乳房攝影測驗

Mammography

2017年8月27日 星期日

1. 除題意不清楚或是圖片有問題，禁止詢問與試題有關的問題。
2. 應答時禁止使用任何文件。
3. 請在電腦答案卡上圈選作答

| 項　　目	填寫內容：
姓名	您的中文與英文姓名
試題名稱	Mammo Test
項目	不用填寫
科目	不用填寫
受試者識別代碼	您的准考證號碼 **17XXX** 將您選定之數字的圓圈塗滿。
科目代碼	不用填寫
地點代碼	不用填寫
作答方式	本測驗共有90題問題。請使用1到90作答欄位。 請將測驗卷Q1的答案於Answer Choices1填入答案卷。 Q2 = Answer Choices2，Q3 = Answer Choices3…….Q90 = Answer Choices90。

Mammo 2017

Q1.   What is the score for 'mass in Phantom image evaluation?
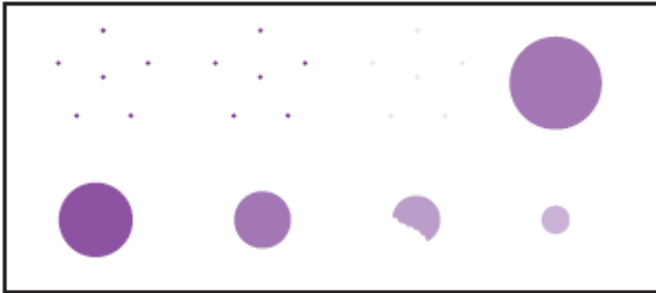
   (A) 3
   (B)   3.5
   (C)   4
   (D)   4.5

Q2.   Which of the breast anatomy indicates correct term from A to D
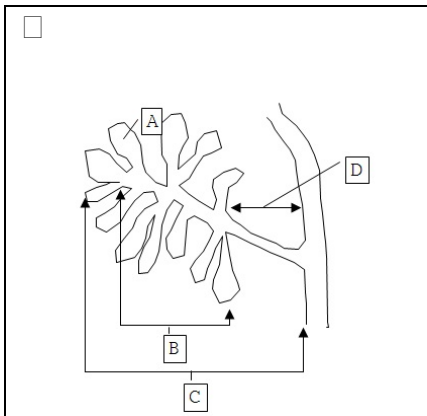
   (A) A - intralobula terminal duct
   (B) B - extralobula terminal duct
   (C) C - terminal duct lobular unit.
   (D) D - ductile

Q3. Which of the following is Not relation with patients exposure dose?
   (A) kVp
   (B) SID
   (C) grid ratio
   (D) focal spot size

Q4. Which of the following is correct explanation of geometric unsharpness?
   (A) When X-ray tube is used small focus, unsharpness is increased.
   (B) When object-film distance is decreased, unsharpness is increased.
   (C) Unsharpness is more decreased at cathode than anode of X-ray tube.
   (D) Unsharpness is more increased in rotated anode x-ray tube than fixed anode x-ray tube in same actual focus.

Q5. As using the Air-gap technique compared to grid, how to change exposure parameter and patient dose?
   (A) Increasing exposure parameter and decreasing patient dose
   (B) Increasing exposure parameter and increasing patient dose
   (C) Decreasing exposure parameter and increasing patient dose
   (D) Decreasing exposure parameter and decreasing patient dose

Q6. Which of the following is the function of the Montgomery Gland?
   (A) Evacuatory function
   (B) Stimulate function
   (C) Stabilization function
   (D) Lubrication function

Q7. Which of the following is correct about explanation of epithelial tissue?
   (A) Almost breast disease was happened in Epithelium layer.
   (B) Epithelial tissue is divided columnar shape basement membrane and myoepithelial cell layer
   (C) Epithelium layer and basement membrane are less affected by hormone on breast tissue
   (D) It is located inside of basement membrane, It is regenerate the columnar-shaped cells

Q8. Which of the following is the most using spot size for Mammography?
   (A) 0.01mm
   (B) 0.03mm
   (C) 0.10mm
   (D) 0.30mm

Q9. Which of the following is correct about relationship between Kilovoltage(kV) and Half-value layer(HVL)?
(A) If the kV increased, the HVL thickness is increase.
(B) If the kV increased, the HVL thickness is decrease.
(C) If the kV increased kV twice, the HVL thickness is increase twice.
(D) d) If the kV increased kV twice, the HVL thickness is increase Squar

