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[MBBS 0825] AUGUST 2025 Sub. Code: 7054

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2024-2025)

FIRST PROFESSIONAL – (CBME) PAPER II – PHYSIOLOGY

Q.P. Code: 527054

Time: Three hours Maximum: 100 Marks (80 Theory + 20 MCQs)

Answer All Questions

Draw neat labeled diagrams wherever necessary

I. Essay: $(1 \times 10 = 10)$

- 1. A 25 year old healthy male tried to hold his breath as long as possible. But within a minute he was unable to hold his breath any longer and gave up.
 - a) What is breaking point? (1)
 - b) What are chemoreceptors? (1)
 - c) Explain in detail about the chemical regulation of respiration. (6)
 - d) What is Cheyne-Stokes breathing? (2)

II. Reasoning out short notes:

 $(2 \times 5 = 10)$

- 1. Patients in hypovolemic shock have cold extremities. Explain.
- 2. Shape of oxygen-hemoglobin dissociation curve is sigmoid. Explain.

III. Write short notes on:

 $(10 \times 6 = 60)$

- 1. Effect of 'g' forces on the body.
- 2. Surfactant.
- 3. Aqueous humor.
- 4. Triple response.
- 5. Hyperbaric oxygen therapy.
- 6. Pain pathway. Add a note on Hyperalgesia.
- 7. Conditioned reflex.
- 8. Blood-brain barrier
- 9. Draw a normal Lead II ECG and describe the waves, intervals and segment of ECG.
- 10. Autoregulation of cerebral blood flow.
