DR KANAILAL BHATTACHARYYA COLLEGE

B.SC. HONOURS SEMESTER-2 INTERNAL ASSESSMENT (JUNE 2022) SUBJECT- PHYSIOLOGY HONOURS PAPER- CC3 (CELL SIGNALLING, NERVE AND MUSCLE)

FM-10 TIME- 30 MINS

ANSWER ANY 10 FROM THE FOLLOWING:

10 X 1= 10

- 1. What do you mean by compound action potential?
- 2. Define rheobase.
- 3. State any two functions of astrocyte.
- 4. What is a GPCR?
- 5. What are co-transmitters? Give one example.
- 6. What is EPP?
- 7. Define isometric muscle contraction.
- 8. Name the structural components of myosin.
- 9. What is NGF? Give example.
- 10. What are the three MAP kinase pathways in mammalian cell?
- 11. What do you mean by absolute refractory period of a nerve fibre?
- 12. What are nebulins?
- 13. What is the function of adenylate cyclase in signaling?
- 14. Where are DHP and ryanodine receptor located?
- 15. Define electromyography.
- 16. What do you mean by denervation hypersensitivity?
- 17. Give example of an agonist and an antagonist muscle.
- 18. What are electrotonic potentials?
- 19. What is calmodulin?
- 20. State one difference between red and white muscle fibre with example.

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B.SC. HONOURS SEMESTER-2 INTERNAL ASSESSMENT (JUNE 2022) SUBJECT- PHYSIOLOGY HONOURS PAPER- CC4 (NERVOUS SYSTEM)

FM-10 TIME- 30 MINS

ANSWER ANY 10 FROM THE FOLLOWING:

10 X 1= 10

- 1. State the difference between an ionotropic and a metabotropic receptor.
- 2. What is the function of Broca's area?
- 3. What is axon reflex?
- 4. Why REM sleep is called paradoxical sleep?
- 5. Mention one advantage and one disadvantage of using MRI.
- 6. What do you mean by anterograde and retrograde amnesia?
- 7. Deficiency of which neurotransmitter causes Parkinson's disease in human?
- 8. What is orexin?
- 9. Where does otolithic organ located?
- 10. What is Kluver-Bucy syndrome?
- 11. Name three endogenous opioid peptides.
- 12. What do you mean by operant conditioning?
- 13. What is nystagmus?
- 14. What is reciprocal inhibition?
- 15. What do you mean by allocortex and Isocortex?
- 16. What is perforant pathway?
- 17. What do you mean by decerebrate rigidity?
- 18. State the name of ascending nerve tracts carrying kinaesthetic sensation.
- 19. What are deep cerebellar nuclei? Name them.
- 20. What causes hypothalamic obesity?