Male Genital System

1- The primary sex organ/s of the male reproductive system is/are:

a. Penis
b. Two testes
c. Accessory genital glands
d. Male genital glands

2- Stroma of the testis consists of:

a. Leydig cells
b. Seminiferous tubules
c. Tunica vaginalis
d. Exocrine parenchyma

3- Endocrine parenchyma of the testis consists of:

a. Leydig cells
b. Seminiferous tubules
c. Tunica vaginalis
d. Tunica albugenia

4- Incomplete septa divide the testis into about:

a. 750 lobules
b. 250 lobules
c. 200 lobules
d. 300 lobules

5- Each lobule in the testis has about:

a. 10-15 seminiferous tubules
b. 2-8 seminiferous tubules
c. 6-10 seminiferous tubules
d. 1-4 seminiferous tubules

6- "A highly tortuous compound tubular gland representing the exocrine portion of the testis that produces spermatozoa", this best describes:

a. Seminiferous tubules
b. Vas deferens
c. Cowper's gland
d. Male urethera

7- Seminiferous tubules join the rete testis via the:

a. Epididymis.
b. Tubuli recti.
c. Ductuli efferentes.
d. Ductus deferens.

8- Testosterone is secreted by:

a. Secondary spermatocyte
b. Sertoli cells
c. Leydig cells
d. Primary spermatocyte

9- Spermatogenesis occurs in the following order:

a. Spermatocytogenesis - meiosis - spermiogenesis
b. Spermiogenesis – Spermatocytogenesis – meiosis
c. Spermiogenesis – mitosis – spermatocytogenesis
d. Meiosis – Spermatocytogenesis – spermiogenesis

10- Which is the correct order for spermatogenic cell differentiation within the seminiferous tubules?

a. Round spermatid, elongating spermatid, testicular sperm, spermatocytes, spermatogonia
b. Spermatocytes, Round spermatid, elongating spermatid, testicular sperm, spermatogonia
c. Spermatogonia, spermatocytes, round spermatid, elongating spermatid, testicular sperm
d. Spermatocytes, spermatogonia, elongating spermatid, round spermatid, testicular sperm

11- Type B spermatogonia:

a. Are germ cells that develop from secondary spermatocytes
b. Undergo mitotic activity subsequent to sexual maturity
c. Develop through meiotic divisions
d. Give rise to secondary spermatocytes

12- Sertoli cells are accurately described by which of the following statements?

a. Occurs in the epididymis
b. Occurs after the release of the developing spermatids from the Sertoli cells
c. Involves the maturation of lysosomal enzymes
d. Involves mitotic activity
e. Involves mitotic divisions

13- In the seminiferous tubules, the spermatogonia cells are arranged as:

a. 4-8 layers
b. 1-2 layers
c. 10-15 layers
d. 2-4 layers

14- Which step occurs first during spermiogenesis?

a. Maturation phase
b. Endocrine phase
c. Acrosomal phase
d. Golgi phase

15- Testosterone is secreted by:

a. Spermatogonia
b. Sertoli cells
c. Primary spermatocytes
d. Leydig cells

16- The largest spermatogenic cells:

a. Spermatids
b. Primary spermatocytes
c. Secondary spermatocytes
d. Type A spermatogonia

17- The acrosome is formed in:

a. Spermatids
b. Primary spermatocytes
c. Secondary spermatocytes
d. Type A spermatogonia

18- Blood-testis barrier is formed by:

a. Leydig cells
b. Sertoli cells
c. Spermatogonia.
d. Spermatids.
e. Spermatocytes

19- Spermiogenesis DOESN'T include:

a. Meiosis I phase
b. Maturation phase
c. Golgi phase
d. Cap phase
e. Acrosome phase

20- Which one of the following ISN'T a function of sertoli cells?

a. Nutritive function
b. Secretion of androgen-binding protein
c. Prevention of autoimmune reactions
d. Formation of acrosomes

21- Spermiogenesis is:

a. Identical to spermatogenesis
b. The process that transforms spermarids into mature sperm
c. A process involving cell division
d. Involved in shape changes with cell division

22- Spermatozoa (sperms):

a. Develop in the epididymis
b. Develop in efferent ductuli
c. Are stored in the seminal vesicles
d. Are stored in the epididymis

23- Spermatozoa:

a. Can travel passively in the seminiferous tubules.
b. Move actively through the spermatic ducts.
c. Undergo maturation in the epididymis.
d. Are stored between ejaculations in the seminal vesicles.

24- Mature spermatozoon is:

a. 5 µm long
b. 55 µm long
c. 50 µm long
d. 65 µm long

25- "Blood-testis barrier divides seminiferous tubules into 2 compartments, the outer (basal) compartment consists of ……..":

a. Spermatogonia
b. Primary spermatocytes
c. Secondary spermatocytes
d. Spermatids

26- "The endocrine portion of testis (interstitium of testis), that produces testosterone", this best describes:

a. Sertoli cells
b. Primary spermatocytes
c. Leydig cells
d. Spermatids

27- Continuous tight junctions between lateral borders of sertoli cells, this refers to:

a. BBB
b. Blood placenta barrier
c. Blood-testis barrier
d. Blood-brain barrier

28- Which piece of mature spermatozoa contains mitochondrial sheath?

a. Middle piece of tail
b. End piece of tail
c. Principal piece of tail
d. Neck

29- Golgi apparatus:

a. Elongates to form axoneme
b. Contains hydrolytic enzymes
c. Forms a sheath around proximal part of flagellum
d. Excess part is shed as a residual body

