UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
MAIN EXAMINATION QUESTION PAPER; MAY, 2018

TITLE OF PAPER: NORMAL PREGNANCY AND ANTENATAL CARE
COURSE CODE: MID407
DURATION: TWO (2) HOURS
TOTAL MARKS: 75

INSTRUCTIONS

1. ANSWER ALL QUESTIONS
2. ALL QUESTIONS CARRY EQUAL MARKS
3. READ THE QUESTIONS CAREFULLY
4. START EACH QUESTION ON A FRESH PAGE
5. TOTAL NUMBER OF PAGES EIGHT (8)

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MID407: NORMAL PREGNANCY AND ANTENATAL CARE

QUESTION 1
Answer all questions. Indicate the most appropriate response e.g. 1.2C, D. Each correct response carries one mark. Total possible marks 25.

1.1 Engagement in the primigravida normally takes place during the antenatal period. At what gestational period does the fetus engage?
A. After 36 weeks gestation.
B. At 36 weeks gestation.
C. At 38 weeks gestation.
D. At 40 weeks gestation.

1.2 During pregnancy, when lightening occurs, what are the minor disorders which may occur?
A. Nausea and vomiting.
B. Dull lower abdominal pain and hip pain.
C. Constipation and increased vaginal discharge.
D. Acute backache.

1.3 What facilitates lightening in the pregnant woman?
A. Formation of the lower uterine segment.
B. Incorporation of the lower uterine segment into the upper uterine segment.
C. The growth and development of the fetus.
D. Increased uterine size.

1.4 Which of the following pelvic anatomical structures may affect engagement in a primigravida in late pregnancy?
A. The ischial spines.
B. The intertuberculous diameter.
C. The promontory of the sacrum.
D. The obtuse diameter.
1.5 What are the sources of information on preconception care?
   A. School health educational and leisure programs.
   B. Literature on health promotion focusing on reproductive health.
   C. Midwives currently working in the labour ward.
   D. Community nurses during community visits.

1.6 When is most of the iron transported from the mother to the fetus during pregnancy?
   A. Most of the iron is transported in the second trimester.
   B. Iron is mostly needed during the first trimester.
   C. Most of the iron is transported to the foetus in the third trimester.
   D. Iron is a concern in pregnancy.

1.7 What is/are some of the effect(s) of oestrogen in the woman during pregnancy?
   A. Causes growth and development of the fetus.
   B. Causes vasodilation of the blood vessels in the lower limbs.
   C. Contributes to increase in size and number of the body cells.
   D. Contributes to oedema of the lower limbs.

1.8 What is/are the contributory factor(s) to haemodilution during pregnancy?
   A. Increase in blood volume
   B. Increase in plasma volume which is not consistent with increase in blood
   C. Increase in red blood cells
   D. Increase in plasma volume which is not consistent with the increase in the number of
      red blood cells.

1.9 Why is it important to confirm the pregnant woman’s haemoglobin (Hb) at 36 weeks
    gestation?
   A. The pregnant woman should go into labour with a ‘normal Hb’ to minimise the
      incidence of postpartum haemorrhage.
   B. Most pregnant women develop physiological anaemia.
   C. All pregnant women lose a lot of iron by 36 weeks gestation.
   D. There is increased iron demand by the fetus from 38 weeks gestation.
1.10 When does implantation occur following fertilisation of the ovum?
   A. After three weeks of engaging in unprotected sexual intercourse
   B. After two weeks of engaging in unprotected sexual intercourse.
   C. Within 9-14 days following fertilisation.
   D. Within 11-14 days following ovulation.

1.11 Why are midwives concerned about the pregnant woman contracting syphilis?
   A. Syphilis is a sexually transmitted infection.
   B. Usually the babies are malnourished at birth.
   C. The baby may develop nasal smudges.
   D. The pregnancy usually goes beyond the expected gestation (beyond term).

1.12 Why do midwives do urinalysis on a pregnant woman during each antenatal care visit?
   A. To identify abnormalities early.
   B. To exclude some of the pregnancy induced conditions in the mother.
   C. To rule out malnutrition.
   D. To rule out pre-existing Diabetes Mellitus.

1.13 Where does fertilisation normally take place?
   A. In both of the fallopian tubes.
   B. As soon as the mature ovum is expelled by the ovary.
   C. In the ampulla of the fallopian tube.
   D. In the interstitial portion of the fallopian tubes.

