

2020
PHYSIOLOGY – HONOURS
THIRD PAPER
FULL MARKS- 50
TIME – 2 HOURS

(Candidates are required to give their answers in their own words as per as practicable.)

Answer any 5.

1. a) Describe the formation, circulation and functions of Cerebrospinal fluid (CSF).
b) What do you mean by blood brain barrier? (4+2+3)+1=10

2. a) Give an account of different nuclei of thalamus.
b) What is thalamic animal? 7+3=10

3. a) Describe with a neat diagram the origin, course, termination and functions of Corticospinal tract.
b) What is comma tract of Schultz? 8+2=10

4. Write a short note (any 2)
 - i) Muscle spindle
 - ii) Meninges of brain
 - iii) Parkinson's disease
 - iv) Gate control theory of pain 5+5=10

5. a) Define inotropic receptor with suitable example.
b) Describe the structure and function of different types of muscarinic receptors. 4+6=10

6. a) Describe the principle of construction and uses of compound microscope.
b) What is meant by resolving power of microscope? (6+2)+2=10

7. a) What is Aquaporin?
b) Describe the role of kidney in renal regulation of acid-base balance. 2+8=10

8. a) "Sensory receptor is a biological transducer" --- Explain.
b) Describe the olfactory pathway with diagram.
c) What is Muller's law of specific nerve endings? 2+6+2=10

