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

[AHS 0122] JANUARY 2022 Sub. Code: 2601 (FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY FIRST YEAR (Regulation 2014-2015 & 2018-2019) PAPER I – ANATOMY AND PHYSIOLOGY, BIOCHEMISTRY Q.P. Code: 842601

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(3 \times 10 = 30)$

- 1. Write in detail the classification of vitamins. Dietary sources and functions of Vitamin A.
- 2. Write in detail the structure and functions of kidney. Add a note on nephron.
- 3. Write in detail the structure, blood supply and functions of thyroid gland. Add a note on thyroid function test.

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

- 1. Bleeding time and clotting time
- 2. Functions of gall bladder and disorders associated with gall bladder
- 3. Micturition
- 4. Blood supply of heart
- 5. Lipoprotein
- 6. Draw the labeled structure of brain
- 7. Classification of enzymes
- 8. Structure of cell membrane and its functions
- 9. Functions of hemoglobin
- 10. What are Heteropolysaccharides? Name some Heteropolysaccharides and enlist their functions.

III. Short answers on:

 $(10 \times 2 = 20)$

- 1. Nerve supply of eyes.
- 2. Define Basal Metabolic rate.
- 3. Sesamoid bone.
- 4. Name some buffer system in the body.
- 5. List out any two causes of dwarfism.
- 6. Glucose transporters.
- 7. Importance of HDL.
- 8. List out any four functions of Insulin.
- 9. Marasmus.
- 10. Tidal volume.
