

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION FOR MD (OBSTETRICS & GYNECOLOGY)
APRIL 2019

Date: 29th April 2019

Time: 1.30 p. m. - 4.30.p. m.

Answer all the six (06) questions.

Answer each question in a separate answer book.

SHORT ANSWER QUESTIONS

1. Describe the anatomy of the female bladder and the urethra with its anatomical relations, blood supply and their adaptations to its functions during pregnancy. (100 marks)
2. Describe the endocrinology of climacteric and menopause. (100 marks)

STRUCTURED ESSAY QUESTIONS

3. A 35-year-old woman delivers a baby by caesarian section. The following day she complains of pain and oedema in the lower limbs.
A diagnosis of deep vein thrombosis is made.
 - 3.1. What are the three (03) primary events which predisposes to thrombus formation? (30 marks)
 - 3.2. List five (05) important predisposing factors for deep vein thrombosis in this patient. (20 marks)
 - 3.3. Briefly describe how the factors stated in 3.2 leads to thrombosis. (30 marks)
 - 3.4. Briefly describe the pathological basis of the known major outcomes of this condition. (20 marks)

Contd...../2-

4.
 - 4.1. Mention the taxonomy of group Group B streptococcus with regard to Family, Genus, Species and Group. (10 marks)
 - 4.2. Briefly describe the following specific to group B streptococcus. (30 marks)
 - 4.2.1. Commensal bacteria
 - 4.2.2. Carriers
 - 4.2.3. Opportunistic organism
 - 4.3. List three (03) each neonatal and maternal infections (diseases) caused by the above organism. (30 marks)
 - 4.4. Briefly describe the principles underlying risk reduction measures for neonatal infections. (30 marks)
5.
 - 5.1. Name the three (03) common drug classes of tocolytic agents and give one (01) drug for each class. (15 marks)
 - 5.2. Explain the mechanisms responsible for the tocolytic effect of each of the drugs mentioned in 5.1. (60 marks)
 - 5.3. Briefly mention the role of tocolysis on obstetric practice. (25 marks)
6.
 - 6.1. Doppler ultrasonography
 - 6.1.1. Describe briefly the physics of Doppler ultrasonography. (25 marks)
 - 6.1.2. List different types of Doppler in ultrasonography. (15 marks)
 - 6.1.3. List four (04) common uses of Doppler ultrasonography in obstetrics. (10 marks)
 - 6.2. A study is conducted on the blood pressure of 60-year-old women with glaucoma in which 225 women are randomly selected. The mean systolic blood pressure is 150 mmHg and the standard deviation is 30 mmHg.
 - 6.2.1. Calculate a 95% confidence interval for the mean systolic blood pressure among the population of 60-year-old women with glaucoma. (30 marks)
 - 6.2.2. Suppose the above study is based on 100 women instead of 225 with the same mean and standard deviation.
 - Recalculate the 95% confidence interval. (10 marks)
 - Give reasons for the difference if any. (10 marks)