

## MODEL QUESTION PAPER

### PHYSIOLOGY & BIOCHEMISTRY - Paper II

Time : 3 hrs  
(1x 10=10)

#### Multiple Choice Question

1. Cushing's syndrome is due to hypersecretion of
  - A. Glucocorticoids
  - B. Mineralocorticoids
  - C. Both
  - D. None
2. Normal blood urea level is
  - A. 10 – 15mg / dl
  - B. 9 – 11 mg / dl
  - C. 25 – 40mg / dl
  - D. 100 – 120 mg / dl
3. All are components of Saliva except
  - A. Blood group antigens
  - B. Lysozymes
  - C. Platelets
  - D. Immunoglobins
4. Which hormone initiates Oogenesis?
  - A. FSH
  - B. Testosterone
  - C. LH
  - D. DHEA-S
5. The renal system does not play a direct role in regulating which of the following?
  - A. Blood solute concentrations
  - B. Blood temperature
  - C. Blood pressure
  - D. Blood pH
6. The characteristic feature of the pyramidal tract is
  - A. 20 % of fibres cross
  - B. 60% of fibres originate from primary motor cortex
  - C. 20% of the fibres show segmental intercrossing
  - D. 80% of the fibres do not cross
7. In comparison to the cones, the rods are more
  - A. concentrated in the fovea region
  - B. sensitive to dim light

- C. important for colour vision  
D. sensitive to detail
8. All of the following are reducing sugar except  
A. Sucrose  
B. fructose  
C. Glucose  
D. Maltose
9. All of the following except one are Aromatic Amino acid  
A. Tyrosine  
B. Phenyl alanine  
C. Tryptophan  
D. Homocysteine
10. Which of the following type of cells the cell junction is abundant?  
A. Cardiac cells  
B. Muscle cells  
C. Hepatic cells  
D. Epithelial cells

**Short Essay**

**( 5 x 10= 50)**

1. Explain the regulation of blood calcium level.
2. Cushing disease
3. Enumerate the functions of cerebellum
4. Function of Thalamus
5. Function of saliva & regulation of Salivary secretion
6. Explain spermatogenesis
7. Draw a diagram of visual pathway & explain it.
8. Glycolysis

**Long answer Questions (LAQ)**

**(10 x 5 = 50)**

1. A 45-year-old casual labourer comes to the OPD with complaints of excessive thirst, urination, hunger and weakness, of two weeks' duration with your knowledge of physiology, answer the following.
  - What is the most likely condition.
  - What tests would you suggest to confirm.
  - How can you explain his symptoms.

- What are the dietary and lifestyle modifications you would suggest for this man. (1+2+5+2)
2. Enumerate the descending tracts of spinal cord. Describe in detail the pyramidal tracts.
  3. Describe in detail about gastro-intestinal movements
  4. What are the female sex hormones? Explain their actions. (2+8)
  5. Give an account of accommodation. Add a note presbyopia (4+6)