## **PROVISIONAL ANSWER KEY**

Question 56/2023/OL

Paper Code:

Category

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Code:

Exam: Assistant Professor Pathology and Microbiology

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Department Government Homoeopathic Medical Colleges

Question1:-All the following are mediators of inflammation derived from Arachidonic acid through Cyclo oxygenase pathway Except:

A:-Prostagland in D2

B:-Prostagland in I2

C:-Lipoxin A4

D:-Thromboxane A2

Correct Answer:- Option-C

Question2:-Which of the following is not a component of Granulation tissue?

A:-Macrophage

B:-Epithelioid cell

C:-Fibroblast

D:-Neutrophil

Correct Answer:- Option-B

Question3:-Pain associated with acute inflammation is due to the action of:

A:-Bradykinin

B:-Histamine

C:-Leukotriene B4

D:-Tumour Necrosis Factor

Correct Answer: - Option-A

Question4:-Libman Sack's endocarditis is seen in:

A:-Myocardial infarction

B:-Rheumatic Heart Disease

C:-Systemic Lupus Erythematosus

D:-Syphilis

Correct Answer: - Option-C

Question5:-Which of the following hypersensitivity reaction is associated with Autoimmune haemolytic anaemia?

A:-Type I

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B:-Type II
     C:-Type III
    D:-Type IV
    Correct Answer:- Option-B
Question6:-Brown induration of Lung is seen in:
     A:-Pulmonary Infarction
     B:-Lobar Pneumonia
     C:-Broncho Pneumonia
    D:-CVC Lung
     Correct Answer:- Option-D
Question7:-Haemorrhagic infarct is seen in the following organ:
    A:-Heart
    B:-Lung
    C:-Kidney
    D:-Spleen
    Correct Answer:- Option-B
Question8:-Lines of Zahn are seen in:
     A:-Thrombus
     B:-Postmortem Clot
    C:-Infarct
    D:-Dry gangrene
     Correct Answer:- Option-A
Ouestion9:-The mechanism of Oedema in cardiac failure is:
     A:-Decreased hydrostatic pressure of circulating blood
     B:-Increased hydrostatic pressure of circulating blood
     C:-Increased Vascular Permeability
     D:-Salt and water retension
     Correct Answer:- Option-B
Question10:-Nutmeg Liver is a condition associated with:
    A:-Amyloidosis
     B:-Chronic Alcoholism
     C:-Chronic Venous Congestion
    D:-Infarction
     Correct Answer:- Option-C
Question11:-The special stain used to demonstrate fat embolism is
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A:-Alcian blue

B:-Congo red C:-PAS D:-Sudan III Correct Answer:- Option-D Question12:-Which of the free radical species is generated from hydrolysis of water? A:-Hydroxyl radical B:-Hydrogen peroxide C:-Superoxide anion D:-Nitric oxide Correct Answer:- Option-A Question 13:- The pattern of tissue necrosis seen in focus of tuberculous infection is: A:-Coagulative **B:-Caseous** C:-Fibrinoid D:-Liquifactive Correct Answer:- Option-B Question14:-The cellular adaptation characterised by increase in the number of cells in an organ or tissue in response to a stimulus is: A:-Hyperplasia B:-Hypertrophy C:-Metaplasia D:-Dysplasia Correct Answer: - Option-A Question15:-All the following are examples of dystrophic calcification Except: A:-Calcification in atheroma B:-Calcification in Tuberculous lymphnode C:-Psammoma body D:-Vitamin D intoxication Correct Answer:- Option-D Question16:-The pigment deposited in different organs and tissues in Ochronosis is: A:-Hemosiderin B:-Homogentisic acid

C:-Lipofuscin

Correct Answer:- Option-B

D:-Melanin

Question17:-Glycogen accumulation in tissue can be demonstrated by the following staining:

A:-Best Carmine

B:-Masson trichrome

C:-Oil red-o

D:-Von Kossa

Correct Answer:- Option-A

Question 18:-Formation of epithelioid cells from activation of macrophages in Tuberculosis is by the action of:

A:-Tumour Necrosis Factor

B:-Interleukin - 2

C:-Interferon gamma

D:-Decay accelerating factor

Correct Answer:- Option-C

Question19:-Morphologic pattern of Hansen's disease is determined by:

A:-Helper T Lymphocyte

B:-Suppressor T Lymphocyte

C:-NK Cell

D:-Macrophage

Correct Answer:- Option-A

Question 20:-Which of the following is an example of X linked Recessive disorder?

