AQI

PROVISIONAL ANSWER KEY [CBRT]

Name of The Post	**Assistant Professor, Microbiology, General State Service, Class-1**
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Instructions / સૂચના

Candidate must ensure compliance to the instructions mentioned below, else objections shall not be considered: -

(1) All the suggestion should be submitted in prescribed format of suggestion sheet Physically.

(2) Question wise suggestion to be submitted in the prescribed format (Suggestion Sheet) published on the website.

(3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key (Master Question Paper), published herewith on the website. Objections should be sent referring to the Question, Question No. & options of the Master Question Paper.

(4) Suggestions regarding question nos. and options other than provisional answer key (Master Question Paper) shall not be considered.

(5) Objections and answers suggested by the candidate should be in compliance with the responses given by him in his answer sheet. Objections shall not be considered, in case, if responses given in the answer sheet / response sheet and submitted suggestions are differed.

(6) Objection for each question shall be made on separate sheet. Objection for more than one question in single sheet shall not be considered & treated as cancelled.

ઉમેદ્વારે નીચેની સૂચનાઓનું પાલન કરવાની તકેદારી રાખવી, અન્યથા વાંધા-સૂચન અંગે કરેલ રજૂઆતો ધ્યાને લેવાશે નહીં

(1) ઉમેદ્વારે વાંધા-સૂચનો નિયત કરવામાં આવેલ વાંધા-સૂચન પત્રકથી રજૂ કરવાના રહેશે.

(2) ઉમેદ્વારે પ્રશ્નપ્રમાણે વાંધા-સૂચનો રજૂ કરવા વેબસાઈટ પર પ્રસિધ્ધ થયેલ નિયત વાંધા-સૂચન પત્રકના નમૂનાનો જ ઉપયોગ કરવો.

(3) ઉમેદ્વારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ ન કરતા તમામ વાંધા-સૂચનો વેબસાઈટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર)ના પ્રશ્ન ક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.

(4) માસ્ટર પ્રશ્નપત્ર માં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચન ધ્યાને લેવામાં આવશે નહીં.

(5) ઉમેદ્વારે જે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદ્વારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદ્વારે સૂચવેલ જવાબ અને ઉત્તરવહીનો જવાબ ભિન્ન હશે તો ઉમેદ્વારે રજૂ કરેલ વાંધા-સૂચન ધ્યાનમાં લેવાશે નહીં.

(6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચન પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

001. Zoonotic infections affecting humans are all except

(A) Plague (B) Brucellosis

(C) Toxoplasmosis (D) Measles

002. True about Bioweapons category A –

(A) These agents are highest priority pathogens which pose greatest risk to national security.

(B) Result in low mortality

(C) Do not cause social disruption

(D) None of the above

003. Re-emerging infections include

(A) MDRTB & XDRTB (B) MRSA &VRSA

(C) Both (A) and (B) (D) None of the above

004. Agents of food poisoning are all except-

(A) Staphylococcus aureus (B) Vibrio Parahemolyticus

(C) Bacillus Cereus (D) Coxiella Burnetii

005. Which parameter is not included in HAI surveillance?

(A) CA-UTI (catheter associated urinary tract infection)

(B) CLABSI (central line associated blood stream infection)

(C) VAP (ventilator associated pneumonia)

