Write short notes on:

1. Control of breathing in neonates and pathogenesis of apnoea of prematurity. 6+4

2. Prenatal workup of foetal hydrops and fetal therapy possible. 7+3

3. Mechanisms of antibiotic resistance in neonates and strategies for prevention. 7+3

4. Heart defects resulting from abnormalities of cardiac looping in a neonate. 10

5. What is a systematic review? What are the steps required in writing a good systematic review? 3+7

6. Universal newborn screening and feasibility. 7+3

7. Physiology of calcium regulation and disorders of metabolism of calcium in a neonate. 6+4

8. Brain imaging in a neonate with Perinatal asphyxia and its usefulness in predicting neurodevelopmental outcome. 6+4

9. Discuss the mechanism of blood pressure maintenance in neonates. Discuss the use of vasopressors in neonates. 4+6

10. How do you assess and classify bacterial infection in a young infant as per Integrated Management of Neonatal and Childhood Illness (IMNCI). 5+5