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

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