

**NEONATOLOGY**

**PAPER – I**

Time : 3 hours  
Max. Marks : 100

NEONAT/D/17/19/I

**Important instructions:**

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

- |  |       |
|--|-------|
| 1. Describe the functional structure of human placenta and discuss physico-chemical and structural properties regulating drug transfer.                        | 4+3+3 |
| 2. Discuss the temperature regulation in a neonate. Write about the concept of therapeutic hypothermia. Does the literature support its use, please elaborate. | 3+4+3 |
| 3. Point of care testing devices in neonatal care.   | 10    |
| 4. Enumerate Levels of Neonatal care and describe requirements for level III (Level 3) Neonatal care.  | 3+7   |
| 5. Discuss future prospects of:<br>a. Human Milk Banking<br>b. Cord blood banking  | 5+5   |
| 6. a. Informed consent in Research studies<br>b. Ethics in Research  | 5+5   |
| 7. Discuss principle of use of NIRS and its clinical applicability in Neonatal practice.   | 4+6   |
| 8. Discuss the role of innate host defences in susceptibility to Early Onset Neonatal Sepsis.  | 10    |
| 9. Enumerate the available postnatal growth charts. Evaluate their merits and demerits.  | 4+6   |
| 10. Strategies for fetal neuro-protection.   | 10    |

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