

ENDOCRINOLOGY  
PAPER-I

ENDO/J/18/07/I

Time: 3 hours

Max. Marks:100

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. Downstream intracellular pathways for prolactin actions. 10
2. Steps of DNA-electrophoretic mobility assay of mutated vitamin D receptor protein in a patient with rickets and alopecia. 10
3. Molecular players in the development of pituitary gland and disease related to these molecules. 10
4. a) What are the phases of normal growth velocity from intrauterine to adult? 7+3  
b) What are the reasons for differences in the average height of normal females and males?
5. a) What are Tolvaptans? 4+3+3  
b) What are their therapeutic indications?  
c) What are their side effects?
6. a) What is the place of Pegvisomant therapy in growth hormone excess? 7+3  
b) Their mechanisms of action.
7. Role of autoimmune regulator genes in the development of Type 1 autoimmune polyglandular syndrome. 10
8. a) Peripheral immune tolerance 5+5  
b) Role of loss of peripheral immune tolerance in the pathogenesis of autoimmune thyroiditis.
9. Molecular mimicry, neoantigen and development of Type 1 diabetes. 10
10. a) Block randomization 6+4  
b) Advantages of block randomization in controlled trial.

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