

[KQ 122]

Sub. Code : 2022

M.D. DEGREE EXAMINATION.

Branch V — Physiology

NERVOUS SYSTEM AND SPECIAL SENSES

Common to :

Paper III — (Old/New/Revised Regulations)

(Candidates admitted from 1988–89 onwards)

and

Paper III — (for candidates admitted from 2004–2005
onwards)

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes .

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay :

1. Discuss the role of various reflexes integrated at the levels of spinal cord and medulla in the regulation posture and movement. (20)

2. Describe various properties of receptors. With the help of a suitable diagram, explain how the sensation of crude touch is projected from the receptor to the cortex. (15)

3. Discuss the connections and functions of brainstem Reticular Activating System (RAS). Explain the role of RAS in the genesis of EEG waves. (15)

II. Write short notes on : (6 × 5 = 30)

- (a) Mechanism of hearing.
- (b) Visual cortex.
- (c) Hair cells of vestibular apparatus.
- (d) Parkinsonism.
- (e) Cortical plasticity.
- (f) Concept of categorization of cerebral hemisphere.

MARCH 2008

[KS 123]

Sub. Code : 2020

M.D. DEGREE EXAMINATION.

Branch V – Physiology

NERVOUS SYSTEM AND SPECIAL SENSES

(Common to all candidates)

Q.P.Code : 202020

Time : Three hours

Maximum : 100 marks

Draw diagrams wherever necessary.

Answer ALL questions.

- I. Essay questions: (2 × 20 = 40)
1. Describe the posture regulating mechanisms in the body.
 2. Mention the afferent and efferent connections of Hypothalamus and explain its functions.
- II. Write Short notes on : (10 × 6 = 60)
1. Sleep.
 2. Final common pathway.
 3. Memory.
 4. Intrinsic analgesic system.
 5. Colour vision.
 6. Cochlea.
 7. Cholinergic projections to cerebral cortex from basal forebrain.
 8. Huntington's disease.
 9. Taste receptors and signal transduction.
 10. Supra chiasmatic nuclei
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September 2008

[KT 123]

Sub. Code: 2020

M.D. DEGREE EXAMINATION

Branch V – Physiology

Paper III – NERVOUS SYSTEM AND SPECIAL SENSES

(Common to all candidates)

Q.P. Code : 202020

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Describe nuclei afferent and efferent connections and functions of cerebellum. Add a note on cerebellar lesions.
2. Describe visual pathway and effects of lesions at various levels.

II. Write short notes on :

(10 X 6 = 60)

1. Endo cochlear potentials.
 2. Renshaw cell inhibition.
 3. Role of nervous system in the behavioural functions of the body.
 4. Neural mechanisms of REM sleep.
 5. Pain perception.
 6. Speech audiometry.
 7. Nucleus tractus solitarius.
 8. Neurotrophins and their use in various disease
 9. Memory.
 10. Role of Hypothalamus in food intake.
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