## **PROVISIONAL ANSWER KEY**

Question 77/2024/OL

Paper Code:

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Question1:-Which of the following is **NOT CORRECT** about Lamins?

A:-Are seen in nuclear lamina of cells

B:-Are a family of intermediate filaments

C:-Are constituents of basement membrane

D:-Mutations in Lamin genes is seen in progeria

Correct Answer:- Option-C

Question2:-Mechanism of cell injury in Cyanide poisoning is by

A:-Direct poisoning of mitochondrial cytochrome oxidase

B:-Conversion to reactive toxic metabolite

C:-Free radical mediated injury

D:-Binding of sulfhydryl group of cell membrane

Correct Answer:- Option-A

Question3:-A patient who received thrombolytic therapy for Myocardial infarction, has increased Serum Creatine Kinase-MB after therapy. What is the most likely biochemical basis for rise in CK-MB?

A:-Increased activity of catalase

B:-Release of calcium from endoplasmic reticulum

C:-Increased generation of oxygen free radicals

D:-Reduced oxidative phosphorylation

Correct Answer:- Option-C

Question4:-Mention the correct sequence of journey of leukocytes in inflammation

A:-Rolling, migration, adhesion to endothelium, margination

B:-Rolling, margination, adhesion to endothelium, migration

C:-Margination, rolling, adhesion to endothelium, migration

D:-Adhesion to endothelium, rolling, margination, migration

Correct Answer:- Option-C

Question5:-Select the vasoconstrictor in the group.

A:-Prostaglandin PGI2

B:-Thromboxane A2

C:-Prostaglandin PGE1

D:-Prostaglandin PGD2

Correct Answer:- Option-B

Question6:-Which is NOT TRUE about Neutrophil extracellular traps (NETs)?

A:-NETs provide a high concentration of antimicrobial substances at sites of infection

B:-NETosis is a cell death process

C:-NET formation in the circulation is dependent on platelet activation

D:-RNA and histones represent the major constituents

Correct Answer:- Option-D

Question7:-In which tumor if BRAF Mutations detected in nearly 100% cases?

A:-Hairy cell leukemia

B:-Melanoma

C:-Colon carcinoma

D:-Dendritic cell tumors

Correct Answer:- Option-A

Question8:-Which of the following subcellular structure in macrophages is important for accumulation of pigment seen in heart failure cells?

A:-Endoplasmic reticulum

B:-Lysosome

C:-Ribosome

D:-Golgi apparatus

Correct Answer:- Option-B

Question9:-What is the abnormality in Chronic granulomatous disease?

A:-Poor chemotaxis

B:-Deficient NADPH oxidase

C:-Defective lysosomal granules

D:-Defective HOCI production

Correct Answer:- Option-B

Question 10:-In a study of Pancreatic Ductal Adenocarcinoma (PDAC), molecular analysis showed continued activation of cytoplasmic kinases in 90% of cases. Which of the Oncogene is likely to be involved

A:-MYC

B:-APC

C:-RAS

D:-ERBB2

Correct Answer:- Option-C

Question11:-A term infant has ambiguous external genitalia. Abdominal CT showed enlarged adrenal glands, uterus, fallopian tubes, ovaries; Chromosomal analysis indicated 46 XX karyotype. The infant is likely to have the abnormality

A:-Testicular ferminization

B:-Female pseudo hermaphroditism

C:-Non disjunctional event with loss of Y chromosome

D:-Fragile X syndrome

Correct Answer:- Option-B

Question12:-Which of the following is the Marker for diffuse systemic sclerosis?

A:-Anti-Sm

B:-Anti Jo-1

C:-Anticentromere

D:-Anti Scl-70

Correct Answer:- Option-D

Question13:-Molecular analysis of cells from multiple colonic lesions from a patient who had carcinoma colon showed changes in *hPMS1*, *hPMS2*, *hMLH1* genes. Which mode of carcinogenesis applies in this case?

A:-Carcinogenesis is a multistep process

B:-Inability to repair DNA is carcinogenic

C:-Many oncogenes are activated by translocations

D:-Tumor promoters induce proliferation

Correct Answer:- Option-B

Question14:-Which is the INCORRECT statement about BRCA1 AND BRCA2 genes.

