



BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Bachelor of Science in Medical Lab Technology

Course Name – General Bacteriology

Course Code - BMLT301

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) Bacteria can be visible under

- | | |
|---------------------------|------------------------|
| a) Dark-field microscope | b) Electron microscope |
| c) Fluroscence microscope | d) All of these |

(ii) The earliest solid media by Robert Koch was:

- | | |
|----------------------|-----------------------|
| a) Cooked cut Potato | b) Cooked cut Spinach |
| c) Cooked cut Onion | d) Cooked cut cabbage |

(iii) Example of enrich media

- | | |
|--------------------------------|-------------------|
| a) Blood agar | b) Chocolate agar |
| c) Blood agar & Chocolate agar | d) TCBS agar |

(iv) For pneumococci sugar media contain:

- | | |
|---------------|----------------|
| a) 3% Serum | b) 3% plasma |
| c) 3% Peptone | d) 3% inositol |

(v) Which of the following is a Complex media for fungal growth?

- | | |
|------------------------------------|--------------------------|
| a) Potato Dextrose Agar(PDA) media | b) Mac Conkey Agar media |
| c) Nutrient broth | d) Luria-Bertani media |

(vi) Which of the following is used as a solidifying agent for media?

- a) Agar
- b) Yeast extract
- c) Peptone
- d) Beef extract

(vii) In the Gaspak method the chemical will generate

- a) Hydrogen and CO₂
- b) Carbonic acid
- c) Hydrogen Peroxide
- d) All of these

(viii) Which of the following is a Complex media for fungal growth?

- a) Nutrient broth
- b) Luria-Bertani media
- c) Potato Dextrose Agar(PDA) media
- d) Mac Conkey Agar media

(ix) Which one of the following is true?

- a) Agar has nutrient properties
- b) Chocolate medium is selective medium
- c) Addition of selective substances in a solid medium is called enrichment media
- d) Nutrient broth is basal medium

(x) Gram staining was developed in:

- a) 1882
- b) 1883
- c) 1884
- d) 1885

(xi) The most common stain used for Gram staining is:

- a) Crystal Violet and methylene blue
- b) Crystal violet and Safarin
- c) Crystal Violet and carbol fuschin
- d) Safarin and methylene blue

(xii) Lipopolysaccharide is found in cell wall of:

- a) Gram Positive bacteria
- b) Gram negative bacteria
- c) Gram Positive bacteria & Gram negative bacteria
- d) fungi

(xiii) Gram staining is an example of

- a) Acid fast stain
- b) Simple stain
- c) Differential stain
- d) None of these

(xiv) Among which stain the cell is appearing as bright object without staining color

- a) Gram Stain
- b) Acid-fast stain
- c) Simple stain
- d) Negative stain

(xv) Clostridium staining will be done by

- a) Differential staining
- b) Endospore staining
- c) Acid fast staining
- d) All of these

(xvi) The dye used for Capsule staining is:

- a) India ink
- b) Eosin
- c) nigrosin
- d) Both India ink & nigrosin

(xvii) Catalase test the reagent used is

- a) 3%-6% hydrogen peroxide
- b) 1%-2% hydrogen peroxide
- c) 4%-5% hydrogen peroxide
- d) All of the these

(xviii) Oxidase reactions is due to

- a) Catalase
- b) Peroxidase
- c) Cytochrome oxidase
- d) All of these

(xix) Urease test is positive for bacteria

- a) Psudomonas
- b) Staphylococcus
- c) Klenseilla
- d) All of these

(xx) Indole test is showing positive result for

- a) Klebsiella
- b) Staphylococcus
- c) E.Coli
- d) Salmonella

(xxi) Methyl red test, culture used for

- a) Glucose phosphate culture
- b) Peptone culture
- c) Beef extract
- d) None of these

(xxii) Sugar Fermentation Test, indicator used for

- a) Andrade's indicator
- b) Methyl red indicator
- c) Phenol red indicator
- d) Both Andrade's indicator and Phenol red indicator

(xxiii) Differential staining of bacteria spore is related to

- a) Albert's staining
- b) Lugol's staining
- c) Moller's staining
- d) Indian ink preparation

(xxiv) The size of the virus can be determined by

- a) Micrography
- b) Ultra-centrifugation at high speed
- c) Ultra-filtration
- d) All of these

(xxv) D.pneumoniae can be cultivated in

- a) Chocolate agar and blood agar
- b) Serum broth
- c) Glucose broth
- d) All of these

(xxvi) Which of the following are gas producing Salmonella?