(D) Open wound infection

006. Which of the following is not Oncogenic virus?

(A) Hepatitis B virus (B) Hepatitis C virus

(C) HIV (D) Varicella-zoster virus

007. Hepatitis B vaccine should be given as per which schedule?

(A) 0, 1, 6 days (B) 0, 1, 6 weeks

(C) 0, 1, 6 months (D) 0, 1, 6 years

008. Which of the following is true about prions?

(A) Destroyed by autoclaving at 121°C (B) Long incubation period

(C) Nucleic acid present (D) Immunogenic

009. Morphology of Coronaviruses has all except

(A) Helical symmetry (B) Linear, positive-sense ssRNA

(C) 120-160 nm size (D) Segmented RNA virus

010. During the window period of patient with AIDS, best diagnostic test is:

(A) ELISA (B) Western blot

(C) Rapid test (D) RT-PCR

011. For the treatment of case of class lll dog bite, all of the following are correct except:

(A) Give immunoglobulin for passive immunity

(B) Give anti-rabies vaccine

(C) Immediately stitch wound with antibiotic coverage

(D) Immediately was wound with soap and water

012. Kyasnur Forest disease is transmitted by:

(A) Mite (B) Louse

(C) Tick (D) Mosquito

013. Certificate of Yellow fever vaccination is valid upto

(A) 10 days (B) 1 year

(C) 5 years (D) 10 years

014. Not true about Salk vaccine is

(A) Expensive than OPV (B) Not useful in epidemics

(C) Contraindicated in low immunity (D) Booster doses are required

015. Which of the following statements concerning antigenic drift in influenza viruses is correct?

(A) It results in major antigenic changes

(B) It is exhibited only by Influenza A viruses

(C) It is due to frame shift mutation in viral genes

(D) It occurs frequently than antigenic shift

016. Transcription is the:

(A) Copying of DNA to RNA (B) Changing of DNA to RNA

(C) Production of a complementary DNA (D) Completion of a protein sequence

017. Why are CLSI-approved ATCC reference strains used for quality control?

(A) they are reasonably priced

(B) they are readily available from many laboratory vendors

(C) they produce reliable results over time

(D) they can be frozen

018. Which is a form of cold sterilization?

(A) Infra-red rays (B) Steam sterilization

(C) Gamma rays (D) UV rays

019. Enrichment broth is used to

(A) shorten incubation time by providing excess nutrients

(B) suppress normal flora to allow pathogens to grow

(C) detect small numbers of anaerobes

(D) increase the growth of fastidious organisms

020. Niesseria gonorrhoeae are capnophilic organisms and require:

(A) 5%-10% CO2, 15% O2 (B) 5%-10% H2, 0% O2

(C) 0.3% CO2, 21% O2 (D) 8%-10% CO2, 5%-10% O2

021. What is the stain that binds to the nucleic acid of organisms but does not discriminate between gram-positive or gram-negative organisms called?

(A) Ziehl-Neelsen stain (B) Auramine-rhodamine stain

(C) Gram stain (D) Acridine orange stain

022. What CO_2 concentration is achieved when using a candle jar?

(A) 1% (B) 3%

(C) 6% (D) 9%

023. XLD (xylose-lysine-desoxycholate) agar:

(A) Inhibits many gram-negative bacilli that are not enteric pathogens

(B) Inhibits gram-positive organisms

(C) Contains a phenol red indicator that detects increased acidity from carbohydrate

(D) All of the above

024. Applications of nucleic acid–based methods:

(A) Direct detection of microorganisms in patient specimens

(B) Identification of microorganisms grown in culture

(C) Characterization of microorganisms beyond Identification

(D) All of the above

025. The purpose of Citrate utilization test is to identify organisms-

(A) capable of using sodium citrate as the sole carbon source

(B) inorganic ammonium salts as the sole nitrogen source

(C) Both (A) and (B)

(D) None of the above

026. Nested PCR: It is modification or PCR

(A) where two rounds of PCR amplification are carried out by using two primers that are targeted against two different DNA sequences of same organism

(B) uses more than one primer which can detect many DNA sequences of several organisms in one reaction

(C) both of the above

(D) none of the above

027. Horizontal transmission of 'R' factor is by:

(A) Transduction (B) Transformation

(C) Conjugation (D) Fusion

028. Cholangiocarcinoma is associated with chronic infection of :

(A) Paragonimus westermani (B) Fasciola hepatica

(C) Clonorchis sinensis (D) Schistosoma haematobium

029. Which of the following protozoa belongs to phylum Sporozoa?

(A) Giardia species (B) Toxoplasma species

(C) Plasmodium species (D) Entamoeba species

030. Which is not a feature of CSF in primary amoebic meningoencephalitis?

(A) Purulent (B) Lymphocytic leucocytosis

(C) High protein (D) Low glucose content

031. Diagnosis of which of the following parasite uses Entero-Test?

(A) Cyclospora species (B) Entamoeba histolytica

(C) Giardia lamblia (D) Dientamoeba fragilis

032. Vector for leishmaniasis:

(A) Sandfly (B) Reduviid bugs

(C) Tsetse fly (D) Anopheles mosquito

033. Maurer's dots in red blood cells are seen in infection with:

(A) Plasmodium vivax (B) Plasmodium falciparum

(C) Plasmodium malariae (D) Plasmodium ovale

034. Most common manifestation ofToxoplasma gondii in immunocompetent adult:

(A) Lymphadenopathy (B) Chorioretinitis

(C) Myocarditis (D) Eencephalitis

035. The largest protozoa parasitizing human intestine?
(A) Trichomonas hominis (B) Balantidium coli
(C) Entamoeba coli (D) Isospora

036. Which of the following cestode eggs are NOT bile stained?
(A) Hymenolepis nana (B) Diphyllobothrium latum
(C) Echinococcus granulosus (D) Taenia solium

037. Humans acquire cysticercus cellulosae infection by all except:
(A) Ingestion of Contaminated vegetables (B) Autoinfection
(C) Reverse peristalsis (D) Ingestion of contaminated pig's meat

038. Carcinoma of urinary bladder is associated with which of the following parasites?
(A) Schistosoma japonicum (B) Schistosoma mansoni
(C) Schistosoma haematobium (D) Schistosoma intercalatum

039. Larva currens is caused by:
(A) Ascariasis (B) Cutaneous larva migrans
(C) Strongyloidiasis (D) Toxocara canis

040. All of the following nematodes are oviparous EXCEPT:
(A) Roundworm (B) Strongyloides
(C) Hookworm (D) Enterobius

041. Visceral larva migrans is caused by:
(A) Ancylostoma duodenale (B) Necator americanus
(C) Ancylostoma caninum (D) Toxocara canis

042. True about Anisakiasis is:
(A) Transmitted by ingestion of larvae found in saltwater fish and squid
(B) Transmitted by Ingestion of adult worm
(C) Marine mammals serve as intermediate host
(D) Transmitted by Ingestion of meat containing eggs