A:-Are DNA repair genes

B:-Have high risk for ovarian cancers

C:-Are inactivated in both familial and sporadic breast cancers

D:-BRCA2 is mutated in Fanconi anemia

Correct Answer:- Option-C

Question15:-Choose the <u>INCORRECT</u> statement from the following descriptions of Venous thrombosis?

A:-Venous thrombi are almost invariably occlusive

B:-Venous thrombi are not attached to the vessel wall

C:-Contain lines of Zahn

D:-Venous thrombi grow in the direction of flow

Correct Answer:- Option-B

Question16:-Which of the following will show elevated blood levels in chronic lead poisoning?

- A:-Alanine aminotransferase
- B:-Creatine kinase
- C:-Sodium arsenite
- D:-Zinc-protoporphyrin (ZPP)

Correct Answer:- Option-D

Question17:-Release of which of the following into the cytosol triggers Apoptosis?

- A:-Phospholipase
- B:-BCL-2
- C:-Catalase
- D:-Cytochrome c

Correct Answer:- Option-D

Question 18:-Which of the following enzymes protect the cell in free radical injury caused by hydrolysis of water as in radiation?

- A:-Glutathione peroxidase
- B:-Phospholipase
- C:-Endonuclease
- D:-Protease

Correct Answer: - Option-A

Question19:-Progression in which phase of cell cycle is controlled by Cyclin B and the active Cyclin dependent kinase 1 (CDK1)?

- A:-G0 to G1
- B:-G2 to M
- C:-S to G2
- D:-G1 to S

Correct Answer:- Option-B

Question 20:-Role of CD 4 positive  $T_{H^1}$  cells is in activation of

- A:-macrophages
- B:-mast cells
- C:-neutrophils
- D:-plasma cells

Correct Answer:- Option-A

Question21:-What will be the renal biopsy findings in Acute cellular rejection after renal transplantation?

- A:-Inflammation of glomerular and pertibular capillaries
- B:-Fibrosis of interstitium and glomeruli, with thickened blood vessels
- C:-Fibrinoid necrosis of renal arterioles with thrombosis
- D:-Interstitial infiltration by CD3+ lymphocytes, tubular epithelial damage

Correct Answer:- Option-D

Question22:-Which of the following is an acquired hypercoagulable state?

A:-Factor V mutation

B:-Protein C deficiency

C:-Antiphospholipid antibody syndrome

D:-Antithrombin III deficiency

Correct Answer:- Option-C

Question23:-Choose the <u>right option</u> correctly describing the features of Fat embolism;

- (i) Typically seen 1-3 days after fractures of long bones
- (ii) Fat emboli are seen in cerebral and pulmonary vasculature
- (iii) Microscopically fat globules and bone marrow emboli can be found
- (iv) Anemia and thrombocytopenia can be seen

A:-only (i and iii) are correct

B:-only (ii and iv) are correct

C:-only (i, ii and iii) are correct

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

Correct Answer:- Option-D

Question24:-All statements about Congenital syphilis are true, EXCEPT;

A:-Cardiovascular syphilis occur in 25% cases

B:-Late abortion or still birth occur in 25% case

C:-Eighth nerve deafness develop as a late complication to congenital syphilis

D:-Infantile syphilis show rash, osteochondritis, liver fibrosis

Correct Answer:- Option-A

Question25:-Which chemical carcinogen is a known risk factor for acute myeloid leukemia?

A:-Benzene

B:-Vinyl chloride

C:-Cadmium

D:-Radon

Correct Answer:- Option-A

Question26:-Morphologic changes in myocardial infarction is given: Gross: Affected area has hyperemic border with central yellow tan softening. Histology showed beginning of disintegration of dead myofibers with dying neutrophils, early phagocytosis of dead cells by macrophages at infarct border

How much time has elapsed since the onset of infarction and death?

A:-1-3 days

B:-3-7 days

C:-7-8 days

D:-8-10 days

Correct Answer:- Option-B

Question27:-Select the single best response. In Atherosclerosis, the formation of foamy macrophages is due to

A:-Ingestion of modified VLDL by macrophages

B:-Ingestion of modified LDL by macrophages

C:-Ingestion of modified Triglycerides by macrophages

D:-Ingestion of modified HDL by macrophages

Correct Answer:- Option-B

Question28:-A patient presented with difficulty breathing and coughing of few years duration. A bronchoscopic biopsy was performed. The histology showed hyperplasia of mucous glands, chronic inflammation and squamous metaplasia of bronchial epithelium. What is your probable diagnosis?

