

**Q.P. Code: 114001****Reg. no.: .....****First Professional MBBS Degree Regular Examinations March 2021**  
**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 43-year-old woman complaining of double vision especially for the last 3 months. She has noticed difficulty holding her head up especially in the evenings. Her family noticed that her voice has become quieter. She has lost about 3kg in weight in the past 6 months. The woman has had no significant previous medical illnesses.
  - What is the diagnosis.
  - What is your plan for investigation and management of this patient.
  - Draw and label neuromuscular junction and describe the neuromuscular transmission. (2+7+6)
2. Important findings on examination include decrease in power in all muscle groups. Tone, coordination, reflexes and sensation are normal. Bilateral ptosis is present and is exacerbated by prolonged upward gaze. Pupillary reflexes, eye movements and funduscopy are normal. Speech becomes soft when the patient is tired. Symptoms are usually worse in the evenings and better in the mornings.
  - What are the connections and functions of Basal ganglia. Add a note on Parkinsonism. (8+7)

**Short essays****(5x8=40)**

3. Draw a diagram to show the origin, course and termination of Cortico spinal tract
4. List the different types of inhibition. Explain Renshaw cell inhibition
5. Define chronaxie, rheobase and utilization time. Draw a strength duration curve.
6. Explain theories of pain and give two examples
7. Draw a neat diagram of visual pathways and label its parts

**Write briefly****(5x4=20)**

8. Name the glucocorticoids and mention its functions
9. How does REM sleep differ from Non REM sleep
10. Describe features of acromegaly
11. Describe secondary sexual characteristics in females
12. Describe parturition

**One word Answers****(10x1=10)**

13. Digestion of proteins occur in .....
14. Stomach epithelial cells secrete .....
15. In caisson's disease pain in the joints is due to .....
16. The maximum amount of carbon dioxide in human body is transported as.....
17. Altitude sickness is typically due to .....
18. The primary function of the cerebrospinal fluid is to .....
19. The lungs are protected by .....
20. Emphysema is characterized by .....
21. Motor speech center is area .....
22. The receptor for dim light vision is .....

\*\*\*\*\*