BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Bachelor of Science (Honours) in Microbiology

Course Name – Patient safety, early intervention and management

Course Code - GEAHS301

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) Circulation of blood is discovered by

a) Karl Landsteiner b) William Harvey

c) James Blundell d) Richard Lower

(ii) Secondary Packaging in blood bank is made of Laminated

a) laminated Polyester b) Laminated Nylon

c) Chitosan d) Cellulose

(iii) In CPDA, citric acid prevents

a) Glucose Carmelization b) Fructose degradation

c) Cell degradation d) None of these

(iv) Blood bag is made up with:

a) Polypropylene b) Poly vinyl chloride

c) Nylon d) All of these

(v) Preparation of Platelets concentration from whole blood blood should be

a) Cooled toward 6 deg b) Cooled toward 20-25 deg

c) 37 deg d) Heated to 50 deg

(vi) The optimum storage temp for RBC

a) -80 deg
b) -20 deg
c) 4 deg
d) Room temp

(vii) Thaw time of fresh frozen plasma will be:

a) 24 hr
b) 37 hr
c) 4 hr
d) 2 hr

(viii) RBC generally frozen in

a) Saline
b) Glycerol
c) Dextrose
d) Phosphate buffer

(ix) Immunological reactions of Blood transfusion include all except

a) Allergic
b) Anaphylactic
c) Leak agglutinin
d) Circulatory overload

(x) In Blood, lack of intrinsic factors causes:

a) Sickle cell anemia
b) Pernicious anemia
c) Target cell anemia
d) Iron deficiency anemia

(xi) Signals of head and spine injuries are:

a) Blood or other fluids in the ears or nose
b) Unusual bumps or depressions on the head or over the spine.
c) Has seizures, severe headaches, or slurred speech
d) Both a and b

(xii) Shock is a condition where:

a) The respiratory system fails to deliver air to the lungs.
b) The cardiovascular system fails to deliver blood to the heart.
c) The circulatory system fails to deliver blood to all parts of the body.
d) All of the these

(xiii) When performing CPR on a child, how deep should the chest compressions be?

a) 1½ inches.
b) 2 inches
c) 2½ inches
d) 3 inches

(xiv) Blood grouping and cross-matching is must prior to infusion of

a) Gelatin
b) Dextran
c) Albumin
d) FFP

(xv) Which of the following not testing as a transfusion related infection in blood bank

a) Hepatitis A
b) Malaria
c) AIDS
d) HIV

(xvi) Which of the following is the minimum weight for routien blood donor

a) 9 lbs
b) 100 lbs
c) 90 lbs
d) 110 lbs

(xvii) What are the common risks of donating blood?

a) Contract common viruses
b) Bacterial infection
c) Low blood pressure
d) None of the these

(xviii) Flow cytometry uses_____

a) Heavy isotope
b) Radioactive elements
c) Immunological techniques
d) Energy content

(xix) How are the cells sorted?

a) By dilution plating until there are only single cell in each well of microtitre plate
b) By the differential weight
c) By electrostatic force
d) By magnetic force

(xx) Which fluorescent dye can be used for red fluorescence?

a) Rhodamine
b) Fluorescein
c) Carmine
d) DAPI

(xxi) Which of the following are measurable parameters for flow cytometry

a) Cell pigments
b) Protein Expression
c) Surface Antigens
d) All of the above

(xxii) Under optimal conditions for flow cytometry, the “sheath” flow should have a Reynolds number that indicates which of the following?

a) Laminar flow
b) Transient flow
c) Turbulent flow
d) All of the above

(xxiii) To encourage people to help others in emergency situations, most states have enacted laws, which protect you, as a rescuer, from being sued. This is called.

a) The Good-Will Law
b) The First Aid No-Fault Law
c) The Good Samaritan Law
d) There is no such law

(xxiv) An eight year old child is unconscious and the airway is blocked. You should:

a) Give abdominal thrusts
b) Begin CPR
c) Begin Rescue Breathing
d) All of the these

(xxv) There are three basic steps you can take in an emergency

a) Call, Check, Care
b) Check, Call, Care
c) Recognize, Decide, Call
d) Decide, Execute, Call

(xxvi) In order to stop the reaction between enzyme and substrate, what process is needed?

a) Incubate the sample at 100oC
b) Add strong acid to sample

c) Wash sample with PBS-Tween
d) Add blocking solution to sample

(xxvii) The most abundant immunoglobulin class in serum is

a) IgG
b) IgE
c) IgM
d) None of these

(xxviii) Epitope signifies:

a) Antibody binding site
b) Antibody binding site
c) Antigen-antibody interaction
d) All of these

(xxix) Which of the following types of spectroscopy can tell us the most about the carbon framework of an organic compound?

a) UV-visible spectroscopy
b) Infra-red spectroscopy
c) NMR spectroscopy
d) Mass spectrometry