Q10. Which of the following is NOT explanation of MTF (modulation transfer function)?
(A) Qualitative expression of image quality in digital image
(B) Falling off in image quality as a diffusion of light cause result of decrease MTF
(C) Difficult of recognizing object because high MTF images are clearly expression of noise
(D) MTF value over efficiency measurement range means high sharpness

Q11. Which of the following is the pixel size to indicate 10 lp/mm resolution in the digital mammography?
(A) 0.01mm
(B) 0.05mm
(C) 0.1mm
(D) 0.5mm

Q12. When the breast device quarter parts, where is the lowest incidence of breast cancer?
(A) Upper Outer Quadrant
(B) Upper Inner Quadrant
(C) Lower Outer Quadrant
(D) Lower Inner Quadrant

Q13. Which of the following is correct explanation of lymph node?
(A) It wraps cell's surface and is supplied blood from capillary vessel connected to tissue.
(B) It can be divided to level 1,2,3,4, according to arrangement of lymph node in axillary part.
(C) Lymph node inside the breast is focused in UOQ(Upper oblique quadrant) for 25% of whole breast.
(D) Two important pathways that through the lymphatic system are skin lymphatic net and nipple lymphatic net.

Q14. What is the largest vein in the breast?
(A) Azygos vein
(B) Axillary vein
(C) Intercostal Vein
(D) Internal mammary vein

Q15. What is NOT the histological name of the mammary duct?
    (A) Myoepithelial cells
    (B) Epithelial cells
    (C) Basement membrane
    (D) Cutaneous lymphathic plexus

Q16. Which of the following is correct relative hormone and function?
    (A) Estrogen - is secreted in the anterior pituitary gland during pregnancy. It makes breast growth and galactoria acceleration.
    (B) Oxytocin - supply for amino acid, fatty acid, grape sugar and calcium to mother's milk
    (C) Prolactin - develop mammary duct length and proliferate linear organization
    (D) Progesterone - increase mammary duct and epithelium of the lobule, and the acinar grow acceleration become pregnancy

Q17. Which of the following belongs to malignant breast disease?
    (A) Sclerosing adenosis
    (B) Intraductal papilloma
    (C) Ductal carcinoma in situ
    (D) Atypical ductal hyperplasia

Q18. Which of the following is NOT describe of the DCIS(Ductal Carcinoma In Situ)?
    (A) Treatment is cure, and prognosis is better
    (B) DCIS with micro calcification
    (C) The mass is palpable and movable, and it usually occures in 20 to 30 years old people.
    (D) Limit in the only ductal, and often occurred TDLU

Q19. Which of the following correct description of the breast cancer?
    (A) Prognosis of mucinous carcinoma is better
    (B) ILC(Invasive Lobular Carcinoma) is amount of 5% entire breast cancer
    (C) When the ductal basement membrane is not through DCIS (Ductal Carcinoma in Situ) or IDC (Infiltrated Ductal Carcinoma)
    (D) LCIS (Lobular Carcinoma in Situ) is rare detection of calcification and palpable mass

Q20. What is the most population breast cancer about 80% of entire breast cancer?
    (A) Ductal carcinoma in situ
    (B) Invasive ductal carcinoma
    (C) Invasive lobular carcinoma
    (D) Mucinous carcinoma

Q21. What is the best answer the indirectly sign?
    (A) Skin thickening
    (B) Nipple retraction

(C) Dilatation duct
(D) Architecture

Q22. What is NOT correct abbreviation?
(A) RCCRL - Roll projection
(B) RFB - Caudocranial projection
(C) RMCC - Magnification projection
(D) RLM - Lateromedical oblique projection

Q23. What is the AEC(Automatic Exposure Control) mode?
(A) target
(B) filter
(C) kVp
(D) mAs

Q24. Which of the following is NOT indication of magnification projection?
(A) To observe margin of mass
(B) To observe number and shape of micro calcification
(C) In case of micro calcification located near the skin
(D) To define micro calcification caused by vascular, fat necrosis, or secretory calcification

Q25. Which one is the appropriate additional method for taking image of lesion that is located to lateral portion of breast and hard to see in the basic craniocaudal projection?
(A) Cleavage projection
(B) Spot compression projection
(C) Exaggerated craniocaudal projection
(D) Superiolateral to inferomedial oblique projection

