NEONATOLOGY

PAPER – I

Time : 3 hours
Max. Marks : 100

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 intravascular 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

Attempt all questions in order.
Each question carries 10 marks

Write short notes on:

1. Role of micronutrients in a low birth weight neonate.  
2. Early diagnosis and management of patent ductus arteriosus.  
4. Parameters that can be used to optimize ventilator settings.  
5. Management of persistent pulmonary hypertension.  
6. Diagnosis and management of congenital toxoplasmosis.  
7. Diagnostic approach to hypocalcemia in neonates.  
8. Approach to a child with conjugated hyperbilirubinemia at the age of 20 years.  
10. ECG changes associated with electrolyte imbalance or disorders.
NEONATOLOGY

PAPER – III

Time : 3 hours
Max. Marks : 100

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

POSSESSION / USE OF CELL PHONES OR ANY SUCH ELECTRONIC GADGETS IS NOT PERMITTED INSIDE THE EXAMINATION HALL.