



## BRAINWARE UNIVERSITY

### Term End Examination 2020 - 21

Programme – Bachelor of Science in Medical Lab Technology

Course Name – Fundamentals of Histopathology

Course Code - BMLT304

Semester / Year - Semester III

Time allotted : 75 Minutes

Full Marks : 60

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 60=60

1. (Answer any Sixty )

(i) Which of the following is a fixative

- |                      |                  |
|----------------------|------------------|
| a) Zenker's fluid    | b) Bouin's fluid |
| c) 10% formol saline | d) All of these  |

(ii) Tissue detail is maintained by

- |             |                  |
|-------------|------------------|
| a) Fixative | b) Normal saline |
| c) Acid     | d) All of these  |

(iii) Which of the following is clearing agent

- |                  |                |
|------------------|----------------|
| a) Xylene        | b) Alcohol     |
| c) Normal saline | d) Picric acid |

(iv) Melting temperature of paraffin used in histopathology

- |                   |                   |
|-------------------|-------------------|
| a) 56 - 58°C      | b) More than 65°C |
| c) More than 45°C | d) None of these  |

(v) Harris's Haematoxylin is a stain for

- |                 |                  |
|-----------------|------------------|
| a) Cytoplasm    | b) Nucleus       |
| c) All of these | d) None of these |

(vi) Eosin 'Y' is a stain for

- a) Nucleus
- b) Golgi bodies
- c) Cytoplasm
- d) None of these

(vii) Fixed tissue for Frozen Section is sectioned of

- a) -5 to -10°
- b) 2 - 5°C
- c) 10°C
- d) 15°C

(viii) PAS stain detects the

- a) Fat
- b) Carbohydrate
- c) Protein
- d) All of these

(ix) Which of the following is a Cytological Stain

- a) H & E Stain
- b) Sudan black stain
- c) PAP stain
- d) None of these

(x) Leishman Giemsa is a

- a) Cytological stain
- b) Blood stain
- c) All of these
- d) None of these

(xi) Prussian blue stain is for

- a) Iron
- b) Calcium
- c) Potassium
- d) Zinc

(xii) Von Kossa stain detects

- a) Iron
- b) Calcium
- c) Zinc
- d) Potassium

(xiii) Silver impregnation stain is for

- a) Protein
- b) Fat

c) Glycogen

d) Reticulin

(xiv) Reticulin stain is for

a) Elastic fibres

b) Reticulin

c) Nerve fibres

d) All of these

(xv) Masson's trichome stain is for

a) Fungi

b) Glycogen

c) Muscle & Collagen

d) Epithelium

(xvi) Adhesive is for

a) Adhesion of the tissue on the slides

b) To remove the tissue from the slides

c) All of these

d) None of these

(xvii) Staining occur due to

a) Chemical reaction

b) Physical action

c) All of these

d) None of these

(xviii) Fixation of the tissue can cause

a) Softening

b) Hardening

c) Drying

d) None of these

(xix) Decalcification is done in case of

a) Cartilage

b) Muscle

c) Bone

d) None of these

(xx) Decalcification is done commonly by

a) HCL

b) Formic acid

c) Formic acid with HCL

d) All of these

(xxi) Mordant is for

- a) Removal of dye
- b) Fixing the dye
- c) All of these
- d) None of these

(xxii) Which one is the Mordant in H&E stain ?

- a) Alum
- b) Eosin
- c) Acid
- d) All of these

(xxiii) H&E stain can cause

- a) Nucleus stain
- b) Cytoplasm stain
- c) All of these
- d) None of these

(xxiv) How does food move through your digestive tract

- a) By gravity
- b) By wavelike muscle contractions
- c) By cilia
- d) By chemical absorption

(xxv) Where does most of the digestive process take place

- a) Small intestine
- b) Large intestine
- c) Stomach
- d) All of these

(xxvi) What does the liver do to help digestion?

- a) Makes important enzymes
- b) Neutralizes stomach acid
- c) Produces bile
- d) None of these

