

IAP Neonatology Chapter

IAP Neonatology Fellowship Exam February 2025

Theory Paper 2

Time: 3 hours

Total Marks–100

- Attempt all questions.
- Write in legible handwriting.
- Draw appropriate figures and flow diagrams
- Quote evidence / studies wherever required.

1. Question 1: 20 marks

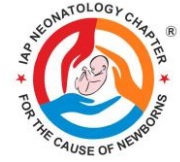
The fetus at 34 weeks has a very rapid heart rate (240 beats per minute) and has developed small bilateral pleural effusions and minimal skin edema. The primi mother's blood group is B positive, she has no known disease before pregnancy.

- a. What is the likely diagnosis and enumerate the possible causes? (2+4)
- b. What antenatal investigations and fetal therapy would you recommend? (3+3)
- c. What specific preparations are indicated in the delivery room? (2)
- d. What postnatal investigation and management will you suggest? (3+3)

2. Question 2: 20 marks

A baby girl was born at 27-week gestation with birth weight of 900 grams. Baby was intubated and ventilated at birth due to poor respiratory effort. Baby was extubated on day 5 to CPAP, after receiving medical treatment for PDA on day 3. On day 13, baby developed features of necrotizing enterocolitis. She was kept on NPO for a week and received medical management including parenteral nutrition. Baby's weight after four weeks of birth was still 800 grams.

- a. List the possible cause of poor weight gain in ELBW infants (4)
- b. Define Extra Uterine Growth Restriction (EUGR) (3)
- c. How do you monitor postnatal growth in an ELBW baby (4)
- d. Mention the measures to prevent EUGR (5)
- e. Describe the long-term effect of EUGR (4)



3. Question 3:

20 marks

A 4-day old neonate is brought to the emergency with the complaints of bilious vomiting. On examination, the neonate has mild abdominal distention.

- Discuss the causes of bilious vomiting in a neonate (5)
- Write an approach to a neonate with suspected surgical abdomen (5)
- Discuss in detail imaging modalities to aid diagnosis (5)
- Write a short note on managing a baby with ileostomy (5)

4. Question 4:

20 marks

You are the fellow on duty in NICU. You get a telephonic call from an anesthetist of a maternity home 50 kms away informing that they want to transfer a baby who is born at term by emergency LSCS in view of thick meconium stained liquor. Baby was depressed at birth and was intubated. The baby is now 15 minutes old and having weak breathing efforts. Activity and tone is poor and colour is sallow. Heart rate is 120 per minute. The anesthetist informs that the paediatrician is unavailable. They want you to send the retrieval team ASAP.

- What additional information do you need to plan the retrieval ? (3)
- What management advice will you give to the anesthetist and obstetrician till the retrieval team reaches there? (3)
- After the transport team reaches the maternity home, how will you stabilise the baby before retrieval? (6)
- What problems do you anticipate during transport and how will you pre-empt them? (4+4)

5. Question 5:

20 marks

A 39 week male baby is born to a mother by emergency LSCS in view of prolonged II stage of labour. Baby did not cry at birth & required aggressive resuscitation.

- What are the criteria for diagnosis of perinatal asphyxia ? (3)
- What is the post resuscitation care required for this neonate ? (7)
- Discuss therapeutic hypothermia.(5)
- How do you prognosticate in a case of perinatal asphyxia ?(5)