

[LB 123]

OCTOBER 2012

Sub. Code: 2020

M.D. DEGREE EXAMINATION
BRANCH V – PHYSIOLOGY
PAPER III – NERVOUS SYSTEM AND SPECIAL SENSES

Q.P. Code : 202020

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
I. Essay:			
1. Discuss the connections and functions of Thalamus Control of the body.	9	15	10
2. How is pain perceived? Discuss the descending pain control mechanism.	9	15	10
II. Short Questions:			
1. Write Neural circuit for transmission of taste signal	3	8	5
2. Describe the electrophysiology of photo receptors.	3	8	5
3. Define stretch reflex? Discuss Inverse stretch reflex.	3	8	5
4. What is Babinski sign? What its physiological & pathological Significance.	3	8	5
5. Describe the parkinson's disease and huntington's disease.	3	8	5
6. Discuss function of hair cells in Vestibular apparatus.	3	8	5
7. Describe the structure and function of limbic system.	3	8	5
8. Discuss the pathophysiology of fever.	3	8	5
III. Reasoning Out:			
1. Why dysmetria seen in cerebellar disease?	5	10	5
2. The nerve gases that were developed for chemical warfare generally inhibit acetyl choline esterase. Why this inhibition produce death?	5	10	5
3. In a normal subject, central delay for a given reflex response was about .9 ms. Explain your answer.	5	10	5
4. Human can discriminate between many different odours. What are the mechanism that make this possible?	5	10	5
IV. Very Short Answers :			
1. Name the four types of eye movements & the function	1	4	2
2. What is a "final common path" & its Importance.	1	4	2
3. What is Bell Magendie law & its importance.	1	4	2
4. Explain hyperalgesia and allodynia.	1	4	2
5. Define somnambulism and narcolepsy.	1	4	2
6. List the clinical use of EEG	1	4	2
7. What is mass reflex?	1	4	2
8. Name the five types of neuron found in the cerebellar cortex.	1	4	2
9. What is an intention tremor?	1	4	2
10. Mention the various type of memory?	1	4	2
