

2010 Scheme

Q.P. Code: 104001

Reg. No.:

First Professional MBBS Degree Supplementary Examinations June 2026

Physiology – Paper II

Time: 3 Hours

Total Marks: 50

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Long essay

(10)

1. A 43-year-old female patient, Ms. Y, presents with central obesity, hirsutism, proximal muscle weakness, and depressive symptoms. On physical examination, she has thin skin, multiple striae on the abdomen, and a "buffalo hump". Her fasting blood sugar is 170 mg/dL and blood pressure is 180/94 mm Hg. Laboratory tests show elevated plasma cortisol levels with loss of normal diurnal variation.
 - a) What is the most probable diagnosis
 - b) Explain the physiological basis for the clinical features observed in this patient
 - c) Write a short note on the normal diurnal variation of cortisol secretion
 - d) Name the hormones involved in the hypothalamic-pituitary-adrenal (HPA) axis regulating cortisol secretion

(1+5+2+2)

Short essays

(2x5=10)

2. Properties of skeletal muscle
3. Brown-Sequard Syndrome

Answer briefly

(5x3=15)

4. Tests for ovulation
5. Any Three errors of refraction and their corrections
6. Myasthenia Gravis
7. Differences between REM and NREM Sleep
8. Hormones for Lactation

Draw and label

(2x2½=5)

9. Pain pathway
10. Accommodation reflex pathway

Explain the physiological basis of the following

(5x2=10)

11. Stretch reflex
12. Impedance Matching
13. Tetany
14. Vasectomy
15. Babinski Sign
