

نموذج (1)

لا تنسوني من صالح دعائكم (سبحان الله وبحمده سبحان الله العظيم)

What is Ph electrode?

- Reference electrode
- Ion selective electrode
- An electrolytic cell
- A full cell

Which of the following organisms cause enteric fever?

- Shigella dysenteriae
- Salmonella typhi
- Salmonella typhimurium
- Campylobacter jejuni

Which is the compound of choice for fixation of blood films for hematological examinations?

Acetone

Propanol

Methanol

Acid -alcohol

Which of the following staphylococcus species is novobiocin resistant?

Aureus

Epidermidis

Saprophyticus

Haemolyticus

Which of the following immunoglobulins is increased in allergy

IgM

IgD

IgG

IgA

What is the type of Gaffe reaction for creatinin analysis?

End points colorimetric

End points enzymatic

Electrochemical

Kinetics

which of the following light does a turbidimeter measure?

Transmission

Absorbed

Scatter

Emitted

What is the reagent blank used for in an instrument?

Calculation

Calibration

Linearity check

Zeroing the observance

Which of the following analytes is photosensitive?

Potassium

Bilirubin

Protein

Glucose

What is the use of standard substance?

- Calibrate new instruments
- Estimate specific test
- External quality control
- Zeroing the observation

Which of the following enzymes is affected by hemolysis?

AST

ALT

GGT

Amylase

Which of the following Haemophilus species requires X and V factor for growth?

Aprophilus

Ducreyi

Parainfluenzae

Influenzae

Which one is the dimmer antibody?

IgG

IgD

IgM

IgA

What is the other term for the adaptive immunity?

- Phagocytosis
- Acquired immunity
- Antigenic immunity
- Lymphocyte reactive immunity

What is the use of screening tests?

- Follow up disease course
- Confirm disease diagnosis
- Detect disease at sub-clinical stage
- Discover treatment regime complication

What is the most critical distinction between *Staphylococcus aureus* and other *Staphylococcus* species?

Phosphatase production

Coagulase production

DNA production

Hemolysis

Which of the following anticoagulant is used for the collection of blood samples for glucose estimation?

EDTA

Citrate

Heparin

Sodium fluoride

Which of the following virus are replicated in the nucleus?

- Poxviruses
- Picornavirus
- Herpes viruses
- Paramyxovirus

Which of the following is an enriched medium

- Nutrient agar
- MacConkey agar
- Blood agar
- Nutrient broth

DAT is used to do what?

- Determine the red cell phenotype
- Demonstrate in vivo Ab coating of red cells
- Demonstrate in vitro Ab coating of red cell
- Detect incomplete antibodies to potential donor red cells

Which of the following is enveloped virus?

- Herpes virus
- Adenoviruses
- Rotaviruses
- Paraviruses

Which of the following is within a reasonable reference range of platelets?

100 x 10¹²/L

10 x 10⁹/L

1000 x 10⁹/L

200 x 10⁹/L

Which of the following is an automated system used for bacterial identification and sensitivity?

Microscan Walk Away

ELISA

PCR

Latex agglutination

Why the monochromatic filter is used for the spectrophotometer?

- Allow the desired light to reach the sample
- Eliminate ultraviolet wavelenghts of light
- Inhibit transmission of light
- Increase luminescence

What is the function of flame in atomic absorption spectrophotometry?

Eliminate ultraviolet light

Generate a reference beam

Break the chemical bonds of molecules

Allow the desired light to reach the sample

Which of the following is the most sensitive test for the diagnosis of herpes simplex meningitis in a newborn infant?

HSV IgG antibody

HSV polymerase chain reaction

HSV culture

Tzank smear

What is the relation between the percentage transmittance (%T) versus concentration in spectrophotometer?

Proportional

Linear function

Non measurable

Non linear function

Which of the following is used to produce chemiluminescence?

Firely luciferase

B-galactosoidase

Horseradish peroxidase

Glucose 6 phosphate dehydrogenase

Which of the following is the common method to be used for quantitative analysis of urinary glucose?

Hexokinase

Glucose oxidase

Glucose dehydrogenase

Glucokinase test

To which of the following fungi classes does "candida" belong to?

Zygomycetes

Ascomycetes

Basidiomycetes

Dutromycetes

The following are good points in the laboratory work ethics, which one has no relatedness?

- Being responsible
- Being reliable
- Being good in planning a career
- Being able to be effortless in the job

Which of the following is used to grow viruses in the laboratory?

Nutrient agar

Blood agar

Nutrient broth

Tissue culture

While working up a case of hemolytic disease of a newborn due to Rh incompatibility, a technician would most likely carry out an indirect Coombs test on which of the following?

Newborns serum

Newborns RBCs

Mother's serum

Mother's RBCs

What could be diagnosed by using modified Ziel-Neelsen stain?

Entamoeba coli

Giardia lamblia

Balantidium coli

Cryptosporidium sp.

Which of the following agar is generally used for the isolation of fungi?

