



IAP Neonatology Chapter

IAP Neonatology Fellowship Exam March 2019

Theory Paper 1

Time – 3 hours

Total Marks – 100 (70+30)

Attempt all questions

Question No. 1

- Describe ICROP Classification of ROP for documenting the severity and extend of ROP (3)
- What constitutes the threshold ROP (3)
- Write a note comparing Anti VEGF injection to Laser for the treatment of ROP (4)

Question No. 2

- Write Modified Bell Staging criteria for NEC (3)
- Write different strategies and risk factors for prevention of NEC (4)
- Comparison of primary peritoneal drainage v/s laparotomy for surgical management of NEC (3)

Question No. 3

Write short notes on the clinical significance of each of the following anomalies found in neonates

- Sacral Dimple (2)
- Single umbilical artery (2)
- Port wine stain (2)
- Extra Digits (2)
- Ash Leaf macules (2)

Question No. 4

Short Notes on the following procedures in NICU

- Hearing screening of NICU graduates (3)
- Screening for CHD by pulse oximeter (4)
- Red reflex– Procedure and significance (3)



Question No. 5

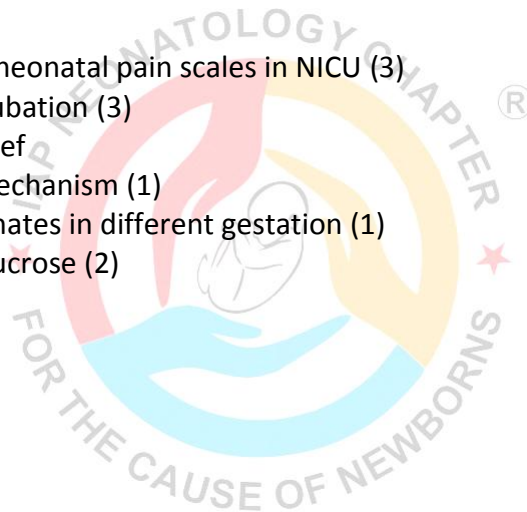
- a) Guidelines for establishment of human milk banking (4)
- b) Human milk fortification (3)
- c) Benefits of Human milk for preterm infants (3)

Question No. 6

- a) Incidence of PDA at different gestations (2)
- b) Describe Clinical and Echo diagnostic markers of Patent ductus arteriosus (4)
- c) Conversation v/s expectant management of PDA in neonates (4)

Question No. 7

- a) Enumerate various neonatal pain scales in NICU (3)
- b) Rapid sequence intubation (3)
- c) Sucrose for pain relief
 - i. Proposed Mechanism (1)
 - ii. Dose in neonates in different gestation (1)
 - iii. Efficacy of sucrose (2)





MCQ

Attempt all questions. Total Marks =30 (15X2)

1. Most common bone fracture during birth related injury.
 - a) Humerus
 - b) Femur
 - c) Radius
 - d) Clavicle

2. What is amount of volume for partial exchange transfusion in neonate at 2.5 kg birth weight with hematocrit 75% to bring down hematocrit to 50%.
 - a) 83 ml
 - b) 76 ml
 - c) 67 ml
 - d) 55 ml

3. A 3.5 kg neonate born to Rh isoimmunised mother had cord bilirubin level = 9 mg/dl. How much whole blood volume will be required for double volume exchange transfusion.
 - a) 610 ml
 - b) 470 ml
 - c) 550 ml
 - d) 680 ml

4. Which of following statements regarding Umbilical artery catheterization are incorrect.
 - a) For high UAC distance is umbilicus to shoulder +2cm plus the length of stump.
 - b) For high UAC catheter tip is placed between T8-T10, and low is at L3-L4 vertebrae
 - c) If there is persistent cyanosis, blanching or poor distal extremity perfusion which does not respond to rewarming; catheter should be removed.
 - d) Method of catheter removal is quick over 15-20 secs allowing artery to constrict.

5. During neonatal resuscitation once you have received the baby in dry, warm linen and baby has cried immediately after the birth, following steps are required
 - a) Clear airway, position, warmth and dry
 - b) Dry, warmth, position, clear airway
 - c) Warmth, position, clear airway and dry



- d) Position, clear airway, dry, warmth
6. In contrast to “classic” bronchopulmonary dysplasia (BPD), initially described in 1967, the “new” BPD in the more contemporary clinical setting is characterized by different histopathologic findings on examination of the lung tissue. Of the following, the most striking abnormality in the lungs of infants who have new BPD is:
- a) Decrease in alveolar septation
 - b) Diffuse leukocytic infiltration
 - c) Hypertrophy of airway smooth muscle.
 - d) Lung parenchymal fibrosis
7. 1.15 kg VLBW neonate, 32 weeks IUGR neonate on iv fluids for respiratory distress. The neonate is planned to be started on MEN, the volume to be started is
- a) 5-6 ml/kg
 - b) 10-20 ml/kg
 - c) 20-30 ml/kg
 - d) 0-5 ml/kg
8. INAP (India Newborn Action Plan) goal is to reduce NMR by 2030
...../1000 live births.
9. Milrinone acts as a pulmonary vasodilator by inhibiting which Enzyme
.....
10. While giving full total parenteral nutrition we should aim to give
to..... kcal/kg/d of energy for normal growth.
11. According to MHFW, which is the preferred Antenatal Steroid for use in mother with preterm labor? What is the recommended dosage?
.....
12. EMLA consists of a mixture of and
13. Recurrence risk of having a baby with down syndrome in a mother with previous baby with down syndrome is _____ if there is Tnsomy 21 and _____ if there is prenatal robertsonian translocation 21:21



14. Which of the urea cycle disorders is as X-linked disorder.....

15. Caffeine base is _____ dose of caffeine citrate

- a) $1/4^{\text{th}}$
- b) $1/2^{\text{th}}$
- c) $1/8^{\text{th}}$
- d) $1/16^{\text{th}}$

