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INSTITUTE OF INDIGENOUS MEDICINE, UNIVERSITY OF COLOMBO, RAJAGIRIYA
BUMS LEVEL II – FIRST SEMESTER EXAMINATION – SEPTEMBER 2015

PHYSIOLOGY III
COURSE CODE - AS 2102

Time: 2 1/2 hours
1.45. p.m. – 4.15 p.m.

Index no

Answer all questions.

Part I - Structured Questions

01. A. Name the lobes of the cerebral cortex for the following special areas

I. Gustatory area : _____ (0.5 Mark)

II. Olfactory area : _____ (0.5 Mark)

III. Wernickes area: _____ (0.5 Mark)

IV. Broca's area : _____ (0.5 Mark)

V. Visual area : _____ (0.5 Mark)

B. I. How can you elicit Babinski's sign? (1.5 Mark)

II. In what kind of neurological condition , this sign will be positive ? (01Mark)

C. I. Name two cranial nerves which are exclusively sensory? (01Mark)

II. Name two cranial nerves which are exclusively motor nerves? (01Mark)

III. Name three salivary glands and mention its parasympathetic nerve supply?

(1.5 Marks)

D. I. What is Lower motor neuron facial nerve palsy?

(0.5 Marks)

II. How is it differ clinically from upper motor neuron facial nerve palsy ?

(01 Mark)

02. A.1. List two major functions of the spinothalamic tract ?

(01 Mark)

II. What will happen to spinothalamic function, if lesion at spinal level?

(01 Mark)

B.I. List three motor pathways in the body?

(1.5 Marks)

II. List three types of motor activities of the above pathways?

(1.5 Marks)

C. I. What is extra pyramidal pathway? **(01 Mark)**

II. List the components of this pathway? **(1.5 Marks)**

D. I. What are the characteristic features of Parkinsons disease? **(01 Mark)**

II. What component's degeneration produces the above disease? **(0.5 Mark)**

III. What kind of neurotransmitter imbalance causes this condition? **(01 Mark)**

Part II-Essay Questions

01. A. Explain briefly about the functions of the hypothalamus (06 Marks)

B. List the functional differences between the Right and Left cerebral hemishpheres (06 Marks)

C. 60 years old clerical officer presented to the GP clinic with the history of weakness in the Right side of the body while walking, and unable to hold the tea cup with his left hand due to tremor, and the same time he felt in difficulties in wearing his slippers to the left foot.

I. What could be the problem? (03 Marks)

II. What are other symptoms and signs may be seen in this patient? (05 Marks)

02. Write short notes on the followings

A. UMN facial nerve palsy (05 Marks)

B. Metabolic fate of glucose in RBC (05 Marks)

C. Neuro muscular junction (05 Marks)

D. Bitemporal hemianopia (05 Marks)

03. A. A patient with agrochemical poisoning who was admitted to emergency medical ward with excessive salivation from the mouth and excessive tearing from his eyes. On examination his heart rate was 50 /minute and his pupils were constricted.

I. What is the reason for the above symptom and sign ? (03 Marks)

II. List the other symptoms and signs which may present in this patient ? (05 Marks)

B. I. What is Referred pain ? (03 Marks)

II. Give three examples for referred pain ? (03 Marks)

C. List the physiological differences between the symphathetic and parasympathetic nervous system. (06 Marks)