A:-Bronchial Asthma

B:-Emphysema

C:-Chronic Bronchitis

D:-Bronchiectasis

Correct Answer:- Option-C

Question29:-Select the best response:

Patient presented to Hospital with high fever, cough, shortness of breath, muscle aches, body aches, severe headaches, diarrhea, nausea, vomiting and confusion. Chest X-ray showed patchy consolidation. Sputum examination showed rod shaped structures 3-5  $\mu$ m long. Culture showed filamentous forms that are 10-25  $\mu$ m long. Which of the following is the most probable organism responsible for this condition.

A:-Staphylococcus Aureus

B:-Streptococcus pneumoniae

C:-Moraxella catarrhalis

D:-Legionella pneumophila

Correct Answer:- Option-D

Question 30:-Regarding Helicobacter Pylori: Read the following statements:

- i. Direct transmission of H pylori from one person to another through saliva, vomit or stool is very rare
- ii. Urea breath test is a non-invasive, accurate method to detect H pylori
- iii. Testing for antibodies against H pylori in blood can help in diagnosis
- iv. Infection by H pilori does not increase the risk of Gastric cancer
- v. In stool, H pylori antigens or DNA can be detected through antigen tests or PCR tests
- vi. Endoscopic biopsy allows direct visualization and sampling of the stomach lining to detect H pylori

A:-i. ii and iii are correct

B:-ii, iii and iv are correct

C:-iv, v and vi are correct

D:-ii, v and vi are correct

Correct Answer:- Option-D

Question31:-A liver biopsy showed the following histology: Ground glass hepatocytes, ballooning degeneration, disruption of normal architecture of liver lobules and varying degrees of inflammation. Which among the following is most likely to be the responsible agent?

A:-Hepatitis A virus

B:-Hepatitis B virus

C:-Hepatitis C virus

D:-Hepatitis E virus

Correct Answer:- Option-B

Question32:-Infection of the biliary tract by the following increases the likelihood or pigment stone formation in Gall bladder : EXCEPT

A:-Escherichia Coli

**B:-Ascaris Lumbricoides** 

C:-Liver Fluke: Clonorchis Sinensis

D:-Group A Streptococcus (GAS)

Correct Answer:- Option-D

Question33:-Secondary membranous nephropathy may occur as an association with the following infections : Except

A:-Syphilis

B:-Trypanosoma Cruzi

C:-Schistosomiasis

D:-Malaria

Correct Answer:- Option-B

Question34:-On Electron Microscopy of glomeruli, subepithelial humps are characteristically seen in which of the following conditions

A:-Goodpasture syndrome

B:-Post infectious glomerulonephritis

C:-Membranoproliferative glomerulonephritis

D:-Minimal change disease

Correct Answer:- Option-B

Question35:-All of the following are true regarding Reed's Syndrome: Except

A:-Increased risk of Uterine Leiomyosarcomas

B:-Multiple Cutaneous Leiomyomas

C:-Increased incidence of Renal Cell Cancers

D:-Autosomal Recessive condition

Correct Answer:- Option-D

Question36:-Regarding Diabetes Mellitus

- i. Type 1 is immune mediated
- ii. Type 2 is due to insulin resistance
- iii. Type 2 is associated with Major linkage to MHC class 2 genes
- iv. Type 2 shows insulitis in histology
- v. Type 1 patients are usually overweight
- vi. Type 1 patients may progress to diabetic ketoacidosis in absence of insulin therapy

A:-i, ii, iii are correct

B:-iii, iv, vi are correct

C:-i, ii, vi are correct

D:-ii, iii, v are correct

Correct Answer:- Option-C

## Question37:-Regarding hyperthyroidism

- i. Heat intolerance is common
- ii. They can have elevated cardiac output
- iii. They can have increased bone density
- iv. They can have hypertrophy of skeletal muscle
- v. They can have tremor, hyperactivity, anxiety
- vi. Graves disease patients show diffuse hypertropy and hyperplasia of thyroid gland
- vii. Graves disease is an autoimmune condition