A:-Alkaptonuria

**B:-Cystic Fibrosis** 

C:-Duchenne muscular dystrophy

D:-Spinal muscular atrophy

Correct Answer:- Option-C

Question21:-Serum level of alpha feto protein is elevated in the following tumour

A:-Seminoma

B:-Trophoblastic tumour

C:-Granulosa cell tumour

D:-Hepato cellular carcinoma

Correct Answer:- Option-D

Question22:-Lack of differentiation of cells to the tissue of origin is termed as:

A:-Anaplasia

B:-Dysplasia

C:-Metaplasia

D:-Metastasis

Correct Answer:- Option-A

Question23:-Retrograde spread by hematogenous route is common for the following tumour

A:-Branchogenic Carcinoma

B:-Carcinoma Prostate

C:-Renal Cell Carcinoma

D:-Osteosarcoma

Correct Answer:- Option-B

Question24:-Which of the following tumour is due to transcoelomic spread

A:-Brenner tumour

B:-Choreo carcinoma

C:-Mesothelema

D:-Krukenberg tumour

Correct Answer:- Option-D

Question25:-Grading of cancer is based on the following features Except:

A:-Spread to regional Lymph node

B:-Degree of differentiation of tumour cells

C:-Number of mitosis

D:-Architectural features of tumour cells

Correct Answer:- Option-A

Question26:-Li-Fraumeni Syndrome is associated with all, except -

A:-High penetrance for Breast carcinoma

B:-High risk for Renal cell carcinoma

C:-High risk for Soft tissue sarcoma

D:-High risk for Brain tumours

Correct Answer:- Option-B

Question27:-Divergent differentiation in Urothelial carcinoma are all, except -

A:-Squamous differentiation

B:-Small cell differentiation

C:-Trophoblastic differentiation

D:-Chondroid differentiation

Correct Answer:- Option-D

Question28:-All are true regarding basal - like molecular subtype of Breast carcinoma, except -

A:-High expression of basal cytokeratin

B:-High proliferation rate

C:-Seen in Micropapillary carcinoma

D:-Platinum based therapy given

Correct Answer:- Option-C

Question29:-Weiss Criteria for Malignancy in Adrenal Cortical Tumours includes all, except -

A:-High nuclear grade

B:-<50% clear cells

C:-Mitotic rate of >5 mitosis/50HPF

D:-Sinusoidal invasion

Correct Answer:- Option-B

Question 30:-According to Internal National Society of Urological Pathology, most specific marker for Urothelial differentiation with relative low sensitivity is -

A:-Uroplakin I

B:-Uroplakin II

C:-Uroplakin III

D:-Uroplakin IV

Correct Answer:- Option-C

Question31:-Papillary Thyroid Carcinoma cells are immunoreactive for all, except -

A:-TTF - 1

B:-PAX - 8

C:-CK - 7

D:-CK - 20

Correct Answer:- Option-D

Question32:-All are features of Ulcerative colitis, except -

A:-Pseudopolyps

B:-Broad based ulcers

C:-Mucosal atrophy

D:-Stricture

Correct Answer:- Option-D

Question33:-Schaumann bodies are seen in

A:-Pneumoconiosis

B:-Sarcoidosis

C:-Hypersensitive pneumonitis

D:-Asbestosis

Correct Answer:- Option-B

Question34:-Systemic manifestation of Lung Carcinoma include -A:-Lambert-Eaton syndrome B:-Peripheral neuropathy C:-Acanthosis nigricans D:-All Correct Answer: - Option-D Question35:-All are true regarding Immature Teratoma of Ovary except -A:-IInd most common malignant germ cell tumour B:-Cellular with mitotically active glial tissue C:-Graded on number of high-power field with immature neural tissue D:-SALL4 positive Correct Answer: - Option-C Question36:-Adult granulose cell tumours are immunophenotypically positive for A:-PAX 8 B:-FOXL 2 C:-CK 7 D:-EMA Correct Answer:- Option-B Question37:-Mutations/Genetic abnormalities seen in Type II Endometrial Carcinoma are all except -A:-TP 53 B:-PI3K C:-PTEN D:-Aneuploidy Correct Answer:- Option-C Question38:-"Tram track appearance" of glomerular basement membrane is seen in A:-MPGN B:-Membranous nephropathy C:-FSGS D:-Diabetic nephropathy Correct Answer: - Option-A Question39:-All are true regarding Autosomal Dominant polycystic Kidney Disease, except -A:-Occur due to recurrent mutations in PKD1 and PKD2 gene. B:-Bilateral kidneys are affected

