1) The most important factor in breast enlargement during pregnancy is
A. stromal edema
B. secretion of chorionic gonadotropin
C. glandular hyperplasia
D. proliferation of stroma
E. increased secretion of oxytocin

2) The increase in breast size during adolescence is predominantly the result of proliferation of
A. lactiferous ducts
B. intralobular ducts
C. glands
D. stroma
E. blood vessels

3) A painless breast lump suggests each of the following except
A. mastitis
B. fibrocystic disease
C. fibroadenoma
D. carcinoma
E. intraductal papilloma

4) Developmental alterations of breast tissue whose gross appearance may be confused with carcinoma include
A. polythelia
B. polymastia
C. inversion of nipples
D. vulvar mass
5) Congenital inversion of the nipples is a clinically significant developmental abnormality because
A. it may be confused with nipple retraction produced by carcinoma
B. it is frequently associated with ovarian dysfunction
C. it is associated with an increased incidence of mammary dysplasia
D. it is an important predisposing condition to carcinoma of the breast

6) Fat necrosis of the breast is characterized by all of the following except
A. is most frequent in obese women with pendulous breasts
B. may simulate neoplasia clinically
C. may be related to trauma
D. is frequently associated with the development of carcinoma of the breast

7) Histologic examination of an indurated breast lesion shows dilated ducts containing necrotic debris and foamy macrophages and surrounded by lymphocytes, plasma cells, and histiocytes. The best diagnosis is
A. fibrocystic disease
B. abscess
C. plasma cell mastitis
D. Paget’s disease
E. comedocarcinoma

8) Features common to both acute mastitis and comedomastitis (plasma cell mastitis) include each of the following except
A. usually unilateral
B. tender to palpation
C. produce skin retraction
D. present as a mass

9) The most common breast lesion in women is
A. fibroadenoma
B. carcinoma of the breast
C. fibrocystic disease
D. ductal papilloma

10) Of the following, which best characterizes fibrocystic disease of the breast

A. predominantly a disease of women under 30

B. multicentric origin

C. subareolar location

D. response to excess progesterone stimulation

E. seldom associated with malignancy

11) Which one of the following lesions usually presents as a discrete, freely movable nodule in the breast

A. sclerosing adenosis

B. cystic disease

C. ductal carcinoma

D. fibroadenoma

E. plasma cell mastitis

12) A 35-year-old woman noted a lump in the breast which seemed to be enlarging. The breast was biopsied primarily to exclude

A. mastitis

B. carcinoma of the breast

C. fibroadenoma of the breast

D. fibrocystic disease of breast

E. metastatic carcinoma

13) Microscopically, a breast lesion is composed of dense collagenous stroma containing small nests and rows of cells that form rudimentary acinar structures. The cells are round or polygonal and contain hyperchromatic nuclei. Occasional mitoses are present. At the margins of the lesion nests of cells infiltrate fibroadipose tissue. The description applies to

A. fibroadenoma

B. fibrocystic disease

C. Infiltrating ductal carcinoma

D. medullary carcinoma
E. Paget’s disease with intraductal carcinoma

14) A lesion from the breast of a 60-year-old woman contains a firm area 3 cm in diameter with irregular, ill-defined margins. The lesion is densely fibrous and gritty. The sectioned surface is gray, slightly depressed and opaque. Cords of fibrotic tissue extend irregularly into surrounding adipose tissue. The most likely diagnosis is

A. fat necrosis
B. fibrocystic disease
C. infiltrating ductal carcinoma
D. medullary carcinoma
E. colloid carcinoma

15) Bleeding from the nipple in a 45-year-old woman, without a palpable breast mass should suggest

A. fibroadenoma
B. sclerosing adenosis
C. fat necrosis
D. intraductal papilloma
E. chronic cystic mastitis

16) Paget’s disease of the nipple presupposes the existence of

A. ductal carcinoma
B. simple eczema
C. lobular carcinoma
D. abnormal estrogen stimulation
E. sclerosing adenosis

17) The most common breast neoplasm (benign or malignant) found in young females (age 20—35) is

