M.D. DEGREE EXAMINATION

BRANCH V – PHYSIOLOGY

PAPER IV – HISTORY OF MEDICINE, RECENT ADVANCES IN CLINICAL PHYSIOLOGY, ENDOCRINOLOGY AND REPRODUCTIVE SYSTEMS

Q.P. Code: 202021

Time: Three Hours Maximum: 100 Marks

I. Essay Questions: $(2 \times 15 = 30)$

1. Discuss in detail of hormonal regulation of blood glucose level. Add a note on effects of hyperglycemia.

2. Discuss the dynamics of ovarian function. Add a note on pregnancy tests.

II. Short notes: $(10 \times 5 = 50)$

- 1. Pineal gland.
- 2. Circadian rhythm.
- 3. J.Paintal.
- 4. Claud Bernard.
- 5. Extra corporeal membrane oxygenation (ECMO).
- 6. Stem cell therapy.
- 7. Formation and function of corpus luteum.
- 8. Neuroendocrine reflexes.
- 9. Pathophysiology of ageing.
- 10. Heat shock proteins.

III. Reasoning Out:

- 1. Oral pills- hormonal suppression of fertility.
- 2. Hypocalcaemia results in tetany. Explain.
- 3. Gonadal sex of a fetus is determined by the Y-chromosome. Explain.
- 4. The cause for exophthalmos in Grave's disease.

 $(4 \times 5 = 20)$