043. Which of the following microfilaria comes to peripheral blood in the day time?
(A) Wuchereria bancrofti (B) Brugia malayi
(C) Loa loa (D) Brugia timori

044. Which of the following infection is eradicated from India?
(A) Wuchereria bancrofti (B) Brugia malayi
(C) Dracunculus medinensis (D) Ascaris lumbricoides

045. Flotation technique is useful for detection of:
(A) Fertilized eggs of Ascaris lumbricoides (B) Larva of Strongyloides
(C) Taenia eggs (D) Operculated eggs of trematodes

046. Boeck and Drbohlav's medium is used for the cultivation of:
(A) Entameoba histolytica (B) Leishmania donovani
(C) Malaria parasite (D) Hookworm

047. One of the statement is not correct for PVA (polyvinyl alcohol):
(A) Difficult to prepare (B) Not good to preserve Giardia cyst
(C) Good for fecal immunoassay kits (D) Contains mercury compounds

048. Rat flea acts as vector for transmission for which of the following parasitic infection:

(A) Paragonimus westermani
(B) Hymenolepis diminuta
(C) Echinococcus granulosus
(D) Diphyllobothrium latum

049. The term premunition means-

(A) Immunity to re-infection lasts only as long as original infection remains active
(B) Immunity to an infection is lifelong
(C) Resistance passively transferred to baby from mother
(D) Immunity developed in large proportion of population

050. Which of the following is an example of heterophile reaction?

(A) Weil Felix reaction
(B) Paul-Bunnell test
(C) Cold agglutinin test in primary atypical pneumonia
(D) All of the above

051. Hereditary angioneurotic edema is associated with deficiency of

(A) C3b inactivator
(B) C9
(C) C1 inhibitor
(D) Components of classical pathway C1, C2, C4

052. Megakaryocyte is a myeloid progenitor of

(A) Basophils
(B) Erythrocytes
(C) Platelets
(D) Eosinophils

053. Chediak Higashi syndrome is an abnormality of

(A) Stem cell differentiation
(B) Congenital aplasia of thymus
(C) Defective intracellular killing
(D) Defective phagocytosis

054. Main source of Interferon beta is

(A) Leucocytes
(B) Fibroblast
(C) T cells
(D) Macrophages

055. Serum sickness is which type of hypersensitivity reaction?

(A) IgE type
(B) Cytotoxic and Cytolytic
(C) Immune complex mediated
(D) Delayed hypersensitivity

056. All of the following are tumor associated transplant antigens except :

(A) Prostate specific Antigen
(B) Carcinoembryonic antigen
(C) CA 125
(D) Rituximab

057. Endotoxin acts by:

(A) Classical pathway
(B) Lectin pathway
(C) Alternative pathway
(D) None of the above

