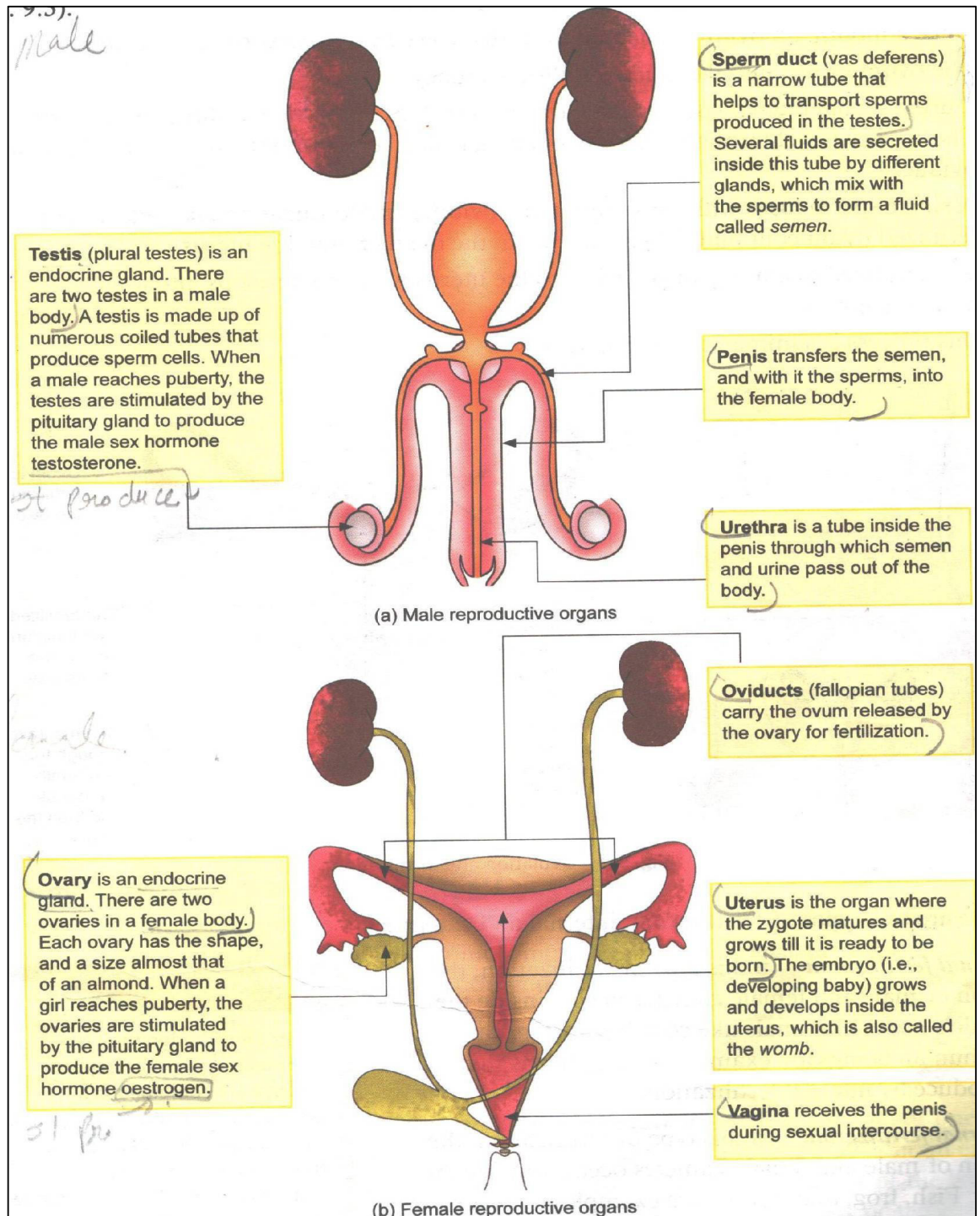


8th - REPRODUCTION IN PLANTS & ANIMALS II

Determination of the sex of a baby: Chromosomes carry information in the form of genes. Each cell contains 23 pairs of chromosomes, including one pair of sex chromosomes. There are two types of sex chromosomes; X and Y. female cells contain the XX pair while male cells have the XY pair.

Baby inside the womb: when the fertilized egg reaches the uterus, it implants itself there. During the first eight weeks after fertilization, the baby is called the embryo. From eight weeks after fertilization till birth, the developing baby is called the foetus.

Viviparous animals: animals that give birth to live offspring (i.e., babies) are called



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viviparous animals. E.g. cow, horse.

Oviparous animals: animals that lay eggs, which hatch into offspring, are called oviparous animals. E.g. fish, birds.

Metamorphosis in frog and butterfly:

There are three main stages in the life cycle of a frog:

Egg → larva (tadpole) → adult

These changes are controlled by the hormone thyroxin.

Metamorphosis: the transformation of a larva into an adult through a series of drastic changes is called metamorphosis.

Hatching: The eggs require a specific temperature that is provided by the hen by sitting on these eggs (or artificially by keeping the eggs in an incubator). Then the egg shell is broken and the chick comes out. This process is called hatching.

Population Growth:

Factors which are responsible for population growth in India are:

1. Reduction of death rate
2. Desire of son's
3. Traditional faith
4. Economic reasons
5. Lack of education.

Birth control

Numbers of family welfare centers have been established in India with following objectives:

1. Knowledge and advice on methods of birth control.
2. To control growth of population.
3. To promote adoption of small families
4. Immunization against Anemia and Vitamin A deficiency of children
5. Reduction of infant mortality rate.

Hormones: Animals and humans body needs certain chemicals for proper growth and development. These chemicals are called hormones.

Endocrine glands: The hormones are produced in organs called endocrine glands. Due to that, hormones are directly released into the blood stream. Very small quantities of hormones are required by the body for growth and development.

For e.g

- Hormone adrenaline is secreted when you are angry or excited.
- The pancreas which controls the sugar metabolism in the blood is regulated by the insulin.
- Pituitary gland is located at the base of the brain. It regulates the activity of other endocrine glands. Hence, called Master gland.
- The estrogen hormone is female sex hormone.
- The testosterone hormone is male sex hormone.