Q26. Which of the following portion is hard to be structurally seem in the basic Craniocaudal(CC) view?
(A) Medial
(B) Lateral
(C) Upper
(D) Lower

Q27. Which one of the following is NOT correct of the standard image evaluation in the CC view?
(A) Include an internal breast tissue
(B) Observe nipple contour on lateral view in middle of breast
(C) Include a retromammary fat
(D) Length of posterior line of nipple is over 1cm than internal-external of the breast

Q28. what is the clinical stage if the tumor size is exceeded 5cm with NO lymph node metastasis?
(A) Stage 1
(B) Stage 2
(C) Stage 3
(D) Stage 4

Q29. Which of the following is the correct explanation about TNM system?
(A) T4:DCIS, LCIS
(B) Nx: no local lymphatic gland metastasis
(C) Mo: remote metastasis including upper clavicle of body side lymphatic gland
(D) T2: maximum length of breast is over 2cm and less 5 cm

Q30. What is the therapy which can suppress some specific genes related with occurrence and progress of breast cancer?
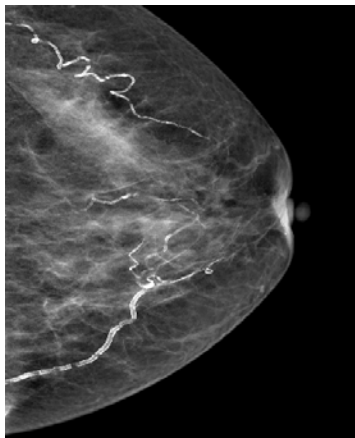
(A) Targeted Therapy
(B) Radiation Therapy
(C) Anti-hormone Treatment
(D) Chemotherapy

Q31. Which of the following is CORRECT description of hormone therapy for breast cancer?
(A) The incidence of cervix cancer can be decrease.
(B) The effect is good when the hormone receptor is positive.
(C) The therapy makes activity female sex hormone.
(D) If tamoxifen takes long time, bone density would be increase

Q32. What is the BI-RADS Category of lesion?
(A) Category 1
(B) Category 2

(C) Category 3
(D) Category 4

Q33. Which of the following is the distribution suggesting the malignancy that shows calcification distributed along the branches of the mammary duct?
(A) Diffuse
(B) Regional
(C) Clustered
(D) Segmental

Q34. Which of the following belongs to 'Malignancy' among the intra mammary tumor evaluation standard?
(A) Irregular
(B) Homogeneous
(C) Well-circumscribed
(D) Wide scatter Calcification

Q35. Which of following image has the lowest sensitivity?

(A)   (B)   (C)   (D)
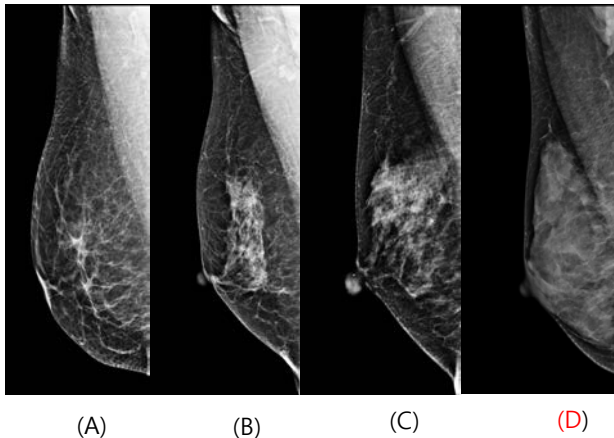
Q36. Which of following is correct about the image?

(A) The disease is derived from less degeneration.

(B) It can be found out in the malignant or inflammatory disease.
(C) The disease is derived from over growth of breast tissue.
(D) The disease takes place due to lack of protein and is rare phenomenon.

