

**First Professional MBBS Degree Supplementary Examinations
January 2019**

Physiology – Paper II

Time: 3 Hours

Total Marks: 50

- *Answer all questions*
- *Draw Diagrams wherever necessary*

Long essay

(10)

1. A married female aged 25 years has history of amenorrhoea for three months. She also has early morning sickness. Answer the following questions based on your knowledge in physiology:

- What is your diagnosis
- Describe one test to confirm your diagnosis
- Describe neuroendocrine reflex in parturition and lactation
- Add a note on foeto-placental unit

(1+2+5+2)

Short essays

(2x5=10)

2. Describe the connections and functions of cerebellum
3. Explain impedance matching occurring in the ear and describe the tympanic reflex

Answer briefly

(5x3=15)

4. Referred pain
5. Law of projection
6. Functions of progesterone
7. Steps in thyroid hormone synthesis
8. Normal EEG waves

Draw and label

(2x2½=5)

9. Visual pathway.
10. Hormonal changes during a normal menstrual cycle.

Explain the physiological basis of the following

(5x2=10)

11. Hypothalamic disorders results in obesity
12. Sodium-potassium pump helps to maintain RMP in a neuron
13. Liver plays a major role to produce hyperglycaemia in diabetes mellitus
14. Pyramidal tract lesions produces exaggerated deep tendon reflexes
15. Deficiency of somatomedins in human beings may result in dwarfism