(xxvii) Risk factors of Atherosclerosis include

- a) Cholesterol level
- b) Protein level
- c) Urea level
- d) Creatinine level

(xxviii) Type I diabetes is

- a) Autoimmune
- b) None immune

c) All of these

d) None of these

(xxix) Obstructive jaundice is commonly caused by

a) Gall stones

b) Ulcer

c) All of these

d) None of these

(xxx) Most common cause of Splenomegaly is

a) Kala-azar

b) Typhoid

c) All of these

d) None of these

(xxxi) Unconjugated bilirubin rise commonly in

a) Haemolytic jaundice

b) Obstructive jaundice

c) All of these

d) None of these

(xxxii) Common cause of leukocytosis is

a) bacterial infection

b) anaemia

c) all of these

d) none of these

(xxxiii) iron deficiency anaemia is characterized by

a) microcytic hypochromic

b) macrocytic hypochromic

c) all of these

d) none of these

(xxxiv) astrocytoma is a type of

a) brain tumor

b) lung tumor

c) all of these

d) none of these

(xxxv) Amylase level is raised in

a) pancreatitis

b) gastritis

c) all of these

d) none of these

(xxxvi) bone marrow examination is done for confirmation of

- a) acute leukaemia
- b) chronic leukaemia
- c) all of these
- d) none of these

(xxxvii) haemophilia b is caused by deficiency of factor

- a) viii
- b) ix
- c) all of these
- d) none of these

(xxxviii) What is the connective tissue covering around the brain and spinal cord?

- a) cell bodies
- b) Meninges
- c) neurofilaments
- d) none of these

(xxxix) histopathology is a branch of anatomy where study

- a) cells
- b) tissue
- c) organ
- d) histone protein

(xl) which is the first step of tissue processing

- a) impregnation
- b) embedding
- c) fixation
- d) staining

(xli) Honing is a process of

- a) Sharpening of the knife by stone
- b) staining of a tissue slide
- c) fixing of a tissue in formalin
- d) decalcifying tissue

(xlii) xylene used in tissue processing in histopathology as a

- a) clearing agent
- b) decalcifying agent
- c) dehydration agent
- d) rehydrate agent

(xliii) Which of the following microtome are used to prepare very thin sections up to one micrometre thickness

- a) Ultra microtome
- b) sliding microtome
- c) rotary microtome
- d) rocking microtome

(xlv) What is the most common cause of a urinary tract infection (UTI)?

- a) Escherichia coli (E. coli)
- b) Staphylococcus aureus (S. aureus)
- c) Chlamydia
- d) Mycoplasma

(xlvi) Which is a common UTI risk factor in adults?

- a) Enlarged prostate
- b) Catheter usage
- c) Diabetes
- d) All of these

(xlvii) What are signs and symptoms of a UTI in adults?

- a) Frequent urge to urinate
- b) Pain during urination
- c) All of these
- d) None of these

(xlviii) On average, what percentage of pregnant women develops UTIs?

- a) 0.5
- b) 0.25
- c) 10-15%
- d) About 1.5%

(xlix) The following is/are considered a positive finding in ectopic pregnancy

- a) Cervical Excitation
- b) P.V bleeding
- c) +ve urine test
- d) All of these

(l) In ectopic pregnancy, which of the following is always important

- a) Amenorrhea for 8 weeks
- b) Pain before vaginal bleeding
- c) Shoulder tip pain
- d) Pregnancy test

(l) Common non-specific symptoms of chronic kidney disease include

- a) Increased urination at night
- b) Loss of appetite
- c) Swelling of hands and feet
- d) All of these

(li) who are more susceptible to kidney stone

- a) men in the third and fourth decades of life
- b) women in the third and fourth decades of life
- c) Children
- d) Adult

(lii) The blockage of the flow of urine at any point in the urinary tract from the collecting ducts in the kidney to the urethra meatus

- a) Hydronephrosis
- b) Urinary tract obstruction
- c) UTI
- d) Urinary calculi

(liii) Which type of urinary calculi is the only stone to be truly radiolucent

- a) Xanthine
- b) Struvite
- c) Uric acid
- d) Calcium

(liv) Where does ovarian cancer occur?

- a) On tissue within the ovary
- b) On the surface of the ovary
- c) In egg-forming germ cells within the ovary
- d) Any of these

(lv) When assessing a patient's serum hormone levels, what would be consistent with PCOS

- a) Decreased testosterone and decreased estrogen
- b) Increased testosterone and LH, decreased FSH
- c) Decreased testosterone and decreased prolactin
- d) Decreased LH and Increased FSH

(lvi) Which of the following structures would be expected to stain intensely with hematoxylin?

- a) Nucleolus
- b) Collagen
- c) Mitochondria
- d) Glycogen

(lvii) Which of the following groups of dyes are generally used for



counterstaining

a) Carmine, eosin, hematoxylin

c) Metanil yellow, neutral red, orcein

b) Light green, methylene blue, nuclear fast red

d) Methyl green, phloxine, Prussian blue

(lviii) common cause of obstructive jaundice is

a) stone in the bile duct

c) all of these

b) infection

d) none of these

(lix) anaemia is due to

a) low hemoglobin

c) all of these

b) high hemoglobin

d) none of these

(lx) stroke is commonly caused by

a) hypertension

c) all of these

b) Typhoid

d) none of these