MacConkey

Muller-Hinton

Chocolate agar


Sabourauds dextrose

A six year-old girl who has a recent travel history with a sore throat, hoarseness and enlarged lymph nodes. A throat swab was sent for culture (see lab results).

Test	Results
Gram stain	Gram +ve bacilli
Organism	Non-motile
Catalase test	Positive
Haemolysis	Non-haemolytic

Which of the following is the most likely causative agent?

- Staphylococcus aureus
- Listeria monocytogenes
- Streptococcus pyogenes

 **Corynebacterium diphtheria**

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Which of the following methods is used for a quantitative assay of creatine kinase isoenzymes?

- Atomic absorption spectrophotometer
- Ion-exchange chromatography
- Flame absorption spectrophotometer
- Flow cytometry

What is the stain used for the identification of amoebae?

Gram

Iodine

Giemsa

Leishmans stain

Which of the following is usually used for quantitative analysis of electrolytes?

Two dimensional paper chromatography

Thin layer chromatography

Ion selective electrodes

Electrophoresis

How the Taenia saginata infection can be diagnosed?

- Finding gravid segments in the feces
- Finding characteristic eggs in feces with lateral spin
- Finding characteristic eggs in feces with terminal spin
- Testing serum for antibodies produced in response to infection

What is the solution that is used to clean microscope lenses?

Xylene

Cider oil

Methyl alcohol

Ethyl alcohol

Which of the following is post-analytical error?

Improper preparation of the patient

Calibrator

Pipetting

Interpretation of the data

Which of the following is the causative agent of variety of cutaneous warts?

- Human papillomavirus
- West Nile virus
- Tick-borne encephalitis virus
- Polyomavirus

A 35 year-old female complains of irritability, heat intolerance and muscle aches. She is also complaining of diarrhea and irregular heartbeat (palpitations) (see lab results).

Test	Result	Normal Value
TSH	1.2	0.4-6.5 mU/L
T4	200	60-165 mmol/L
T3	4.5	1.3-3.1 nmol/L

- Primary hyperthyroidism
- Secondary hyperthyroidism
- Non-thyroidal illness
- T3 thyrotoxicosis

All repeating measurements for one sample can give the same values
Which of the following can be titled the comment below?

Accuracy

Precision

Specificity

Sensitivity

Which of the following organism does not possess a cell wall?

Cocci

Bacilli

Spiral

Mycoplasma

What is/are the true constituent (s) of α 1-globulin?

α 1 anti-trypsin

Haptoglobin IgG,IgM,IgD,IgE and CRP

IgA and complement

IgG,IgM,IgD,IgE and CRP

What is the causative organism of the lymphatic filariasis?

Loa loa

Trichinella spiralis finding characteristic eggs in the urine with terminal spine

Onchocerca volvulus

Wuchereria bancrofti

Which of the following physical hazard is associated with hypochlorite compounds?

- Explosive
- Flammable
- Water reactive

Oxidizer

A 19 year-old male blood donor comes to the blood Donation Center and during donation the donor starts to feel faint and nauseous.

What immediate action should be taken?

Stop collecting blood for five minutes then continue

Reassurance and continue collecting the blood

Remove tourniquet and withdraw the needle

Call blood bank doctor

Which of the following is one of the tap worms?

Ancylostoma duodenale

Ascaris lumbricoides

Trichuris tricura

Taenia saginata

What volume in milliliters of any hazardous material is a major spill?

250

500

2000

3000

What is measured with the arterial blood sample?

P_{CO}2

Enzymes

Lipid profile

Electrolyte

Which indicator system can be used in a complement fixation test?

Lattice

Substrate

Human RBCs

Precipitation

A 17 year-old sickle cell patient has the A2 blood group, and a request for two units packed RBCs has been received at the Blood Bank.

Which blood group should be used in the cross match?

A

B

AB

O

What does CLED agar stand for?

- Cystin lactulose electrolyte deficient
- Cystin leucine electrolyte deficient
- Cystin lactose electrolyte deficient
- Cystin lysine electrolyte deficient

Which of the following methods is used for the staining of acid fast bacilli?

Simple

Albers

Giemsa

Ziehl-Neelsen

By the fermentation of which of the following the gonococcus can be differentiated from meningococcus?

Sugar fermentation

Oxidase Production

Gram stain

Capsulation

What could be examined to detect malaria parasites?

- Stained thick blood films
- Stained lymph node aspirates
- The buffy coat after centrifuging blood
- White blood cells for malaria pigments

Which of the following tests is used for the detection of viral antibodies?

Tissue culture

PCR

Haemagglutination

Immunofluorescence

What is the type of reaction for alanine transaminase measurement activity?

End points colorimetric

End points enzymatics

Kinetics

Potentiometric

What is the most appropriate diagnostic test for CRP?

- Western blot
- Immunofluorescence
- Reverse passive agglutination
- Agglutination inhibition reaction

How are the fractions of separated solutes detected in high-pressure liquid chromatography?