30- Excess ……. is shed as a residual body & phagocytosis by Sertoli cells:

a. Cytoplasm
b. Mitochondria
c. Centrioles
d. Golgi apparatus

31- Which is the last step in spermiogenesis?

a. Maturation
b. Golgi
c. Acrosomal
d. Sertoli

32- The epididymis is composed of:

a. 2-3 tubes
b. 5 tubes
c. 6-8 tubes
d. A single tube

33- Which of the following best describes spermatids?

a. Meiotic cell division
b. Cell differentiation of spermatids
c. Endocytosis
d. Formation of primary spermatocytes

34- The red arrows are pointing to:

a. Spermatogonia
b. Primary spermatocyte
c. Secondary spermatocyte
d. Sertoli cells

35- One of intratesticular duct is:

a. Vas deferens
b. Epididymis
c. Rete testis
d. Male urethra

36- Rete testis is lined with:

a. Simple columnar epithelium
b. Stratified columnar epithelium
c. Pseudostratified columnar epithelium
d. Simple cuboidal epithelium

37- Distal portion of tubuli recti is lined with:

a. Simple columnar epithelium
b. Stratified columnar epithelium
c. Pseudostratified columnar epithelium
d. Simple cuboidal epithelium

38- Ductus epididymis:

a. Is a long highly coiled duct
b. Is lined with simple columnar bearing stereocilia
c. Has a folded lumen
d. Is connected with a seminal vesicle

39- The epididymal duct (ductus epididymis) is lined with:

a. Stratified columnar epithelium.
b. Ciliated epithelium.
c. Epithelium with stereocilia.
d. Epithelium with goblet cells.

40- The epithelium lining the efferent ductules (ductuli-efferentes) of the epididymis is:

a. Identical to that of the epididymal duct.
b. Coated with stereocilia.
c. A stratified epithelium.
d. Simple columnar nonciliated, simple columnar ciliated.

41- The vas deferens:

a. Has only 2 layers in Musculosa
b. Has a thin muscle wall.
c. Has an outer serosa.
d. The epithelium lining is pseudostratified columnar.

42- The ductus deferns can best be identified by:

a. A smooth bore lumen.
b. Three separate muscle coats.
c. Transitional epithelium.
d. Flattened mucosa.

43- The vas deferens is best identified in cross section by:

a. Its smooth unfolded luminal margin.
b. Three well defined thick layers of smooth muscle.
c. The epithelium is transitional.
d. Wide lumen.

44- Transitional epithelium is the lining epithelium of:

a. Membranous urethra
b. Penile urethra
c. Prostatic urethra
d. Spongy urethra

45- Which is the true accurate function of ejaculatory duct?

a. Transport sperm from vas deferens to urethra
b. Transport urine from urinary bladder
c. Transport semen from male genitalia to the outside of the body
d. Act as a major energy source for sperm

46- Secretions of the seminal vesicles represent about:

a. 30% of human semen
b. 50% of human semen
c. 70% of human semen
d. 90% of human semen

47- Seminal vesicles AREN'T characterized by:

a. Envaginations of the ductus deferens.
b. Basically similar in structure to the ductus deferens.
c. Usually lined with transitional epithelium.
d. Usually lined with pseudostratified epithelium.

48- Corpora amylacea may be found in:

a. Corpora cavernosa in penis
b. Prostate gland
c. Ejaculatory duct
d. Seminal vesicles

49- The portion of the prostate that is the most common site of prostatic carcinoma is the:

a. Mucosal gland
b. Transition zone (sub mucosal gland)
c. Peripheral zone
d. Central zone

50- Seminal vesicles secrete fluid rich in:

a. Fructose
b. Sucrose
c. Glucose
d. Fibrinogen

51- The prostate gland:

a. Secretes hormones.
b. Secretes alkaline phosphatase.
c. Contains myoepithelial cells.
d. Often contains concretions.

52- The prostate gland:

a. Has a muscular stroma.
b. Has secretory ducts lined with transitional epithelium.
c. Opens into the epididymal duct.
d. Tubuloacinar glands arranged in 2 zones

53- The accessory genital gland whose secretion is responsible for lubricating the urethra is the:

a. Prostate gland
b. Bulbourethral glands
c. Seminal vesicles
d. Penis

54- <u>"Paired small glands located under the membranous urethera, secretes mucus fluid that lubricate urethera", this best describes:</u>

a. Penis
b. Prostatic gland
c. Seminal vesicles
d. Cowper's gland

55- <u>The male urethra:</u>

a. Is a paired structure
b. Originates in the kidneys
c. Is all lined throughout with transitional epithelium
d. Passes through the prostate gland

Answers							
1.	B	15.	D	29.	B	43.	B
2.	C	16.	B	30.	A	44.	C
3.	A	17.	A	31.	A	45.	A
4.	B	18.	B	32.	D	46.	C
5.	D	19.	A	33.	B	47.	C
6.	A	20.	D	34.	B	48.	B
7.	B	21.	B	35.	C	49.	C
8.	C	22.	D	36.	D	50.	A
9.	A	23.	C	37.	D	51.	D
10.	C	24.	D	38.	A	52.	A
11.	B	25.	A	39.	C	53.	B
12.	C	26.	C	40.	D	54.	D
13.	A	27.	C	41.	D	55.	D
14.	D	28.	A	42.	B		