Examination of the male genitalia

1. Examination before collection of the semen:

- Know the age of puberty :

Every species of the animals have a specific age in which the animal reach to the wholeness of the body structures and genital organs and become able to copulation and reproduction. Puberty in the Male means:

1-Age when behavioural traits are expressed

2-Age at first ejaculation

3-Age when sperm first appear in the ejaculate

4-Age when sperm first appear in the urine

5-Age when the ejaculate contains a threshold number of sperm

Average Age of Puberty

Type of animal	Age of male	Age of female
Bovine	11 Mo	11 Mo
Ovine	7 Mo	7 Mo
Porcine	14 Mo	6 Mo
Equine	14 Mo	18 Mo
Canine	9 Mo	12 Mo
Feline	9 Mo	8 Mo

- In the seasonal poly estrus animals: should be Know the season of reproduction such as:

❖ Mares: February – October.
❖ Ewes and she goats: June – December.
❖ Bitches, cats and wild animals: at the time of overabundance of the diet and good weather especially during the March and April.

- Examination the testes to affirmation the present two, one or absent of the testes such as *cryptorchidisim*.
- Examination the penis and doing the tests to detection any venereal diseases such as

2. Examination after collection:

Examination the semen to know:

- Volume of the ejaculation and number of sperms per ml: the volume of ejaculation differs among the type of animals, show table 2.

Table 2 show volume of ejaculation in some males of animals

Class	ml/ejaculate	Sperm Conc.	No. Females
Bull	5-6	800-1,200	300-500
Ram	1	800-4,000	40-100
Boar	200-300	25-1,000	15-25
Stallion	50-150	30-800	8-12

- Masal motility of the sperms.
- Individual motility of the sperms.
- Percentage of the dead sperms.
- Percentage of the abnormal sperms.

Reproductive efficiency of the male depends on:

1- Ability to service.
2- Ability to ejaculate enough amounts of good quality spermatozoa which can fertilize the ovum of the female.

Components of seminal fluid

1- Spermatozoa.
2- Seminal fluid or plasma in which spermatozoa can swim or move. Seminal fluid or plasma composed from: Fructose, citric acid, vitamins, amino acids and protein, hormones, enzymes and fatty acids.

Benefits of seminal plasma

1- Act as fluid to suspend sperm.
2- Act as activator to sperms due to its pH 7-7.2.
3- Act as a nutrient for sperms and activate their metabolism.
4- It maintains sound sperms in fallopian tube of female.
5- It helps in process of sperm maturation.
6- Cause muscle contraction of female genital tract which help in movements of sperms upward.

Physiological characteristics of spermatozoa

1- Ability of nutrient metabolism by sperm body.
2- Able to move by the tail.
3- Process the ability to fertilize the ovum by the head of sperm.

Sperm morphology

The sperm composed from: Head, Nek, Middle and Tail.