FINAL ANSWER KEY

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Question1:-

A 70 year old male on mechanical ventilation develops ventilator-associated pneumonia.Endotracheal aspirate culture yields *Acinetobacter baumannii* resistant to carbapenems. Molecular testing detects the bla_{OXA-23} gene. Select the WRONG statement regarding this isolate:

A:-

OXA-23 is a class D β-lactamase capable of hydrolysing carbapenems

B:-

Ceftazidime-avibactam is the preferred targeted therapy for this infection

C:-

colistin may be used for treatment if in-vitro susceptibility is demonstrated by MIC testing

D:-

Sulbactam has activity against *Acinetobacter sp*

Correct Answer:- Option-B

Question2:-

Etiological agents of the following clinical conditions are ***strict anaerobes,*** **EXCEPT**

A:-

A patient with rapidly progressive myonecrosis, crepitus and foul smelling discharge following a traumatic wound

B:-

A patient with trismus and generalized muscle spasms developing after a contaminated puncture wound

C:-

A patient presenting with a painless ulcer with a black eschar and surrounding oedema following contact with

animal products

D:-

A patient with pseudomembranous colitis developing after prolonged broad-spectrum antibiotic therapy

Correct Answer:- Option-C

Question3:-

Geobacillus stearothermophilus spores are ideally used as the biological indicator for monitoring the effectiveness of all of the following sterilisation methods EXCEPT

A:-

Autoclave

B:-

Plasma sterilisation

C:-

Hot air oven

D:-

Low-temperature steam-formaldehyde sterilisation

Correct Answer:- Option-C

Question4:-

A 23-year-old woman presents with high-grade fever, hypotension, diffuse erythematous rash and subsequent desquamation of palms and soles. She recently used intravaginal tampons. Blood cultures are sterile. Which virulence factor is primarily responsible for the pathogenesis of this condition?

A:-

Exotoxin A causing inhibition of protein synthesis

B:-

Lipopolysaccharide-mediated cytokine release

C:-

Superantigen causing non-specific T-cell activation

D:-

Pore-forming cytolysin causing direct cell lysis

Correct Answer:- Option-C

Question5:-

Which of the following statements regarding Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) is True?

A:-

RT-PCR directly amplifies RNA without conversion to complementary DNA

B:-

RT-PCR is primarily used for detection of DNA viruses

C:-

Reverse transcriptase synthesizes complementary DNA from RNA template prior to PCR amplification

D:-

RT-PCR does not require thermal cycling and is performed at a constant temperature

Correct Answer:- Option-C

Question6:-

A 5-year-old unimmunised child presents with fever, sore throat, stridor and progressive breathing difficulty. Examination reveals a greyish pseudomembrane over the tonsillopharyngeal region. The child is immediately treated with antidiphtheritic serum (ADS) along with antibiotics. The **protective immune mechanism** provided by ADS in this child is best described as

A:-

Active immunity mediated by stimulation of memory B cells against diphtheria toxin

B:-

Passive immunity through neutralisation of diphtheria toxin by pre-formed antibodies

C:-

Cell-mediated immunity via activation of toxin-specific cytotoxic T lymphocytes

D:-

Innate immunity by enhancement of complement-mediated bacterial lysis

Correct Answer:- Option-B

Question7:-

Select the *WRONG* statement regarding immunoglobulins

A:-

IgM is efficient at activating the classical complement pathway

B:-

IgA2 is the dominant subclass in serum

C:-

IgG2 has the poorest ability to cross placenta

D:-

IgE is responsible for defence against helminths

Correct Answer:- Option-B

Question8:-

Select the *WRONG* match between complement deficiency and the associated clinical condition

A:-

C1q deficiency - Systematic lupus erythematosus

B:-

C3 deficiency - Recurrent pyogenic bacterial infections

C:-

C5-C9 deficiency - Recurrent *Neisseria* infections

D:-

C1 inhibitor deficiency - Chronic granulomatous disease

Correct Answer:- Option-D

Question9:-

With respect to Interferon-Gamma Release Assays (IGRA), which of the following statements are correct?