C:-Associated with hepatic fibrosis

D:-Associated with mitral valve prolapse

Correct Answer:- Option-C

Question40:-Following Hematological criteria for the accelerated phase of Chronic Myeloid Leukemia are correct, except -

A:-Persistent thrombocytopenia (> $1000 \times_{10^9/L}$ )

B:-Persistent thrombocytosis ( $<100 \times_{10^9/L}$ )

C:->10% Basophils in Peripheral blood

D:-persistent or increase Spenomegaly

Correct Answer:- Option-C

Question41:-Common cytogenetic abnormality seen in Essential Thrombocythemia are all, except -

A:-JAK2V617

B:-CALR

C:-MPL

D:-BCR-ABL 1

Correct Answer: - Option-D

Question42:-Most important genetic indicator of high-risk Myeloma are all, except -

A:-Del 17p

B:-t(14:16)

C:-Del 13

D:-t(14:20)

Correct Answer:- Option-C

Question43:-Lacunar cells are seen in,

A:-Nodular sclerosing classic HL

B:-Nodular lymphocyte predominant HL

C:-Mixed cellularity classic HL

D:-Lymphocyte - rich classic HL

Correct Answer:- Option-A

Question44:-Warm Antibody Type immune hemolytic anemia are associated with all, except -

A:-Autoimmune disorder

**B:-Viral infections** 

C:-Lymphoid neoplasms

D:-Drugs

Correct Answer:- Option-B

Question45:-Deficiency of Gp Ilb-Illa complex cause -

A:-Glanzmann thrombasthenia

B:-Bernard Soulier syndrome C:-Von - Willibrand disease D:-Christmas disease Correct Answer:- Option-A Question46:-In Glioblastoma, molecular aberration associated with longer survival A:-ERBB2 B:-IDH C:-PIK3CA D:-PIK3R1 Correct Answer:- Option-B Question47:-Grade II meningioma are all, except -A:-Clear cell meningioma B:-Metaplastic meningioma C:-Chordoid meningioma D:-Atypical meningioma Correct Answer:- Option-B Question48:-Most common gene mutation in Osteosarcoma is A:-RB B:-TP 53 C:-INK4a D:-CDK4 Correct Answer:- Option-A Question49:-According to French Federation of Cancer Centres Sarcoma group, Soft tissue sarcomas are graded on the basis of following factors except -A:-Tumour size B:-Tumour differentiation C:-Mitotic count D:-Histological grade Correct Answer:- Option-A Question 50:- All are premalignant lesions, except -A:-Bowens disease

B:-Actinic keratosis

C:-Large cell acanthoma

D:-Bowenoid papullosis

Correct Answer:- Option-C

Ouestion51:-Find out the aerotolerant anaerobe? A:-Clostridium perfringens B:-Bacteroides fragilis C:-Campylobacter species D:-Clostridium tetani Correct Answer: - Option-A Question52:-Which among the following possess genetic configuration of double stranded linear DNA? A:-Bacterial chromosome of Escherichia coli B:-Bacterial chromosome of Bacillus subtilis C:-MS 2 bacteriophage D:-T 7 bacteriophage Correct Answer:- Option-D Ouestion53:-Brevundimonas diminuta is used as a sterilization control of A:-ETO B:-Ionizing radiation C:-Non ionizing radiation D:-Membrane filters Correct Answer:- Option-D Question54:-Name the group of bacteria which obtain reducing equivalents (electrons) from inorganic compounds? A:-Chemotrophs B:-Lithotrophs C:-Organotrophs D:-Phototrophs Correct Answer: - Option-B Question55:-All the given diseases are transmitted by Hard Tick except? A:-Tick typhus B:-KFD C:-Endemic relapsing fever D:-Tularemia Correct Answer:- Option-C Question 56:-The National Collection of Type cultures is situated at? A:-France B:-England

C:-Germany

D:-Japan

Correct Answer:- Option-B

Question57:-Which antibiotic among the following is time dependent antibiotic?

A:-Carbapenems

B:-Colistin

C:-Metronidazole

D:-Aminoglycosides

Correct Answer:- Option-A

Question58:-Name the scientist who had attempted to *demonstrate a physical* reality to the transmission of infection in the case of syphilis and gonorrhea by inoculating a subject with pus from sores of a person with gonorrhea and syphilis.

