

**ENDOCRINOLOGY**

**PAPER-I**

Time: 3 hours  
Max. Marks:100

ENDO/J/19/07/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. Discuss downstream signaling pathways after binding of insulin with insulin receptor.  | 10    |
| 2. Endocrine Disrupting Chemicals (EDCs).   | 10    |
| 3. Short and long term side effects of growth hormone therapy in a subject with growth hormone deficiency (GHD).                                  | 5+5   |
| 4. Neuroendocrine regulation of Prolactin secretion.  | 10    |
| 5. Methods for measurement of free hormones.  | 10    |
| 6. Sample size calculation for a drug intervention study for type 2 diabetes.   | 10    |
| 7. Principle and interpretation of water deprivation test.  | 5 + 5 |
| 8. Management of a newly married 24-yr old lady with galactorrhea and amenorrhea of three month duration with serum prolactin level of 110 ng/ml. | 10    |
| 9. Gamma knife therapy for pituitary tumors.  | 10    |
| 10. Evaluation of a case of acromegaly:<br>a) Biochemical diagnostic evaluation<br>b) Evaluation of associated complications.                     | 6+4   |

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