



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Applied and Health Sciences

DEPARTMENT OF **MEDICAL SCIENCES**

DIPLOMA IN MEDICAL LABORATORY SCIENCES
(DMLS 11M)

AML 2254: HISTOLOGY

SPECIAL/SUPPLEMENTARY: EXAMINATIONS

SERIES: February 2013

TIME: 2 HOURS

INSTRUCTIONS:

You should have the following for this examination

- *Answer booklet*

This paper consists of **TWO** sections.

Answer all questions in **Section A** and **B**. $\frac{1}{2}$ marks deducted for any wrong answer in **Section A**.

This paper consists of 6 PRINTED pages
SECTION A (40MARKS)

1. The following do not define diagnostic cytology as a science mainly exsoliation of cells from
 - a) Epithelial surfaces
 - b) Various tissues
 - c) Embalmed tissues
 - d) Macerated tissues

2. Diagnostic cytology methods of specimen collection making includes the following except
 - a) Those form natural secretions
 - b) FNA and body fluids
 - c) Open biopsy
 - d) Embalmed body tissue

3. The following are not advantages of pap smear
 - a) Painless and simple
 - b) Detect cancer and precancer
 - c) No cellular distertin
 - d) Not infectious

4. Cytological specimens include
 - a) Sputum
 - b) CSF
 - c) Stool
 - d) Blood

5. The following are instructions for cervical smear collection
 - a) Undouched vagina atleast a day
 - b) Absence of pressuries a day
 - c) Douching
 - d) Coitus

6. Cytological fixatives includes
 - a) Denatured alcohol
 - b) Ether alcohol mixture
 - c) Formalin
 - d) Mercuric chloride

7. An adequate sample
 - a) Provides a representatic of appropriate zone
 - b) Accurate representation of abnormalities present
 - c) Presence of endocervical
 - d) Adequate specimen

8. The following are not smapling devices
 - a) Wooden spatulas
 - b) Plastic devices

- c) Wire loop
 - d) Cryopiputes
9. The following are not purposes of museum techniques
- a) Exhibition of common pathological conditions
 - b) Sources of materials for research and teaching
 - c) Cinema
 - d) Finance
10. The choice aid design of the museum forms depend on except
- a) Tissue size
 - b) Availability of materials
 - c) Number of technicians
 - d) Museum size
11. Special techniques in museum include the following except
- a) Injection
 - b) Maceration
 - c) Post mortem
 - d) Fixation
12. Keiserling solution III has the following except
- a) 40% formaldehyde potassium acetate
 - b) Glycerine distilled water sodium hydroxide
 - c) Potassium nitrate, 40% formaldehyde
 - d) Tap water, 80% alcohol
13. The following are purposes of embalming
- a) Disinfection, preservation
 - b) Restoration
 - c) Autoclaving
 - d) Maceration
14. The following are malignant neoplasm's characteristics except
- a) Rapid increase in size
 - b) Anaplasia and metastasis
 - c) Slow growth and different ion
 - d) Absence of metastases, rapid increase in cell size
15. Neoplasms can be characterized by
- a) Their evidence
 - b) Death rate
 - c) Race
 - d) Age and sex
16. The following are some treatment intervention for neoplasia
- a) Surgery, chemotherapy
 - b) Radiation , immunotherapy
 - c) Fasting

- d) Hospice
- 17. The following should be contained in cytology laboratory
 - a) Reception , specimen collection room
 - b) Processing, stunning and reporting
 - c) Infection prevention
 - d) Conference
- 18. The following are cytological staining methods
 - a) Papanicolou
 - b) Mayciranward
 - c) Eosin
 - d) Zn
- 19. The importance of keeping smears for 3-5 years is
 - a) Quality control
 - b) Follow up
 - c) Inspection
 - d) Resource nobilization
- 20. Inflammatory smear can reveal
 - a) Marked leucocytocin
 - b) Pathogenic organisms
 - c) Polygoral
 - d) Fine chromatin

SECTION B ESSAY (60MARKS) Answer all questions

Question ONE

- a) Describe advantages of diagnostic cytology **(10marks)**
- b) Outline the maceration method by Edward of 1959. **(10marks)**

Question TWO

- a) Describe the organizational structures of a cytology lab **(10marks)**
- b) State cytological specimens that are processed in a cytology lab **(10marks)**

Question THREE

Discuss the papanicolon stunning procedure in cytology.

(20marks)