A. duct papilloma
B. adenocarcinoma
C. fibroadenoma
D. sarcoma
E. Paget’s disease of the breast

18) Paget’s disease of the nipple has all of the following characteristics except:

A. is a neoplastic breast disease involving the epidermis
B. histologically shows characteristic large clear cells
C. is part of the picture of long standing fibrocystic disease
D. is associated with intraductal carcinoma

19) Longstanding fat necrosis can be distinguished from breast carcinoma by the presence of:

A. calcification on mammography
B. induration
C. skin retraction
D. tenderness
E. the cytology of fine needle aspiration

20) All of the following are associated with an increased risk of breast cancer except:

A. a previous mastectomy for cancer
B. a maternal history of breast cancer
C. breast feeding
D. increasing age beyond 50 years

21) Carcinoma of the breast is commonly associated with all of the following except:

A. calcification as seen on mammography
B. a frequency of multicentricity above 10%
C. axillary lymph node metastasis
D. osteoblastic bone metastases
E. hormone production by tumor

22) Breast cancer is suggested by physical findings which include all of the following except:

A. skin dimpling
B. alterations of breast contour
C. edema of the skin
D. nipple inversion

E. pain on palpation

23) Breast lesions which may produce skin retraction include each of the following except

A. apocrine metaplasia
B. invasive ductal carcinoma
C. subacute mastitis
D. plasma cell mastitis
E. fat necrosis

24) A 50-year-old woman presents with persistent soreness of the nipple of the right breast. A crusted red, eczematous rash is present on the areola of the right breast. The management of choice would be

A. antibiotics
B. biopsy of the nipple
C. cortisone cream
D. observation without specific treatment
E. simple mastectomy

25) The most common location for carcinoma of the breast is

A. upper inner quadrant
B. lower inner quadrant
C. upper outer quadrant
D. lower outer quadrant
E. subareola and nipple

26) Which descriptive feature best fits fibroadenomas of the breast

A. associated with Paget’s disease
B. slowly invasive
C. nipple discharge
D. high potential for malignancy
E. usually solitary
27) A feature which distinguishes inflammatory carcinoma of the breast from other breast carcinomas is:

A. cured by antibiotics
B. relatively favorable prognosis
C. obstruction of dermal lymphatics by neoplasm
D. history of trauma to the breast
E. marked lymphocyte response

28) Factors predisposing to the development of breast cancer in women include each of the following except:

A. a maternal history of breast cancer
B. early first pregnancy
C. fibrocystic disease of the breast
D. increasing age beyond 50 years
E. previous mastectomy for cancer

29) Of the following breast lesions, which is most characteristically bilateral:

A. fat necrosis
B. fibroadenoma
C. intraductal papilloma of nipple ducts
D. lobular carcinoma-in-situ
E. Paget’s disease

30) Each of the following is a typical feature of breast carcinoma as it grows and spreads except:

A. retraction of the nipple
B. enlargement of axillary lymph nodes
C. bone pain
D. lung metastases
E. hormone production
31): Fibroadenoma of the breast is likely to
A. require radical mastectomy
B. develop in elderly women
C. be fixed to the overlying skin
D. occur as a solitary freely movable mass

32) A 60-year-old woman comes to your office for evaluation of a breast “lump.” About 4 months ago she noticed a “hard” but painless area along the lateral aspect of her left breast. She has previously had minor chest trauma and thought the lump was a scar. She states that this hard area is now larger than when she first noticed it. There is a 5 cm firm area in the upper outer quadrant which seems firmly attached to the chest wall. The overlying skin is dimpled but the mass is painless. There is a firm 2 cm nodule in the left axilla and her left arm is swollen. The most likely diagnosis is
A. traumatic fat necrosis
(B. comedomastitis (plasma cell mastitis
C. mammary dysplasia
D. Paget’s disease of breast
E. inoperable breast cancer