058. In Chemiluminescence-linked immunoassay method visible effect is detected by-

(A) Spectrophotometer
(B) Luminometer
(C) Gamma counter
(D) Electron microscope

059. Northen blotting is used for separation of

(A) DNA
(B) RNA
(C) Protein
(D) None of the above

060. Prosodemic diseases referes to

(A) Disease that spread rapidly

(B) Disease that is constantly present in a particular area

(C) Disease that spreads to many areas of the world

(D) Disease that spreads person to person conact & evolve slowly

061. Staphylococcus aureus causes vomiting in 6-8 hours. The mechanism of action by:

(A) Stimulation of cAMP (B) Vagal stimulation

(C) Stimulation of cGMP (D) Acts through ganglioside GM receptor

062. Serotyping of Streptococcus pyogenes is based on which of the following protein?

(A) M protein (B) T protein

(C) R protein (D) Carbohydrate antigen

063. Carrom coin appearance of colonies is seen for:

(A) S. pyogenes (B) Viridans streptococci

(C) S. agalactiae (D) S. pneumonioe

064. All of the following are causative agents of NGU (Non gonococcal urethritis) except:

(A) Chlamydia trachomatis (B) Mycoplasma hominis

(C) Candida albicans (D) Meningococci

065. Metachromatk granules diphtheriae can be stained special stains except:

(A) Neisser's stain (B) Albert's stain

(C) Ziehl- Neelsen stain (D) Ponder's stain

066. A "Malignant pustule" is a term used for:

(A) An infected malignant melanoma (B) A carbuncle

(C) A rapidly spreading rodent ulcer (D) Anthrax of the skin

067. Characteristic of anaerobic bacteria is:

(A) Foul smelling discharge (B) Fail to grow in aerobic media

(C) Gas in tissue (D) All of the above

068. Pseudomembranous colitis is caused by?

(A) Clostridium perfringens (B) Clostridium diffidle

(C) Clostridium tetani (D) Clostridium botulinum

069. Which of the following mycobacteria are microaerophilc?

(A) Mycobacterium tuberculosis (B) Mycobacterium bovis

(C) Mycobacterium leprae (D) None of the above

070. The generation time of lepra bacilli is:

(A) 20 minutes (B) 2 hours

(C) 20 hours (D) 12-13days

071. In erysipeloid, the route of infection is:

(A) Direct inoculation (B) Ingestion

(C) Inhalation (D) None of the above

072. Which of the following actinomycete is acid fast?

(A) Streptomyces (B) Actinomodura

(C) Nocardia (D) Actinomyces

073. Phenyl alanine deaminase test is characteristic of which of the following tribes of Enterobacteriaceae:

(A) Escherichieae (B) Salmonelleae

(C) Yersinieae (D) Proteae

074. Which of the following Shigella species is mannitol non fermenter?

(A) Shigella sonnei (B) Shigella boydii

(C) Shigella dysenteriae (D) Shigella flexneri

075. Bipolar staining is characterstic of:

(A) Yersinia pestis (B) Shigella species

(C) Klebsiella oxytoca (D) Proteus mirabilis

076. In a patient with typhoid, diagnosis after 15 days of onset of fever is best done by:

(A) Blood culture (B) Stool culture

(C) Urine culture (D) Widal test

077. Pathogenesis of V. cholerae involves one of the following second messenger systems:

(A) cGMP (B) cAMP

(C) Ca^{2+} (D) IP3

078. All of the following Vibrio species are halophilic except:

(A) V. cholera (B) V. parahaemolyticus

(C) V. alginolyticus (D) V. vulnificus

079. Cause of melioidosis is:

(A) Burkholderia mallei (B) Burkholderia pseudomallei

(C) Burkholderia cepacia (D) None of the above

080. Ecthyma gangrenosum is caused by:

(A) Pseudomonas (B) Bordetella

(C) Brucella (D) H. influenzoe

081. Which of the following agent of meningitis can grow on chocolate agar but not on blood agar?

(A) Neisseria meningitides (B) Haemophilus influenza

(C) Moraxella catarrhalis (D) Escherichia coli

082. Chancroid, a sexually transmitted disease, which presents as genital ulcer is caused by

(A) Haemophilus ducreyi (B) Haemophilus aegyptius

(C) Haemophilus haernolyticus (D) Haemophilus aphrophilus

083. Mercury drop appearance on Regan Lowe media is seen in colonies of

(A) Brucella melitensis (B) Brucella abortus

(C) Bordetella pertussis (D) Bordetella parapertussis

084. Malta fever is also called as:

(A) Undulant fever (B) Relapsing fever

(C) Hemorrhagic fever (D) Rat bite fever

085. All of the following serological tests would be helpful in the diagnosis of chronic brucellosis except:

(A) Standard agglutination test (B) Mercaptoethanol test

(C) Complement ftxation test (D) ELISA detecting lgG

086. Most sensitive and accurate method of diagnosis of Helicobacter pylori is:

(A) Culture Biopsy (B) Urease test

(C) Histopathology (D) Urea breath test

087. Most common mode of transmission of Legionella pneumophila is:

(A) Aspiration (B) Insect bite

(C) Ingestion (D) Blood

088. In Amsel's Criteria, Bacterial vaginosis is diagnosed if following finding is/are present:

(A) Presence of clue cells

(B) pH of vaginal discharge more than 4.5

(C) Accentuation of distinct fishy odor immediately after vaginal secretions is mixed with 10% solution of KOH (Whiff test)

(D) All of the above

089. Weils disease is caused by:

(A) Leptospira interrogans (B) Borrelia recurrentis

(C) Treponema carateum (D) Treponema pallidum

090. Bejel is caused by:

(A) Borrelia recurrentis (B) Treponema endemicum

(C) Trepanema pallidum (D) Treponema carateum

091. Positive tunica reaction is produced by all except:

(A) Rickettsia prowazekii (B) Rickettsia typhi

(C) Rickettsia conorii (D) Rickettsia akari

092. Weil Felix test-Rickettsial antibodies detected against Proteus OX 19, OX2 and OX K antigens, epidemic and endemic typhus is associated with

(A) Increase in OX 19 antibody (B) Increase in OX 19 and OX 2 antibodies

(C) Increase in OX K antibody (D) All of the above

093. Chlamydia exists in 2 morphological forms, elementary body & reticulate body. Features of elementary body are all except-

(A) Extracellular form (B) Metabolically active

(C) Infectious form (D) Nucleoid is electron dense

094. The most commonly used method for isolation of Chlamydia:

(A) Culture on artificial media (B) Culture on Vero cell line

(C) Inoculation into guinea pig (D) Culture on McCoy cell line

095. Mycoplasmas are the smallest microbes capable of free living in the environment and self-replicating on artificial culture media. They have the following characteristics except:

