

# **2019 Scheme**

**Q.P. Code: 114001**

**Reg. no.: .....**

## **First Professional MBBS Degree Regular/Supplementary Examinations February 2022 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 69-year-old man went to consult his physician. He had tremors in his hands and fingers. His face was unexpressive. When he was invited to enter the physician's office, he had difficulty in standing up. He walked slowly into the office. There was no sensory loss. The stretch reflexes were normal and the muscles exhibited rigidity.
  - Identify this condition
  - Discuss the physiological basis of this condition
  - Describe the connections of basal ganglia
  - Discuss the functions of basal ganglia

(1+4+5+5)
2. List the hormones of the anterior pituitary gland. Describe the actions and control of growth hormone. Explain the consequences of its hyper and hypo secretion (2+5+3+5)

### **Short essays**

**(5x8=40)**

3. Describe the effects of complete transverse section of spinal cord.
4. Describe the physiological actions and control of testosterone secretion
5. Explain the functions of middle ear
6. Explain neuromuscular transmission in response to an adequate stimulus to the motor nerve.
7. Explain the different types of intercellular connections.

### **Write briefly**

**(5x4=20)**

8. Methods of contraception in the woman.
9. Draw a taste pathway.
10. Explain the ionic basis of resting membrane potential of a nerve fiber.
11. Draw the diagram of stretch reflex arc
12. Explain the physiological basis of referred pain.

### **One word Answers**

**(10x1=10)**

13. Yellowish tint of skin in myxoedema is due to.....
14. Adrenal cortical insufficiency leads to a condition.....
15. Bilateral destruction of ventromedial nucleus of hypothalamus results in .....
16. The motor speech centre is .....area
17. Acromegaly is due to hypersecretion of .....in adults
18. Detection of pregnancy is based on hormone .....
19. Sensation lost in ageusia is.....
20. Raised intraocular pressure is called.....
21. Process of programmed cell death is called .....
22. Degenerative changes in distal part of nerve fiber is called.....

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