A:-John Hunter

B:-Edward Jenner

C:-John Snow

D:-Jacob Henle

Correct Answer:- Option-A

Question59:-Which modification of gram staining is useful for Meningococci and Gonococci?

A:-Kopeloff and Beerman's modification

B:-Jensen's modification

C:-Weigert's modification

D:-Preston and Morrell's modification

Correct Answer:- Option-B

Question60:-Polymyxins act against the microbes by carrying out which of the following actions?

A:-Inhibition of protein synthesis

B:-Inhibition of nucleic acid synthesis

C:-Damage to the cytoplasmic membrane

D:-Inhibition of specific enzyme systems

Correct Answer:- Option-C

Question61:-Which is the monoclonal antibody that act against VEGF (Vascular endothelial growth factor) and is used in the treatment of colorectal cancers?

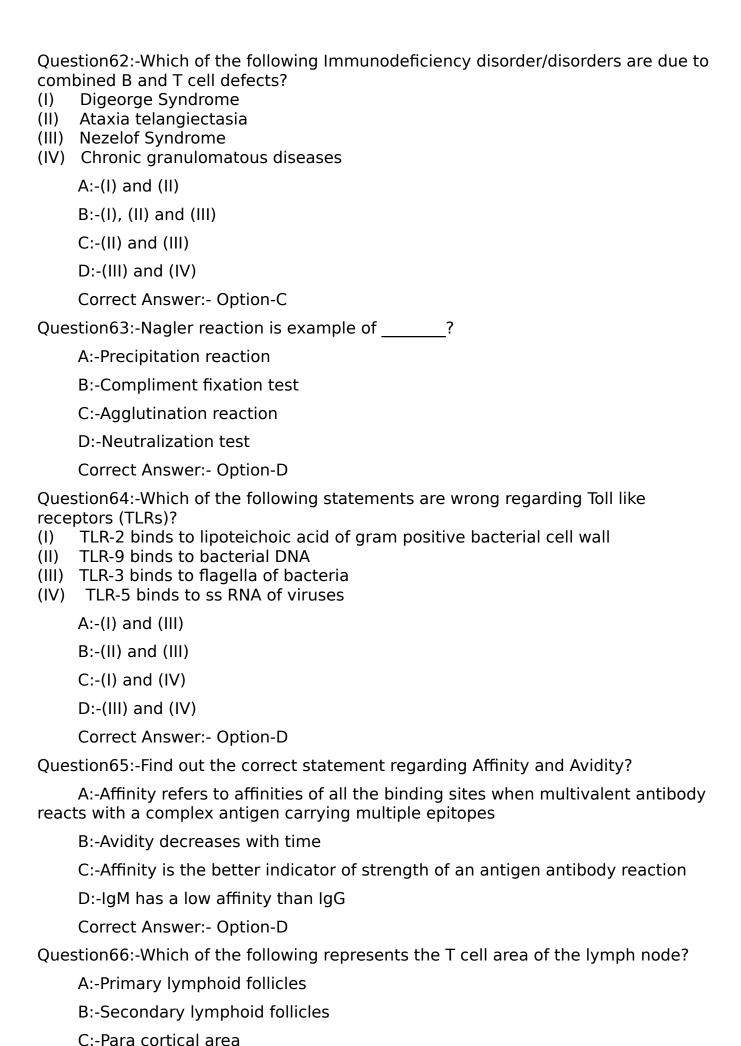
A:-Bevacizumab

B:-Abciximab

C:-Trastuzumab

D:-Muromonab

Correct Answer:- Option-A



Correct Answer:- Option-C Question67:-Which among the following statements are true regarding antigen processing pathways? (1) In cytosolic pathway, exogenous antigens are processed (II)In endocytic pathway, exogenous antigens are processed (III) In cytosolic pathway, antigen is presented to CD8 T cells (IV) In endocytic pathway, antigen is complexed with MHC Class II Molecules A:-(I), (II) and (III) B:-(II), (III) and (IV) C:-(I) and (III) D:-(I) and (IV) Correct Answer:- Option-B Question68:-The most common class of antibody involved in type II hypersensitivity? A:-lg G B:-Iq M C:-lg E D:-la D Correct Answer: - Option-A Question69:-C5 Convertase in classical complement pathway is \_\_\_\_\_. A:-C14b2a3b B:-C14a2a3b C:-C14b2b3a D:-C14a2b3b Correct Answer: - Option-A Question 70: Find out the live vaccines among the following? (1) Sabin polio vaccine MMR vaccine (II)(III) Rota virus vaccine (IV) Rabies vaccine A:-(I), (II) and (IV) B:-(II), (III) and (IV) C:-(I), (II) and (III) D:-(I) and (IV) Correct Answer:- Option-C Question71:-All the statements are true regarding Widal test except

D:-Medulla

A:-The 4 antigens used for performing widal test are O antigens of Salmonella Typhi, H antigens of S. Typhi, H antigens of S. Paratyphi, A and H antigens of S. Paratyphi B

B:-H antibody titre more than 1/100 and O antibody titre more than 1/200 is significant

C:-A rise in antibody titre due to unrelated infections like Malaria, Dengue is termed as Anamestic response.

