

**D.M. – NEONATOLOGY**

**Paper I – APPLIED BASIC SCIENCES AS APPLIED TO  
NEONATOLOGY AND PERINATOLOGY; RESEARCH METHODS**

*Q.P.Code: 161451*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Physiology of transition from fetal to neonatal circulation and pathophysiology of persistent pulmonary hypertension.
2. Control of breathing in neonates and pathogenesis of apnoea of prematurity.

**II. Write notes on:**

**(10 x 7 = 70)**

1. Newer insights into pathophysiology of PVL.
2. Management of foetal tachyarrhythmia.
3. Cellular mechanisms of antibiotic resistance and strategies for prevention.
4. Umbilical artery Doppler in the assessment of foetal growth restriction.
5. Adaptive responses to Neonatal hypoglycaemia.
6. Development of neonatal skin and its implications.
7. Cerebral function monitoring.
8. Prenatal work up of foetal hydrops.
9. ROC curve.
10. Metabolic acid base disorders in a neonate.

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