

Chapter – 2 | Human Reproduction

QUIZ PART-04

1. Oogenesis is the process of formation of:

- A. Mature male gametes
- B. Mature female gametes
- C. Zygote
- D. Embryo (B)

Explanation : Oogenesis is the process of formation of mature female gametes (ova) from oogonia.

2. Oogenesis begins during:

- A. Puberty
- B. Childhood
- C. Embryonic development stage
- D. Menopause (C)

Explanation : The initiation of oogenesis occurs during embryonic development. Several million oogonia are produced within each embryonic ovary.

3. The female gamete mother cells are called:

- A. Spermatogonia
- B. Oogonia
- C. Spermatids
- D. Secondary oocytes (B)

Explanation : Oogonia are the female gamete mother cells produced during embryonic development.

4. Primary oocytes are formed when oogonia enter:

- A. Prophase I of meiosis
- B. Second meiotic division
- C. Fertilization process
- D. Mitotic division after birth (A)

Explanation : Oogonia enter prophase I of meiosis and become temporarily arrested at that stage, forming primary oocytes.

5. Primary oocytes are surrounded by a layer of granulosa cells to form:

- A. Secondary follicle
- B. Primary follicle
- C. Graafian follicle
- D. Corpus luteum (B)

Explanation : Primary oocytes covered by a layer of granulosa cells are called primary follicles.

6. At puberty, approximately how many primary follicles remain in the ovaries?

- A. 1000–2000
- B. 5000–10000
- C. 60,000–80,000
- D. 1 million (C)

Explanation : A large number of primary follicles degenerate from birth to puberty, and around 60,000–80,000 remain at puberty.

7. The fluid-filled cavity present in tertiary follicles is called:

- A. Zona pellucida
- B. Antrum
- C. Corona radiata
- D. Perivitelline space (B)

Explanation : Tertiary follicles are characterised by the presence of a fluid-filled cavity called the antrum.

8. The first meiotic division of the primary oocyte results in the formation of:

- A. Two equal-sized ova
- B. Secondary oocyte and first polar body
- C. Four spermatids
- D. Zygote and polar body (B)

Explanation : The primary oocyte completes the first meiotic division (unequal division) and forms a large haploid secondary oocyte and a small first polar body.

9. The mature follicle from which the secondary oocyte is released is called:

- A. Primary follicle
- B. Secondary follicle
- C. Graafian follicle
- D. Corpus albicans (C)

Explanation : The tertiary follicle develops into a mature Graafian follicle, which ruptures to release the secondary oocyte during ovulation.

10. The release of secondary oocyte from the ovary is called:

- A. Fertilization
- B. Implantation
- C. Ovulation
- D. Menstruation (C)

Explanation : The secondary oocyte is released from the ovary by rupture of the Graafian follicle through the process of ovulation.