33) Conditions associated with increased risk of breast cancer include all of the following except
A. a previous mastectomy for cancer
B. fibrocystic disease with severe epithelial hyperplasia
C. a maternal history of breast cancer
D. early pregnancies and breast feeding

34) Classically, a fibroadenoma of the breast is
A. more likely to be found in women over 40
B. a solitary, slow growing, small, firm mobile breast mass
C. associated with the development of breast cancer
D. composed of anaplastic epithelium
35) A 24-year-old woman developed a breast lump which had been first noted four months before she sought a medical opinion. The tumor was well defined and seemed discrete. What is the most likely diagnosis?

A. fibrocystic disease
B. fibroadenoma
C. sclerosing adenosis
D. ductal carcinoma
E. medullary carcinoma

36) Which breast lesion is most commonly bilateral?

A. intraductal carcinoma
B. medullary carcinoma
C. tubular carcinoma
D. in situ lobular carcinoma

37) Each of the following is considered a risk factor in the development of breast carcinoma except:

A. early menarche
B. oral contraceptive use
C. nulliparity
D. previous breast cancer
E. familial history of breast cancer

38) A 22-year-old woman presents with a discrete upper/outer quadrant breast mass. The most likely diagnosis is:

A. carcinoma
B. fat necrosis
C. fibroadenoma
D. fibrocystic disease
E. intraductal papilloma

39) The breast carcinoma with the worst prognosis is:

A. infiltrating ductal carcinoma
B. medullary carcinoma  
C. mucinous (colloid) carcinoma  
D. papillary carcinoma  
E. tubular carcinoma  

40) Which of the following breast lesions are believed to be induced by imbalance of estrogen and progesterone stimulation?  
A. fat necrosis  
B. plasma cell mastitis  
C. gynecomastia  
D. fibrocystic disease  

41) In patients with breast cancer, poor prognostic signs include all the following except:  
A. edema of breast skin  
B. fixation of tumor to chest wall  
C. metastases to >3 axillary lymph nodes  
D. presence of estrogen receptors in tumor  
E. swelling of breast  

42) Characteristics of lobular breast cancer include all of the following except:  
A. often bilateral  
B. multicentricity within the same breast  
C. high incidence of estrogen receptor positivity  
D. 50% of all breast carcinomas  

43) A firm, sharply circumscribed neoplasm removed from the breast of a 25-year-old woman is most likely:  
A. adenocarcinoma  
B. duct papilloma  
C. fibroadenoma  
D. fibrocystic disease
44) Breast diseases that tend to be bilateral include
A. fibrocystic disease
B. lobular carcinoma-in-situ
C. both A and B
D. Papillomata in major ducts
E. plasma cell mastitis

45) A disease typically caused by a traumatic blow to the breast is
A. supernumerary nipples
B. fat necrosis
C. plasma cell mastitis
D. acute mastitis
E. gynecomastia

46) The mean age at diagnosis for carcinoma of the breast is
A. 10
B. 20
C. 30
D. 55
E. 70

47) Which of the following breast diseases characteristically occurs during lactation?
A. supernumerary nipples
B. fat necrosis
C. mammary duct ectasia (plasma cell mastitis)
D. acute mastitis
E. gynecomastia

48) The mean age of diagnosis for fibroadenoma of the breast is
A. 10
B. 25
:49) All of the following are correct in regard to invasive breast carcinoma except:
A. a leading cause of death from cancer in women in the Western world
B. carries a good prognosis if the mass is less than 1 cm in diameter
C. has often spread to axillary lymph nodes at the time of detection
D. common between age 20 and 30
E. more common in women whose mother and 4 sisters died of the same disease

:50) Fibroadenomas have all of the following common characteristics except:
A. occur in young women
B. contain an abundance of stroma
C. are rubbery and discrete on palpation
D. are associated with lymph node enlargement
E. they are benign tumors