D:-False negative widal test is common in early stage of disease.

Correct Answer:- Option-B

Question72:-Which statement is false regarding pathogenesis of Shigellosis?

A:-Minimum infective dose 10-1000 bacilli

B:-Shigella produces endotoxin as well as exotoxins

C:-It enters intestinal mucosa through M cells and are engulfed by macrophages which release the bacilli resulting in acute colitis

D:-Invasion is determined by a large virulence plasmid which codes for important virulence factors such as ipa proteins and type 3 secretion systems.

Correct Answer:- Option-A

Question73:-All are true regarding Leprosy except

A:-Leionine facies appearance is typically seen in Tuberculoid leprosy

B:-Multibacillary disease observed in Lepromatous leprosy

C:-Pronounced nerve damages may lead to deformities in Tuberculoid leprosy

D:-Cell mediate immunity is adequate in Tuberculoid leprosy

Correct Answer:- Option-A

Question74:-All are true regarding MRSA except,

A:-Cefoxitin disc is used as a surrogate, marker for identification

B:-Common resistance mechanisms include Beta-lactamase mediated resistance and alteration at the target Pencillin binding site PBP2a which is regulated by

C:-All generations of Cephalosporins should be avoided including  $_{5^{\sharp_{\hbar}}}$  generation

D:-MRSA prevalence in India is almost 30-40%

Correct Answer:- Option-C

Question75:-Choose the Invitro tests available for the diagnosis of Diphtheria.

A:-Detection of TOX gene by PCR

B:-Elek's Gel Precipitation test

C:-Detection of Diphtheria toxin by ELISA

D:-All of the above

Correct Answer:- Option-D

Question 76:- Which of the following Atypical mycobacteria produce Buruli ulcer

A:-Mycobacterium ulcerans

B:-Mycobacterium scrofulaceum

C:-Mycobacterium chelonae

D:-Mycobacterium kansaii

Correct Answer:- Option-A

Question77:-Which Clostridial species is responsible for necrotizing fasciitis?

A:-Clostridium novyi

B:-Clostridium perfringens

C:-Clostridium sordellii

D:-All of the above

Correct Answer:- Option-B

Question 78:- Which statement is true regarding caseous necrosis in Pulmonary tuberculosis?

A:-Caseous necrosis with numerous bacilli will be liquefied and can be directly drained into airways.

B:-Lymphatic spread can occur affecting opposite lung and can disseminate to other organs

C:-Haematogenous spread to various other organs specifically in young children

D:-All of the above

Correct Answer:- Option-D

Question79:-Disadvantages of Non Treponemal tests include the following:

A:-Biological false positive reactions

B:-Prozone phenomenon

C:-Low sensitivity in late stages of the disease

D:-All of the above

Correct Answer:- Option-D

Question80:-Which statement is true regarding Non Gonococcal Urethritis

A:-Chlamydia trachomatis, urogenital mycoplasma are bacterial causative agents of NGU

B:-Herpes Simplex virus and Candida albicans are viral and fungal aetiological agents

C:-NGU is more commoner than Gonococcal Urethritis

D:-All of the above

Correct Answer:- Option-D

Question81:-Smallest cestode infecting man

A:-Echinococcus granulosus

B:-Taenia solium

C:-Diphyllobothrium latum

D:-Hymenolepis nana

Correct Answer:- Option-D

Question82:-Maltese cross appearance seen in

A:-Trypanosomiasis

B:-Leishmaniasis

C:-Babesiosis

D:-Malaria

Correct Answer:- Option-C

Question83:-All the following nematodes are viviparous except

A:-Wucherieria bancrofti

B:-Enterobious vermicularis

C:-Trichinella spiralis

D:-Dracunculus medinensis

Correct Answer:- Option-B

Question84:-Which of the following is true regarding Trichomonas vaginalis?

