

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

[MD 0723]

**JULY 2023  
(MAY 2023 EXAM SESSION)**

**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. Explain in detail about Spermatogenesis. Add a note on sperm capacitation and its clinical implication.
2. Discuss in detail about the Glucose Homeostasis and its clinical importance.

**II. Short notes: (10 x 5 = 50)**

1. Ovulation indicators.
2. Various methods of female contraception.
3. A.S. Paintal.
4. Counter regulatory hormones.
5. Puberty.
6. Neuroendocrine reflex.
7. Fight and flight response.
8. Cushing's syndrome.
9. Esophageal manometry.
10. Obesity and its adversity.

**III. Reasoning Out: (4 x 5 = 20)**

1. What type of Knee jerk is seen in Hypothyroidism? - Reason out.
2. Light affects the circadian rhythm. Reason out.
3. Amenorrhea during lactation. Why?
4. Physiological anemia in pregnancy. Reason out.

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