



**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 5th Semester Examination, 2020

**DSE2-ZOOLOGY**

Full Marks: 40

**ASSIGNMENT**

*The figures in the margin indicate full marks.*

**The question paper contains two parts: Paper-A and Paper-B  
The candidates are required to answer any *one* from *two* parts.  
Candidates should mention it clearly on the Answer Book.**

**PAPER-A**

**REPRODUCTIVE BIOLOGY**

**Answer any *four* questions from the following**

10×4 = 40

1. How does the intra ovarian factors effect the ovulation? 10
2. What are the hormones of Adrenal gland? Write about the disorders of Adrenal gland. 10
3. What do you mean by intrauterine insemination? How does IUI work? Comment on the risk of IUI. 2+6+2 = 10
4. With suitable labelled diagrams describe the histoarchitechture of testis. 10
5. What is contraception method? Describe the mechanism of contraception by IUD and emergency contraceptive pills. 2+4+4 = 10
6. Describe the hormonal regulation and the histoarchitechtrual change in ovary during the menstrual cycle. 10
7. Briefly describe the process of male and female gonad differentiation. 10
8. Describe the process of parturition. Comment on the role of reproductive hormones in implantation. 6+4 = 10

**PAPER-B**  
**ENDOCRINOLOGY**

**Answer any *four* assignment-based questions from the following**

10×4 = 40

1. Classify hormones on the basis of chemical nature and mechanism of action.
2. Elucidate the role of melatonin in reproduction. State briefly how melatonin secretion is regulated.
3. Mention the source, chemical nature and important functions of hypophyseal hormones. Add a note on Cushing's disease.
4. Mention the sources and discuss in detail about the functions of adrenal cortical hormones.
5. Define thyrotoxicosis. Write down the symptoms and management of Graves' disease.
6. Mention the cell types and the functions of the hormones secreted from the islets of Langerhans. Add a note on intra-islet regulation of pancreatic hormones.
7. What is estrous cycle? Describe the uterine ovarian and vaginal changes in different phases of estrous cycle.
8. Mention the sources of testicular hormones and their roles in spermatogenesis.

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