

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

[DM 0822]

AUGUST 2022

Sub. Code :1451

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. Briefly discuss the development of the Ventricles of brain, germinal matrix and its blood supply. Mention briefly the pathogenesis of preterm intraventricular haemorrhage its risk factors and clinical features. Write a note on neonatal care bundle for prevention of IVH.
2. Discuss on validation of diagnostic tests. Write briefly on the Receiver operating characteristic curves and likelihood in clinical practice.

II. Write notes on: (10 x 7 = 70)

1. Diagnosis of Fetal Growth Restriction and monitoring of FGR babies.
2. Write a note on Odds Ratio and Confidence Interval.
3. Discuss the auditory pathway and write a note on Brainstem Evoked Response Audiometry.
4. Discuss the Etiopathogenesis of apnoea of prematurity and its management.
5. Write a note on Bilirubin metabolism and discuss the diagnosis and management of Crigler Najjar Syndrome.
6. Discuss the management of antenatally diagnosed fetal pelvicalyceal dilatation.
7. Discuss the mechanisms of gas transport in ventilation using High Frequency Oscillatory ventilator. How will you alter the settings when ABG shows Hypercapnia?
8. What is Pedigree charting? Write briefly on degrees of Consanguinity.
9. Pathogenesis of Osteopenia of prematurity and its diagnosis.
10. Write briefly on Delivery point screening of Newborn for birth defects.
