NAME: OBERIKO OGHENERUNO FAVOUR

MATRIC NO: 18/MHS02/123

DEPARTMENT: NURSING

COURSE TITLE: PHYSIOLOGY

COURSE CODE: PHS 212

ASSIGNMENT TITLE: MALE REPRODUCTIVE FUNCTIONS

ANSWERS

A SHORT NOTE ON SPERMATOGENESIS

* Spermatogenesis is the process by which haploid spermatozoa develop from germ cells in the seminiferous tubules of testis. This process starts with the mitotic division of the stem cells located close to the basement membrane of the tubules. These are called the spermatogonial stem cells. The mitotic division of these produces two types of cells, Type A cells replenish the stem cells, and type B cells differentiate into primary spermatocytes. The primary spermatocyte divides meiotically (Meiosis I) into two secondary spermatocytes; each secondary spermatocyte divides into two equal haploid spermatids by meiosis II. The spermatids are transformed into spermatozoa (sperm) by the process of spermatogenesis. These develop into mature spermatozoa, also known as sperm cells. Thus, the primary spermatocytes gives rise to two cells, the secondary spermatocytes, and the two secondary spermatocytes by their subdivision produce four spermatozoa and four haploid cells.

A SHORT NOTE ON SEMEN

* Semen, also known as seminal fluid, is an organic fluid that contains spermatozoa. It is secreted by the gonads (sexual glands) and other sexual organs of male or hermaphroditic animals and can fertilize the female ovum. In humans, seminal fluid contains several components besides spermatozoa: proteolytic and other enzymes as well as fructose are elements of seminal fluid which promotes the survival of spermatozoa, and provides a medium through which they can move or “swim”. Semen is produced and originates from the seminal vesicle, which is located in the pelvis. The process that results in the discharge of semen is called Ejaculation. Semen is also a form of genetic material. In animals, semen has been collected for cryoconservation. Cryoconservation of animal genetic resources is a practice that calls for the collection of genetic material in effort for conservation of a particular breed.

PS: semen is also a greyish white bodily fluid that is secreted by the gonads of male animals. It carries sperm or the spermatozoa and fructose and other enzymes that help the sperm to survive to facilitate successful fertilization.