

**6- Fluorescent in situ hybridization technique is used for:**

A. isolating cell components

B. rapid technique for diagnosis of tumors

C. purify nucleic acid fragments

D. localize the site of the genes on chromosomes

Answer : D



41) Which of the following is a method for studying DNA localization?

a Cell fractionation

b Ecctoibaresis

c <sup>Fluorescent</sup> SE VC Funescence in situ hybridization

d Histochemistry

e imunotestochemustry

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المفروض  
هو الاجابة  
الصحيحة

10) Freezing technique is for  
Histochemical studying

L2

11) Metachromatic staining:

L2

Stain the tissue in new color different from that of the stain

12) Fluorescent in situ hybridization

L2


Used to localize site of gene

13) In centrifugation, organelles are separated in which order?

✓✓

- A) Nucleus, microsome, mitochondria
- B) Nucleus, mitochondria, microsome
- C) Mitochondria, microsome, nucleus
- D) Microsome, nucleus, mitochondria
- E) Microsome, mitochondria, nucleus

B

27) Hematoxylin: 

Stains the nucleus with blue color

**2- Which of the following is true about freezing technique:** 22

- A. isolating the cell to study under control condition
- B. useful in histochemical stain
- C. It include fixation
- D. can preserve for long time

Answer : b

**3- Which of the following is true about the metachromatic stain:** 22

- A- Stain which gives the tissue new color different from that of the stain
- B- stain elastic fiber brown
- C- Stain nerve cell brown

Answer : A

**4- The true arrangement in centrifugation:** 22

- A. ribosome, nucleus, microcosms, mitochondria
- B. mitochondria, microcosms, nucleus, ribosome
- C. nucleus, mitochondria, microcosms, ribosome

Answer : c

**5. which of the following ISN'T of the characteristics of freezing technique?**

- A) can be kept for a long time**
- B) Rapid technique**
- C) Don't use chemical**
- D) No dehydration**

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**Answer:A**

**6. which of following is TRUE about the H stain?**

- A) it stains the nucleus with blue color**
- B) it Stains the r-Rna with red color**
- C) It stains the cytoplasm with blue color**
- D) Stains basic**

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**Answer:A**

**7. which stain is used for nerve cells staining?**

- A)H and E**
- B)Silver**
- C)Orecin**
- D)Metachromatic**

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**Answer:B**

**8. the type of culturing when the cell are directly cultured from the tissue is:**

- A)primary culture**
- B) secondary culture**
- C) tertiary culture.**

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**Answer:A**

7. which of The following is correct about H&E ✓✓

Answer: hematoxylin stains acidic components blue\*

8. which of the following is wrong? ✓✓

Trypan blue \ mast cells\*

Leishman \ blood films

Trichrome \ collagen fibers

Silver stain \ nerve cells





**8. Immortalized cell line means?**



Answer: **Proliferate indefinitely** \*

**26. Most commonly used stain in the electron microscope?** *✓*

Answer: **osmium tetroxide**

**27. The substance that used in clearing?** *✓*

Answer: **XYLOL**

**12-Which of the following sentences is true:** 22

A-Hematoxylin=stains nucleus blue

B-Freezing=useful for histochemical student

C-A+B

D-Non of them

Answer : C

**41-Regarding centrifugation from first to separate:** ↘ 2

Answer : (nucleus-mitochondria-micropasms-ribosomes)

**44-stain which give the tissue new color different from that of the stain :** *22*

Answer : (metachromatic stain)

**51-Technique used to identify ,quantity and purify nucleic acid**



**Answer : (DNA electrophoresis)**

28-fixation? L2

=glutaraldehyde

29-coagulation and facilitate sectioning? L2

=fixation...

30-freezing sections? L2

=enzymatic studies...

31-orcein stain? L2

=elastic fibers

32-histochemical stains? L2

=selective enzyme ....

36-FISH technique for? ٢٢

=nucleic acid...

37- سؤال عن in vivo & in vitro... ٢٢



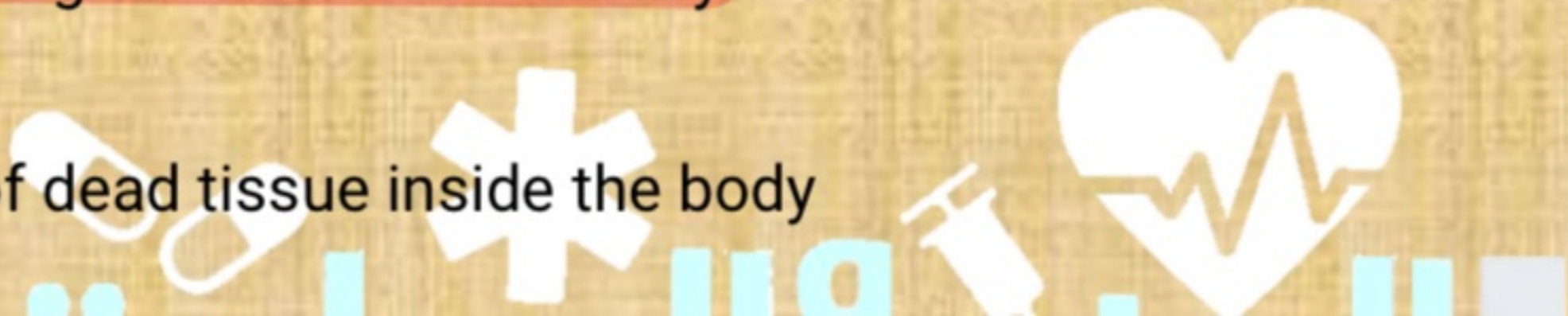
1) Metachromasia is : *12*

a Staining of tissue by color of original stain

b. Staining of phagocytic cells by trypan blue

c Staining of a tissue by a color differs from the original stain a  
Staining of living cells outside the body

e Staining of dead tissue inside the body



6) All the following statements about Freezing technique are wrong EXCEPT:

a slow technique to diagnosis

d som section can be obtained

c done using femol salin

e preserve fore long time

e fore histochemical studies

15) Choose the INCORRECT statement among the followings?

a. Phase contrast microscopy is used for visualizing cells in tissue cultures

b. In situ hybridization is used to demonstrate the pattern of expression of enzymes

c. When a tissue is stained using Hematoxylin & Eosin, the nucleus appears blue because it i  
which reacts with hematoxylin

d One thousand micrometers are equal to one millimeter

e The condenser of light microscope is used to augment the illumination power

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16) Which of the following is NOT TRUE regarding routine histological stains Hematoxylin and Eosin?

a Hematoxylin is a blue dye

b cytoplasmic RNA will attract Hematoxylin

c The nucleus is basophilic

d Eosin is a red basic dye

e Eosin is a negatively charged dye

28) The main purpose of using the microscope 15

a Fication

b Staining

c Mounting

d Resolution

c charing

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15

48) Fixation of histological specimens in 10 % formal saline is essential to

12

a Gradual removal of water from tissue

Inhibit degeneration and Replace alcohol

to clear the section and making it transparent for staining

to Keep the cells alive

1) Metachromasia is : *12*

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Staining of living cells outside the body