

Name:

A -----
: 20

Q1/ Fill the following blanks: (chose 5) 20 M.

- 1- ----- the process in which the mature spermatozoa are released from the protective Sertoli cells into the lumen of the seminiferous tubule.
(Spermatogenesis, meiosis, spermiation, steroidogenesis)
- 2- The duration of spermatogenesis, i.e. the time between spermatogonial divisions and the release of the spermatozoa, is approximately ----- in most domestic animals.
(30 days, 60 days, 120 days, 14 days)
- 3- The time between two successive appearances of the same cellular associations at a given location in the seminiferous tubules is -----.
(Seminiferous epithelial cyclic, spermatogenic waves, spermatogenesis, spermiation)
- 4- ----- is the fluid portion of semen.
(Seminal plasma, spermatozoa, seminiferous tubule, blood serum)
- 5- ----- Is that part of sperm which covers the anterior part of sperm nucleus and contain enzyme needed for penetration zona pellucida.
(Mitochondrial sheath, proximal centriole, acrosome, post nuclear caps)
- 6- ----- is the thickened part of the tail that contains enzymes which convert energy substrate to high energy compound that can be used by spermatozoa.
(Main piece, proximal centriole, axial filament, mitochondrial sheath)

Q2/ Define following: (chose 4) 20 M.

- 1- Blood-testis barrier:
- 2- Spermiogenesis:
- 3- Spermatocytogenesis:
- 4- Spermatogenesis:
- 5- Negative feedback mechanism:

Q3/ Enumerate one of the following: 16 M.

- A- Types of sperm abnormality.
- B- Seminal plasma compounds.

Q4/ Write short note about the hormonal control of reproduction in male. 14 M.

Q5/ Explain the following: 10 M.

- A- The spermatogenesis is continuous process throughout the life of animals.
- B- The spermatozoa may remain fertile up to 60 days during stored in epididymis while in fresh ejaculate semen it will be fertile only a few hours.

Q6/ Enumerate the factors effect metabolism rate of sperm that can be used for extend fertile life of semen. 10 M.

Q7/ chose tow of the following: 10 M.

- A- How can you differentiate between puberty and maturity in male?
- B- Enumerate some of definitions have been given the term puberty in male.
- C- Explain the influence of hypothalamus to initiate puberty in male.