

Gametogenesis is a process by which diploid or haploid cells undergo cell division and differentiation to form mature haploid gametes.

## gametogenesis

- ▶ occurs by meiotic division of diploid gametocytes into various gametes, or by mitotic division of haploid gametogenous cells.
- ▶ The existence of a multicellular, haploid phase in the life cycle between meiosis and gametogenesis is also referred to as alternation of generations.

# Gametogenesis is simply...

- ▶ the process of gametes formation
- ▶ It occurs in the gonads (ovary or testis)

## Gametogenesis is divided into four phases

- ▶ 1. Extra-gonadal origin of primordial germ cells
- ▶ 2. Proliferation of germ cells by mitosis
- ▶ 3. Meiosis
- ▶ 4. Structural and functional maturation of the ova and spermatozoa