

**D****r. . MEDICAL****[MBBS 0825]****AUGUST 2025****Sub. Code: 7053****M.B.B.S. DEGREE EXAMINATION****(For the candidates admitted from the Academic Year 2024-2025)****FIRST PROFESSIONAL – (CBME)****PAPER I – PHYSIOLOGY*****Q.P. Code: 527053*****Time: Three hours****Maximum: 100 Marks (80 Theory + 20 MCQs)****Answer All Questions****Draw neat labeled diagrams wherever necessary****I. Essay:****(1 x 10 = 10)**

1. A 12 years old boy was brought to the emergency department with history of fever, poor intake of foods, breathlessness and loss of consciousness for past 1 day. His father revealed that he has been complaining of intense thirst in spite of drinking plenty of water. There is also history of gradual loss of weight over the past 3 months. His blood reports are as follows: Random Blood Sugar: 650 mgs/dl, urine Ketones 4+, with a normal renal function tests.
  - a) What is the diagnosis? (1)
  - b) What are the physiological mechanisms regulating blood glucose level in human body? (5)
  - c) Tabulate the actions of insulin. (2)
  - d) How will you differentiate between the different types of diabetes? (2)

**II. Reasoning out short notes:****(2 x 5 = 10)**

1. Rigor Mortis occurs after death – Reason out.
2. Peristalsis in gastrointestinal tract occurs in a unidirectional manner from oral to aboral direction – Reason out.

**III. Write short notes on:****(10 x 6 = 60)**

1. Apoptosis.
2. Genesis of RMP.
3. Megaloblastic Anaemia.
4. Properties of smooth muscle.
5. Achalasia cardia.
6. Factors regulating GFR.
7. Artificial Kidney.
8. Hypothyroidism.
9. Menstrual cycle.

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**10. Role of an Indian Medical Graduate.**

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