

Q.P. Code: 303379

Reg. No:.....

**Final Year M.Sc Medical Physiology Degree Supplementary
Examinations February 2018**

Nervous System, Special Senses, Muscle and Nerve Physiology

Time: 3 hrs

Max. Marks: 100

- *Answer all the questions*
- *Draw diagrams wherever necessary*

Essay: (20)

1. Describe the neuronal organization of basal ganglia with its afferent and efferent connections. Explain the functions of basal ganglia and add a note on Parkinsonism.

Short Essays: (8x10=80)

2. List the sensory pathways of dorsal column of spinal cord. Explain the pathway for fine touch from left leg.
3. Describe the major nuclei of hypothalamus and their functions.
4. Explain the causes and treatment of various refractive errors of eyes.
5. Explain the physiology of hearing. Add a note on types and tests for deafness.
6. Describe the structure of neuromuscular junction and explain the steps in transmission of impulses across NMJ. Add a note on myasthenia gravis.
7. Compare skeletal muscles with smooth muscles.
8. Explain the structure of olfactory receptors and describe the olfactory pathway.
9. Describe the mechanical, electrical and thermal changes taking place during muscle contraction.