(A) Pleomorphic (B) Possess gliding motility

(C) Susceptible to beta lactams (D) Contaminants of cell culture

096. Fried egg colonies are produced by:

(A) Bacillus cereus (B) Haemophilus influenzae

(C) Neisseria subflava (D) Mycoplasma pneumoniae

097. Brewer's yeast is a common name for-

(A) Pichia guillermondii (B) Aspergillus niger

(C) Saccharomyces cerevisiae (D) Penicillium notatum

098. Favic chandeliers are short, multiple branches at end of hypha, resembling reindeer horn. They are seen in

(A) Trichophyton schoenleinii (B) Trichophyton mentagrophyte

(C) Epidermophyton floccosum (D) Trichophyton tonsurans

099. Mycotic diseases produced by Dimorphic fungi are all except

(A) Histoplasmosis (B) Blastomycosis

(C) Sporotrichosis (D) Candidiasis

100. Exophiala dermatitidis is new name for

(A) Absidia corymbifera (B) Acremonium kiliense

(C) Madurella grisea (D) Wangiella dermatitidis

101. Melanin pigment is a surface component virulence factor in this fungal pathogen-

(A) Aspergillus flavus (B) Cryptococcus neoformans

(C) Rhizopus species (D) Coccidioides

102. Production of pink color on CHROMagar indicates

(A) Candida albicans (B) Candida krusei

(C) Candida tropicalis (D) None of the above

103. Skin tests and fungal antigens used are correctly matched in the following, except-

(A) Dermatophytoses – trichophytin (B) Candidiasis – Candidin

(C) Histoplasmosis – Histoplasmin (D) Blastomycosis – Caenorhabditin

104. Epidemiological markers used in fungal infection are all, excluding

(A) Phage typing (B) Serotyping

(C) Nucleic acid probe (D) Computed tomography

105. Antifungal antibiotic is

(A) Imidazole (B) Tolnaftate

(C) Nystatin (D) Itraconazole

106. Selenium sulfide is used in the treatment of-

(A) Pityriasis versicolor (B) Dandruff

(C) White piedra (D) All of the above

107. Malassezia furfur is new nomenclature for-

(A) Malassezia ovalis (B) Pityrosporum malassezii

(C) Pityrosporum ovale (D) All of the above

108. Chromoblastomycosis is caused by

(A) Fonsecaea pedrosoi (B) Phialophora verrucosa

(C) Both of the above (D) None of the above

109. Black piedra is caused by

(A) Hortaea wernckii (B) Curvularia lunata

(C) Piedraia hortae (D) Scytalidium dimidiatum

110. Hematogenous dissemination seen in which of the following Trichosporon species?

(A) Trichosporon ovoides (B) Trichosporon inkin

(C) Trichosporon cutaneum (D) Trichosporon asahii

111. Following is a geophilic fungi

(A) Trichophyton tonsurans (B) Microsporum canis

(C) Microsporum persicolor (D) Trichophyton nanum

112. The etiological agent of kerion celsi is/are

(A) Trichophyton verrucosum (B) Trichophyton mentagrophyte

(C) Microsporum canis (D) All of the above

113. Coral red color fluorescence is seen under Wood's lamp in

(A) Microsporum canis (B) Malassezia furfur

(C) Corynebacterium minutissimum (D) Trichophyton schoenleinii

114. Microconidia are absent in

(A) Trichophyton (B) Microsporum

(C) Epidermophyton (D) None of the above

115. Causative agent of Actinomycetoma is/are –

(A) Streptomyces somaliensis (B) Trichophyton mentagrophyte

(C) Both of the above (D) None of the above

116. Causative bacteria of Botryomycosis is/are-

(A) Staphylococcus aureus (B) Pseudomonas aeruginosa

(C) Actinobacillus lignieresi (D) All of the above

117. Clinical manifestation of Rose Gardener disease is/are

(A) Lymphocutaneous sporotrichosis (B) Fixed cutaneous sporotrichosis

(C) Extra cutaneous sporotrichosis (D) All of the above

118. Chromoblastomycosis is described by presence of

(A) Sclerotic bodies (B) Negri bodies

(C) Aster bodies (D) None of the above

119. All are yeast or yeast like fungi except:

(A) Candida (B) Geotrichum

(C) Cryptococcus (D) Trichophyton

120. Organism that does not cause onychomycosis:

(A) Trichophyton (B) Epidermophyton

(C) Microsporum (D) Candida albicans

121. A patient coming from sub-Himalayan hilly area, presents with multiple skin lesions. Microscopy reveals cigar shaped yeast cells and asteroid bodies. Microscopy of culture shows 'flower like' pattern. Identify the agent.

(A) Candida (B) Sporothrix schenckii

(C) Epidermophyton floccosum (D) Rhizopus

122. Germ tube test is diagnostic for:

(A) Candida glabrata (B) Candida olbicans

(C) Cryptococcus neoformans (D) Coccidioides immitis

123. Example for fungus having branching, aseptate hyphae are all except:

(A) Rhizopus (B) Absidia

(C) Penicillium (D) Mucor

124. Most common fungus causing orbital cellulitis in a patient with diabetic ketoacidosis is:

(A) Mucor (B) Aspergillus

(C) Candida (D) Cryptococcus

125. Which one of the following antifungal drugs does not target the biosynthesis of ergosterol in the fungal membrane?

(A) Voriconazole (B) Itraconazole

(C) Micafungin (D) Terbinafine

126. Which one of the following pathogenic yeasts is not a common member of normal human flora or microbiota?

(A) Candida tropicalis (B) Malassezia globosa

(C) Cryptococcus neoformans (D) Candida glabrata

127. Which statement regarding fungi is correct?

(A) All fungi are able to molds

(B) Although fungi are eukaryotes, they lack mitochondria.

(C) Fungi are photosynthetic

(D) Fungi have one or more nuclei & chromosomes

128. The potassium hydroxide examination of sputum from a heart transplant patient with fever and pulmonary infiltrates contains oval budding yeast cells and pseudohyphae. What is the diagnostic significance?