(xxx) In gas chromatography, the basis for separation of the components of the volatile material is the difference in

a) Partition coefficients
b) Conductivity
c) Molecular weight
d) molarity

(xxxi) Gas chromatography can be performed in which of the following ways?

a) Only in columns
b) Only on plane surfaces
c) Either in columns or on plane surfaces
d) Neither in columns nor on plane surfaces

(xxxii) Which of the following cannot be used as adsorbent in Column adsorption chromatography?

a) Magnesium oxide
b) Silica gel
c) Activated alumina
d) Potassium permanganate

(xxxiii) In which type of chromatography, the stationary phase held in a narrow tube and the mobile phase is forced through it under pressure?

a) Column chromatography
b) Planar chromatography
c) Liquid chromatography
d) Gas chromatography

(xxxiv) Chromatography is a physical method that is used to separate and analyse

a) Simple mixtures
b) Complex mixtures
c) Viscous mixtures
d) Metals

(xxxv) In Reverse phase HPLC

a) Polar solvent/non-polar column
b) Non polar solvent/polar column
c) Non polar solvent/non-polar column
d) All of these

(xxxvi) Which mode of HPLC separates sample components by molecular size

a) Gel permeation chromatography
b) Refractive index
c) Velocity
d) Density

(xxxvii) Bioaffinity chromatography is a type of

a) Liquid Chromatogrpahy
b) High-performance liquid chromatography (HPLC
c) Partition Chromatography
d) All of these

(xxxviii) Three types of detectors are there in HPLC:

a) fixed wavelength detectors
b) variable wavelength detectors
c) Diode array detectors.
d) All of these

(xxxix) The following malignancies are a particular problem in patients on immunosuppressive therapy:

a) Melanoma
b) Non-Hodgkins lymphoma
c) Sunlight-related skin malignancies.
d) Kaposi's sarcoma

(xl) Hand hygiene is to be used in the following situations by imaging

professionals in the workplace

a) Before caring for a patient
b) After caring for a patient
c) When preparing for an invasive procedure
d) All of these

(xli) Retention of medical records is required for

a) Future information
b) Medico legal purpose
c) None of them
d) Both a and b

(xlii) What is the color coding for ‘Priority Three ‘ in triage:

a) Blue
b) Black
c) Green
d) Red

(xliii) Among the followings which is NOT included in patient right after hospitalized

a) Confidentiality
b) Refusal of the treatment
c) Informed consent
d) None of these

(xliv) Anticoagulant prevents RBC hemolysis

a) Dextrose
b) Heparin
c) Mannitol
d) Citrate

(xlv) Cryopreservation of blood components need

a) Glycerol
b) DMSO
c) DPG
d) Both a and b

(xlvi) Soft tissue wounds should be cared for by:

a) Heat and elastic bandages.
b) Ice and elevation
c) Apply direct pressure on the area to cut down on bleeding under skin.
d) Both b and c

(xlvii) Your role in making the EMS system work effectively includes four steps

a) Elevate, Identify, decide, execute.
b) Check, call, care, protect
c) Recognize, decide, call, provide.
d) None of the these.

(xlviii) Wounds that would require stitches are….

a) Internal bleeding
b) Bleeding from an artery or uncontrolled bleeding.
c) Human or animal bites.
d) None of the these.

(xlix) Disaster Management includes:

a) Mitigation
b) Reconstruction
c) Rehabilitation
d) All of the these

(l) In India National Institute of Disaster Management is located at

a) Manipur
b) Punjab
c) Hyderabad
d) New Delhi

(li) Which of the following is not an atmospheric hazard

a) Epidemic in human
b) Hail
c) Heavy rainfall
d) hurricanes

(lii) Where should you palpate for a pulse on an unconscious adult during CPR?

a) carotid pulse
b) radial pulse
c) femoral pulse
d) brachial pulse

(liii) The most common hypovolemic shock is

a) CPR
b) Blood loss
c) Fatigue
d) Vision loss

(liv) The medical term for stroke is

a) cerebrovascular accident
b) cerebrovascular injury
c) cerebrovascular spine
d) All of these

(lv) Hyperthermia deals with
a) Precipitation
b) Perspiration
c) Perception
d) hypothermia

(lvi) Seizures deals with
a) Muscular disorder
b) neurological disorders
c) renal disorders
d) Gastro intestinal disorder

(lvii) The successful blood transplantation of blood vessels was done by
a) Bruce Reitz
b) Alexis Carrel
c) Eduward Zirm
d) Carl Landsteiner

(lviii) First successful Kidney transplant in
a) 1958
b) 1963
c) 1954
d) 1951

(lix) Cadaveric donor can donate
a) Liver
b) Stomach
c) Heart
d) All of these

(lx) Hyper acute rejection can start within
a) Minutes
b) after 6 months
c) after few hours
d) None of these