1. IGRA measures interferon - γ released from sensitized T lymphocytes following exposure to ESAT-6 and CFP-10 antigens
2. IGRA shows false-positive results in individuals vaccinated with BCG
3. IGRA can reliably differentiate active tuberculosis from latent tuberculosis infection
4. IGRA does not use Purified Protein Derivative (PPD) as the stimulating antigen

A:-

1 and 4 only

B:-

1 and 2 only

C:-

2 and 3 only

D:-

1, 2 and 4

Correct Answer:- Option-A

Question10:-

Select the CORRECT statement?

A:-

Heterophile antigens are present in closely related species

B:-

Paul-Bunnell test uses sheep red blood cells to detect heterophile antibodies in Epstein-Barr virus infection

C:-

Weil-Felix reaction detects species-specific antibodies against rickettsial outer membrane proteins

D:-

Heterophile agglutination test is highly specific and confirmatory for the etiologic diagnosis of infectious diseases

Correct Answer:- Option-B

Question11:-

Which of the following toxins is commonly associated with community-acquired MRSA (CA-MRSA) strains?

A:-

Toxic shock syndrome toxin

B:-

Enterotoxin

C:-

Panton-Valentine Leukocidin toxin

D:-

Exfoliative toxin

Correct Answer:- Option-C

Question12:-

Microscopic Agglutination Test (MAT) for leptospirosis uses antigens in the form of

A:-

Killed leptospires

B:-

Purified LPS

C:-

Recombinant Proteins

D:-

Live leptospiral cultures

Correct Answer:- Option-D

Question13:-

Which of the following cell lines is a diploid cell line?

A:-

HeLa

B:-

BHK-21

C:-

WI-38

D:-

HEp-2

Correct Answer:- Option-C

Question14:-

Congenital Human Cytomegalovirus (HCMV) infection is best diagnosed by

A:-

CMV PCR of neonantal blood at 6 weeks of birth

B:-

CMV culture or PCR from urine or saliva within 3 weeks of birth

C:-

Detection of CMV IgG antibody in neonatal serum

D:-

Detection of owl's eye inclusions in placental tissue

Correct Answer:- Option-B

Question15:-

Which flavivirus shares the highest antigenic cross-reactivity with Japanese Encephalitis Virus potentially complicating serological diagnosis?

A:-

West Nile Virus

B:-

Yellow fever virus

C:-

Dengue virus

D:-

Zika Virus

Correct Answer:- Option-A

Question16:-

Best laboratory test to monitor response to antiviral therapy in chronic Hepatitis B virus infection

A:-

HBsAg level

B:-

Anti HBS titre

C:-

HBeAg level

D:-

HBV DNA quantitative PCR

Correct Answer:- Option-D

Question17:-

Which among the following dimorphic true pathogenic fungi causing systemic mycosis grow most quickly in culture?

A:-

Histoplasma capsulatum

B:-

Paracoccidioides brasiliensis

C:-

Coccidioides immitis

D:-

Blastomyces dermatitidis

Correct Answer:- Option-C

Question18:-

Onychomycosis is caused by all of the following fungus EXCEPT

A:-

Microsporum canis

B:-

Trichophyton rubrum

C:-

Trichophyton mentagrophytes

D:-

Epidermophyton floccosum

Correct Answer:- Option-A

Question19:-

Which of the following statement regarding Plasmodium vivax infection is incorrect?

A:-

Tends to infect young RBCs

B:-

Mature schizont contains 12-24 merozoites

C:-

Normal sized RBCs

D:-

Schuffner's dots after 8-10 hours

Correct Answer:- Option-C

Question20:-

Human Develop Neurocysticercosis by

A:-

Eating undercooked pork

B:-

Eating undercooked beef

C:-

Skin penetration of larvae

D:-

Ingestion of eggs of *Taenia solium*

Correct Answer:- Option-A

Question21:-

The most appropriate indicator organism for faecal contamination of drinking water is

A:-

Enterococcus faecalis

B:-

Escherichia coli

C:-

Clostridium perfringens

D:-

Salmonella typhi

Correct Answer:- Option-B

Question22:-

Which medium is best for air sampling in operation theatres?

A:-

Lowenstein-Jensen medium

B:-

MacConkey agar

C:-

Blood agar

D:-

TCBS agar

Correct Answer:- Option-C

Question23:-

The commonest mode of transmission of human brucellosis is

A:-

Inhalation of aerosols

B:-

Arthropod vector

C:-

Direct animal bite

D:-

Consumption of unpasteurized milk

Correct Answer:- Option-D

Question24:-

Which laboratory test is most useful for early diagnosis of rabies in humans?

