

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

[DM 0822]

AUGUST 2022

Sub. Code :1461

D.M. – ENDOCRINOLOGY

Paper I – BASIC SCIENCES OF ENDOCRINOLOGY

Q.P. Code: 161461

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. The embryological development of pancreas, the various transcription factors involved and its clinical relevance.
2. The synthesis and degradation of aldosterone. Also mention the action of mineralocorticoids on its receptor and downstream pathways.

II. Write notes on: **(10 x 7 = 70)**

1. Appetite regulation in the hypothalamus.
2. Role of gut microbiota in obesity.
3. Endocrine functions of the gastrointestinal tract.
4. Animal models used in diabetes mellitus.
5. Assays used for measurement of parathormone.
6. Thyroid receptors – structure and function.
7. Genomic imprinting in endocrinology.
8. Interpretation of likelihood ratios.
9. Body composition analysis – techniques and interpretation.
10. Twin cycle hypothesis.
