

**Theory Question paper 2 (Total Marks 100)**

- Attempt answers for each question on a separate page
- All questions are compulsory
- Marks allotted for each question is given in bracket

Q 1) 29 weeks' baby with birth weight 830 grams was admitted to NICU. On rounds, it was decided to start the baby on Total Parenteral Nutrition (TPN). Answer the following questions:

- a. How much protein and lipid will you start on Day 1? Write daily increments of protein and lipid and maximum amount to be given?(5)
- b. What precautions will you take while administering TPN? (5)
- c. Write down formula for Calorie Nitrogen Ratio(CNR).What is the normal CNR value?(5)
- d. Biochemical monitoring of this baby while on TPN. (5)

Q2) 1100 grams baby born at 31 weeks is now 30 minutes old. You have decided to provide respiratory support with Continuous Positive Airway Pressure (CPAP). Kindly answer the following questions in brief.

- a. Physiology and mechanism of CPAP (5)
- b. Criteria of CPAP success and failure. (5)
- c. Evidence for CPAP use for RDS (5)
- d. Complications of CPAP(5)

Q 3) .40 weeks baby with 3600 grams birth weight didn't cry at birth even after initial steps of resuscitation. Baby required IPPV to sustain respiration. Cord pH was 6.92 with base excess of -17.2. Baby developed seizures at 3 hours of life in NICU. Kindly answer following questions:

- a. What clinical criteria and investigations will help in prognostication of this baby? (10)
- b. Write all the criteria for starting therapeutic hypothermia (5)
- c. Monitoring this baby while on Hypothermia protocol (5)

Q 4). A 6 day old male baby presented in emergency with altered sensorium for last few hours

- a. List the differential diagnosis(5)
- b. Describe emergency stabilisation of this baby(5)
- c. Describe your approach to diagnosis and what investigations will you ask for?(5)
- d. Outline the management of such a baby (5)

Q. 5) Term 3150 gm, male baby admitted in NICU at 4 hours of life with tachypnea and cyanosis. His SpO<sub>2</sub> on room air was 70% which increases to 80-85 % with oxygen by hood.

- a. Discuss differential diagnosis (5)
- a. Describe echocardiographic features of PPHN [5]
- b. Discuss management principles of PPHN [10]