

Mufar 0007



POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

**SELECTION EXAMINATION IN MD (OBSTETRICS &
GYNAECOLOGY) FEBRUARY/APRIL 2023**

Date: 18th April 2023

Time: 1.00 p.m. – 4.00 p.m.

Answer all six (06) questions.

Answer each question in a separate answer book.

SHORT ANSWER QUESTIONS

1.

1.1 Describe the arrangement of the muscles, fascia and the vasculature of the anterior abdominal wall excluding the inguinal canal. (80 marks)

1.2. List the anatomical structures that are cut in a supra pubic transverse abdominal (Pfannenstiel) incision. (20 marks)

2. Describe the physiological basis of the onset of labour in a uncomplicated term pregnancy. (100 marks)

STRUCTURED ESSAY QUESTIONS

3.

3.1. Explain why pregnancy is considered a prothrombotic state. (40 marks)

3.2. Briefly describe the pathophysiological basis for each of the following.

3.2.1. Deep vein thrombosis in the left lower limb of a 28-year-old woman with a uterine fibroid equivalent to a 24-week gravid uterus, who is on combined oral contraceptive pill. (20 marks)

3.2.2. Pulmonary embolism in a 36-year-old woman in her 4th pregnancy with active systemic lupus erythematosus and three first trimester miscarriages. (20 marks)

3.2.3. Deep vein thrombosis of the left upper limb in a 65-year old woman receiving chemotherapy for an ovarian carcinoma via a peripherally inserted central catheter in the same arm. (20 marks)

4. A 30-year-old non-pregnant woman was seen in the gynaecology clinic for evaluation of abnormal menstrual periods. She complained of recent onset weight gain, hair loss and intolerance to cold weather. On examination she was found to have facial puffiness and bradycardia. A clinical diagnosis of primary hypothyroidism was made.
 - 4.1. List five (5) clinical features (in addition to the above) that would support a diagnosis of hypothyroidism. (10 marks)
 - 4.2. Explain the physiological basis for the following:
 - 4.2.1. Weight gain (25 marks)
 - 4.2.2. Bradycardia (25 marks)
 - 4.2.3. The expected results in her thyroid function tests (25 marks)
 - 4.3. Outline the effects of untreated hypothyroidism on the reproductive system of this woman. (15 marks)

5. A 27-year-old intern house officer examined a patient admitted with non-specific symptoms for 2 days. The patient was diagnosed to have varicella zoster infection the following day. The house officer denies a history of varicella infection or immunization against varicella.
 - 5.1. Describe the pathogenesis of varicella zoster infection. (30 marks)
 - 5.2. Describe the clinical manifestations and the complications of varicella infection. (30 marks)
 - 5.3. Outline how you would diagnose varicella zoster infection excluding similar manifestations of other diseases. (30 marks)
 - 5.4. Briefly describe the management of the house officer following the contact with the patient. (10 marks)

6.

6.1. Ms. Y is 27-years-old and has a 9-month-old infant. She began taking the combined oral contraceptive pill (COCP) 3 months ago. She does not have any long-term medical disorders.

6.1.1. Name the 2 main types of hormones included in the COCP giving one (01) example for each type (10 marks)

6.1.2. Explain the mechanism of action of the COCP. (20 marks)

6.1.3. Discuss the advantages of using the COCP in Mrs. Y. (20 marks)

6.2.

6.2.1. What is the role of Clinical Audit in Obstetric Care? (10 marks)

6.2.2. List five (5) benefits of cervical smear as a screening test (15 marks)

6.2.3. Discuss with reasons the best study design for the following research question.

Do low levels of carotene and vitamin A in a pregnant woman's diet lead to a higher risk of preeclampsia? (25 marks)