

(LM 135)

MAY 2018

Sub. Code: 2030

**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. Embryology of Atrial Septal Defect.
2. Changes that occur in Fetal circulation at birth.
3. Portosystemic anastomosis.
4. Brachial plexus injuries.

II. PHYSIOLOGY: (4 x 5 = 20)

1. Thyroid hormone synthesis and regulation.
2. Principle behind oral rehydration therapy.
3. Regulation of serum calcium.
4. Jugular venous pulsation.

III. BIO-CHEMISTRY: (3 x 5 = 15)

1. Albumin cytochemical dissociation in CSF analysis.
2. Bilirubin metabolism.
3. Urine protein estimation.

IV. PHARMACOLOGY: (3 x 5 = 15)

1. Methylxanthines.
2. Mechanisms of antibiotic resistance in bacteria.
3. Probiotics and prebiotics.

V. MICROBIOLOGY: (3 x 5 = 15)

1. Gene Xpert.
2. Recent advances in diagnosis of typhoid fever.
3. Pneumocystis jiroveci.

VI. PATHOLOGY: (3 x 5 = 15)

1. Urine microscopic examination.
2. Pathophysiology of Rotavirus diarrhoea.
3. Macrocytic anaemia.
