954. All of the following hormones have been implicated in the development of fibrocystic changes in the mature female breast EXCEPT:
   a. estrogen
   Estrogen is the primary trophic hormone for the breast.
   b. progesterone
   Progesterone has a marked influence on the breast. Manipulation of the estrogen and progesterone levels can ameliorate the clinical symptoms of fibrocystic change.
   c. thyroid hormone
   Please choose another answer.
   d. prolactin
   Choose another answer.
   e. growth hormone
   Growth hormone has no association with the development of fibrocystic change.
   **Correct answer is: e**

Breast: Section on Benign Clinical Conditions; Fibrocystic disease
Reference: page 330

569. Which of the following histologic breast changes is most associated with an increased risk of breast cancer:
   a. fibroadenoma
   Until recently, there has been no demonstrated increased risk of breast cancer with fibroadenoma. The recent review in the New England Journal suggests that there is a slight increase of cancer in patients who have had fibroadenoma in the remote past.
   b. epithelial hyperplasia with atypia
   Reference: Nonproliferative Lesions: Mild Epithelial Hyperplasia, Table 13.4.
   c. duct ectasia
   Duct ectasia is associated with benign scarring but not malignant transformation.
   d. apocrine metaplasia
   Apocrine metaplasia is not associated with an increased risk of malignancy.
   e. macro- and microcysts

Cystic disease is common in pre-menopausal women.
   **Correct answer is: b**

Nonproliferative lesions: Mild Epithelial Hyperplasia, Table 13.4.
Reference: page 331
960. The accessory glands of Montgomery:
a. open into the lactiferous sinuses
   They open directly onto the skin of the areola; they do not communicate with the ductal system of the breast.
b. produce milk during lactational states
   They produce a scant secretion which contributes to the moisture of the areola; they do not produce milk.
c. regress at menopause
d. produce colostrum
   They are an intermediate stage between sweat glands and mammary glands. They do not have the ability to produce milk or colostrum.
e. regress with pregnancy
   They increase in size with pregnancy and lactation.

Correct answer is: c
Breast: Section on topographic and surface anatomy
Reference: page 321

966. The most common histologic type of breast cancer is which of the following?
a. ductal adenocarcinoma
b. medullary carcinoma
Ductal carcinoma accounts for 85% of breast cancers, approximately 6% are medullary.
c. colloid cancer
Ductal carcinoma accounts for 85% of breast cancers, approximately 2% are colloid.
d. papillary carcinoma
Ductal carcinoma accounts for 85% of breast cancers, approximately 2% are papillary.
e. lobular carcinoma
Ductal carcinoma accounts for 85% of breast cancers, approximately 5-10% are lobular.

Correct answer is: a
Breast: Section on Histologic Types of Breast Cancer.
Reference: page 344
Page 3 I 5
973. The ER status of a breast tumor correlates with which of the following?
a. tumor size
Please choose another answer.
b. tumor location in the breast
Please choose another answer.
c. nodal status
Please choose another answer.
d. clinical stage
Please choose another answer.
e. age of the patient
Premenopausal women less frequently have ER positive tumors.

Correct answer is: e
Breast: Estrogen Receptor
Reference: page 336

39. The most common cause of precocious puberty in females is:
a. Idiopathic
The most common cause of precocious puberty in females is idiopathic
b. Adrenal tumors
Adrenal tumors are a relatively uncommon cause of precocious puberty in the female and often present with evidence of virilization due to excess secretion of adrenal androgens.
c. Ovarian tumors
Ovarian tumors are a relatively uncommon cause of precocious puberty in the female
d. McCune Albright syndrome
McCune Albright syndrome is a relatively uncommon cause of precocious puberty in the female
e. N/A
N/A

Correct answer is: a
Section on Precocious Puberty
Reference: page 308
Page 4 I 5
148. The production of progesterone by the placenta is dependent primarily upon which of the following substrates:
a. Fetal adrenal production of DHEAS
   Most of the fetal OHEAS is converted to estrogens by the placenta.
b. Fetal adrenal production of cholesterol
   The fetal adrenal derives most of its cholesterol from circulating sources (LOL) and does not rely on synthesis.
c. Maternal delivery of cholesterol to the placenta
   Maternal delivery of cholesterol via low density lipoproteins (LOL) is important in placental production of progesterone. The fetal circulation is not necessary for the placental production of progesterone. In fact progesterone production can continue at a normal rate despite intra-uterine fetal demise
d. Maternal adrenal production of DHEAS
   Any OHEAS which is made in the maternal adrenal will be converted to estrogen after the sulfatase enzyme removes the sulfate.
e. N/A

Correct answer is: c
(Section on Pregnancy).
Reference: page 313

202. The precursor for granulosa cell estrogen synthesis is delivered to the cell by:
a. the blood stream
   The direct precursor for granulosa cell synthesis are androgens produced by the thecal layer.
b. By diffusion from the surrounding thecal layer
   The direct precursor for granulosa cell synthesis of estrogen are androgens which diffuse from their site of production in the thecal layer
c. By a portal system of vessels from the theca to granulosa
   There is no portal system of vessels from the theca to granulosa layer.
d. Diffusion from the oocyte
   The direct precursor for granulosa cell synthesis is androgens produced by the thecal layer.
e. N/A

Correct answer is: b
(Section on The Ovarian Cycle).
Reference: page 310
550. Which of the following conditions results in a small, ill defined fetal adrenal gland?

a. Spina bifida
   Spina bifida does not interfere with adrenal gland function.

b. Diabetes mellitus
   Diabetes mellitus does not interfere with adrenal gland function.

c. Anencephaly
   Anencephaly results in incomplete development of the brain including the hypothalamus. The pituitary gland does not receive stimulation from Corticotropin releasing hormone and hence does not release ACTH which is needed to stimulate the adrenal gland to function.

d. Diaphragmatic hernia
   A diaphragmatic hernia does not interfere with adrenal gland function.

e. N/A
   N/A

Correct answer is: c
(Section on Pregnancy).
Reference: page 313

552. In early pregnancy one expects the serum Beta-Hcg to double every:

a. 4 hours
   Doubling occurs every 48-72 hours.

b. 48 hours
   The maternal serum Beta-Hcg doubles every 48-72 hours during normal, early gestation. A failure to double in 48-72 hours suggests an abnormal gestation.

c. 5 days
   Doubling occurs every 48-72 hours.

d. 14 hours
   At birth the infant's gonadotropins increase due to falling maternal steroid levels following separation from the placenta.

e. N/A
   N/A

Correct answer is: b
(Section on Pregnancy).
Reference: page 313