



IAP Neonatology Chapter

IAP Neonatology Fellowship Exam August 2024

Theory Paper 1

Time: 3hours

TotalMarks–100

- **Attempt all questions.**
- **Write in legible handwriting.**
- **Write answers to the point.**
- **Quote evidence / studies wherever required.**

Question 1: Write short notes on:

(20 marks)

- Chorionic villus sampling(5)
- Disorders of neural tube formation(5)
- Major congenital malformations and morbidities in infant of diabetic mother(5)
- Fetal heart rate monitoring, its interpretative systems and management decisions based on these categories(5)

Question 2: Write short notes on the following:

(20 marks)

- Role of antenatal magnesium sulphate in fetal neuroprotection (5)
- Breast crawl and the importance of golden hour breastfeeding. (5)
- Preterm IVH prevention bundle (5)
- Developmentally supportive care components and strategies (5)

Question 3: Illustrate the following using tables / flow chart

(20 marks)

- Approach to a 3-day old infant with seizures, lethargy, and two neonatal deaths(5)
- Diagnosis, staging and management of retinopathy of prematurity (5)
- Approach to a neonate with hydronephrosis on antenatal ultrasound (5)
- Approach to a preterm with post hemorrhagic hydrocephalus (5)

Question 4: Write short notes on the following

(20 marks)

- Role of facility-based lactation management to support breastfeeding(5)
- Define EUGR, enumerate causes and preventive strategies (5)
- Approach to a 3-day neonate with stridor(5)
- LaQshya Program (5)

Question 5: Choose the most appropriate answer (20 marks - 1 mark for each MCQ)



1. **True statement regarding “Therapeutic Hypothermia” in HIE is**
 - a. Core temperature should be maintained at 32.5 to 33.5 centigrade.
 - b. Longer cooling for 120 hours rather than 72 hours is slightly beneficial.
 - c. It works by decreasing excitotoxicity and oxidative stress.
 - d. Initiating therapeutic hypothermia after six hours of birth is harmful.

2. **The ability of a test to correctly identify those without the disease is called**
 - a. Sensitivity
 - b. Specificity
 - c. Positive Predictive Value
 - d. Negative Predictive Value

3. **Term baby with birth weight 3 kilos, born to diabetic mother, found to be very plethoric. Baby PCV was 80. You decided to do partial exchange with desired PCV of 55. What is the volume who would like to infuse?**
 - a. 75ml
 - b. 70ml
 - c. 65ml
 - d. 80ml

4. **The following statement is false about PNAC:**
 - a. PN's soybean-based lipid emulsion component has been implicated as a potential causative factor in PNAC.
 - b. The lipid emulsion component of parenteral nutrition should be completely removed to prevent cholestasis.
 - c. Restricting the intravenous fat emulsion to 1 g/kg two to three times per week can reduce total bilirubin without causing growth failure.
 - d. All the above

5. **Congenital pulmonary airway malformation (CPAM) develops during which stage of fetal lung development?**
 - a. Embryonic phase
 - b. Canalicular phase
 - c. Pseudoglandular phase
 - d. Saccular phase



6. Which of the following not a part of Category 1 FHR tracing according to NICHD criteria?
- Heart rate variability 6-25bpm
 - Baseline heart rate 110-160 bpm
 - Spontaneous acceleration may be present or absent
 - Sinusoidal pattern
7. Double lung point on Lung USG is seen in
- TTNB
 - Pneumothorax
 - RDS
 - None of Above
8. All these clinical trials studied role of antenatal steroids except-
- BETACODE Trial
 - ASTEROID TRIAL
 - EPAR Trial
 - WHO ACTION-III Trial
9. Prader scale is used
- To classify the degree of virilization of the external genitalia
 - For dysmorphism in Prader Willi Syndrome
 - For radiological features to assess bone age
 - To assess cardiac contractility
10. Poor neonatal adaptation syndrome may occur with antenatal exposure to which drug?
- Methadone
 - Ibuprofen
 - Duloxetine
 - Phenobarbital
11. Which of the following pattern during Amplitude-integrated electroencephalography (aEEG) indicate good prognosis.
- Sleep-wake cycling
 - Flat tracing
 - Burst suppression
 - Low voltage
12. Your lactation nurse observed the mother and newborn (2nd day of life) while breastfeeding. She noticed that newborn was sucking nipple, there was occasional audible swallowing. Mother had flat nipple and she had mild discomfort and needed some assistance while feeding. What would be the LATCH score?



- a. 3
 - b. 4
 - c. 5
 - d. 6
- 13. As per 2023 American Heart Association and American Academy of Pediatrics Focused Update on Neonatal Resuscitation, intact cord milking is not recommended below which gestational age?**
- a. 26 weeks
 - b. 28 weeks
 - c. 30 weeks
 - d. 32 weeks
- 14. In Ortolani maneuver, hip is-**
- a. Abducted and flexed
 - b. Adducted and flexed
 - c. Abducted and extended
 - d. Adducted and extended
- 15. Which of the following graphs is used for depicting publication bias?**
- a. ROC curve
 - b. Bland Altman curve
 - c. Funnel plot
 - d. Forest plot
- 16. A baby is about to be delivered at 26 weeks' gestation. The mother received antenatal dexamethasone. Which one of the following is good practice in the first 'golden hour' after delivery?**
- a. All babies at this gestation should be intubated electively to receive surfactant.
 - b. The baby should be born into a plastic bag or wrap so that he can maintain body temperature.
 - c. Saturation probe to be attached to the baby's left hand and oxygen given until the SaO₂ is >85%.
 - d. The baby should be dried, weighed and then placed under a radiant heater.
- 17. Which intrauterine infection causes characteristic cicatricial skin lesions and hypoplastic extremities :**
- a. Varicella Zoster Virus
 - b. Cytomegalovirus
 - c. Herpes simplex
 - d. Parvo virus
- 18. 'HERO score' quantifies which of the following?**



- a. Heart rate variability
- b. Perfusion index variability
- c. Heart rate & blood pressure co-relation
- d. Oxygenation Index variability

19. In neonates which chart is used to calculate blood volume according to weight?

- a. Zubrow's
- b. Monroe's
- c. Rowling's
- d. Ehrenkranz's

20. At ____ hours of life, physiologically PCV will be maximum?

- a. Immediately after birth
- b. 2 hours
- c. 6 hours
- d. 12 hours

