

Syllabus: Reproductive Biology

1. Introduction to reproductive strategies in animal Kingdom

Reproductive strategies, unisexuality and bisexuality, sex reversal.

2. Reproductive system in human beings

Male and female reproductive system, follicular development and ovulation, secondary sexual characteristics in male and female, gametogenesis.

3. Pregnancy, gestation, placentation, parturition and lactation

Gestation, parturition, foetal membranes, classification of placenta.

4. Reproductive cycles in mammals

Estrous and menstrual cycles and hormonal control.

5. Reproductive technologies

Infertility and its causes, infertility management, semen collection and storage, artificial insemination and surrogacy.

6. In vitro fertilization and embryo transfer

In vitro fertilization, cryopreservation of embryos and test tube babies.

7. Assistant Reproductive Technologies

GIFT, ZIFT, ICSI, TET, oocyte and embryo donation.

8. Prenatal diagnosis

Different methods, reasons, female foeticide issues.

9. Fertility control

Reasons, chemical and hormonal control methods, surgical contraception, sterilization, removal of gonads and uterus, abortion.