Q37. What is "Probably benign ? short interval follow-up suggested" in the overall impression of BI-RADSTM?
(A) category 1
(B) category 2
(C) category 3
(D) category 4

Q38. Which one of the following is NOT correct description of the mass analyses Algorism?
(A) Focal asymmetry show lesion only single directional image
(B) Added external examination when focal asymmetry has a disease
(C) Focal asymmetry disease is not clearly margin
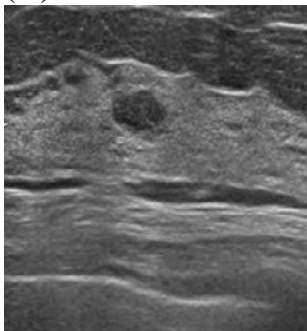(D) If the conscious mass lesion is in Mammography, should be distinguish mass or focal asymmetry

Q39. Which of following is different to others in this image?
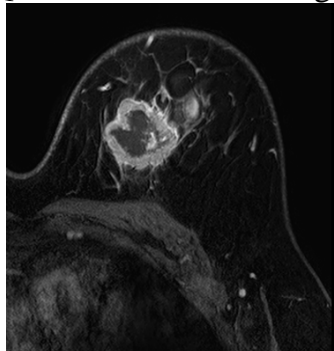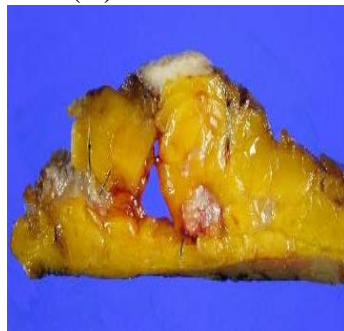

(A)
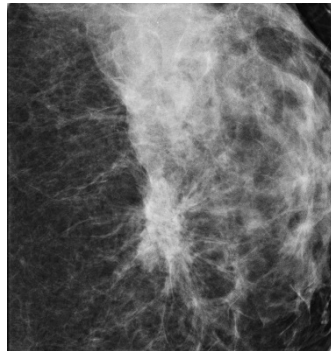
(B)

(C)

(D)

Q40.Which of the following is correct of the image?

(A) This method is used for Wide excision
(B) This method is to do Biopsy of lesion on palpable mass.
(C) Must control the paddle to get loose automatically.
(D) The track of the needle should be the shortest distance from skin to lesion

Q41.Which of the following is correct about Fine needle aspiration?
(A) This method is less likely to transfer the cancer along the needle track.
(B) Confirm by stereotactic biopsy can be performed.
(C) Exam when the diagnosis with non ? Palpable mass.
(D) Easy to check and increase the amount of tissue pathological examination high accuracy.

Q42.Which of the following is correct of the Sono guide gun biopsy?
(A) Using for no palpable region
(B) Useful for using 3D approaches
(C) Check a pathology using the cell aspiration
(D) Achieve a lot of cells using the Core needle

Q43.Which of the following is the most suitable lesion for Stereotactic mammotome biopsy?
(A) Papiloma
(B) Fibroadenoma
(C) Micro calcification
(D) Malignancy lymphoma

Q44.What is the distinguish standard to vessel and mammary duct in breast Ultrasound image.
(A) Direction
(B) Length
(C) Distribution
(D) Diameter

Q45. Which of the following is NOT correct description of the Tomosynthesis?
    (A) Reducing exposure due to decrease repeat rate
    (B) Boundary of the mass find distinctly and ill-defined
    (C) Achieve one 3D mammography image which gets many planes with various angle
    (D) Increase overlapping image than common mammography

Q46. Which of the following is NOT correct about the BSE (Breast Self Exam)?
    (A) After finishing menstruation every month
    (B) Compare to change of the nipples shape
    (C) Using 2nd, 3rd and 4th fingers touchable in clockwise
    (D) Every month check after ovarietectomy or becoming menopause naturally

Q47. Which of the following is NOT correct emergency patient care about the Vasovasal syncope reaction?
    (A) Massage to neck and shoulder to patient
    (B) Continues movement to keep consciousness
    (C) Patient head located to between both knees position
    (D) Supply to oxygen or fanning

Q48. Which of the following is INCORRECT for increasing the resolution?
    (A) Using the fine focus.
    (B) Using the long exposure time
    (C) Increasing the SID (Source Image Distance)
    (D) Using the low speed screen and film

Q49. Which of the following is NOT explanation of MTF (modulation transfer function)?
    (A) Qualitative expression of image quality in digital image
    (B) Falling off in image quality as a diffusion of light cause result of decrease MTF
    (C) Difficult of recognizing object because high MTF images are clearly expression of noise
    (D) MTF value over efficiency measurement range means high sharpness

