

2022

PHYSIOLOGY

[HONOURS]

(B.Sc. Fourth Semester End Examination-2022)

PAPER-C10T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

A. Answer any FIVE questions of the following: 5x2= 10

1. Define Reflex Arc.
2. Why Basal Ganglia is known as primitive motor cortex
3. Mention two functions of CSF.
4. What are the afferent and efferent conuotions of a Muscle spindle?
5. What is Papet circuit?
6. Classify memory.
7. What do you mean by speech centre?
8. What is classical conditioning? Give an example.

B. Answer any FOUR questions of the following: 4x5 = 20

1. How CSF formed in the ventricle? The formation of CSF is a filtration process or secretion process: Justify your answer. 3+2
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(2)

2. Write the components of Basal Ganglia. Describe the hypokinetic and hyperkinetic dysfunctions of basal ganglia.

$$1\frac{1}{2} + 3\frac{1}{2}$$

3. Define Pain pathway. Write a short note on Referred Pain. 3+2
4. Describe the molecular mechanism of long term memory. 5
5. Define different sleep centers and name of neurotransmitter involved in sleep. Write the characteristics different waves of EEG. 1+1+3
6. Write the difference between sympathetic and parasympathic nervous system. 5

C. Answer any ONE question of the following: 1x10 = 10

1. Write the origin, transmission and functions of tract of Goll and Burdach.

What are the importance of blood brain barrier?

Draw a schematic diagram of Golgi-tanaka organ. 3+3+2+2

2. Classify cerebellum on the basis of functions. What are the deep cerebellum nuclei? Write the functions of cerebellum. What is Purkinje cell? 2+2+4+2