

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

[AHS 0321]

MARCH 2021

Sub. Code: 2601

(AUGUST 2020 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 x 10 = 30)

1. Describe the physiology of urine formation. Write in detail the functions of kidneys.
2. Define enzyme. Describe the different types of inhibition. Add a note on isozymes.
3. Explain the various parts of respiratory system and their functions. Add a note on mechanism of respiration.

II. Write notes on:

(10 x 5 = 50)

1. Write the physiology of Muscle contraction.
2. Write in detail about the lymphoid organs.
3. Explain the functions of pancreas. Add a note on disorders of insulin secretion.
4. Add a note on anticoagulants and their uses.
5. Write in detail the respiratory and renal regulation of blood pH.
6. Explain the various cellular organelles with functions.
7. List out the important endocrine glands of the body. Write in detail about thyroid gland.
8. Explain functions and deficiency manifestation of Vitamin A.
9. Explain about cardiac cycle.
10. Classify lipids. Add a note on amphipathic lipids with examples.

III. Short answers on:

(10 x 2 = 20)

1. What is blood brain barrier?
2. Classify carbohydrates with example.
3. Bleeding Time and Clotting Time.
4. Deltoid muscle.
5. Explain isoelectric pH with example.
6. Cretinism.
7. What is Basal metabolic rate?
8. What are the parts of uterus?
9. Cranial Nerves supplying the Eyes.
10. What is a Sesamoid Bone? Give examples.