Q50. Which of the following is NOT the main muscle around breast?
    (A) Deltoid muscle
    (B) Pectoralis major muscle
    (C) Pectoralis minor muscle
    (D) Serratus anterior muscle

Q51. Which of the following is the TRUE electronic hit target area?
    (A) Focus
    (B) Actual Focus
    (C) Effective Focus

(D) Nominal Focus

Q52. Which of the following is correct of Point Processing?
(A) It is the processing that making new pixels using for around pixels in image
(B) It is the processing that using changed wave through the body
(C) It is the processing that location of image is moving or size changing
(D) When a pixel size change, commonly using the Look Up Table

Q53. What is the meaning of change continuous density value to a positive number?
(A) Sampling
(B) Quantization
(C) Image compression
(D) Image reconstruction

Q54. Which of the following is correct description of the Line Focus Principle?
(A) Relationship between Actual focus spot and Effective focus spot
(B) Relationship between Grid ratio and rate of liner per inch
(C) Relationship between changing the SID and film density
(D) Film exposure and result density of film

Q55. Which of the following is FALSE regarding to fibrocystic change?
(A) duct ectasis
(B) degeneration of TLD
(C) mild fibrosis
(D) apocrine metoplasia

Q56. Which of the following is the most concerning physiological factors of metastasis of breast cancer?
(A) Feeding
(B) Lymph node
(C) Blood circulation system
(D) Adipose tissue variations

Q57. Lymph node is divided into three groups. Which of the following is NOT included it?
(A) Axillary lymph nodes
(B) Transpectoral lymph nodes
(C) Deep cervical lymph nodes
(D) Internal mammary lymph nodes

Q58. Which of the following is NOT purpose for Roll View?
(A) apply to show for spread the high dense tissue of part
(B) Apply to determined existing unclearly margin abnormal tissue
(C) Apply for the case of observe only one projection
(D) Apply for palpable region although left and right side images are not searching.

Q59. When the breast device quarter parts, where is the lowest incidence of breast cancer?
  (A) Upper Outer Quadrant
  (B) Upper Inner Quadrant
 (C) Lower Outer Quadrant
  (D) Lower Inner Quadrant

Q60. Which of the following is correct of the epithelial hyperplasia?
  (A) It means the calcification of hematoma by trauma
  (B) It means hyperplasia of the mammary grand tissue of the skin
  (C) means hyperplasia of lactiferous or lobule as a hyperplasia breast disease
 (D) It means hyperplasia of the pectoralis major muscle or lobule cell as a hyperplasia breast disease

Q61. What is the best description about the compression?
  (A) By increasing OID, increase resolution
  (B) The compression force is within 24~45pounds
  (C) Quality control for the breast compression device is 1 year cycle.
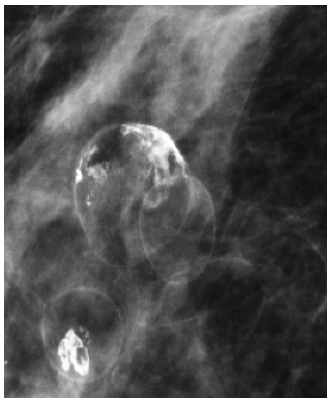 (D) Thickness of the compression pad is over 4mm is safety and stability

