

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

[MD 0524]

MAY 2024

Sub. Code: 4021

M.D. DEGREE EXAMINATION

BRANCH VII – PAEDIATRICS

PAPER I – BASIC SCIENCES AS APPLIED TO PAEDIATRICS

Q.P. Code: 204021

Time: Three Hours

Maximum: 100 Marks

Write notes on:

I. ANATOMY:

(4 x 5 = 20)

1. Development of diaphragm.
2. Biliary atresia.
3. Tetralogy of fallot.
4. Posterior urethral valve.

II. PHYSIOLOGY:

(4 x 5 = 20)

1. Biological changes during adolescence.
2. Determinants of plasma osmolality.
3. Vitamin A metabolism.
4. Lactose intolerance.

III. BIO-CHEMISTRY:

(3 x 5 = 15)

1. Insulin resistance and PCOS in adolescence.
2. Thyroid function test.
3. Applied aspects of CSF analysis in meningitis.

IV. PHARMACOLOGY:

(3 x 5 = 15)

1. Deferasirox.
2. Nirsevimab
3. Newer anti malarial drugs

V. PATHOLOGY:

(3 x 5 = 15)

1. Stages of hepatic encephalopathy.
2. Macrophage activation syndrome
3. Compartment syndrome.

VI. MICROBIOLOGY:

(3 x 5 = 15)

1. Pediculosis.
2. Gut microbiome in pediatrics.
3. Clinical features suggestive of T cell defect.
