

QUESTIONS

1.15 Female Reproductive System

554. The ovary of a young girl, who has not reached puberty, has:
- (a) oogonia
 - (b) primordial follicles
 - (c) developing primary follicles
 - (d) mature secondary (Graafian) follicles
 - (e) atretic follicles
555. Primordial follicles in the ovary:
- (a) appear during the embryonic period
 - (b) increase in number after birth
 - (c) contain secondary oocytes (oocyte II)
 - (d) are concentrated in the area of the hilus
 - (e) can complete their development through to ovulation at puberty
556. Associated with Graafian follicles are:
- (a) zona pellucida
 - (b) cumulus oophorus
 - (c) theca folliculi
 - (d) liquor folliculi (follicular liquid)
 - (e) tunica albuginea
557. Corpora lutea develop:
- (a) following ovulation
 - (b) from the theca folliculi only
 - (c) to their greatest degree during pregnancy
 - (d) into corpora albicans
 - (e) into steroid secreting glands
558. The corpora lutea:
- (a) secrete progesterone
 - (b) are yellow in appearance
 - (c) develop mainly from granulosa cells
 - (d) develop under the influence of luteinizing hormone (LH)
 - (e) have lipid-rich cells
559. The corpora lutea possess:
- (a) an oocyte
 - (b) granulosa lutein cells
 - (c) theca lutein cells
 - (d) a fluid-filled cavity
 - (e) many blood capillaries

560. Corpora albicantes are:
- (a) found in fetal ovaries
 - (b) found in ovaries of young girls
 - (c) found in post-menopausal ovaries
 - (d) degenerate corpora lutea
 - (e) mainly composed of fibrous connective tissue
561. The zona pellucida of Graafian follicles:
- (a) surrounds the oocyte
 - (b) is adjacent to the theca interna
 - (c) is in direct contact with the liquor folliculi
 - (d) stains PAS-positive
 - (e) is penetrated by oocyte microvilli
562. The zona pellucida is:
- (a) acidophilic
 - (b) basophilic
 - (c) homogeneous
 - (d) acellular
 - (e) composed of glycoproteins
563. Fertilization usually occurs in the:
- (a) ovary
 - (b) peritoneal cavity
 - (c) oviduct
 - (d) vagina
 - (e) uterus
564. Follicular atresia may occur:
- (a) at any stage in the development of a follicle
 - (b) only in mature Graafian follicles
 - (c) immediately after birth
 - (d) during pregnancy
 - (e) only after the menopause
565. The epithelium lining the oviduct is:
- (a) simple columnar
 - (b) ciliated
 - (c) stratified
 - (d) pseudostratified
 - (e) transitional

566. The wall of the oviduct possesses:
- (a) mucosa
 - (b) submucosa
 - (c) glands
 - (d) smooth muscle
 - (e) serosa
567. Stratified squamous epithelium may be found in the:
- (a) oviduct
 - (b) cervix uteri
 - (c) vagina
 - (d) endometrium
 - (e) peritoneum
568. Which structure prevents entry of further spermatozoa after one has penetrated the oocyte?
- (a) cumulus oophorus
 - (b) zona pellucida
 - (c) theca interna
 - (d) tunica albuginea
 - (e) theca externa
569. The endometrium:
- (a) is constantly changing its histological appearance throughout the menstrual cycle
 - (b) is influenced by estrogen
 - (c) is influenced by progesterone
 - (d) has a fairly constant basal layer
 - (e) has a functional layer, which reaches its greatest development when the uterus is most ready for implantation
570. Coiled arteries of the endometrium:
- (a) are found in the functional portion
 - (b) develop anew each menstrual cycle
 - (c) are especially well developed in the first half of the menstrual cycle
 - (d) constrict and close off blood supply at the end of the secretory phase
 - (e) are present in the cervix uteri
571. During menstruation:
- (a) progesterone levels are low
 - (b) estrogen levels are low
 - (c) the basal layer of the endometrium disintegrates
 - (d) uterine glands break down
 - (e) uterine blood clots are common