A:-i, ii, iii are correct

B:-ii, iii, iv are correct

C:-iv, v, vi are correct

D:-v, vi, vii are correct

Correct Answer:- Option-D

## Question38:-Regarding Hypercortisolism

- i. Majority are the result of endogenous glucocorticoids
- ii. ACTH secreting pituitary adenomas account for majority of cases of endogenous hypercortisolism
- iii. Primary adrenal neoplasms are the most common causes for ACTH independent cushing syndrome
- iv. Increased ACTH secretion results in variable degree of nodular cortical hyperplasia of adrenal glands
- v. The disorder is more common in women
- vi. Hypotension and increased libido may be seen

A:-i, ii, iii are correct

B:-ii, iii, iv are correct

C:-iv, v, vi are correct

D:-i, v, vi are correct

Correct Answer:- Option-B

Question39:-Regarding Growth hormone

- i. Excess growth hormone causes acromegaly in children
- ii. Excess growth hormone causes gigantism in adults
- iii. In acromegaly there is hyperostosis in both the spine and hips
- iv. Excess growth hormone increases risk of diabetes mellitus
- v. Excess growth hormone increase risk of congestive heart failure
- vi. Excess growth hormone increases risk of hypotension

A:-i, ii, iii are correct

B:-ii, iii, iv are correct

C:-iii, iv, v are correct

D:-iv, v, vi are correct

Correct Answer:- Option-C

Question 40:- The following laboratory findings were found in a patient :

Peripheral smear showed spherocytes with polychromasia, reticulocyte count: 7%

Albumin level: 3.4 gm/dL, LDH: 1460 U/L, unconjugated bilirubin: 1.4 mg/dL,

Haptoglobin: 25 mg/dL

What is the most possible diagnosis?

A:-Iron deficiency anemia

B:-Hemolytic anemia

C:-Folate deficiency

D:-Vit B 12 deficiency

Correct Answer:- Option-B

Question41:-Select the best response. Transient Aplastic Crisis may be seen because of infection by

A:-Parvovirus

B:-Epstien Barr Virus

C:-Cytomegalovirus

D:-HIV

Correct Answer:- Option-A

Question42:-Select the best response. Read the following statements about chemical mediators for Neutrophil chemotaxis :

- i. Cytokine IL-8 is an endogenous chemotactic factor for neutrophils
- ii. Complement component C5a is an endogenous chematotactic factors for neutrophils
- iii. Arachidonic acid metabolite leukotriene B4 is an endogenous chemotactic factor for neutrophils
- iv. Platelet factor 4 is an endogenous chemotactic factor for neutrophils
- v. Nitri oxide is an endogenous chemotactic factor for neutrophils
- vi. MCP-1 is an endogenous chemotactic factor for neutrophils

A:-i, ii and vi is correct

B:-ii, iii and v is correct

C:-ii, iii and iv is correct

D:-iv, v and vi is correct

Correct Answer:- Option-C

Question43:-Regarding Leukemias, select the best response:

- i. Cytochemical staining is useful to differentiate different leukemias
- ii. Western blot is useful to differentiate different types of leukemias
- iii. Enzyme linked immunosorbent assay is useful to differentiate different types of leukemias
- iv. Fluorescence in situ hybridization (FISH) is useful to detect specific genetic mutations
- v. Immunohistochemistry can be useful in sub-classifying leukemias
- vi. Flow cytometry is useful to differentiate leukemias

A:-i, ii and iii are correct

B:-ii, iii and iv are correct

C:-i, iv and vi are correct

D:-iii, v and vi are correct

Correct Answer:- Option-C

Question44:-Read the following statements about philadelphia chromosome:

- i. BCR-ABL fusion gene is present on the long arm of chromosome 9
- ii. BCR stands for breakpoint cluster region
- iii. ABL stands for Abelson Murine Leukemia virus gene
- iv. In CML the nature of fusion of BCR gene and ABL gene is side by side fashion
- v. The product of the fusion gene BCR-ABL is a constitutively active protein tyrosine kinase that promotes cellular proliferation and suppresses apoptosis
- vi. Chronic Myeloid Leukemia patients who are philadelphia chromosome <u>negative</u> have better prognosis

