

BBB-003-1184002

Seat No.

M. Sc. (CBCS) (Sem. IV) (W.E.F. 2016) Examination

June / July - 2021

ZOOL-420 : Zoology

(Neurobiology) (Core Course)

Faculty Code: 003

Subject Code: 1184002

Time : $2\frac{1}{2}$ Hours]

[Total Marks: 70

1 Answer the Following very briefly

- $2 \times 7 = 14$
- (a) Write the function of oligodendrocyte.
- (b) Describe GABA.
- (c) Complete the name ANG.
- (d) Define EEG.
- (e) What is myelin sheath?
- (f) Explain the term "Connective and Commisure" in invertebrate nervous system.
- (g) What is Pons?
- 2 Answer the Following very briefly

 $2 \times 7 = 14$

- (a) Write the function of cerebellum.
- (b) Define neurophagia.
- (c) What is neurolemma?
- (d) Name of the natural pain killers.
- (e) Types of glial cells.
- (f) What is neurofibrils?
- (g) Complete the name of CSF.
- 3 Answer of the following

 $7 \times 2 = 14$

- (a) Write a note on ultrastructure of electrical synapses.
- (b) Write a note on the evolution of the brain.
- 4 Answer the following:

 $7 \times 2 = 14$

- (a) Give a detailed account of the invertebrate nervous system.
- (b) Write a short note on any two neurotransmitter and functions.

BBB-003-1184002]

5 Answer the following:

 $7\times2=14$

- (a) Write a short note on arthropod and mollusc nervous system in evolutionary aspect?
- (b) Give the detail account on the morphology of vertebrate brain.
- 6 Answer the following:

 $7 \times 2 = 14$

- (a) What is synapse? Classify the various types of synapse in central and peripheral nervous system?
- (b) Give the detail account on role of Renin-Angiotensinogen system in brain.
- 7 Answer the following:

 $7\times2=14$

- (a) Explain the signal propagation in mylinated and non mylinated nerve fibre.
- (b) Explain any two types of neuropeptides and their function.
- 8 Answer the following:

 $7 \times 2 = 14$

- (a) Briefly describe the oligodendrocyte?
- (b) Describe the process of the measurement of action potential in nerve fiber with a suitable model.
- 9 Answer the following:

 $7 \times 2 = 14$

- (a) Write a short note on the Resting potential.
- (b) Write short note on melatonin and its function?
- 10 Answer the following:

 $7 \times 2 = 14$

- (a) Classify the structural synapses?
- (b) Describe the physiological function of Natural pain killer?