572. The cervix uteri:
- (a) is lined with endometrium that changes its appearance according to the stage of the menstrual cycle
 - (b) has in certain areas simple, columnar, secretory epithelium
 - (c) has large, branching mucous glands
 - (d) has a well-developed muscular wall as in the fundus
 - (e) dilates during parturition as a result of hormonal influences
573. The contraceptive pill usually contains synthetic analogues of:
- (a) FSH
 - (b) LH
 - (c) progesterone
 - (d) estrogen
 - (e) oxytocin
574. Gonadotropins are secreted by the:
- (a) hypothalamus
 - (b) adenohypophysis
 - (c) thyroid
 - (d) adrenal cortex
 - (e) placenta
575. Estrogens are secreted by the:
- (a) adrenal cortex
 - (b) theca interna of developing follicles
 - (c) theca lutein cells of corpora lutea
 - (d) placenta
 - (e) vagina
576. Nabothian cysts are found in the:
- (a) oviduct
 - (b) ovary
 - (c) placenta
 - (d) vagina
 - (e) cervix uteri
577. The vagina has:
- (a) glycogen-rich epithelial cells
 - (b) mucus-secreting cells
 - (c) stratified squamous epithelium
 - (d) glands
 - (e) rugae

578. Vaginal smears taken during the premenstrual phase of a normal menstrual cycle show large quantities of:
- (a) acidophilic (cornified) cells
 - (b) intermediate cells with folded edges
 - (c) intermediate cells with smooth edges
 - (d) mucus
 - (e) neutrophils
579. Placental functions include:
- (a) nutrition of the developing fetus
 - (b) excretion of waste products
 - (c) gaseous exchange
 - (d) hormonal transfer
 - (e) hormonal synthesis
580. The maternal blood of the human placenta:
- (a) mixes with the fetal blood
 - (b) is separated from the fetal blood by floating villi
 - (c) provides an exchange of metabolites with the fetal blood
 - (d) transfers antibodies to the fetal blood
 - (e) is separated from the fetal blood by a thicker physical barrier towards the end of pregnancy
581. The fetal part of the placenta is built from:
- (a) chorionic plate
 - (b) deciduas basalis
 - (c) floating villi
 - (d) placenta septa
 - (e) intervillous spaces
582. The maternal part of the placenta includes:
- (a) chorionic plate
 - (b) endometrial glands
 - (c) basal plate (deciduas basalis)
 - (d) intervillous spaces
 - (e) placental septa
583. Human chorionic gonadotropin in females is:
- (a) secreted in small amounts from puberty until menopause
 - (b) only secreted during pregnancy
 - (c) active in stimulating the development of the corpus luteum of pregnancy
 - (d) secreted by the placental syncytiotrophoblast
 - (e) detectable in the urine of pregnant women

584. Decidual cells are:
- (a) derived from the fetal part of the placenta
 - (b) derived from the maternal part of the placenta
 - (c) rich in lipid
 - (d) rich in glycogen
 - (e) most commonly found in the later stages of pregnancy
585. In the mammary glands of adult females the secretory units:
- (a) are always well developed
 - (b) have myoepithelia cells
 - (c) reach their peak of development during the suckling period
 - (d) degenerate to a large degree when suckling ceases
 - (e) produce milk under the influence of prolactin
586. The nipple has:
- (a) stratified squamous epithelium
 - (b) keratin
 - (c) elastic fibers
 - (d) collagen fibers
 - (e) smooth muscle
587. Lactiferous ducts:
- (a) are restricted to one per breast
 - (b) open on the nipple
 - (c) open on the areola
 - (d) are composed of simple epithelium
 - (e) are composed of two-layered epithelium
588. During lactation the secretory cells of the mammary glands are:
- (a) columnar
 - (b) flat or cuboid
 - (c) rich in lipid droplets
 - (d) rich in rough endoplasmic reticulum
 - (e) a storage site for milk