

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

[MD 0522]

MAY 2022

Sub. Code: 2021

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 x 15 = 30)

1. Describe the actions and regulation of Glucocorticoids.
2. Describe the synthesis and actions of estrogen. Explain the negative and positive feedback effects of estrogens on anterior pituitary and hypothalamus.

II. Short notes:

(10 x 5 = 50)

1. Paracrine system.
2. Failure to reject the “Fetal Graft” by the mother.
3. Synthesis of thyroid hormones.
4. Luteal phase of ovarian cycle.
5. René Laennec.
6. Metabolic syndrome.
7. Control of prolactin secretion.
8. Calcitonin.
9. Pineal gland.
10. Insulin –Glucagon molar ratio.

III. Reasoning Out:

(4 x 5 = 20)

1. Somatic cell nuclear transfer (SCNT) clones are genetically not strictly identical.
2. Skeletal muscles during exercise are independent on Insulin for their Glucose uptake.
3. Carpopedal spasm in hyperparathyroidism is due to hyper excitability of nerve and muscle fibers.
4. Excess oxygen therapy in premature infants can lead to blindness.
