

**M.D. DEGREE EXAMINATION
BRANCH VII – PAEDIATRICS
PAPER I – APPLIED BASIC SCIENCES IN PAEDIATRICS**

Q.P.Code: 202030

Time: Three Hours

Maximum: 100 Marks

Write notes on:

I. ANATOMY:

(4 x 5 = 20)

1. Formation and fate of neural tube.
2. Base of Heart.
3. Development of kidney and its anomalies in shape and position.
4. Temporary and Permanent teething.

II. PHYSIOLOGY:

(4 x 5 = 20)

1. Prostaglandins.
2. Function of platelets and tests for platelets deficiency.
3. Maintenance of Plasma osmolarity.
4. Stretch reflex.

III. BIO-CHEMISTRY:

(3 x 5 = 15)

1. Phenylketonuria.
2. Serum amino acid pattern in protein-energy malnutrition.
3. Urine Screening Test.

IV. PHARMACOLOGY:

(3 x 5 = 15)

1. Beta-lactamase inhibitors.
2. Newer antiepileptic drugs.
3. Low molecular heparin and its uses.

V. MICROBIOLOGY:

(3 x 5 = 15)

1. Chikungunya virus.
2. Serological markers of hepatitis B.
3. Life cycle of Malaria.

VI. PATHOLOGY:

(3 x 5 = 15)

1. Non-hodgkin's lymphoma.
2. Histopathology of lobar pneumonia.
3. Pathogenesis of septic shock.