A:-

Serum antibody detection

B:-

CSF culture

C:-

RT-PCR of saliva

D:-

Virus isolation in mice

Correct Answer:- Option-C

Question25:-

Which of the following situations requires handwashing rather than alcohol-based hand rub?

A:-

Before aseptic procedure

B:-

After touching intact skin

C:-

Before touching a patient

D:-

After caring for diarrhoea patient

Correct Answer:- Option-D

Question26:-

Which statement regarding needle-stick injury prevention is correct?

A:-

Recapping needles using both hands is recommended

B:-

Needles should be bent before disposal

C:-

Used needles should be disposed in puncture-resistant containers

D:-

Needles should be removed from syringes before disposal

Correct Answer:- Option-C

Question27:-

Which of the following organisms is most commonly associated with outbreaks due to contaminated disinfectants in hospitals?

A:-

Pseudomonas aeruginosa

B:-

Staphylococcus aureus

C:-

Clostridioides difficile

D:-

Enterococcus faecium

Correct Answer:- Option-A

Question28:-

The MOST appropriate specimen for screening MRSA carriage in hospitalized paitents is

A:-

Nasal swab

B:-

Throat swab

C:-

Axillary swab

D:-

Perianal swab

Correct Answer:- Option-A

Question29:-

The recommended blood volume per culture bottle for adults is

A:-

1-2 mL

B:-

3-5 mL

C:-

8-10 mL

D:-

15-20 mL

Correct Answer:- Option-C

Question30:-

For suspected anaerobic infections, the MOST appropriate specimen for culture is

A:-

Swab from wound surface

B:-

Tissue in formalin

C:-

Slough

D:-

Aspirated pus in sealed syringe

Correct Answer:- Option-D

Question31:-

Which of the following containers does not require calibration in clinical laboratory?

A:-

Electronic balance

B:-

Centrifuge

C:-

Liquid in glass thermometer

D:-

Automated pipets

Correct Answer:-Question Cancelled

Question32:-

Find the mismatched pair for biomedical waste disposal

A:-

Yellow bag : Sharp objects, needles

B:-

Blue bag : Glassware, vials

C:-

Black bag : Food waste

D:-

Red bag : Gloves, IV sets

Correct Answer:- Option-A

Question33:-

In which type of ELISA the absorbance is inversely proportional to the substrate concentration?

A:-

Indirect ELISA

B:-

Direct ELISA

C:-

Competitive ELISA

D:-

Sandwich ELISA

Correct Answer:- Option-C

Question34:-

Which among this is true regarding ion selective electrodes (ISEs)

A:-

The sodium ion selective electrode uses valinomycin

B:-

Calcium ISE is a liquid membrane electrode

C:-

pH electrode is a special membrane enzyme electrode

D:-

Oxygen and carbon dioxide electrodes have gas specific membranes

Correct Answer:-Question Cancelled

Question35:-

Most laboratory errors are attributed to which phase of laboratory process?

A:-

Proficiency

B:-

Analytical

C:-

Post analytical

D:-

Pre-analytical

Correct Answer:- Option-D

Question36:-

In capillary electrophoresis

A:-

Low molecular weight ions as well as proteins and macromolecules can be separated

B:-

Heat generation is a problem so lower voltage should be used

C:-

Aminoacids being weak chromophores, cannot be detected unless stains are used

D:-

Only uncharged molecules can be separated by capillary electrophoresis

Correct Answer:- Option-A

Question37:-

The number of ATP produced when one molecule of acetyl CoA is oxidized through the TCA cycle

A:-

12

B:-

10

C:-

32

D:-

36

Correct Answer:- Option-B

Question38:-

The lipoprotein that contains Apo, B100, Apo E and Apo C is

A:-

VLDL

B:-

LDL

C:-

HDL

D:-

Chylomicrons

Correct Answer:- Option-A

Question39:-

A test was performed on a urine sample using ammoniacal silver nitrate, potassium cyanide, sodium nitroprusside and magenta color was obtained, this indicated the presence of which amino acid in urine

A:-

Lysine

B:-

Tyrosine

C:-

Homocystine

D:-

Arginine

Correct Answer:- Option-C

Question40:-

L:S ratio 2:1 suggest :

A:-

Presence of phosphatidyl glycerol in amniotic fluid

B:-

Presence of phosphatidyl inositol in the amniotic fluid

C:-

Absence of sphingomyelin in the amniotic fluid

D:-

All of the above

Correct Answer:- Option-A

Question41:-

Which laboratory finding is abnormal in a pregnant woman at 24 weeks of gestation?