- Visible spectrophotometers
- UV spectrophotometers
- Infrared spectrophotometers

 Electrophoresis

Which of the following methods of osmometry determines the concentration of alcohol in blood?

Membrane

Vapour depression

Freezing point depression

Suction pumps asymmetry

Which of the following is the most sensitive test for cardiac troponin?

Fluorescent-labeled immunoassy

chemiluminescence immunoassy

Enzyme labeled immunoassay

Spectrophotometer

What is the most common method for measuring heavy metals?

AAS

ISEs

HPLC

Electrophoresis

1 Atomic Absorption Spectrophotometer

2 Ion Selective Electrodes

3 High Performance Liquid Chromatography

How is the internal quality control assessed?

- Result from many laboratories are compared
- Laboratories own internal standards
- Actual results are compared with previous values
- Samples are distributed to laboratories at the same time

Which of the following structures can be detected by india ink preparation?

Spores

Capsules

Pili

Flagella

What does steatorrhea mean?

- Increased amount of fat in the faeces
- Persistent diarrhea
- Hyperlipemia
- Isosthenuria

A unit of blood was collected then transfused to a patient, with 24 hours post transfusion the patient developed fever, shivering, nausea, vomiting and diarrhea. A post transfusion investigation reported bacterial contamination (see image).

Which of the following is the most likely cause?

- Needle of the blood bag is big.
- Venipuncture site touched after cleaning
- Donor hand not was with soap
- Patient blood group was wrong



ABO typing on a patient gave the above reaction (see image)
What is the patient's blood group?

A

B

AB

O



A unit of whole blood was collected in the blood Donation Center then rejected by the components preparation unit (see image)

What is most likely reason?

- Overweight
- Single bag used
- Blood not tested
- CPD anticoagulant



Which of the following is the most likely organism (see image)?

Staphylococci

Streptococci

Diplococci

Tetrads



ABO typing on a patient gave the above confusing reaction (see image).
Which sort of case would this result be likely seen?

Newborns

Children

Leukaemia

Bombay



Which of the following is the most likely organism (see image)?

- Bacillus anthracis
- Mycobacterium tuberculosis
- Clostridium tetani



Corynebacterium diphtheria

Increase uric acid cause

- Gout disease
- Diabetes millitus
- Reumatic disease
- Anemia

Oil lenses magnification in light microscope is

10x

20x

40x

100x

Glycated hemoglobin test is show the level of glucose during

8-12 weeks

2 months

1 years

3 years

Enzyme elevated in acute pancreatitis is?

sGpt

B-amylase

CKmb

Lipase

Substance cannot trans and absorbed without a factor

Iron

Vitamin B12

Folic acid

Vitamin A.

Heparine is

Lipopolysaccharide

Fatty acid

Protein

carbohydrate

Which immunoglobulin is the principal one found in secretions such as milk?

IgG

IgM

IgE

IgA

The dimeric Antibodies is

IgM

IgE

IgD

IgA

Antibodies associated in Rh.

IgG

IgM

IgD

IgA

Which of the following leukocyte responsible for parasitic & allergic reaction

Neutrophile

Monocyte

Basophile

Eosinophile

Cell not contain nucleus

Erythrocyte

Leukocyte

Platelets

blast cell

If infant has Rh+ve & mother RH-ve must give

Anti-D immunoglobulin

Anti-E immunoglobulin

Anti-A immunoglobulin

Anti-C immunoglobulin

life span of RBCs is

120 day

60 day

30 day

25 day

Life Span of platelets in bags stored at R.T.

35 dayes

5 dayes

14 day

120 day

CPDA1 anticoagulant to store blood for :

- 42 day
- 35 day
- 21 day
- 10 day

Which of the following cause cerebral malaria

Plasmodium malaria

Plasmodium falciparum

Plasmodium ovali

Plasmodium vivax

Infective stage in malaria

Cyst

Sporozoite

Oocyst

Ova

The cause of chaga's disease:

- Trypanosoma gambiense
- Trypanosoma Rhodoscence
- Trypanosoma cruzi
- Leishmania tropica

Infective stage of Taenia:

Ova

Larva

Cercaria

Cysticercus

Taenia saginata diagnostic by

Gravid segment

Ova in urine

Cyst

Trophozoite

The biochemical test differentiate *S.pneumonia* from other streptococci

Catalas

Coagulase

Optichine

Citrate

Staph aureus differentiate from strepto pyogenes because it

Contain Catalase

Contain Coagulase

Contain Citrate

Contain Urease

TCBS is the selective media for isolation of:

H.pylori

Vibro cholera

E-coli

H influenza

Safety in the Lab include vaccination of stuff against

HAV

HBV

HCV

HDV

Rice watery stool can caused by

Salmonell

Shigella

Vibro cholera

Streptococcus

Cause Kala- azar

Leishmania donovani

Leishmania tropica

Leishmania brazillince

Leishmani mexicana