A:-i, ii and iii are correct

B:-ii, iii and iv are correct

C:-ii, iii and v are correct

D:-iii. v and vi are correct

Correct Answer:- Option-C

Question45:-Regarding Glanzmann thrombasthenia, all are true EXCEPT:

A:-It is Autosomal Dominant

B:-Platelets fails to aggregate in response to ADP, Collagen

C:-There is deficiency of dysfunction of integrin IIb IIIa

D:-The associated bleeding tendency is often severe

Correct Answer:- Option-A

Question46:-Regarding Acute bacterial (pyogenic) Meningitis : Choose the best response :

i. Escherichia Coli or Group B streptococci is the common causative agents in infants

- ii. CSF examination shows low glucose, high protein content and presence of neutrophils
- iii. The waterhouse-Friderichsen syndrome results from hemorrhagic infarction of pituitary
- iv. Neisseria meningitides is the common causative agent in young adults
- v. Streptococcus pneumonia may be the causative agent in older adults

A:-i, ii and iii are correct

B:-ii, iii and iv are correct

C:-iii, iv and v are correct

D:-i, ii and iv are correct

Correct Answer:- Option-D

Question47:-A 40 year old HIV patient came to Hospital with complaints of memory loss, loss of language ability, weakness in the legs and arms and vision problems. His family says he is also showing personality changes and that all the other complaints are progressing very fast. On examination it was found that he had loss of coordination, cognitive impairment, ataxia affecting limbs and also during walking and hemiparesis. Brain biopsy was performed, histology showed areas of demyelination in a subcortical location with reactive astrocytosis and perivascular lymphocytic cuffing. Several large infected oligodendrocytes with inclusion-bearing dark nuclei or clear nucleoplasm having marginated chromatin were present in the periphery of demyelinated area. The demyelinated areas revealed small around lesions with meyelin breakdown. Numerous macrophages had infiltrated and they contained fragmented myelin.

Which among the following is the most likely diagnosis

A:-Progressive multifocal leukoencephalopathy

B:-Alzheimer's disease

C:-Huntington's disease

D:-Parkinson's disease

Correct Answer:- Option-A

Question48:-Regarding Rheumatoid Arthritis:

- i. Anti CCP antibody testing is a good method to diagnose rheumatoid arthritis
- ii. Histology of Rheumatoid nodules show central zone of fibrinoid necrosis surrounded by a prominent rim of activated macrophages, lymphocytes and plasma cells
- iii. High Rheumatoid factor titers indicate a good prognosis
- iv. Part of spine that is commonly involved is this cervical spine
- v. Testing for ANA can help confirm a diagnosis of rheumatoid arthritis
- vi. Testing for CRP levels is not helpful with management of rheumatoid arthritis

A:-i, ii and iii are correct

B:-ii, iii and v are correct

C:-iv, v and vi are correct

D:-i, ii and iv are correct

Correct Answer:- Option-D

Question 49:-Read the following statement about melanocytic nevus:

- i. Histology of congenital melanocytic nevus shows nevus cells in dermis and around adnexa, neurovascular bundles and blood vessels
- ii. Histology of blue nevus shows highly dendritic melanocytes with heave pigmentation and may be associated with fibrosis
- iii. Histology of spitz nevus shows small round melanocytes in deep dermie with no melanin surrounded by fibrosis and dense lymphocytic infiltrate
- iv. Histology of halo nevus shows a dense, somewhat band like lymphocytic infiltrate present in the papillary and often reticular dermis with nests of nevus cells located centrally
- v. Histology of dysplastic nevus shows coalescent intra-epidermal nests of atypical melanocytes

A:-i, ii and iii are correct

B:-ii, iii and iv are correct

C:-iii, iv and v are correct

D:-i, ii and iv are correct

Correct Answer:- Option-D

Question50:-Regarding epidermolytic hyperkeratosis :

- i. It is autosomal dominant
- ii. Mutations have been found in Keratin 1 (K1) and Keratin 10 (K10) gene
- iii. Hallmark features are erythroderma, blistering and skin denudation
- iv. Clinical presentation is in the elderly age group
- v. Skin is prone to cytolysis and blistering
- vi. Histology shows orthohyperkeratosis, hypergranulosis and cytolysis of the suprabasal and granular layers
- vii. With correct treatment cure and normal life is possible

A:-i, v and vii are correct

B:-ii, iii and iv are correct

C:-iii, iv and v are correct

D:-iv, v and vi are correct

Correct Answer:- Option-B

Question51:-Who is known as the father of hand hygiene?