A:-

2 Hours post-glucose value after 50 g of glucose load is 180 mg/dL

B:-

Serum alkaline phosphatase level is 200 IU/L

C:-

Serum triglyceride level is 150 mg/dL

D:-

Alpha fetoprotein level is 200 ng/mL

Correct Answer:-Question Cancelled

Question42:-

Which of the following statement is/are correct about cardiac markers?
(i) CK-MB isoenzyme value in serum is increased in myocardial infarction
(ii) Patients with myocardial infarction have high plasma concentrations of Brain Natriuretic peptide
(iii) Myoglobin is raised after myocardial infarction

A:-

only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-C

Question43:-

Normal reference level of serum uric acid is

A:-

0.7 - 1.5 mg/dL

B:-

3 - 7 mg/dL

C:-

20 - 40 mg/dL

D:-

70 - 100 mg/dL

Correct Answer:- Option-B

Question44:-

Urobilinogen is synthesized in

A:-

Liver

B:-

Kidney

C:-

Pancreas

D:-

Intestine

Correct Answer:- Option-D

Question45:-

Which of the following statement is/are causes of haemolytic jaundice?

(i) Rh incompatibility

(ii) Hereditary spherocytosis

(iii) Viral hepatitis

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-A

Question46:-

Which of the following statement is/are correct about functions of Vitamin C?

(i) Ascorbic acid is necessary for the post-translational hydroxylation of leucine and lysine

(ii) Ascorbic acid enhances iron absorption from the intestine

(iii) Ascorbic acid helps the enzyme folate reductase to reduce folic acid to tetrahydrafolic acid

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-B

Question47:-

Which of the following are copper containing enzyme?

(i) ALA synthase

(ii) Tyrosinase

(iii) Lysyl oxidase

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-B

Question48:-

Which of the following statement is/are correct about tRNA?

(i) The acceptor arm has seven base pairs. The end sequence is CCA-3'

(ii) The base sequence of anticodon arm are complementary to that of the mRNA codon

(iii) DHU arm of tRNA is involved in binding tRNA to ribosomes

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-A

Question49:-

Which of the following statement is / are correct about reversible inhibitors of translation?

(i) Tetracycline bind to the 30S subunit of the bacterial ribosome and so inhibit attachment of amino acyl tRNA to the A site of ribosomes

(ii) Chloramphenicol inhibits the peptidyl transferase activity of bacterial ribosomes.

(iii) Penicillin prevents the translocation process

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-A

Question50:-

Which of the following statement is/are correct about clinical applications of polymerase chain reaction?

(i) Diagnosis of bacterial and viral disease

(ii) Diagnosis of genetic diseases

(iii) Fossil studies

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-D

Question51:-

Which of the following diseases are prevented by live attenuated vaccines?

(i) Mumps

(ii) Yellow fever

(iii) Rubella

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-D

Question52:-

Which of the following statement is/are correct about Immunoglobulin?

(i) Immunoglobulin G is seen in secondary immune response and can pass from vascular compartment to interstitial space

(ii) Immunoglobulin M is dimer and is seen in seromucous secretions of gastrointestinal tract

(iii) Immunoglobulin E mediate hypersensitivity and anaphylaxis

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

All of the above (i), (ii) and (iii)

Correct Answer:- Option-C

Question53:-

What is the physiological impact of prolonged tourniquet application for more than one minute during venipuncture?

A:-

Accelerated glycolysis in the sample collection tube

B:-

Decreased serum potassium due to cellular uptake

C:-

Hemodilution and decreased protein concentration

D:-

Hemoconcentration and elevated levels of protein-bound analytes

Correct Answer:- Option-D

Question54:-

A 45-year-old patient on maintenance lithium therapy for bipolar disorder presents for a routine 6-monthly check up. Which of following parameters may be increased in the patient due to the chronic effect of lithium?

