

# 2019 Scheme

Q.P. Code: 114001

Reg. no.: .....

## First Professional MBBS Degree Supplementary (SAY) Examinations May 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 40- year old female patient reported that she was feeling very weak. Her arms and legs were thin but abdomen, upper back and face were full with deposition of fat. She had also noticed that minor injuries were resulting in bruises and taking a long time to heal. Reddish purple striations were seen in the skin of her abdomen. Her blood pressure was 180/100 mmHg, pulse rate was 99/min.
  - a) Identify the condition.
  - b) Discuss the physiological basis for the above condition
  - c) Discuss the physiological and pharmacological actions of glucocorticoids

(1+5+4+5)
2. Explain the connections and functions of cerebellum. Add a note on clinical symptoms seen in cerebellar lesions. 

(5+5+5)

### Short essays

(5x8=40)

3. Describe otolith organs and their functions
4. Describe endometrial changes that occur during a normal menstrual cycle. Name the hormone responsible for each phase. 

(5+3)
5. Draw the accommodation reflex pathway. Describe the changes occurring in accommodation.
6. Discuss the ionic basis for action potential of a nerve fiber.
7. Explain the different transport mechanisms across a cell membrane.

### Write briefly

(5x4=20)

8. Explain the physiological basis of Parkinson's disease.
9. Describe the physiological basis of cretinism.
10. Draw a labeled diagram of visual pathway. Explain the physiological basis of macular sparing 

(2+2)
11. Define chronaxie and rheobase. Explain strength duration curve with the help of a diagram 

(2+2)
12. Explain the physiological basis of myasthenia gravis.

### One word Answers

(10x1=10)

13. Babinski sign is positive in.....
14. In Argyll Robertson pupil, the reflex which is lost .....
15. In Turner's syndrome, karyotype pattern is .....
16. Resting membrane potential of a skeletal muscle is.....
17. The part of a neuron in which action potential initiates is.....
18. The type of muscle found in the iris of the eye is .....
19. Neurotransmitter secreted at the Autonomic ganglia is.....
20. Adrenal medullary hormones belong to a chemical class of.....
21. Cells of testis that secrete testosterone is .....
22. The condition in which carpopedal spasm is seen is .....

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