A:-Joseph Lister

B:-Ignaz Semmelweis

C:-Paul Ehrlich

D:-Robert Koch

Correct Answer:- Option-B

Question52:-The bacteria that use reduced, preformed organic molecules as carbon sources are knwon as

A:-Lithotrophs

**B:-Organotrophs** 

C:-Autotrophs

D:-Heterotrophs

Correct Answer:- Option-D

Question53:-Which of the following statement regarding bacterial spores is not true?

A:-For a given species, the precise position, shape and relative size of the spore are constant

B:-In gram staining, spores appear as unstained refractile bodies within the cells

C:-Sporulation commences when growth ceases due to lack of nutrients

D:-Spores of bacillus atrophaeus are used as sterilization control for plasma sterilizer

Correct Answer:- Option-D

Question54:-The following statements regarding Ethylene oxide sterilizer are all true except

A:-ETO causes lakylation of cell components such as cell proteins, DNA and RNA

B:-It is used for the sterilization of multi-lumen tubings

C:-At ETO concentration of 700 mg/l; 10-20% relative humidity; sterilization is achieved in 4 hrs at 55°C

D:-Extensive aeration of sterilized materials for 8-12 hrs is necessary to remove residual ETO

Correct Answer:- Option-C

Question55:-Bowie-Duck test is

A:-Class I chemical indicator

B:-Class II chemical indicator

C:-Class III chemical indicator

D:-Class IV chemical indicator

Correct Answer:- Option-B

Question 56:-Bacterial toxins that are coded by lysogenic phages include all except

A:-Diphtheria toxin

B:-Cholera toxin

C:-Verocytotoxin of *E.coli* 

D:-Tetanolysin

Correct Answer: - Option-D

Question 57:- Commercially available probiotics contain all the following except

A:-Bifidobacterium

B:-Prevotella

C:-Lactobacillus

D:-Saccharomyces

Correct Answer:- Option-B

Question58:-Bacteriophage typing was used in the past for the typing of all except

A:-Streptococcus species

B:-Staphylococcus aureus

C:-Salmonella species

D:-Vibrio species

Correct Answer:- Option-A

Question59:-Western blotting is the technique used for the detection of

A:-Specific DNA

B:-Specific protein

C:-Specific RNA

D:-Specific glycolipid

Correct Answer:- Option-B

Question60:-Infectious agents that are transmitted through aerosols include all except

A:-Corynebacterium diphtheriae

B:-Mycobacterium tuberculosis

C:-Measles virus

D:-Varicella virus

Correct Answer:- Option-A

Question61:-The mononuclear phagocyte system does not include

A:-Monocytes

B:-Kupffer cells

C:-Kidney mesangial cells

D:-Endothelial cells

Correct Answer:- Option-D

Question62:-Which of the following statements does not apply to IgG?