1.14 What is /are the function(s) of the amniotic fluid?
   A. Allows for symmetrical musculoskeletal fetal development.
   B. Protects the fetus against all forms / types of infection.
   C. Protects the pregnant woman from any direct trauma to the abdomen.
   D. Protects the fetus against domestic violence.
1.15 What may be the effects of true knots on the umbilical cord during pregnancy?
A. The fetus may experience intermittent or inconsistent abnormal fetal movements.
B. Mild to moderate hypoxia may contribute to irregular fetal heart patterns.
C. The mother may report irregular fetal movements on the first day.
D. True knots do not cause any adverse effects to either the mother or the fetus.

1.16 The vertex is one of the important regions of the fetal skull. Which of the following defines the vertex?
A. The area bound by an imaginary line drawn between the frontal bone, the parietal bone, the occipital bone and back to the frontal bone.
B. The area between the two fontanelles.
C. The area bound by an imaginary line drawn between the anterior fontanelle, the two parietal eminences and the posterior fontanelle.
D. The area bound by the face, the temporal bones and the occipital bone.

1.17 You are a senior student midwife and a junior student midwife asks you the question, "How do you describe the ischial spines? How would you answer him/her?"
A. They are two prominent structures where the intertubercular diameter is measured.
B. They are two blunt projections on either side of the pelvis at the pelvic outlet.
C. They are two projections between the intertubercular diameter.
D. They are found at the pelvic brim.

1.18 When there is incomplete ossification of the fetal skull bones, which structures are formed on the fetal skull?
A. The membranes
B. The prominences
C. The fontanelles
D. The sutures.
1.19 Iron deficiency anaemia is common in the third trimester. What is/are the likely contributory factor(s)?

A. Haemodilution.
B. The fetus is dependent on the mother’s reserves resulting in anaemia.
C. There is increased iron demand by the fetus in the third trimester.
D. Usually pregnant women are anaemic.

1.20 Which of the following will encourage pregnant women to participate during antenatal classes (sessions on antenatal education)?

A. Provision to ask questions at the end of the session.
B. When midwives talk about preparation for labour.
C. When parents are allowed to lead a discussion group.
D. When parents are allowed to freely present their views and concerns.

Questions 1.21 to 1.25 relate to the change and adaptation in pregnancy that occurs in the uterus.

1.21 What name is given to the endometrium during pregnancy?

A. The decidua
B. Decidua basalis
C. The Trophoblast
D. The anchoring villi.

1.22 What causes the increase in the size of the uterus?

A. The effect of progesterone.
B. The effect of prolactin
C. The effect of oestrogen.
D. The products of conception and the effect of oestrogen.
1.23 What contributes to the change in shape and position of the uterus between the 12th and 16th week of pregnancy?
   A. The uterus becomes part of the anterior abdominal wall.
   B. The bladder is displaced superiorly when the uterine size increases and comes into contact with the anterior abdominal wall.
   C. The increase in size of the uterus as it displaces abdominal contents.
   D. The rotation of the rectosigmoid colon.

1.24 When the midwife conducts an abdominal palpation at 36 weeks gestation, where does he/she palpate the fundus?
   A. Midway between the umbilicus and the symphysis pubis.
   B. Just above the umbilicus.
   C. Midway between the umbilicus and the xiphisternum.
   D. At the xiphisternum.

1.25 Which of the following statements is true about uterine divisions during the last two weeks of pregnancy?
   A. The lower uterine segment becomes instinct.
   B. The upper uterine segment becomes thinner in preparation for labour.
   C. There is a clear distinction between the upper and lower uterine segment.
   D. The isthmus develops into a thin membrane.
QUESTION 2

The placenta is a temporary endocrine organ which provides a connection between the fetus and the mother during pregnancy.

2.1 Explain the functions of the placenta at term. One mark for each correct point (20).

2.2 The fetal circulation allows for survival of the fetus in utero. Briefly describe and give rationale for each, the structures in the cardiovascular system of the fetus which allow for its survival. Consider 5 points. (5).

[25]

QUESTION 3

3.1 Briefly outline five (5) possible causes or contributory factors of nausea and vomiting in pregnancy. (10).

3.2 One of the responsibilities of the midwife is to monitor fetal well being during pregnancy. Briefly explain the indicators of fetal well being during pregnancy. One mark for each correct point explained. (10).

3.3 Outline five (5) physiological changes which can take place in the cardiovascular system during pregnancy and indicate the significance of the change. One mark for each correct point. (5).

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