



## IAP Neonatology Chapter

### IAP Neonatology Fellowship Exam August 2019

#### Theory Paper 1

Time – 3 hours

Total Marks – 100 (80+20)

- Attempt all questions.
- Write in legible handwriting
- Write to the point answers. More no of answer sheets carries no marks
- Quote evidence/ studies wherever required

#### Question No. 1 (10 Marks)

- Write definitions of Perinatal mortality Rate (PNMR) and Neonatal Mortality Rate (NMR) and Current PNMR and NMR in INDIA. (2)
- What are the existing challenges faced in their reduction and evidence-based strategies to reduce them (4)
- The Every New-born Action Plan (4)

#### Question No. 2: Write short notes on : (20 marks)

- Therapeutic Hypothermia in Perinatal Asphyxia (5)
- Prognostic indicators in Perinatal Asphyxia (5)
- Management principals of PPHN (5)
- Use of High frequency ventilation in Neonatology (5)

#### Question No. 3: Write a short note on following maternal condition and their neonatal effects: (10 marks)

- Antenatal interventions to improve neonatal outcome in preterm delivery. (5)
- Antenatal monitoring and interventions in Rh isoimmunisation. (5)

#### Question No. 4: Short Notes on the following: (20 marks)

- LISA/MISA (5)
- NAVA (5)
- EXIT Procedure (5)
- HHFNC (5)



**Question No. 5: Write short notes along with clinical evidences (any 4) (20 marks)**

- a) Indication of erythropoietin (rHEPO) in Neonatology along with its side effects (5)
- b) Use of Probiotics in Neonatology (5)
- c) Magnesium sulphate in Perinatology (5)
- d) Delayed cord clamping and it's importance in Neonatology (5)
- e) Antibiotics stewardship (5)





## MCQ

Attempt all questions. Total Marks =20 (10X2)

Question 1: A 7 day old male infant presents with a seizure. Serum glucose is 17 mg/dL. Examination is normal with exception of jaundice and microphallus. The most likely diagnosis is:

- a) Congenital toxoplasmosis
- b) Congenital hypopituitarism
- c) Nonketotic hypoglycemia
- d) Infantile spasms

Question 2: Most Accurate USG predictor for gestational age assessment in newborn:

- a) Biparietal diameter
- b) Femur length
- c) Crown to rump length
- d) Humerus length

Question 3: Sucking swallowing and breathing coordination reflex develop at which gestational age

- a) 28-30 weeks
- b) 30-32 weeks
- c) 32- 34 weeks
- d) 34-36 weeks

Question 4: Which is a marker of fetal lung maturity in infant of diabetic mother

- a) Lecithin-Sphingomyelin ratio
- b) Positive Amniostat
- c) Saturated phosphatidylcholine
- d) All of the above



**Question 5: Reagent strips measure whole blood glucose levels which is**

- a) 15% higher than plasma levels
- b) 15% lower than plasma levels
- c) 25% higher than plasma levels
- d) 25% lower than plasma levels

**Question 6: Which of the following is most important mechanism of action of phototherapy**

- a) Photoisomerization
- b) Structural isomerization
- c) Photo oxidation
- d) All are equally important.

**Question 7: Normal compliance of a term neonate**

- a) 4-6 cm H<sub>2</sub>O/ml/sec
- b) 4-6 ml/cm H<sub>2</sub>O
- c) 10-12 cm H<sub>2</sub>O/ml/sec
- d) 10-12 ml/cm H<sub>2</sub>O

**Question 8: Moderate meconium aspiration Syndrome is defined as**

- a) Requirement of > 40% oxygen for < 48 hours without air leak.
- b) Requirement of > 40% oxygen for < 48 hours with air leak
- c) Requirement of < 40% oxygen for > 48 hours without air leak
- d) Requirement of > 40% oxygen for > 48 hours without air leak.

**Question 9. Which is not a component of BIND score (1)**

- a) Mental status
- b) Muscle tone
- c) Cry
- d) Reflex



**Question 10:** 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

