnant woman might experience during the course of her pregnancy.**

1.22 The woman may complain of heartburn. At what period of gestation is the woman likely to complain that the heartburn is getting worse?

- a) 20-32
- b) 30-40
- c) 34-40
- d) 36-40

1.23 Which of the following may help the woman to relieve the heartburn?

- a) Sleeping with her upper body elevated and not just using more pillows than usual
- b) Sitting up in bed for the whole night
- c) Taking small frequent meals with mild spices.
- d) Taking a hot bath just before going to bed.

1.24 Which of the following may contribute to physiological anaemia in the woman?

- a) Haemodilution
- a) Pregnancy usually causes anaemia in most mothers
- b) The fact that all pregnant women suffer from physiological anemia
- c) Fetal demands which are always too high in pregnancy.

1.25 What explanation can the midwife give to the woman if she presents with constipation.

- a) Constipation occurs as a result of reduced peristalsis in pregnancy.
- b) Constipation occurs as a result of the effect of progesterone and oestrogen.
- c) Constipation occurs as a result of the effect of progesterone, oestrogen and the Human chorionic gonadotrophin hormone.
- d) Constipation occurs as a result of the effect of progesterone and the chorionic gonadotrophin hormone.



## QUESTION 2

Read the following scenario and answer the questions that follow.

Phumzile is Para 3 Gravida 4, gestation 26 weeks. Her last normal menstrual period was on 25.09.2017. She presented at Mbabane Public Health Unit (PHU) for the initial antenatal care (ANC) visit today.

2. 1 What are the screening tests the midwife will perform on Phumzile? Give rationale for each.

**(8marks)**

2.2 Based on the World Health Organisation, focussed antenatal care model (approach), give an outline, of the care the midwife will provide to Phumzile during this visit. Give rationale for each point. **(17marks).**

**[25marks]**

## QUESTION 3

Read the following scenario and answer the question that follows.

Mrs Zulu is a Primigravida, 36 weeks gestation, aged 22 years. She has reported at Mbabane Public Health Unit today for a repeat antenatal care visit. Both maternal and foetal conditions are stable. At 36 weeks gestation the body has adapted to pregnancy and the uterus has developed and adjusted as well, partly as a result of the hormonal effect as well as the developing foetus.

Describe the stages of uterine development which Mrs Zulu is likely to go through during this pregnancy up to term (40 weeks). In your response include the characteristic uterine changes. Give rationale for these changes. **(25 marks).**

**[25 marks]**