2021

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. Explain with diagram the hypothalamo-hypophyseal-gonadal axis mechanism in the secretion of hormones.

 $7 \times 2 = 14$

- 2. Write notes on *any two* of the following:
 - (i) Glycoprotein hormones
 - (ii) Regulation of gonadotropin secretion in male
 - (iii) Mechanism of sex differentiation

UNIT-II

- 3. State the differences between male reproductive organs in the male of rat and human. Describe the cellular function of the testis. 2+12=14
- 4. Write notes on $7\times 2=14$
 - (i) Male reproductive accessory gland functions in rat
 - (ii) Structure and function of ductus epididymis

UNIT-III

- 5. Discuss the menstrual cycle and its regulation. 9+5=14
- 6. What is corpus luteum? Explain its formation and regression. 2+12=14

UNIT-IV

- 7. Explain the transport pathways of the following cells: 7+7=14
 - (i) Ovum in the fallopian tubes
 - (ii) Sperm transport in the female tract

8. Explain the mechanism of parturition and its hormonal regulation.

14

UNIT-V

- 9. Describe the cause, diagnosis and management of fertility in female. 14
- 10. Write notes on

 $7 \times 2 = 17$

- (i) Sex selection
- (ii) Modern contraceptive technologies of female