A:-Neutralizers bacterial toxins

B:-Can cross human placenta

C:-Can fix complement

D:-Appears early in primary immune response

Correct Answer:- Option-D

Question63:-A plasma cell secretes

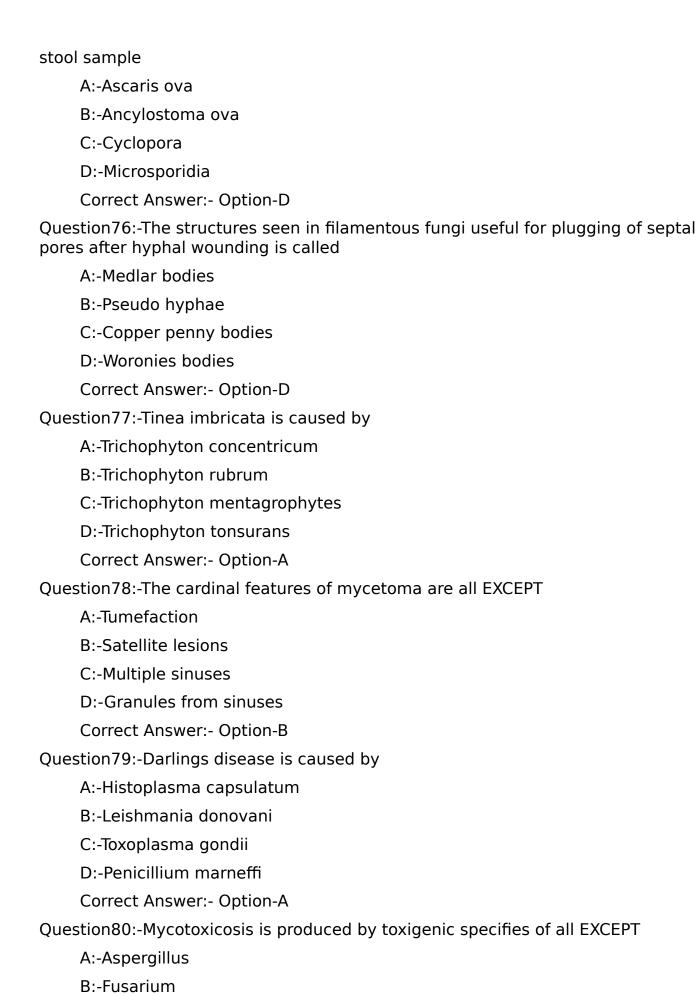
A:-Antibody of two antigen specificities

B:-Antibody of a single specificity related to that on the surface of parent B cell

D:-The antigen it recognizes Correct Answer:- Option-B Question64:-T cell surface receptors for antigen partly recognize A:-MHC **B:-Cytokines** C:-Antibody D:-IL-2 Correct Answer:- Option-A Question65:-Ig idiotypes are found A:-In constant region of heavy chain B:-In constant region of light chain C:-In hinge region D:-In variable region of both heavy and light chains Correct Answer: - Option-D Question66:-The paracortical area of a lymph node comprises mainly A:-Plasma cells **B:-Macrophages** C:-T cells D:-B cells Correct Answer:- Option-C Question67:-Which type of hypersensitivity cannot be transferred with serum antibody? A:-Type I B:-Type II C:-Type III D:-Type IV Correct Answer:- Option-D Question68:-The membrane attack complex consists of A:-Properdin B:-C3bBb C:-C5b6789 D:-C14b2a Correct Answer:- Option-C Question69:-DiGeorge Syndrome results due to a defect in A:-Purine nucleoside phosphorylase

C:-Many different types of antibodies

B:-Thymic development
C:-DNA repair
D:-Myelopheroxidase production
Correct Answer:- Option-B
Question70:-HAT medium is used to
A:-Fuse B lymphocytes to myeloma cells
B:-Kill B cell hybridomas
C:-Immortalize B lymphocytes
D:-Select hybrids in hybridoma technique
Correct Answer:- Option-D
Question71:-Bachmans intradermal test is used for the diagnosis of
A:-Schistosoma japonicum
B:-Trichinella spiralis
C:-Trichuris trichiura
D:-Ancylostoma duodenale
Correct Answer:- Option-B
Question72:-Megaesophagus or megacolon may be associated with the chronic infections with
A:-Trypanosoma gambiense
B:-Trypanosoma cruzi
C:-Leishmania donovani
D:-Leishmania tropica
Correct Answer:- Option-B
Question73:-Man is NOT the intermediate host for
A:-Plasmodium spp
B:-Babesia
C:-Taenia solium
D:-Echinococcus granulosus
Correct Answer:- Option-C
Question74:-Fugitive or Calabar swellings are seen in
A:-Loa loa
B:-Onchocerca volvulus
C:-Wuchereria bancrofti
D:-Brugia malayi
Correct Answer:- Option-A
Question75:-Modified Trichrome staining is used for the detection of in



C:-Penicillium

D:-Mucor

Correct Answer:- Option-D

Question81:-Which of the following is not a good biosafety practice in a viral diagnostic laboratory?

A:-Use of biosafety hoods

B:-Use of laboratory coats and gloves

C:-Avoidance of mouth pipetting

D:-Flushing untreated labwaste down laboratory sink

Correct Answer:- Option-D

Question82:-Which group of viruses usually establish latent infection?

