

2019 Scheme

Q.P. Code: 114001

Reg. no.:

First Professional MBBS Degree Regular/Supplementary

Examinations November 2023

Physiology II

Time: 3 Hours

Total Marks: 100

- 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 Essays

(2x15=30)

1. A 55-year-old man came to the medicine department with complaints of headache. On examination he had coarse facial features, enlarged hands and feet and hepatosplenomegaly. His blood sugar was elevated
 - a) Name the most probable clinical condition
 - b) Physiological basis for his enlarged hands and for the elevated blood sugar
 - c) What type of visual field defect can occur in this patient. Give its physiological basis
 - d) Add a note on somatomedins (1+3+3+1+4+3)
2. Define synapse. Depict the mechanism of synaptic transmission using a flow chart. Describe the post - synaptic inhibition. Add a note on synaptic plasticity (1+4+7+3)

Short essays

(5x8=40)

3. Describe the ovarian changes in menstrual cycle and the hormones regulating it (5+3)
4. Describe the functions of Thyroid hormone. Write the physiological basis for cretinism (5+3)
5. Draw and label the pathway for fast pain from the right lower limb. Describe the supra-spinal modulation of pain (4+4)
6. Depict the auditory transduction using a flow chart. Add a note on masking of sound (5+3)
7. Describe the actions of insulin. Write the physiological basis for polyuria and polyphagia in Diabetes Mellitus (3+5)

Write briefly

(5x4=20)

8. Physiological basis of intra uterine devices (IUCD)
9. Two – point discrimination is better on the finger tips than on the back. Why
10. Edema is not a feature of primary hyper aldosteronism. Why
11. Compare the Upper Motor Neuron (UMN) and Lower Motor Neuron (LMN) lesions
12. Physiological basis for myasthenia gravis

One word Answers

(10x1=10)

13. Normal range for serum calcium level is -----
14. Disdiadochokinesia is a feature of ----- disorder
15. ----- cells form the blood testes barrier
16. Edema in hypothyroidism is due to the accumulation of -----
17. Hypothalamic nucleus responsible for heat generation is -----
18. Sleep spindles and K- complexes are seen in ----- sleep
19. Disappearance of alpha waves in EEG while opening the eyes is called -----
20. Type of memory lost in Alzheimer's disease in -----
21. Disorders due to the hypersecretion of glucocorticoids is called -----
22. Name the hormone secreted by the pineal gland
