

# **TECHNICAL UNIVERSITY OF MOMBASA**

## Faculty of APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATIONS FOR DEGREE IN
BACHELOR OF MEDICAL LABAROTORY SCIENCE
BMLS 12S MID ENTRY

**AML 2301 : HISTOLOGY** 

END OF SEMESTER EXAMINATIONS
SERIES: DECEMBER 2013
TIME: 2 HOURS

#### **INSTRUCTIONS:**

- 1. Answer All questions in section A and B.
- 2. This paper consists of Eight printed pages
- 1. The following staining Techniques can be used for demonstration of Fung. EXCEPT
  - A. MARTIN SCARLET BLUE.
  - B. GORDON'S AND SWEET
  - C. GROCOTTS
  - D. PAS
  - E. AIKALI CONGO RED
- **2.** The following are CTToPLASMIC DYES which gives a red color . Except.
  - A. ROSE Benger
  - B. Bouroex Red (c)
  - C. PHLOXINE
  - D. ERYTHROSIN
  - E. TEYRAZINE

- 3. The following are microtimes used for frozen sections Except.
  A. Cryostat
  B. ULTRA
  C. Therms Electric Cooling Device
- 4. The following ARE EMBEDDING media used for filozen sections except
  - A. Gelatin
  - B. Agar

D. Freezing

- C. Gum Arabic
- D. Water soluble waxes
- E. Ester waxes
- 5. The following is a technique used for demonstation of Amyloid
  - A. Congo Red
  - B. Ledrim'c phloxine tetraline
  - C. pasm
  - D. Picromallory
  - E. PAS
- **6.** The following are lubricants except
  - A. Castor oil
  - B. Clove oil
  - C. Mineral oil
  - D. Zinc oil
  - E. Olive oil
- 7. The following are techniques used for demonstrating of and mulins except
  - A. South gate mucicarmine
  - B. Hole's colloidal iron
  - C. Apcian Blue
  - D. Hexamine silver tek
- **8.** The following are hones except
  - A. Belgium yellow
  - B. Fine carborandum
  - C. Plate Glasss 8x3x1
  - D. Zinc Oxide
  - E. Arkandas

- 9. The following techniques can be used for demonstration of Glycogen except.
  A. Best carmine
  B. Pas
  C. Pasm
  D. Hexamine silver tek
- 10. The following are Alum Haema Toxylins except
  - A. Maters
  - B. Haiden Hain's susa
  - C. Detafield
  - D. Einersson's Gallocyanin
  - E. Coles
- 11. The following are microtime knives except
  - A. Biconcave
  - B. Semi planoconcave
  - C. Plano convex
  - D. Tool Edge
  - E. Plan wedge
- **12.** The following are stops except
  - A. Lanvas
  - B. Horse Hide
  - C. Leather
  - D. Carborandum paste
- 13. The following are Accentuators except
  - A. Phendc
  - B. Aletic Acid
  - C. Citric Acid
  - D. Glycerol
- **14.** The following are Accentutors except
  - A. Hydrogen peroxide
  - B. Potassium per management
  - C. Sodium 10 date
  - D. Mercuric oxide
  - E. Chloral Hydrate
- 15. The following are resindus mounting media except
  - A. Colophonism Resin

- B. Euparac
- C. Aparthy's
- D. Dammar Baisam
- E. Canada of Baisam
- 16. The following are synthetic mounting media except
  - A. Xam
  - B. BPS
  - C. DPX
  - D. Farrany
- 17. The following are ringing media except
  - A. Nak varnish
  - B. Cellulose
  - C. Starch Paste
  - D. AParaffin wax
  - E. Duraffix
- **18.** The following are Intravital stains except
  - A. Tryqan blue
  - B. Congo rd
  - C. Neutral red
  - D. Janks Green
  - E. Indian Ink
- 19. The following can be used for demonstration of Elastic fibres except
  - A. Orein weiyaerts re
  - B. Verhoeff's
  - C. Weighert's
  - D. Aidehyde
- **20.** The following are Aqueous media except
  - A. Farrants
  - B. MEHR'S Egg Dtbumin
  - C. Aparthy's
  - D. Water
  - E. Glycerol
- **21.** The following are constituents of Farrants except
  - A. Gum Arabic
  - B. Glycerine
  - C. Arsenic Acid
  - D. Gelatin

