

MOMOH, Hafsat Omoze

18/MHS01/214

Medicine and surgery

200 level

1. Ovulation is the release of the secondary oocyte from the ovarian follicle. This occurs when the ovarian follicles ruptures due to an increase luteinizing hormone.
- 2.

MEIOSIS 1	MEIOSIS 2
Homologous chromosome separate	Sister chromatids separate
Produce 2 diploid daughter cells	Produce 4 diploid daughter cells
Crossing over occurs	Crossing over does not occur
Reductive division takes place i.e. half chromosome number as parent	Equational division takes place i.e. same chromosome number as parent

3. Stages involve in fertilization are;
 - Passage of sperm through the corona radiata through capacitation
 - Penetration of the zona pellucida by the sperm through secretion of acrosome
 - Fusion of the sperm and oocyte plasma membrane also the zona pellucida closes the binding site to prevent polyspermy
 - Completion of the second mitotic division and the formation of the female pronucleus which is the nucleus of the oocyte when the region of the head and tail enter the cytoplasm
 - The formation of the male pronucleus which occurs when the tail of the sperm degenerates and the nucleus of the sperm enlarges
 - Formation of the zygote as a result of the fusion of the male and female pronucleus to form an ootid that gives rise to the zygote
4. Monozygotic twins are developed from the same fertilized egg and hence have the same genetic material. They are identical twins.
Dizygotic twins are developed from two different fertilized eggs hence do not share the same genetic material. They are fraternal twins