

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION FOR MD (OBSTETRICS & GYNAECOLOGY)
MARCH 2014

Date : 17th March 2014

Time : 1.00 p.m. – 4.00 p.m.

Answer all five questions

Write the answer to each question in a separate book.

Essay Question (1 hour)

Question 1

1. Discuss the molecular and cellular mechanisms of different types of immune hypersensitivity reactions. (50 marks)

Short Essay Questions (30 minutes each)

Question 2

- 2.1. Describe the gross and microscopic anatomy of the left testis. Include details regarding its blood supply and lymphatic drainage. (20 marks)
- 2.2. Briefly describe the embryological development of the testis. (05 marks)

Question 3

- 3.1.
 - (a) List the physiological mechanisms activated by low and high ambient temperatures to maintain body temperature. (06marks)
 - (b) Explain the role of brown fat in thermoregulation. (05 marks)
- 3.2.
 - (a) List five main mechanisms activating the vomiting reflex giving one example for each mechanism. (05 marks)
 - (b) Describe the pathophysiological basis of maternal complications caused by hyperemesis gravidarum. (09 marks)

Question 4

4.1

- (a) List the pathways in the fetal circulation that allows bypassing of the pulmonary circulation to perfuse the umbilical-placental circulation. (03 marks)
- (b) Outline the steroidogenesis in the feto-placental unit. (07 marks)
- (c) Describe the endocrinological mechanisms underlying menarche. (05 marks)

4.2.

- (a) List three causes of physiological jaundice in a neonate.(03 marks)
- (b) Briefly explain how surfactant deficiency leads to pulmonary oedema. (03 marks)
- (c) Briefly describe why a neonate is more prone to dehydration. (04 marks)

Question 5

- 5.1 Outline the mechanisms by which a tumour escapes immune defences. (10 marks)
- 5.2 Briefly discuss how monoclonal antibodies are useful in management of malignant tumours. (10 marks)
- 5.3. List the features of a tumour which influence radio sensitivity in radiotherapy ?. (05 marks)