- a) S.typhi
- b) S.enteritidis
- c) S.cholerasuis
- d) S.typhimurium

(xxvii) Culture media for fungi are

- a) Potato dextrose agar (PDA)
- b) Sabouraud's agar
- c) Czapekdox agar
- d) All of the these

(xxviii) Viral antigens are likely

- a) Proteins
- b) Glyco proteins

c) Lipo proteins

d) Both Proteins and Glyco proteins

(xxix) E.coli produce which type of toxins

a) Exotoxins

b) Endotoxins

c) Leucocidin

d) Both Exotoxins and Endotoxins

(xxx) Neisseria gonorrhoeae causes

a) Urethritis

b) Conjunctivitis

c) Arthritis

d) All of the these

(xxxi) Diphtheria is an example of

a) Bacteraemia

b) Pyaemia

c) Septicemia

d) Toxaemia

(xxxii) Among Micrococcaceae which is not pathogenic to human

a) Micrococci

b) Planococci

c) Staphylococcus

d) Both Micrococci and Planococci

(xxxiii) Micrococci found in usually

a) Skin

b) Mucosal membrane

c) Teeth

d) Both Skin and Mucosal membrane

(xxxiv) Virulent factor in pneumococcus is

a) Cell wall

b) Capsule

c) Mesosomes

d) Endotoxins

(xxxv) The following characters are true about Neisseria gonorrhoeae except

a) Gram-negative, aerobic bacteria

b) Non-motile diplococci

c) Oxidase positive organisms

d) Air borne infection

(xxxvi) Acid fast bacteria are

- a) Neisseria
- b) Staphylococci
- c) Mycobacteria
- d) All of the these

(xxxvii) Tuberculous meningitis is tested by

- a) Adenine Dehydrogenase Activity
- b) Acyl Deaminase Activity
- c) Adenosine Deaminase Activity
- d) Adenine Deaminase Activity

(xxxviii) Newer Diagnostic Techniques for Mycobacterium tuberculosis

- a) Bactec system
- b) Septic check acid-fast bacilli system
- c) Polymerase chain reaction
- d) All of these

(xxxix) BCG vaccine is for the prevention of

- a) Brucellosis
- b) Diphtheria
- c) Botulism
- d) Tuberculosis

(xl) Dose of BCG vaccine is

- a) 0.2–0.5 ml
- b) 0.1 ml
- c) 0.05 ml
- d) 0.2 to 0.3 ml

(xli) Drugs used against tuberculosis (TB) are

- a) Refampicin, Isoniazid
- b) Pyrazinamide, Streptomycin
- c) Both Refampicin, Isoniazid and Pyrazinamide, Streptomycin
- d) None of these

(xlii) Pulmonary anthrax results

- a) Bloody diarrhea
- b) Hemorrhagic meningitis
- c) Septicemia
- d) fatality

(xliii) Clsotridium welchii is positive for

- a) Elek's gel precipitation test
- b) Nagler's test

c) Weil felix test

d) Bacitracin test

(xlv) The first isolated from the faeces of neonates

a) Clostridium Difficile

b) Clostridium Botulinum

c) Clostridium tetani

d) Clostridium welchii

(xlv) The following microorganisms with their respective appearance of colonies on bismuth Sulphite agar from A to E:

a) Salmonella typhi-Black

b) Salmonella-No growth

c) Escherichia coli-yellow

d) Shigella flexneri-green

(xlvi) E.coli produces the following toxins

a) Enterotoxins

b) Endotoxins

c) Exotoxin

d) Both Enterotoxins and Exotoxin

(xlvii) The colonies produced by Pseudomonas on Mac Conkey's medium are

a) Purple colored

b) Pink colored

c) Pale colored

d) Green colored

(xlviii) Industrial Production of Vitamin-B12 is from

a) Propionibacterium sps.

b) Pseudomonas sps.

c) Both Propionibacterium sps. and Pseudomonas sps.

d) None of these

(xlix) Which of the following is most similar to Rickettsia and Chlamydia

a) Bdellovibrio

b) Clostridium

c) Mycobacterium

d) Mycolidaima

(l) Vibrio cholera differs from vibrio eltor by

a) It shares some Inaba, Ogawa subtypes with eltor

b) Resistant to polymyxin

c) Eltor is non-motile

d) Causes less subclinical infections as compared to eltor

(li) Yeast extract is an excellent source of

a) A Vitamin

b) Proteins

c) B Vitamin

d) Carbohydrates

(lii) Tubercular bacilli grow best in

a) Absence of O₂

b) Presence of CO₂

c) Presence of O₂

d) None of these

(liii) Bacteria are more sensitive to antibiotics at which phase of growth curve?

a) Decline phase

b) Stationary phase

c) Lag phase

d) Log phase

(liv) Botulism means

a) Food adulteration

b) Food poisoning by streptococcus bacteria

c) Chemical contamination of food

d) Food processing

(lv) Septicaemia is

a) Bacteria in blood

b) Toxin in blood

c) Pus in blood

d) Multiplication of bacteria and toxins in blood

(lvi) Plague and Tularemia vaccine can be prepared from

a) Chemical fraction of the causative bacteria

b) Heat killed suspension of virulent bacteria

c) Avirulent live bacteria

d) All of these

(lvii) Vaccines are prepared from killed microbes, they are

- a) Inactivated (killed) vaccine
- c) Autogenous vaccine

- b) Attenuated vaccines
- d) None of these

(lviii) Anthrax vaccine is prepared by

- a) Killing the bacilli
- c) Attenuated bacilli

- b) Live bacilli
- d) None of these

(lix) Attenuated, oral poliomyelitis vaccine is

- a) BCG
- c) Sabin vaccine

- b) Measles vaccine
- d) TAB vaccine

(lx) Raw-material used for the production of alcohol is

- a) Molasses
- c) Sulphite waste water

- b) Starch
- d) All of these