:51) Which of the following forms of breast cancer has the best prognosis?
A. colloid carcinoma
B. medullary carcinoma
C. scirrhous carcinoma
D. lobular carcinoma
E. ductal carcinoma-in-situ

:52) Which condition increases the risk of breast cancer at a later time?
A. fibroadenoma
B. duct papilloma
C. sclerosing adenosis
D. ductal hyperplasia with atypia
E. apocrine metaplasia
53) A 54-year-old woman presents with a left breast mass and enlargement of the left axillary lymph nodes. The most likely histologic finding in the breast biopsy is

A. necrosis of fat and chronic inflammation
B. an abscess composed of PMN’s
C. foreign body granulomata
D. apocrine metaplasia of breast parenchyma
E. invasive breast carcinoma

54) Which of the following is the most likely cause of a bleeding nipple?

A. duct papilloma
B. fat necrosis
C. galactocele
D. breast cancer
E. fibroadenoma

55) A 50-year-old female was found to have a 2 cm lump in the right breast on a routine physical examination. The microscopic picture of an excisional biopsy showed all of the following except

A. pleomorphic, anaplastic epithelial cells
B. an abundance of mitoses
C. foci of necrosis
D. granulomatous inflammation
E. sparse lymphocytic infiltrate, focally

56) A 54-year-old woman presents with a left breast mass and enlargement of the left axillary lymph nodes. Further work-up of this patient should include

A. intravenous pyelogram
B. bone scan for evidence of metastatic disease
C. lung biopsy
D. study for antibodies to HLA antigens
E. total white blood count
57) Irregular calcifications in mammograms are associated with the following breast disease(s):
   A. in-situ ductal carcinoma
   B. invasive ductal carcinoma
   C. fat necrosis
   D. all of the above

58) Invasive ductal carcinoma, Stage IV of the breast has:
   A. metastasized to distant organs
   B. estrogen receptors
   C. an excellent prognosis
   D. decreased levels of serum alkaline phosphatase
   E. been confined to the breast

59) Fibroadenoma is usually:
   A. found in the elderly woman
   B. a premalignant tumor
   C. present as a breast lump
   D. found during pregnancy

60) Multiple irregular flecks of calcium on mammogram are likely to be present in which of the following except:
   A. fat necrosis
   B. ductal carcinoma-in-situ
   C. ductal carcinoma
   D. abscess
   E. duct papilloma

61) Each of the following pathologic entities are components of fibrocystic disease of the breast except:
   A. apocrine metaplasia
   B. sclerosing adenosis
   C. plasma cell mastitis
A bleeding nipple may be a symptom of which breast disease?

- D. duct papilloma
- B. fat necrosis
- C. galactocele
- D. fibroadenoma

Breast cancer may have the following characteristics:

- A. present as a firm, painless mass
- B. be familial
- C. present with a bleeding nipple
- D. present as an axillary mass
- E. all of the above

Sclerosing adenosis of the breast is:

- A. not seen in fibrocystic disease
- B. a component of fibroadenomas
- C. commonly seen in nursing mothers
- D. a hyperplastic epithelial lesion
- E. characterized by abundant mitoses

All of the following findings on physical examination suggest breast cancer except:

- A. hard mass in the breast
- B. painless, enlarged axillary lymph nodes
- C. bloody discharge from the nipple
- D. retraction of the nipple
- E. painful, enlarged axillary lymph nodes

Bleeding from the nipple is associated with the following breast disease(s) except:

- A. duct papilloma
B. Paget’s disease of the nipple

C. plasma cell mastitis

D. breast cancer

67) A 30-year-old female was found to have a 2 cm lump in the right breast on a routine physical examination. A mammogram showed minute foci of calcification in the area of the lump. This would most likely correlate with which histologic feature?

A. granulomas

B. necrosis

C. high mitotic rate

D. anaplasia

68) The most common clinical presentation of a duct papilloma is

A. a painful lump

B. a painless lump

C. a bloody nipple discharge

D. microcalcifications in mammograms

E. eczema and itching of the nipple and areola

**AS4**