

093/20

The West Bengal University of Health Sciences
M.D. (Physiology) March-April 2020 Examination

Paper: I

Full Marks: 100

Time: 3 Hours

Attempt all questions

1. Enumerate different modes of transport across cell membrane. What is emiocytosis ? 8 + 2
2. Describe the contributions of Bert Sakmann. Briefly explain patch clamp technique and its uses. 3 + 4 + 3
3. What is Law of GUT ? Explain in detail GUT-BRAIN axis. 2 + 8
4. State the Gibbs-Donnan equation. Describe Donnan effect on distribution of ions. What is demarcation potential ? 4 + 4 + 2
5. Discuss the Pathophysiology of peptic ulcer and drugs to treat. Add a note on Gastric Function tests. 4 + 3 + 3
6. Narrate bruce protocol in Treadmill Test. Explain electrocardiographic changes in myocardial infarction. What is cardiac reserve ? 3 + 5 + 2
7. Explain in detail molecular basis of skeletal muscle contraction. What is size principle ? 7 + 3
8. Briefly discuss about Interleukins and Neuromodulators. 5 + 5
9. With a neat labelled diagram enumerate intercellul onnections. Explain connexin mutations. 7 + 3
10. Give an account of serpentine receptors . What happens in denervation hypersensitivity ? 5 + 5