A:-Trichomoniasis is the most common parasitic cause of Sexually transmitted diseases

B:-Straw berry Cervix is observed in 2% patients

C:-Vaginal pH more than 4.5 facilitates infection

D:-All of the above

Correct Answer:- Option-D

Ouestion85:-Giardia lamblia inhabits in

A:-Rectum

B:-Caecam

C:-Large intestine

D:-Duodenum

Correct Answer:- Option-D

Question86:-Barrel shaped arthroconidia with alternate distorted cells are seen in

A:-Paracoccidioidomycosis

**B:-Coccidioidomycosis** 

C:-Blastomycosis

D:-Histoplasmosis

Correct Answer:- Option-B

Question87:-South American Trypanosomiasis is caused by

A:-Trypanosoma cruzi

B:-Trypanosoma brucei gambiensae

C:-Trypanosoma brucei rhodesiense

D:-Trypanosoma rangeli

Correct Answer:- Option-A

Ouestion88:-Medlar bodies are characteristic of

A:-Rhinosporidiosis

**B:-Dermatophytosis** 

C:-Chromoblastomycosis

D:-Sporotrichosis

Correct Answer:- Option-C

Question89:-Spaghetti and meatball appearance are characteristic of

A:-Geotrichum spp

B:-Sporothrix

C:-Malassezia furfur

D:-Scedosporium apiospermum

Correct Answer:- Option-C

Question 90:- The probable aetiological agent of Mycetoma, sinus with discharging red granules

A:-Actinomadura madurae

B:-Madurella mycetomatis

C:-Actinomadura pelletieri

D:-Nocardia asteroids

Correct Answer:- Option-C

Question91:-The earliest Antibody marker appears to be seen in blood of Hepatitis B patients

A:-Anti HBc antibody

B:-Anti HBs antibody

C:-Anti HBe antibody

D:-All of the above

Correct Answer:- Option-A

Question92:-Herpetic whitlow indicates

A:-Eczema herpeticum

B:-Herpes labialis

C:-Localised infection seen in finger tips of health care workers, doctors and nurses

D:-Erythema multiformis

Correct Answer:- Option-C

Question 93:- The following are true regarding Bacteriophages

A:-They codes for Bacterial toxins

B:-They mediate transduction and facilitate drug resistance

C:-They are used in phage therapy

D:-All of the above

Correct Answer: - Option-D

Question94:-The staining technique used for demonstration of Negri bodies

A:-Field's stain

B:-H and E stain

C:-Seller's stain

D:-Wright's stain

Correct Answer:- Option-C

Question95:-All are true regarding Antigenic drift except,

A:-It produces abrupt, drastic and discontinuous variation in antigenic structure of the virus

B:-It is due to mutation and selection

C:-it produces periodic epidemics of influenza

D:-Characterised by presence of antibodies to the predecessor virus strains

Correct Answer:- Option-A

Question96:-All the following are clinical conditions produced by Parvo virus B-19 except,

A:-Pure red cell aplasia

B:-Erythema infectiosum

C:-Genital tumours

D:-Aplastic crisis

Correct Answer:- Option-C

Question97:-All are regarding NACO (National AIDS Control Organisation) except,

A:-NACO, Ministry of Health and Family Welfare, GOI has laid out guidelines and strategies for screening, testing and monitoring HIV infected or suspected individuals.

B:-Strategy 1 is used for Surveillance purposes

C:-Strategy 11 B is used for determining HIV status of clinically symptomatic suspected cases in which highly sensitive screening and confirmatory tests are used.

D:-Strategy 111 is used for asymptomatic individuals

Correct Answer:- Option-B

Question 98:-All are human prion diseases except,

A:-Kuru

B:-Scrapie

C:-Creutzfeldt-lakob disease

D:-Gerstmann-Straussler-Scheinker disease

Correct Answer:- Option-B

Question99:-Which virus possess the shape of space vehicle?

A:-Polio virus

B:-Herpes virus

C:-Flavi virus

D:-Adeno virus

Correct Answer:- Option-D

Question100:-All are true regarding Measles except

A:-The pathognomonic Koplik spot contain giant cells, intranuclear and intracytoplasmic inclusion bodies indicating local viral replication.

B:-Koplik spots develop 1 to 2 days after the appearance of rash.

C:-Giant cell pneumonia, meningoencephalitis and SSPE are complications of Measles.

D:-Cytopathic effects of Measles virus consists of multinucleate syncytium formation

Correct Answer:- Option-B