(i) Bilirubin
(ii) Calcium
(iii) Creatinine
(iv) TSH

A:-
Only (i), (ii) and (iii)

B:-
Only (i), (ii) and (iv)

C:-
Only (ii), (iii) and (iv)

D:-
All of the above (i), (ii), (iii) and (iv)

Correct Answer:- Option-C

Question55:-

The WHO ASSURED criteria for point of Care Testing (POCT), includes the following
(i) Affordable, Sensitive, Specific
(ii) Universal, Reliable and Robust
(iii) Equipment-free, Delivered
(iv) Electronic, Documented

A:-
Only (i) and (iii)

B:-
Only (ii) and (iv)

C:-
Only (i), (ii) and (iii)

D:-
Only (i), (ii) and (iv)

Correct Answer:- Option-A

Question56:-

Which methodology is used in Six Sigma to improve an existing biochemical assay process?

A:-

Define, Measure, Analyse, Design, Verify (DMADV)

B:-

Define, Measure, Analyse, Improve, Control (DMAIC)

C:-

Kaizen

D:-

Plan, Do, Check, Act (PDCA)

Correct Answer:- Option-B

Question57:-

A 65-year-old hospitalized patient developed acute renal failure. Laboratory findings showed BUN/creatinine ratio > 20, urine sodium < 20 mmol/L and a fractional excretion of sodium (FeNa) < 1%. What is the most likely diagnosis?

A:-

Acute Interstitial Nephritis

B:-

Acute Tubular Necrosis

C:-

Chronic Kidney Disease

D:-

Prerenal Azotemia

Correct Answer:- Option-D

Question58:-

A 30-year-old patient presented with a history of recurrent kidney stones and urinalysis revealed hexagonal crystals. Which test will help to confirm the diagnosis?

A:-

Urine amino acid chromatography

B:-

Urine Calcium/Creatinine ratio

C:-

Urine Citrate level

D:-

Urine uric acid level

Correct Answer:- Option-A

Question59:-

During the 'Window Period' of HIV infection, which biochemical marker is the first to be detectable in a patient's serum using a fourth generation ELISA?

A:-

Anti-gp41 IgG

B:-

gp 120 antibodies

C:-

p24 antigen

D:-

Reverse transcriptase enzyme

Correct Answer:- Option-C

Question60:-

In the setting of fasting hypoglycemia, the pairing of elevated insulin level with low C-peptide level suggests the possibility of

A:-

Endogenous insulin production (insulinoma)

B:-

Exogenous insulin administration

C:-

Glycogen Storage Disease Type I

D:-

Endogenous glucagon production (glucagonoma)

Correct Answer:- Option-B

Question61:-

A hospital wants to sterilise plastic catheters that cannot tolerate heat or moisture. The most appropriate method is

A:-

Autoclaving at 121°C

B:-

Ethylene oxide

C:-

Hot air oven

D:-

UV radiation

Correct Answer:- Option-B

Question62:-

Which statements about GeneXpert MTB (CBNAAT) are TRUE?

(i) Detects rifampicin resistance

(ii) Detects isoniazid resistance

(iii) Suitable for extrapulmonary samples

(iv) Uses real-time PCR

A:-

(i), (ii) and (iv)

B:-

(ii), (iii) and (iv)

C:-
(i), (iii) and (iv)

D:-
(i), (ii), (iii) and (iv)

Correct Answer:- Option-C

Question63:-
Alpha-haemolytic, optochin-sensitive, bile-soluble organism is

A:-
Enterococcus faecalis

B:-
Streptococcus pneumoniae

C:-
Streptococcus pyogenes

D:-
Viridans streptococci

Correct Answer:- Option-B

Question64:-
Immunochromatographic Tests (ICTs) are also called

A:-
Lateral flow assays

B:-
Flow through assays

C:-
Neutralization assays

D:-
Precipitation assays

Correct Answer:- Option-A

Question65:-

Minimum Inhibitory Concentration (MIC) is defined as

A:-

Highest concentration inhibiting visible growth

B:-

Highest concentration killing bacteria

C:-

Lowest concentration inhibiting visible growth

D:-

Lowest concentration killing bacteria

Correct Answer:- Option-C

Question66:-

A microbiology lab cultures a specimen on non-nutrient agar with E.coli microorganism migrate leaving tracks on the agar surface. This culture technique is used for isolation of

