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CHAPTER

UNIT - I

Human Reproduction



Chapter Outline

- 2.1 Human reproductive system
- 2.2 Gametogenesis
- 2.3 Menstrual cycle
- 2.4 Menstrual disorders and menstrual hygiene
- 2.5 Fertilization and implantation
- 2.6 Maintenance of pregnancy and embryonic development
- 2.7 Parturition and lactation



Learning Objectives

- Creates an awareness towards a healthy reproductive life in adolescents.
- Understands the structure of the male and female reproductive systems.
- Explains the functions of the structures associated with the male and female reproductive system.
- Compares the process of spermatogenesis and oogenesis.
- Discusses the changes in a female body during and after Fertilization.
- Appraises the role of hormones in the process of reproduction.
- Understands the events in pregnancy and foetal development.



In every child who is born, the potentiality of the human race is born again

- James Agee

Every organ system in the human body works continuously to maintain homeostasis for the survival of the individual. The human reproductive system is essential for the survival of the species. An individual may live a long healthy life without producing an offspring, but reproduction is inevitable for the existence of a species.

The reproductive system has four main functions namely,

- to produce the gametes namely sperms and ova
- to transport and sustain these gametes
- to nurture the developing offspring
- to produce hormones

The major reproductive events in human beings are as follows:

- **Gametogenesis:** Formation of gametes by spermatogenesis and oogenesis.
- **Insemination:** Transfer of sperms by the male into the female genital tract.
- **Fertilization:** Fusion of male and female gametes to form zygote, called Fertilization.
- **Cleavage:** Rapid mitotic divisions of the zygote which convert the single celled