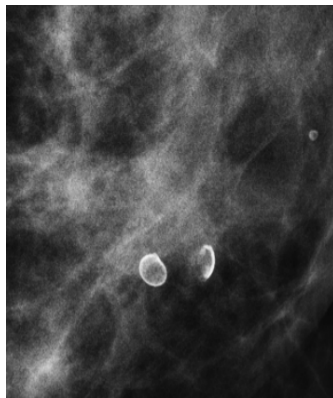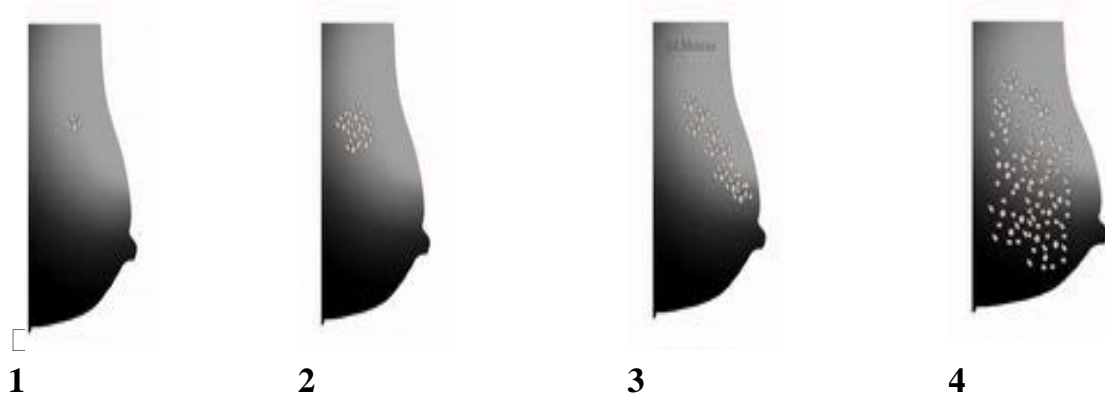Q62. Following calcifications images, which is represents malignancy?
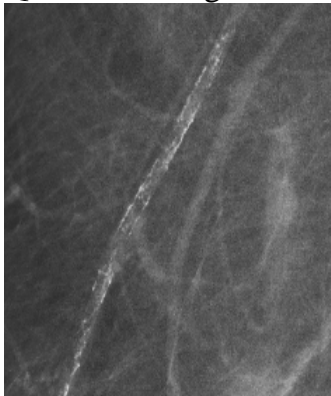
(A)
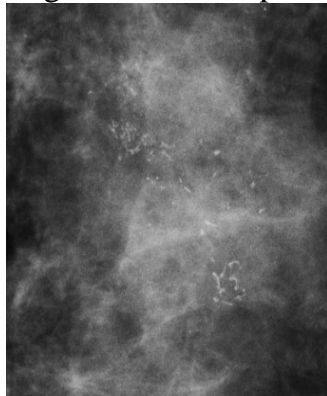
(B)

(C)
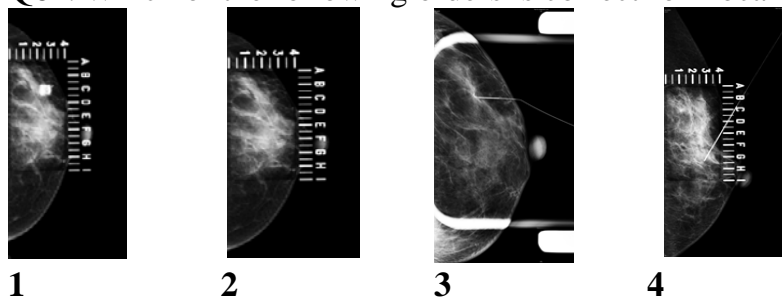

(D)

Q63. Which of the following is correct order to develop benign-malignant disease as a calcification distribution?

1   2   3   4

(A) 4 - 2 - 1 - 3
(B) 4 - 3- 2 - 1
(C) 1 - 2 - 3 - 4
(D) 1 - 3 - 2 - 4

Q64. Which of the following orders is correct for Localization?

1   2   3   4

(A) 1 - 2 – 4 -3
(B) 2 - 4 - 1 - 3
(C) 2 - 1 - 4 - 3
(D) 3 - 1 - 4 - 2

Q65. Which of the following is correct about difference of X-ray absorption in breast tissues?
(A) If breast tissues density is high, X-ray absorption decrease
(B) X-ray attenuation of small breast is larger than that of a thick breast.
(C) It reduces object's contrast by enhancing photon effect using high atomic number.
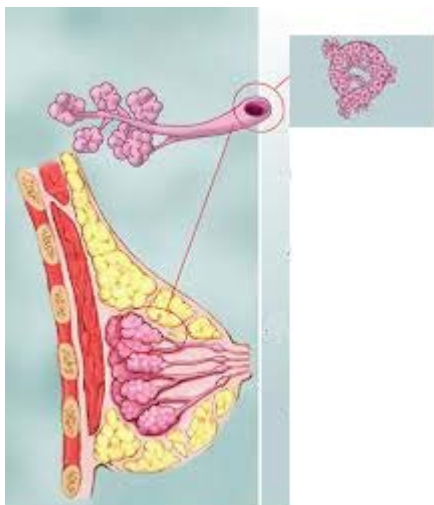(D) X-ray transmission rates of thin breast tissue are higher than those of thick breast tissue.