A:-

Balantidium coli

B:-

Entamoeba histolytica

C:-

Giardia lamblia

D:-

Naegleria fowleri

Correct Answer:- Option-D

Question67:-

A young adult presents with hypopigmented macules on the trunk. KOH mount shows short hyphae and round yeast cells ("spaghetti and meatballs"). The most likely diagnosis is

A:-

Candidiasis

B:-

Pityriasis versicolor

C:-

Tinea corporis

D:-

White piedra

Correct Answer:- Option-B

Question68:-

Shell vial assay detects viral growth by

A:-

Cytopathogenic effect only

B:-

Electron microscopy

C:-

Hemagglutination

D:-

Immunofluorescence

Correct Answer:- Option-D

Question69:-

Antigenic drift in influenza virus is characterized by

(i) Genetic reassortment

(ii) Occurs in Influenza A and B

(iii) Point mutations

(iv) Responsible for seasonal epidemics

A:-

(i), (iii) and (iv)

B:-

(i), (ii) and (iii)

C:-

(ii), (iii) and (iv)

D:-

(i), (ii), (iii) and (iv)

Correct Answer:- Option-C

Question70:-

Which of the following is the key cytokine of delayed-type hypersentivity reaction and is also used for the diagnosis of latent tuberculosis?

A:-

Interferon alpha

B:-

Interferon gamma

C:-

Tumour necrosis factor alpha

D:-

Tumour necrosis factor beta

Correct Answer:- Option-B

Question71:-

The primary purpose of adjuvants in vaccines is to

A:-

Enhance immune response

B:-

Kill pathogens

C:-

Preserve vaccine

D:-

Reduce side effects

Correct Answer:- Option-A

Question72:-

The MOST important single measure to prevent nosocomial (health care associated) infections is

A:-

Antibiotic prophylaxis

B:-

Use of PPE only

C:-

Hand hygiene

D:-

Patient isolation

Correct Answer:- Option-C

Question73:-

Karyotyping is done for

A:-

Chromosomal disorders

B:-

Autosomal recessive disorders

C:-

Autosomal dominant disorders

D:-

Linkage disorders

Correct Answer:- Option-A

Question74:-

Nuclear stain used in papanicolaou stain is

A:-

Haematoxyline

B:-

Eosine

C:-

Orange G

D:-

Lithium carbonate

Correct Answer:- Option-A

Question75:-

Karyotyping is done in which phase of cell cycle

A:-

Anaphase

B:-

Telophase

C:-

Metaphase

D:-

Sphase

Correct Answer:- Option-C

Question76:-

Special stain to demonstrate iron is

A:-

Perl stain

B:-

PAS stain

C:-

Masson fontana

D:-

Reticulin stain

Correct Answer:- Option-A

Question77:-

Anticoagulant of choice for prothrombin time is

A:-

Heparin

B:-

EDTA

C:-

Oxalate

D:-

Trisodium citrate

Correct Answer:- Option-D

Question78:-

Most common blood transfusion reaction is

A:-

Febrile haemolytic transfusion reactions

B:-

Haemolysis

C:-

Transmission of infections

D:-

Electrolyte imbalance

Correct Answer:- Option-A

Question79:-

The characteristic finding in peripheral smear of new born with ABO incompactibility is

A:-
Microsperocytes

B:-
Fragmemented RBCs

C:-
Elliptocytes

D:-
Polychromasia

Correct Answer:- Option-A

Question80:-
The stain for Reticulocyte count is

A:-
Brillant cresyle blue

B:-
Eosine

C:-
Papanicolaou stain

D:-
Aematoxylline

Correct Answer:- Option-A

Question81:-
MCHC is increased in

A:-
Iron deficiency anaemia

B:-

Thalassemia

C:-

Spherocytosis

D:-

All of the above

Correct Answer:- Option-C

Question82:-

True about Iron deficiency anaemia

A:-

Microcytic hypochromic rbcs

B:-

Increased bone marrow iron

C:-

Decreased total iron binding capacity

D:-

Increased ferritin

Correct Answer:- Option-A

Question83:-

All are 3 chemical tests for ketone bodies in urine except

A:-

Rotherastest

B:-

Gerhardts test

C:-

Hart test

D:-

Hellers test

Correct Answer:- Option-D

Question84:-

Heteropolysaccharides, containing uronic acid and amino sugars are known as

A:-

Starch

B:-

Glycosaminoglycans

C:-

Inulin

D:-

Chitin

Correct Answer:- Option-B

Question85:-

In chromatography Rf value stands for

A:-

Ratio of figure

B:-

Reading figure

C:-

Real fronts

D:-

Ratio of fronts

Correct Answer:- Option-D

Question86:-

All are enzymes used for diagnostic purposes, except

A:-

Taq polymerase

B:-

Lipase

C:-

Urokinase

D:-

Hexokinase

Correct Answer:- Option-C

Question87:-

Which vitamin among the following is a prohormone?

