

**NEONATOLOGY**

**PAPER – I**

**Time : 3 hours**  
**Max. Marks : 100**

**NEONAT/D/10/19/I**

**Attempt all questions in order.**  
**Each question carries 10 marks.**

- 1 Draw a flow chart to show steps in diagnosing a blood gas report. 10
- 2 Describe the pathophysiology of hypothermia in neonates. 10
- 3 Prepare a check list for reporting a randomized controlled trial. 10
- 4 Describe the pathophysiology of shock in neonates. Discuss the management of distributive shock 10
- 5 Describe the pathogenesis, differential diagnosis and management of neonates with maculopapular rash. 2+5+3
- 6 Describe the embryology and the hemodynamics of coarctation of aorta in neonates. 3+7
- 7 Describe the mechanism of clotting of blood. What is the pathogenesis of disseminated intraocular coagulation? 6+4
- 8 Tabulate the recommended intake of nutrients in very low birth weight neonates. 10
- 9 Describe the etiological factors for retinopathy of prematurity and classification severity of retinopathy of prematurity. 4+6
- 10 Describe the pathophysiology of neonatal sepsis. 10

**NEONATOLOGY**

**PAPER – II**

Time : 3 hours  
Max. Marks : 100

NEONAT/D/10/19/II

Attempt all questions in order.  
Each question carries 10 marks

Write short notes on:

- 1 Role of micronutrients in a low birth weight neonate. 10
- 2 Early diagnosis and management of patent ductus arteriosus. 5+5
- 3 Aetiology, prevention and management of respiratory distress in hyaline membrane disease. 3+4+4
- 4 Parameters that can be used to optimize ventilator settings. 10
- 5 Management of persistent pulmonary hypertension. 10
- 6 Diagnosis and management of congenital toxoplasmosis. 10
- 7 Diagnostic approach to hypocalcemia in neonates. 10
- 8 Approach to a child with conjugated hyperbilirubinemia at the age of 20 years. *days* 10
- 9 New resuscitation (AAP) guidelines modified by ILCOR in October 2010. 10
- 10 ECG changes associated with electrolyte imbalance or disorders. 10

## NEONATOLOGY

### PAPER – III

Time : 3 hours  
Max. Marks : 100

NEONAT/D/10/19/III

Attempt all questions in order.  
Each question carries 10 marks

#### Write short notes on:

- 1 Rational use of antibiotic in neonatal sepsis. 10
- 2 "Janani Suraksha Yojna" and its role and limitation in reducing neonatal mortality. 10
- 3 Norms for physical facilities, equipments and manpower for a level II neonatal unit. 10
- 4 Modalities of non-invasive ventilation in neonates. Outline the advantages and disadvantages of these various modalities. 6+4
- 5 How would you assess and interpret muscle tone up to 1 year age in a follow up clinic using Amiel Tisson approach. 5+5
- 6 What are the hearing screens for high risk neonates? How would you interpret brain stem evoked auditory response? 3+7
- 7 Clinical features, diagnosis and management of Hirschsprung disease in neonates. 4+3+3
- 8 Role and utility of prostaglandin in congenital cyanotic heart disease. 10
- 9 Prevention and management of necrotising enterocolitis. 4+6
- 10 ~~Prevention and management of necrotising enterocolitis.~~ ~~4+6~~