

**INSTITUTE OF INDIGENOUS MEDICINE, UNIVERSITY OF COLOMBO, RAJAGIRIYA**  
**BAMS LEVEL II- SECOND END SEMESTER EXAMINATION – APRIL 2015**  
**SHAREERA KRIYA (PHYSIOLOGY & BIOCHEMISTRY) - IV**

**COURSE CODE – AS 2202**

**Time: 2 ½ hours**  
**1.45 p.m. – 4.15 p.m**

**Answer all questions.**

**Index No**

**Part I - Structured Questions**

1. Indicate the nerve pathway of the following

(a). Direct pupillary light reflex

(03 Marks)

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(b). Consensual pupillary reflex

(03 Marks)

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2. Following a fall from a tree, a man has fractured 2 cervical vertebrae. Fracture has damaged the left side of the spinal cord at cervical segments 5 and 6 (C<sub>5</sub> and C<sub>6</sub>). Giving reasons, state five (05) neurological signs that the patient may have. (07 Marks)

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3. Write short notes on the following (04 Marks)
- (a) Motor cortex

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- (b) Taste sensation (03 Marks)

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4. Briefly describe the catabolism of the following.

(a) Nitrogen moiety of protein

(03 Marks)

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(b) Carbon skeleton of protein

(03 Marks)

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5. Explain the physiological basis of the following.

(a) Urine is light yellow in haemolytic jaundice but dark yellow in hepatocellular jaundice.

(04 Marks)

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(b) Neomycin (an antibiotic) is given by mouth in the management of liver failure (03 Marks)

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6. Write short notes on the following;

(a). Conditionally essential aminoacids (03 Marks)

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(b). Essential fatty acids (04 Marks)

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**Part II – Essay Questions**

1. Describe how glycogen stored in the skeletal muscles is used to generate energy during aerobic exercise (When oxygen is available). (20 Marks)

2. When the arm of a subject was pricked with a pin, arm was withdrawn due to a reflex. Describe the electro-chemical changes occur during transmission of impulse during the reflex. (20 Marks)

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