ATOGWE VICTORIA ALOIYE 18/ENG08/003 BIOMEDICAL ENGINEERING PHS 212

WRITE SHORT NOTES ON A FEW TERMS RELATED TO MALE REPRODUCTION:

- 1. <u>Spermatogenesis:</u> This is a process by which haploid spermatozoa develop from germ cells in the seminiferous tubules of the testes. This process starts with the mitotic division of the stem cells located close to the basement membrane of the tubules. These cells are called spermatogonia stem cells.
- 2. <u>Testosterone:</u> This is the primary male sex hormone and anabolic steroid. It plays a key role in the development of mal reproductive tissues such as testes and prostate, in male humans. Teste also promotes secondary sexual characteristics such as increased muscle and bone mass, and the growth of body hair.
- 3. <u>Semen:</u> It is also called seminal fluid. It is an organic fluid that is produced and originates from the seminal vesicle which is located in the pelvis, and emitted from the male reproductive tract. It contains spermatozoa which are capable of fertilizing the female eggs. It consists of other components such as proteolytic and other enzymes as well as fructose which promote survival of spermatozoa and provide a medium through which they can move or swim.
- 4. <u>Male orgasm:</u> This is a complex system involving multiple hormones, organs, and nerve pathways. The male hormone testosterone, which is produced in the testicles, plays an important role by enhancing the sexual desire (libido) that leads to arousal, erection and finally the orgasm.
- 5. <u>Male infertility:</u> This is a male's inability to cause pregnancy in a fertile female. It can occur due to various factors such as; deficiencies in the semen, genetics (chromosomal anomalies and genetic mutations), abnormal set of chromosomes, trauma, testicular cancer, etc. It can also be prevented by healthy diets, avoiding heavy marijuana and alcohol use, avoiding excessive heat to the testicles etc.