TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA

AML 2313 : MUSEUM AND MAUSOLEUM TECHNIQUE

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Dec 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt ALL questions.

Circle the correct answer in section A.

Section A

1. The embalming fluid known as cavity fluid is
   a. Injected into cavities of the body.
   b. Used to fix the brain
   c. Injected into the liver
   d. Injected into the kidneys
2. In embalming, preservation is
   a. The secondary purpose
   b. The primary purpose
   c. The tertiary purpose
   d. The last requirement
3. Record keeping and storage of reported slides in Histology is of the following reason
   a. To please the manager
   b. To create jobs for laboratory personnel
   c. Medical illegal situations
   d. Just for display

4. Museum specimens can be recovered from
    a. In charges office
    b. Library
    c. Mortuary
    d. The ward
5. The following fixative can be used as a primary fixative in Museum laboratory
    a. 10% Neutral buffer saline
    b. 100% formaldehyde
    c. 100% alcohol
    d. 1% acid alcohol
6. In museum laboiratory, Kaiserling's solution II can be used for
    a. Colour restoration
    b. Fixation
    c. Staining
    d. Differention
7. In a laboratory, a fixative should
    a. Protect the laboratory personnel
    b. Destroy the cells
    c. Preserve cells and tissues constituents
    d. Mount the specimen
8. Kaiserling's fluid I is made up of
    a. Potassium acetate
    b. Potassium chloride
    c. Potassium bicarbonate
    d. Potassium floride
9. The natural colour of museum specimens can be lost after
    a. Primary fixation
    b. Tertiary fixation
    c. Emmersion in 80% ethyl alcohol
    d. Mounting
10. The method used in storing museum specimens must
    a. Permit certain identification of each specimen
    b. Contain water only
    c. Allow specimen to dry
    d. Leave the container open all the time
11. The main aim of embalming is to
    a. For display purposes
    b. For staining
    c. Prevent spread of diseases and preserve the body
    d. For mounting the body
12. The most important ingredient in Kaiserling's fluid III is
    a. Potassium nitrate
    b. 80% alcohol
    c. Sodium carbonate
    d. Glycerine

13. Embalming fluids include
    a. Kaiserling solution II
    b. 60% formaldehyde
    c. 1% acid alcohol
    d. Kaiserling solution B
14. The following steps can be used for handling museum specimens except
    a. Staining
    b. Fixation
    c. Preservation
    d. Presentation
15. Disadvantages of using formaldehyde in embelding include
    a. Is expensive
    b. Dehydrates the tissues
    c. It restores colour
    d. Does not coagulate blood rapidly.
16. The following bacteria can be demosttrated in tissue
    a. Mycobacteria tuberculosis
    b. Enteamoeba histolytica
    c. Fungi
    d. Cryptococcus
17. Fungi in tissue can be demonstrated mainly by
    a. ZN technique
    b. Giemsa technique
    c. Papanicolaou technique
    d. Methanamine Silver technique
18. In shipment of dead body, the body is treated as cargo and labeled
    a. Human remains handle with care
    b. Infectious specimen
    c. Dead body
    d. Pathological specimen
19. Human dead body becomes state property
    a. If they are unclaimed after certain period of time
    b. If brought by a doctor
    c. If brought by police
    d. If from the wards
20. Types of death include
    a. Coma
    b. Somatic death
    c. Asphyxia
    d. Cell death
21. Arterial fluids in embalming are classified into
    a. Category A and C
    b. Category A and B
    c. Category 1 and 3
    d. Category F

22. Post mortem changes involve
    a. Embalming
    b. Staining
    c. Decomposition
    d. Fixation
23. Embalmer's eczema is caused by
    a. Phenol
    b. Formaldehyde
    c. Tap water
    d. Kaiserling's solution III
24. One of the triple effects of phenol in embalming is
    a. Fixation
    b. Staining
    c. Bleaching
    d. Mounting
25. Humectants are added to a body during embalming to
    a. Restore colour of tissue
    b. Restore shape of the body
    c. Restore tissue to more natural and hydrated appearance
    d. Restore air to the body
26. To enhance the odour of embalming solutions the following can be used
    a. Glycerine
    b. Formaldehyde
    c. Lilac oils as deodorants
    d. Potassium acetate
27. The following are embalming processes except
    a. Hypodermic embalming
    b. Arterial embalming
    c. Basement embalming
    d. Surface embalming
28. The choice and design of museum laboratory depend on
    a. Size and site interest
    b. The laboratory manager
    c. Availability of funds
    d. The patients
29. Faults in museum specimens include
    a. Staining artifacts
    b. Scores and scratches
    c. Thin and thick sections
    d. Breaking up of friable soft specimens
30. Museum specimens should be
    a. Be alive
    b. Be left at the bottom of the container
    c. Be put in tap water
    d. Not be left to dry

31. Whole organs like the brain should always
    a. Be washed in water
    b. Be cut into pieces
    c. Be fixed in Kaiserling's fluid III
    d. Be injected with fixative
32. The pH for Kaiserling's III should be
    a. pH 7.0
    b. pH 9.0
    c. pH 8.0
    d. pH 6.0
33. Specimens should always be handled in Kaiserling's solution to
    a. Avoid distortion
    b. To avoid drying
    c. To destroy microorganism
    d. To distort the tissue.
34. Centre plates are used in
    a. Mounting fluid
    b. Tap water
    c. Distilled water
    d. 10% formal saline
35. Museum specimens must be in a closed container to
    a. Avoid mounting
    b. Avoid fixation
    c. Avoid contamination and drying
    d. Destroy the microorganisms
36. Perl's Prussian blue technique demonstrates
    a. Fats
    b. Amyloid
    c. Bone
    d. Hemosiderin
37. Thymol solution is added to Kaiserling's III solution to
    a. Prevent hardening of tissue
    b. To promote fluid intake
    c. To prevent moulds from growing
    d. To accelerate fixation
38. The primary goal of quality assurance is
    a. To provide accurate and reliable results
    b. To protect the laboratory personnel from victimization
    c. To give good results
    d. To give normal values only
39. Signs of death include
    a. Hot temperature
    b. Eyes not moving
    c. No pulse detected
    d. coma

40. The following is vital when you want to facilitate diagnosis of fungal infections
    a. Put the specimen in Kaiserling's solution
    b. Fungal morphology
    c. The patient must abstain from eating
    d. Report results as positive or negative only

SECTION B

41. Write briefly on;

a. Disadvantages of using formaldehyde as an embalming fluid (5 marks)
b. Post mortem changes (5 marks)
c. Disinfection as the primary purpose of embalming (5 marks)
d. Color restoration of specimen in museum techniques (5 marks)

42. a. Describe the purpose of museum technique (10 marks)
b. Discuss the five steps of handling museum specimens (10 marks)

43. Discuss the different chemicals in an embalming fluid (20 marks)