## 2023

## B.A./B.Sc.

### **Fifth Semester**

### DISCIPLINE SPECIFIC ELECTIVE - 2

### **ZOOLOGY**

Course Code: ZOD 5.21 (Reproductive Biology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

#### UNIT\_I

- 1. What is steroid hormone? Classify steroid hormone with examples. State the functions of the steroid hormones.
- 2. Explain hypothalamo-hypophyseal-gonadal axis with a diagram. How is gonadotropin secretion regulated in males and females? 7+7=14

# **UNIT-II**

- 3. Where are germ cells located in males? Give an account on the germ cell renewal system with a diagram. 2+10+2=14
- 4. Elucidate the physiology of maturation of spermatozoa and detail its transcription in male tract. 8+6=14

#### UNIT-III

- 5. Give an illustrative account on the histology of ovary. Explain steroidogenesis metabolism in ovaries. 2+5+7=14
- 6. Name ovarian hormones and state its functions. Explain the three stages of folliculogenesis. What are the common changes that can occur in the female reproductive tract? 5+6+3=14

## **UNIT-IV**

- 7. Explain the processes of implantation and gestation and their hormonal control. 7+7=14
- 8. Describe the physiology of parturition and its hormonal regulation.

8+6=14

## **UNIT-V**

9. Write brief accounts on the following:

 $7 \times 2 = 14$ 

- (a) Sex selection
- (b) Sperm bank
- 10. Write notes on the following:

 $7 \times 2 = 14$ 

- (a) Infertility in male
- (b) GIFT