A:-

Vitamin D

B:-

Vitamin C

C:-

Vitamin A

D:-

Vitamin E

Correct Answer:- Option-A

Question88:-

Disorders of purine metabolism includes
(i) Orotic aciduria
(ii) Xanthinuria
(iii) Gout
(iv) Lesch Nyhan syndrome

A:-
(i), (iii), (iv)

B:-
(ii), (iii), (iv)

C:-
(i) only

D:-
(iii), (iv) only

Correct Answer:- Option-B

Question89:-
Normal glucose level in CSF

A:-
20 - 40 mg/dl

B:-
70 - 110 mg/dl

C:-
60 - 100 mg/dl

D:-
50 - 70 mg/dl

Correct Answer:- Option-D

Question90:-
Following are the tests for bile pigments, except

A:-

Fouchet's test

B:-

Mucic acid test

C:-

Gmelin's test

D:-

Ehrlich's test

Correct Answer:- Option-B

Question91:-

Normal anion gap is

A:-

20 mmol/liter

B:-

12 mmol/liter

C:-

24 mmol/liter

D:-

15 mmol/liter

Correct Answer:- Option-B

Question92:-

Non Protein Nitrogen (NPN) includes
(i) Urea
(ii) Ammonia
(iii) Uric acid
(iv) Creatinine

A:-

(i), (iii), (iv)

B:-

(i), (ii), (iv)

C:-

(i), (iii)

D:-

(i), (iv)

Correct Answer:-Question Cancelled

Question93:-

POCT stands for

A:-

Patient Care Testing

B:-

Patient Outcome Testing

C:-

Period of Care Testing

D:-

Point of Care Testing

Correct Answer:- Option-D

Question94:-

Important acute phase proteins are

(i) Globulin

(ii) CRP

(iii) Albumin

(iv) Ferritin

(v) Haptoglobin

A:-

(i), (iii), (iv)

B:-

(ii), (iii), (iv)

C:-

(ii), (iii), (v)

D:-

(ii), (iv), (v)

Correct Answer:-Question Cancelled

Question95:-

Recircularisation of the sticky ends of the DNA can be prevented by

(i) Ligation by restriction endonucleases

(ii) Homopolymer tailing

(iii) Transfection

A:-

Only (ii)

B:-

(i) and (ii)

C:-

Only (iii)

D:-

(i) and (iii)

Correct Answer:- Option-A

Question96:-

Which enzyme activity of Taq DNA polymerase is essential for TaqMan assay?

A:-

Ligase activity

B:-

Exonuclease 3' - 5' activity

C:-

Exonuclease 5' - 3' activity

D:-

Reverse transcriptase activity

Correct Answer:- Option-C

Question97:-

Restriction Fragment Length Polymorphisms (RFLPs) can be used to detect human genetic defects in prospective parents or fetal tissue for
(i) Sickle cell anemia
(ii) Cystic fibrosis
(iii) Retinoblastoma

A:-

Only (i) and (ii)

B:-

Only (ii) and (iii)

C:-

Only (i) and (iii)

D:-

(i), (ii) and (iii)

Correct Answer:- Option-D

Question98:-

The authorisation certificate for Biomedical waste handling is issued by

A:-

Municipal Corporation

B:-

Hospital Administration

C:-

State Pollution Control Board

D:-

Ministry of Health

Correct Answer:- Option-C

Question99:-

In NABL-accredited laboratories, external quality control primarily ensures

A:-

Staff competence

B:-

Method validation

C:-

Internal Quality Control

D:-

Inter-Laboratory Comparability

Correct Answer:- Option-D

Question100:-

After accidental needle-stick injury, the immediate first step is to

A:-

Report infection control authority

B:-

Wash the area with soap and water

C:-

Apply antiseptic and bandage

D:-

Start post-exposure prophylaxis

Correct Answer:- Option-B