Q66. Which is NOT TRUE for filtration plate used in W(tungsten) target?
 (A) Rh
 (B) Ag
 (C) Al
 (D) Mo

Q67. The following illustration below, which area associated with pajet's disease?
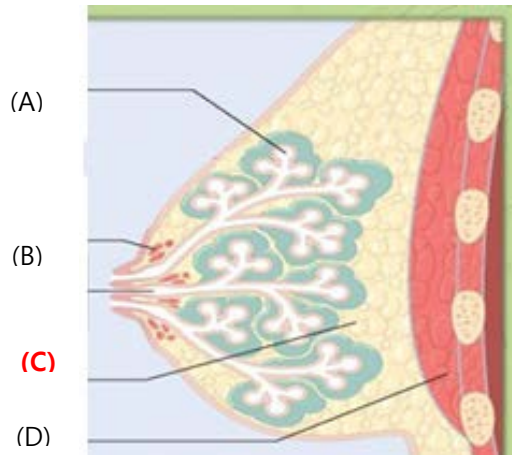
Q68. Which of the following statement is TRUE?

 (A) It contains mucinous carcinoma.
 (B) It is benign disease arising from TDLU.
 (C) It is proliferation disease arising from TDLU.
 (D) It is confined in ducts and non-invasive disease to the adjacent stromal tissues

Q69. According to BI-RADS classification, which of following features is associated with "category 2"?
 (A) Oval
 (B) Irregular

  (C) Retracted
  (D) Spiculated

Q70. Which of following test should be checked in 1year cycle?
  (A) MTF measurement
  (B) ACR phantom test
  (C) Beast compresstion device test
  (D) Average glandular dose measurement

Q71. Which of the following is TRUE for the quality control(QC)?
  (A) Average glandular dose should not exceed 3mGy
  (B) Repeated X-ray exam rates should be keep in less than 3%
  (C) inspection cycle for evaluation in clinical image is every 6month.
  (D) when testing radiation field, differences between the x-ray radiation field and optical radiation field should not exceed 5% of SID.

Q72. When using ductography, which of the following combination is demonstrated in order?
  (A) lactiferous sinus->subsegmental branch->segmental branch->peripheral branch->terminal duct lobular unit
  (B) lactiferous sinus->segmental branch->subsegmental branch->peripheral branch->terminal duct lobular unit
  (C) lactiferous sinus->segmental branch->subsegmental branch->terminal duct lobular unit-> peripheral branch
  (D) lactiferous sinus->terminal duct lobular unit->segmental branch->subsegmental branch->peripheral branch

Q73. Which of the following statement is TRUE for the distribution of axillary lymph nodes?
  (A) Level 1 is located in inferolateral to pectoralis minor muscle.
  (B) Level 2 is located in superior to pectoralis minor muscle.
  (C) Level 3 is located in posterior to pectoralis minor muscle.
  (D) Level 2,3 is closely associated in metastasis because most of lymph drainage occur in level 2,3.

Q74. According to the diagram below, which interventional procedure correspond to letter A?
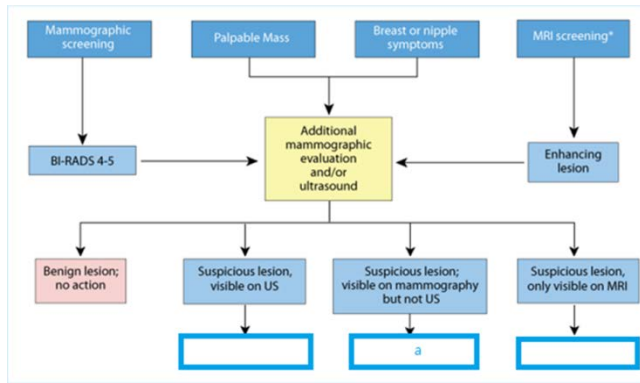
(A) Us guided core biopsy
(B) Fine needle aspiration
(C) Stereotatic biopsy
(D) Us guided localization

Q75. Which of the following statement is TRUE about lumpectomy?
    (A) It is procedure that remove the entire breast tissues including nipple and skin.
    (B) It is performed if the mass sized is less than 4~5cm and singular one.
    (C) It is performed if the mass is located in subareolar area or that's size is large.
    (D) after breast conserving therapy, when needed, radiation therapy can combined with it.