- E. Water
- 22. The following are constituents of aparhys except
  - A. Gum Arabic
  - B. Cane sugar
  - C. Thymol
  - D. Glycerol
  - E. Water
- 23. The following are mordanys used with Haemotoxlin except
  - A. Phosphotongstic Acid
  - B. Ntric acid
  - C. Chromic alum
  - D. Iron salts
  - E. Ammonium Alum
- 24. The following are constituents of Glycerol mounting media except
  - A. Glycerine
  - B. Gelation
  - C. Gum Arabic
  - D. Phenol
  - E. water
- **25.** The following are Haemato Genovs pigments except
  - A. Haemazon
  - B. Haemosiderin
  - C. Haematoidin
  - D. Haemoglobin
  - E. Haemotemises
- **26.** The following are Endogenous pigments except
  - A. Melanin
  - B. Kulschiyky cells
  - C. Lipofuchsin
  - D. Copper
  - E. Silver
- 27. The following are Exogenous pigments except
  - A. Silga
  - B. Iron ore
  - C. Carbin
  - D. Asbestos

- E. Calcium
- 28. The following are methods used for demonstration of Enterochrumaffin cells except.
  - A. Schmorn
  - B. Masson fontana
  - C. Diazu reageny
  - D. Gibbs Indophenol
  - E. GIEMSA
- **29.** The following are methods used for demonstration of CHROMAFFIN cell Granules except.
  - A. GIEMSA
  - B. FIF
  - C. Masson Fontano
  - D. Schmorl's
  - E. Diazo reagent
- **30.** The following are methods used for demonstration of calcium except
  - A. OGRESSIVE staining
  - B. Direct stainig
  - C. HiSTOCHEMICAL staining
  - D. Non-vital staining metachromatic staining
- 31. The following are True above perls Prussian Blue except
  - A. OGRESSIVE staining
  - B. DIRECT staining
  - C. Histochemical staining
  - D. Non-vital staining metachromatic staining
- **32.** The following are True about weighter staining except.
  - A. Regressive stainig
  - B. Indirect stainig
  - C. Non-vital stainig
  - D. Metallic Impregnation
- **33.** The following LAN be used for demonstration of BILE pigments except.
  - A. Gmellions
  - B. HE
  - C. Fouchets
  - D. DIAZO REAGENT
  - E. Rubeanic acid

- **34.** The following are addting of paraffin wax Except
  - A. BAYBERRY WAXES
  - B. CARESIN
  - C. STEARIC ACID
  - D. PLASTIC WAXES
  - E. RUBEANIC ACID
- **35.** The following are forms of paraffin wax except
  - A. BIOTD
  - B. Tissue MAT
  - C. PARA PLAST PLUS
  - D. PARAPLAST
  - E. PARALDEHYDE
- **36.** The following are Embedding moulds except.
  - A. Leukharts
  - B. PAPER BOATS
  - C. GLASS TUBIN
  - D. WATCH GLASSES
  - E. TISSUE BLOCKS
- **37.** The following are Adhesives except
  - A. Mehro EggAlbumin
  - B. SODIUM SILICATE
  - C. METHYL CELLULOSE
  - D. AGAR
  - E. SGELATIN
- **38.** The following are Sudan dyes except
  - A. Sudan III
  - B. Sudan Black B
  - C. Oil Red
  - D. Sudan II
  - E. Achlace
- **39.** The following are solvents for celloidin embedding media exept
  - A. AMYL Acetate
  - B. Castor oil
  - C. Methyl Benzuate
  - D. Aicohol lether mixture
  - E. Olive oil

- **40.** The following Reagents can be used for tissue storage and presentation except.
  - A. 10% Formal saline
  - B. Neutral Buffered formalin
  - C. 10-20% diethyl glycerol
  - D. 1% phenocetalE. Mereuric Chloride

### **SECTION B**

## **QUESTION 1**

a)	List of purposes of tissue storage and presentation.	(2marks)
b)	Define an Agirophil reaction giving example	(3marks)
c)	List 4 types of Alums	(2marks)
d)	Write the differences between Alum haemalsaylin and iron Haematoxylin	(4marks)
e)	Outline the difference between paraffin wax section and frozon section.	(7marks)

## **QUESTION 2**

a)	Discuss on if and staining technique.	(10marks)
b)	Write short notes on frozen section.	(10marks)

### **QUESTION 3**

a)	Write short notes on enologenous prejments.	(9maks)
b)	Discus Resins mounting media.	(6marks)
c)	Write short notes on any two non-water soluble Embeddind MEDIA.	(5marks)