

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION FOR MD (OBSTETRICS & GYNECOLOGY)

April 2018

Date: 27th April 2018

Time: 1.30pm to 4.30pm (03 hours)

ANSWER ALL SIX (06) QUESTIONS

Answer each question in separate answer book

1. Describe the structures which support the organs in the female pelvis and explain their role in maintaining bladder and bowel continence. (100 Marks)
2. Describe the physiological mechanisms that restore the blood pressure following the loss of 1.5L of blood. (100 Marks)
3.
 - 3.1 Describe the features of a myofibroblast in terms of light microscopy, ultrastructure and immuno-pheno type. (30 Marks)
 - 3.2 Describe the possible origin of this cell. (20 Marks)
 - 3.3 Discuss its significance in clinical practice. (50 Marks)
4.
 - 4.1 Describe the following terminology specific for herpes viridae family. (15X3=45 Marks)
 - a. Latent infection
 - b. Reactivation
 - c. Recurrence or recrudescence
 - 4.2 Name three infective agents of the above family that can cause painful vesicular ulcerative lesions in the vulva. (5X3=15 Marks)
 - 4.3 How do the neonatal herpes infection rates differ when the baby is born with a mother having primary genital herpes infection in contrast to recurrent genital herpes infection at term? (25 Marks)
 - 4.4 Name the three categories of disease exhibited as neonatal herpes. (5X3=15 Marks)

5. 5.1 Name one selective sex hormone receptor modulator each that act predominantly on oestrogen receptors, progesterone receptors and androgen receptors. (5X3=15 Marks)
- 5.2 Explain mechanisms of action of each selective sex hormone receptor modulator you have mentioned under 5.1. (20X3=70 Marks)
- 5.3 List one indication each for the use of the selective sex hormone receptor modulator you mentioned in 5.1 (15 Marks)
6. 6.1.1 Define stem cells (20 Marks)
- 6.1.2 List five known potencies of stem cells (3X5=15 Marks)
- 6.1.3 List **three** sources **each** of mesenchymal stem cells of adult and fetal origin commonly obtained. (2.5X6=15 Marks)
- 6.2 Investigator A and Investigator B respectively measured the heights of 100 and 1000 randomly selected women in a community.
- 6.2.1 Which investigator would tend to get a bigger standard deviation (SD) for the heights of the women in their sample? Briefly explain the statistical basis for your answer. (20 Marks)
- 6.2.2 Explain which investigator is likely to get a larger standard error of the mean height. (15 Marks)
- 6.2.3 Explain which investigator's sample is likely to include the tallest woman? (15 Marks)