Q76. Which of the following statement is TRUE about mammogram dose index?
    (A) Because most of radiation dose used in exam are absorbed into skin, entrance skin dose is used as a index.
    (B) Maximum dose is more useful measurement rather than average dose of breast glandular tissue.
    (C) Image value that is performed without grid should not exceed 0.2 rads.
   (D) breast thickness, breast structure material, and X-ray quality are considered

Q77. On MLO view, most correct angle for both low waist and fatty wide breast.
    (A) 45°
    (B) 55°
    (C) 60°
    (D) 70°

Q78. Which of the following is TRUE about magnification projection?
    (A) Use short exposure time.
    (B) Reduce geometric unsharpness using micro-focusing(0.3mm)
    (C) Reduce radiation field according to lesion
    (D) Choose and install the suitable magnification exposure table that can magnify to 1.5~2times.

Q79. which of the following abbreviation is correct?
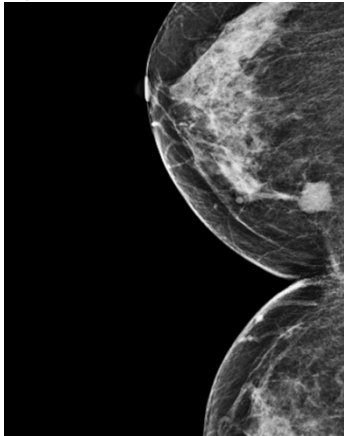
    (A) R CV
    (B) R CC RL
    (C) R CP
    (D) no need to mark

Q80. Which of the following statement is TRUE about mammotomy?
    (A) it is performed in case of many lesion correspond to BI-RADS category 3.
    (B) they get tissues by shooting more than 4~5times ,usually using 14G needle.
    (C) by using a machine using a vacuum inhaler principle, it can remove malignant tissues.
    (D) it is triangulation method that calculates the location of lesion in 3 dimension.

Q81. Which of the following is TRUE about fibroadenoma?
    (A) They arised from large ducts including lactiferous sinus.
    (B) They secret bloody or mucinous nipple discharge.
    (C) They are completely contained within ducts and non-invasive to adjacent interstitial tissues.
    (D) They arised from TDLU.

Q82. On a mammogram CC view, a mass that is medial to the nipple will actually (2) than it appears on the MLO view.
    (A) lie lower
    (B) lie higher
    (C) apper larger
    (D) apper small

Q83. which of the following benign mass is associated with bloody nipple discharge of patient breast?
    (A) cyst
    (B) lipoma
    (C) galactocele
    (D) papilloma

Q84. The earliest mammographic sign for breast cancer is:
    (A) skin thickening,
    (B) nipple retraction.
    (C) desmoplasia
    (D) microcalcifications.

Q85. which of the following statements is/are true of breast MRI?
    (A) Benign masses can show contrast enhancement and mimic cancer.
    (B) it is effective in only 50% of patient with DCIS.
    (C) It can miss microcalcifications.
    (D) all of the above.

Q86. which of the following is NOT be considered a risk factor for breast cancer?
    (A) advanced age
    (B) late menopause
    (C) late menarche
    (D) family history

Q87. which feature would suggest lymph node pathology?
    (A) hilar blood flow from single artery
    (B) thin capsule
    (C) central fatty hilum
    (D) round shape

Q88. Which of the following is correct for the Galactocele?
    (A) Traumatic breast disease
    (B) Benign cyst contain of the lactation
    (C) Calcification of the shell-shaped
    (D) Mammary cystic hyperplasia contain of the lactation

Q89. Which of the following is INCORRECT of the Mammography?
    (A) Breast combine with parenchyma, fibrotic tissue and fatty tissue
    (B) Parenchyma and fibrotic tissue is lower density and fatty tissue is high density
    (C) Observe linear shape of the duct, ligament and vessel in the Fatty breast
    (D) Breast parenchyma type is decided rate of fibrotic tissue and relative sensitivity of the Mammography

Q90. Which of the following is NOT correct compression in the Mammography?
    (A) As reducing thickness of beast and scattering ray, the contrast is increasing.
    (B) By increasing OID, increase resolution
    (C) Separate breast tissue and archive uniformity image density
    (D) Make a flat breast as a result x-ray attenuate equally