(A) Aspergillosis (B) Candidiasis

(C) Hyalohyphomycosis (D) No diagnostic significance

129. A 24 year old, HIV negative migrant worker from Columbia presented with a painful ulcerative lesion on the tongue. The edge of the lesion was gently scraped and a calcofluor white- potassium hydroxide smear revealed tissue cells, debris and several large, spherical, multiply budding yeast cells. Based on this observation, what is the most likely diagnosis?

(A) Blastomycosis (B) Candidiasis

(C) Histoplasmosis (D) Paracoccidioidomycosis

130. Replication of which of the following requires physical integration with a bacterial replicon?

(A) Single-stranded DNA bacteriophage (B) Single-stranded RNA bacteriophage

(C) Plasmid (D) Transposon

131. What is a characteristic of the adaptive immune response and not of innate response?

(A) Physical barriers (B) Clonal expansion of effector cells

(C) Inflammatory mediators (D) Phagocytosis

132. Which class of antibody has the ability to cross placenta?

(A) IgG (B) IgA

(C) IgM (D) IgD

133. A 2 year old child with recurrent bacterial infections causing otitis media and pneumonia is most likely deficient in

(A) T cells (B) Phagocytes

(C) B cells (D) C1 esterase inhibitor

134. Superantigens are peptide toxins released from virulent strains of staphylococcal or streptococcal bacteria. To what entity do these superantigen bind in order to elicit their effect?

(A) TCR gamma chains (B) TCR beta chain & MHC class ll chain complex

(C) MHC class l molecule (D) Peptide antagonist

135. NK cells express a killer immunoglobulin-like receptor which recognizes:

(A) MHC class l molecule (B) MHC class ll molecule

(C) Cell adhesion molecule (D) CD40 molecule

136. The first microorganism to satisfy Koch's postulate (in the late 19th century) was

(A) Treponema pallidum (B) Mycobacterium leprae

(C) Bacillus anthracis (D) Neisseria gonorrhoeae

137. Which of the following is most likely to be associated with the formation of a bacterial biofilm?

(A) Airway colonization in cystic fibrosis patient with a mucoid strain of Pseudomonas aeruginosa

(B) Urinary tract infection with Escherichia coli

(C) Meningitis with Neisseria meningitides

(D) Tetanus

138. Which of the following best describes the mechanism of action of diphtheria toxin?

(A) Forms pores in red blood cells causing hemolysis

(B) Degrades lecithin in eukaryotic cell membranes

(C) Inhibits elongation factor 2

(D) Causes increased adenylate cyclase activity

139. Which of the following statement is correct?

(A) Lipopolysaccharide is a part of cell wall of Escherichia coli

(B) Cholera toxin is attached to the flagella of Vibrio cholera

(C) The lecithinase of Clostridium perfringens causes diarrhea

(D) Toxic shock syndrome toxin l is produced by strains of Staphylococcus epidermidis

140. Which one of the following microorganisms can be a part of normal vaginal flora and cause meningitis in newborns?

(A) Candida albicans (B) Corynebacterium species

(C) Staphylococcus epidermidis (D) Group B streptococcus

141. Anaerobic bacteria such as Bacteroides fragilis occur in the sigmoid colon in a concentration of about 10^{11}lg of stool. At what concentration do facultative organisms such as Escherichia coli occur?

(A) 10^{11}/ g (B) 10^{10}/g

(C) 10^{9}/g (D) 10^{7}/g

142. Dental plaque and periodontal disease can be thought of as a continuum of what type of physiological process?

(A) Biofilm formation (B) Normal aging

(C) Exaggerated immune response (D) Abnormal digestion

143. All of the following statement regarding Clostridium perfringens are correct except:

(A) It produces an enterotoxin

(B) It produces double zone of beta hemolysis when grown on blood agar

(C) It can cause intravascular hemolysis

(D) It is most common cause of antibiotic associated diarrhea

144. Movement of Listeria monocytogenes inside host cells is caused by

(A) Inducing host cell actin polymerization (B) The formation of pili on the Listeriae surface

(C) Tumbling motility (D) The motion of listeria flagella

145. A group of six children under 8 years of age live in semitropical country. Each of the children has several crusted weeping skin lesions of impetigo. The lesions are predominantly on arms and faces. Which of the following microorganisms is a likely cause of the lesions?

(A) Escherichia coli
(B) Chlamydia trachomatis
(C) Staphylococcus aureus
(D) Streptococcus pneumoniae

146. Which of the following genera are typically resistant to vancomycin?

(A) Aerococcus
(B) Pediococcus
(C) Streptococcus
(D) Abiotrophila

147. Enterococci can be distinguished from non enterococcal Group D streptococci on the basis of which of the following charecterstics?