A:-Pox viruses

**B:-Filoviruses** 

C:-Herpes viruses

D:-Influenza viruses

Correct Answer:- Option-C

Question83:-Antiretroviral drug which inhibits integrase enzyme

A:-Zidovudine

B:-Tenofovir

C:-Dolutegravir

D:-Nevirapine

Correct Answer:- Option-C

Question84:-A virus that enter through skin abrasion is

A:-Adeno virus

B:-Papilloma virus

C:-Rhino virus

D:-Rota virus

Correct Answer:- Option-B

Question85:-Which of the following pox virus infects only humans?

A:-Molluscum contagiosum

B:-Tana pox

C:-Yaba tumour virus

D:-Monkey pox

Correct Answer:- Option-A

Question86:-A 30 year old nurse if found to be both HBsAg positive and HBeAg positive. The nurse most likely has

A:-Acute hepatitis and is infectious

B:-Both HBV and HEV infection

- C:-Cleared a past HBV infection
- D:-Chronic HBV infection

Correct Answer:- Option-A

Question87:-Each of the following clinical syndromes is associated with infection by Picorna viruses EXCEPT

- A:-Myocarditis
- **B:-Mononucleosis**
- C:-Hepatitis
- D:-Meningitis

Correct Answer:- Option-B

Question88:-The virus has a segmented double stranded RNA and a double shelled capsid. Identify the family of the virus.

- A:-Adenoviridae
- B:-Astroviridae
- C:-Caliciviridae
- D:-Reoviridae

Correct Answer: - Option-D

Question89:-Which of the following disease lacks a known vector?

- A:-Hantavirus pulmonary syndrome
- B:-West Nile fever
- C:-La Crosse encephalitis
- D:-St Louis encephalitis

Correct Answer:- Option-A

Question 90:-Which of the following symptom is not typical of influenza?

- A:-Fever
- B:-Myalgia
- C:-Malaise
- D:-Rash

Correct Answer:- Option-D

Question91:-All the following are members of HACEK group EXCEPT

- A:-Acinetobacter spp
- B:-Cardiobacterium hominis
- C:-Haemophilus influenza
- D:-Eikenella corrodens

Correct Answer:- Option-A

Question92:-True about transmission of Salmonella Typhi

A:-Salmonella Paratyphi A is more common than Salmonella Typhi B:-Humans are the only natural hosts C:-More common in rural areas than urban area D:-Infection uncommon in children Correct Answer:- Option-B Ouestion93:-Malta Fever is also called as A:-Rat bite fever B:-Relapsing fever C:-Undulant fever D:-Haemorrhagic fever Correct Answer:- Option-C Question94:-A newborn baby was being fed with honey and developed flaccid paralysis, diplopia, dysphagia which could be due to A:-Clostridium perfringens B:-Clostridium botulinum C:-Vibrio parahaemolyticus D:-Cyclospora Cayetanensis Correct Answer: - Option-B Question95:-Malignant pustule is the term used for A:-An infected malignant melanoma B:-A carbuncle C:-A rapidly spreading rodent ulcer D:-Anthrax of the skin Correct Answer:- Option-D Question96:-Resistance to both Isoniazid and Rifampicin with or without resistance to other first line antitubercular agent is called A:-Mono resistance **B:-MDR TB** C:-XDR TB D:-PDR TB Correct Answer:- Option-B Question 97:-Travellers diarrhoea is caused by A:-ETEC B:-EPEC

C:-EIEC

D:-EAEC

Correct Answer:- Option-A

Question98:-All the following cause zoonotic infection EXCEPT

A:-Francisella tularensis

B:-Brucella melitensis

C:-Bordetella pertussis

D:-Bacillus anthracis

Correct Answer:- Option-C

Question99:-Mycoplasma have all of the following characteristics EXCEPT

A:-Possession of both DNA and RNA

B:-Capability of cell free growth

C:-Extracellular parasitism in vivo

D:-Susceptibility to Penicillin G

Correct Answer:- Option-D

Question100:-Long term carriage and shedding is most likely to occur after gastrointestinal infection with

A:-E coli O157:H7

B:-Salmonella Typhi

C:-Vibrio cholera

D:-Campylobacter jejuni

Correct Answer:- Option-B