

Principles of Exfoliative Cytology

Cytopathology · Answer Key · 15 Questions

1. What is the primary definition of exfoliative cytology?

- A) The study of blood components
- B) The microscopic study of cells shed from body surfaces**
- C) The surgical removal of tissue for biopsy
- D) The analysis of genetic mutations

2. Which classification of smear indicates the presence of minor atypia but no evidence of malignant changes?

- A) Class I
- B) Class II**
- C) Class III
- D) Class IV

3. What is the minimum volume of body fluid specimen desirable for optimal cytological evaluation?

- A) 5 ml
- B) 10 ml**
- C) 20 ml
- D) 50 ml

4. Which additive may be used to reduce clotting in body fluid specimens?

- A) EDTA
- B) Sodium citrate
- C) Heparin**
- D) Formalin

5. In the Papanicolaou staining method, what color does Harris hematoxylin stain the nuclear chromatin?

- A) Orange
- B) Pink
- C) Blue to dark purple**
- D) Green

6. Which of the following is considered a primary indication for a Pap smear?

- A) Detection of early cervical cancer or precancerous lesions**
- B) Treatment of bacterial infections
- C) Diagnostic imaging of the pelvic region
- D) Assessment of blood glucose levels

7. What is the primary purpose of adding a fixative to a cytological specimen?

- A) To increase the size of the cells
- B) To preserve and maintain the form and structure of elements**
- C) To stain the cytoplasm automatically
- D) To remove excess debris

8. Which of these is a common mounting medium used for permanent slide preparation?

- A) Xylene
- B) Ethanol
- C) Eukitt**
- D) Saline

9. What type of smear is specifically useful for hormonal cytology evaluation?

- A) Vaginal pool smear**
- B) Sputum smear
- C) Tzanck smear
- D) Gastric washing

10. Which class of smear is defined as positive for cancer, where cells are obviously malignant?

- A) Class II
- B) Class III
- C) Class IV
- D) Class V**

11. What is the recommended fixative concentration for ethanol in cytological smears?

- A) 50%
- B) 70%
- C) 95%**
- D) 100%

12. In liquid-based cytology, what are two common preparations mentioned?

- A) Pap and Giemsa
- B) ThinPrep and SurePath**
- C) Gram and Acid-Fast
- D) Tzanck and PAS

13. Which tool is commonly used for scraping cells from the cervix?

- A) Forceps
- B) Ayre spatula**
- C) Scalpel
- D) Needle

14. What is the target structure for the OG-6 (Orange G) stain?

A) Nuclear chromatin

B) Keratinized superficial cells

C) RBCs

D) Nucleoli

15. Which technique involves introducing saline into a cavity, agitating it, and aspirating it?

A) Scraping

B) Brushing

C) Washing and Lavage

D) Spontaneous exfoliation