(A) Gamma hemolysis
(B) Esculin hydrolysis
(C) Growth in 6.5% NaCl
(D) Growth in presence of bile

148. Which of the following individual should routinely receive vaccination with the conjugate meningococcal vaccine?

(A) A healthy young adolescent entering high school
(B) A healthy child entering kindergarten
(C) A 60 year old man with insulin dependent diabetes
(D) A 65 year old woman with coronary artery disease

149. The definition of extensively drug resistant (XDR) tuberculosis includes :

(A) Resistance to isoniazid and rifampin
(B) Resistance to fluoroquinolone
(C) Resistance to capreomycin, amikacin and kanamycin
(D) Resistance to all of the above

150. Which of the following organism principally infects liver and kidney?

(A) Streptobacillus moniliformis
(B) Leptospira interrogans
(C) Enterococcus faecalis
(D) Treponema pallidum

151. Which of the following carbapenem antibiotics has no activity against Pseudomonas aeruginosa?

(A) Imipenem
(B) Meropenem
(C) Doripenem
(D) Ertapenem

152. All of the following are common mechanisms of resistance to penicillins except:

(A) Production of beta lactamase
(B) Alterations in target receptors (PBP)
(C) Inability to activate autolytic enzymes
(D) Methylation of ribosomal RNA

153. Which one of the following can be used to quantitate the infectious titer of virus?

(A) Plaque assay
(B) Electron microscopy
(C) Haemagglutination
(D) Enzyme immunoassay

154. Laboratory infections can be acquired when working with viruses unless good laboratory safety practices are followed. Which of the following is not a good biosafety practice?

(A) Use of aseptic techniques
(B) No pipetting by mouth
(C) Flushing experimental waste down laboratory sink
(D) No eating or drinking in the laboratory

155. Human bocavirus is a parvovirus. It has been detected most frequently in which type of sample?

(A) Urine (B) Cord blood

(C) Respiratory secretions (D) Fetal liver

156. Which of the following events led to reappearance of acute respiratory disease outbreak among U.S military recruits in the late 1990s?

(A) Emergence of a new virulent strain of adenovirus

(B) Cessation of adenovirus vaccination program for recruits

(C) Change in military housing & training conditions for recruits

(D) Cessation of antiviral adenovirus drug therapy program for recruits

157. Which one of the following is a recommended therapy for HSV genital infection?

(A) Acyclovir (B) Herpes immune globulin

(C) Interferon alpha (D) Ribavirin

158. Which of the following pox infects only humans ?

(A) Monkeypox (B) Molluscum contagiosum

(C) Tanapox (D) Yaba tumor virus

159. Which of the following properties of enteroviruses is not shared by rhinoviruses?

(A) Single stranded RNA genome (B) Resistance to lipid solvent

(C) Stability at acid pH (pH 3.0) (D) Icosahedral symmetry

160. Rabies virus is rapidly destroyed by

(A) Ultraviolet radiation (B) Heating at 56°C for 1 hour

(C) Ether treatment (D) All of the above

161. Which of the following statement is true?

(A) Zika virus disease is transmitted by bite of Aedes mosquito

(B) Zika virus disease can be transmitted sexually

(C) Zika virus can be transmitted from pregnant mother to foetus

(D) All of the above

162. What is the acceptable limit of bacterial count in air in operation theatre?

(A) 50 per cubic feet (B) 10 per cubic feet

(C) 4 per cubic feet (D) 1 per cubic feet

163. Drinking water is considered satisfactory if the presumptive coliform count of water is:

(A) 0/100mL (B) 1-3/100mL

(C) 4-10/100mL (D) >10/100mL

164. Minimum inhibitory concentration of an antibiotic can be detected by:

(A) Broth dilution method (B) Epsilometer test

(C) Both of the above (D) None of the above

165. At what age first dose of Vitamin A is given?

(A) 6 weeks (B) 6 months

(C) 7 months (D) 9 months

166. Specific immunoglobulins are available for passive immunization against:

(A) Tetanus (B) Hepatitis B infection

(C) Rabies (D) All of the above

167. Which of the following bacteria can cause infection in hospitalized burn patients?

(A) Pseudomonas aeruginosa (B) Staphylococcus aureus

(C) Acinetobacter species (D) All of the above

168. Which of the following organism can cause painless genital infection?

(A) Treponema pallidum (B) Chlamydia trachomatis

(C) Klebsiella granulomatis (D) All of the above

169. Which is the commonest etiological agent of endocarditis associated with intravenous drug abusers?

(A) Staphylococcus aureus (B) Staphylococcus epidermidis

(C) Aspergillus fumigatus (D) Streptococcus agalactiae

170. What is significant bacteriuria?

(A) Bacterial count > 10^5 per mL (B) Bacterial count < 10^4 per mL

(C) Bacterial count 10^4 to 10^5 per mL (D) None of the above

171. Ergot alkaloids are produced by

(A) Aspergillus flavus (B) Fusarium nivale

(C) Claviceps purpurae (D) Penicillium rubrum

172. Which of the following fungi has not been cultured ?

(A) Sporothrix (B) Rhinosporidium

(C) Acremonium (D) Blastomyces

173. Who discovered prions?

(A) Carlton Gajdusek (B) Stanley B Prusiner

(C) Sigurdsson (D) Karry B Mullis

174. What is the relative risk of transmission of HIV by the sexual contact?

(A) 0.1-1.0% per exposure (B) 2-20% per exposure

(C) 30-50% per exposure (D) 50-90% per exposure

175. Subacute sclerosing panencephalitis may occur as complication in:

(A) Mumps (B) Measles

(C) Rubella (D) Respiratory syncytial virus

176. Which of the following bacteria requires microaerophilic environment for primary isolation?

(A) Mycobacterium tuberculosis (B) Mycobacterium bovis

(C) Both of the above (D) None of the above

177. The causative agent of Pontaic fever is:

(A) Legionella pneumophila (B) Yersinia pseudotuberculosis

(C) Pseudomonas putida (D) Francisella tularensis

178. 'Safety pin appearance' on methylene blue staining is characteristic feature of:

(A) Yersinia pestis (B) Pseudomonas aeruginosa

(C) Burkholderia mallei (D) Burkholderia pseudomallei

179. Which of following bacteria is non-motile?

(A) Pseudomonas stutzeri (B) Burkholderia mallei

(C) Burkholderia pseudomallei (D) Stenotrophomonas maltophila

180. Which antibody is responsible for systemic lupus erythematosus?

(A) Antiplatelet antibodies (B) Antibasement membrane antibodies

(C) Antinuclear antibodies (D) None of the above

181. Shwartzman reaction is an example of:

(A) Type l hypersensitivity reaction (B) Type ll hypersensitivity reaction

(C) Type lll hypersensitivity reaction (D) None of the above

182. Which of the following HLA types is associated with rheumatoid arthritis?

(A) HLA-B27 (B) HLA-A1

(C) HLA-DR4 (D) None of the above

183. Codes of modern medical ethics include

(A) Hippocratic oath (B) Declaration of Geneva

(C) Declaration of Tokyo (D) All of the above

184. The Indian Medical Council (amendment) act was passed in

(A) 1964 (B) 1933

(C) 1947 (D) 1921

185. Recognition of foreign medical degrees are governed by Indian Medical Council act 1956, under the following section/s

(A) Section 12 (B) Section 13 (4)

(C) Both (A) and (B) (D) None of the above

186. All of the following are examples of privileged communication except

(A) A hotel waiter diagnosed as typhoid carrier

(B) A barmaid diagnosed of open case of tuberculosis

(C) A railway engine driver who is colorblind

(D) Regarding a married women pregnancy as illegitimate and informing to relatives

187. According to doctrine of emergency, a doctor can provide treatment without prior consent from patient who is gravely sick, unconscious or mentally ill, under which section?

(A) Section 92 of IPC (B) Section 31 of IPC

(C) Section 104 of IPC (D) Section 40 of IPC

188. Examples of doctrine of res ipsa loquitor in malpraxis are following except

(A) Mismatched blood transfusion (B) Giving medicine in heavy dose

(C) Giving injection in wrong site/route (D) Promising 100 per cent cure

189. The existing AIDS law in India consist of

(A) State amendments and a proposed central bill

(B) AIDS prevention bill

(C) Section 4, 7, 5 , 5 (c)

(D) All of the above

190. Integrationist response to tackle AIDS , proposed by WHO, adopted by US and UK includes 3 specific features , except

(A) No compulsory testing

(B) Protecting through confidentiality

(C) Ensuring nondiscrimination against them

(D) Mandatory testing

191. Recommended type of personal protective equipment in context of Covid-19 disease for health care worker performing Aerosol generating procedures on Covid-19 patients include all except

(A) FFP2 mask
(B) Gloves and face shield
(C) Long sleeved water resistant gown
(D) Surgical mask

192. Steps involved in convalescent plasma therapy include all , except-

(A) Blood is collected and run through a machine to separate antibody containing plasma in a process called apheresis
(B) Convalescent plasma is collected and rest of the blood is returned to donor body
(C) Convalescent plasma is given to COVID-19 patients through intravenous transfusion to deliver antibodies through blood.
(D) Plasma can be collected only from healthy individuals who are never exposed to the Covid-19 infection.

193. Death certificate data can be used locally

(A) to guide disease surveillance
(B) quarantine measures
(C) optimize medical resources
(D) all of the above

194. Bacteriophages were discovered by

(A) d'Herelle
(B) W.H Welch
(C) Kitasato
(D) Bruce

195. Barbara McClintoch, Nobel laureate, her contribution in Microbiology is-

(A) Discovered mobile genetic element (transposon)
(B) Invented polymerase chain reaction
(C) Discovered genetic code
(D) Discovered HLA antigen

196. Resolution power of electron microscope is

(A) 0.2 mm
(B) 0.5mm
(C) 0.5nm
(D) 1mm

197. Generation time of Mycobacterium leprae is-

(A) 20 minutes
(B) 20 days
(C) 20 hours
(D) 20 seconds

198. Lithotrophs are the bacteria that obtain

(A) Reducing equivalents (electrons)from inorganic compounds
(B) Reducing equivalents (electrons) from organic compounds
(C) Obtain energy from light
(D) Both (A) and (B)

199. Property responsible for bleaching is

(A) Oxidation
(B) Conjugation
(C) Precipitation
(D) Septication

200. All of the following are exotoxins except:

(A) Botulinum toxin
(B) Anthrax toxin
(C) Diphtheria toxin
(D) lipid A portion of lipopolysaccharide