

Chapter 3: Human Reproduction

Male Reproductive System:

Testes: Produce sperm & secrete testosterone. Located in **scrotum**.

Epididymis: Stores and matures sperm.

Vas deferens: Transports sperm.

Accessory glands: Seminal vesicles, prostate gland, and bulbourethral glands. Produce seminal fluid.

Female Reproductive System:

Ovaries: Produce ova (eggs) & secrete estrogen and progesterone.

Fallopian Tubes (Oviducts): Site of fertilization.

Uterus: Site of implantation and fetal development.

Vagina: Receives sperm during intercourse and acts as the birth canal.

Gametogenesis: Formation of gametes.

Spermatogenesis: Formation of sperm in seminiferous tubules of testes.

Oogenesis: Formation of ovum in ovaries.

Menstrual Cycle: 28 days cycle in females; involves:

Menstrual Phase (1-5 days): Shedding of uterine lining.

Follicular Phase (6-14 days): Maturation of follicle & ovum; peak of estrogen.

Ovulation (Day 14): Release of mature ovum from ovary.

Luteal Phase (15-28 days): Corpus luteum formation and progesterone secretion.

Fertilization & Implantation:

Occurs in fallopian tubes.

Zygote undergoes division while moving towards the uterus.

Implants into the endometrium.

Pregnancy & Embryonic Development:

Placenta: Connects fetus to uterine wall; nutrition, waste exchange, & producing hormones.

Gestation: Pregnancy period; lasts ~9 months.

Development stages: Zygote → Morula → Blastocyst → Embryo → Fetus.

Parturition: Process of childbirth; initiated by signals from the fully developed fetus and placenta.

Lactation: Mammary glands produce milk after childbirth for nourishing the newborn.

