

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION FOR OBSTETRICS & GYNAECOLOGY
FEBRUARY/MARCH 2017

Date :- 7th March 2017

Time :- 1.00 p.m. – 4.00 p.m.

Answer all six (06) questions.

Write the answer to each question in a separate book.

SHORT ANSWER QUESTIONS

1. Describe the gross anatomy of the internal iliac artery and its branches.
Briefly outline its clinical importance. (100 marks)
2. Explain the mechanisms involved in maintaining haemostasis and outline how these are altered during pregnancy. (100 marks)

SHORT ESSAY QUESTIONS

3.
 - 3.1. List three (03) pathological processes that cause reduction in the size of an organ or tissue. (15 marks)
 - 3.2. Define each of the pathological processes stated in 3.1. (15 marks)
 - 3.3. Describe the cellular events underlying any one (01) of the processes mentioned in 3.1. (50 marks)
 - 3.4. Discuss the relevance of the pathological process described in 3.3. in relation to obstetrics and gynaecology. (20 marks)
4.
 - 4.1. Briefly describe the stages and pathogenesis of Human Immune deficiency Virus (HIV) infection (45 marks)
 - 4.2. List the laboratory tests used in the diagnosis and management of HIV infection and outline the basis of their use. (40 marks)
 - 4.3. List six (06) classes of anti retroviral therapy available for the management of HIV infection. (15 marks)

5.

5.1. State the morphological, immune-phenotypical and functional differences between natural killer cells (NK cells) and T lymphocytes. (30 marks)

5.2. Describe the role of NK cells in the feto-maternal interface in protecting the fetus. (10 marks)

5.3. Outline the mechanism of action of B lymphocytes in combating bacterial infection. (30 marks)

5.4. Write short notes on formation of fetal blood cells. (20 marks)

5.5. Explain how a fetus with blood group A is capable of surviving in a mother with blood group B without developing haemolysis. (10 marks)

6.

6.1. Outline the synthesis of vitamin D in the body. (10 marks)

6.2. Describe three (03) metabolic functions of vitamin D. (15 marks)

6.3. Briefly describe the mechanism of absorption of iron from the gut and how inhibitory and facilitatory factors affect the absorption of iron. (25 marks)

6.4.

6.4.1. List four (04) types of DNA damage. (20 marks)

6.4.2. List four (04) mechanisms of DNA repair. (10 marks)

6.4.3. Briefly outline the steps involved in polymerase chain reaction. (20 marks)