

## AMZ

### PROVISIONAL ANSWER KEY (CBRT)

Name of The Post	Associate Professor, Microbiology, General State Service, Class-1 (Special Recruitment)
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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.

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

- (1) ઉમેદવારે વાંધા-સૂચનો નિયત કરવામાં આવેલ વાંધા-સૂચન પત્રકથી રજૂ કરવાના રહેશે.
- (2) ઉમેદવારે પ્રશ્નપ્રમાણે વાંધા-સૂચનો રજૂ કરવા વેબસાઇટ પર પ્રસિધ્ધ થયેલ નિયત વાંધા-સૂચન પત્રકના નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ ન કરતા તમામ વાંધા-સૂચનો વેબસાઇટ 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) ઉમેદવારે જે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદવારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદવારે સૂચવેલ જવાબ અને ઉત્તરવહીનો જવાબ ભિન્ન હશે તો ઉમેદવારે 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. Unaided human eye has resolution power of:  
(A) 0.2 mm (B) 0.2  $\mu$ m  
(C) 0.2 nm (D) 0.5 mm
002. Which one of the following Bacteria is Cell wall deficient ?  
(A) Escherichia coli (B) Mycoplasma  
(C) Salmonella typhi (D) Treponema palidum
003. Staphylococcal scalded skin syndrome is caused by –  
(A) Hemolysin (B) Coagulase  
(C) Enterotoxin (D) Epidermolytic toxin
004. Staphylococcus aureus causes vomiting in 6-8 hours. The mechanism of action is:  
(A) Stimulation of cAMP (B) Vagal stimulation  
(C) Stimulation of cGMP (D) Acts through ganglioside GM receptor
005. All can be given in MRSA except?  
(A) Cotrimoxazole (B) Cefaclor  
(C) Vancomycin (D) Teicoplanin
006. The survival of Mycobacteria after ingestion by macrophages is attributed to:  
(A) Bacterial inhibition of complement activation via the alternative pathway.  
(B) Bacterial inhibition of phagolysosome formation and interference with endosomal acidification.  
(C) The poor immunogenicity of the cell wall glycolipids.  
(D) The bacterium's rapid escape from the endosome into the cytoplasm of infected cells.
007. A patient has prosthetic valve replacement and he develops endocarditis 8 months later. Organism responsible is?  
(A) Staphylococcus aureus (B) Streptococcus viridans  
(C) Staphylococcus epidermidis (D) HACEK
008. Serotyping of *Streptococcus pyogenes* is based on which of the following protein?  
(A) M protein (B) T protein  
(C) R protein (D) Carbohydrate antigen
009. Streptococcus pyogenes can be differentiated from Streptococcus agalactiae by:  
(A) Optochin sensitivity (B) Bacitracin sensitivity  
(C) Polymyxin sensitivity (D) Novobiocin sensitivity
010. CAMP test is useful in identification of:  
(A) S. Pyogenes (B) S. Agalactiae  
(C) Viridans streptococci (D) S. Pneumoniae
011. Which is a poststreptococcal sequelae:  
(A) Acute rheumatic fever (B) Cellulitis  
(C) Pharyngitis (D) Impetigo
012. Neonatal meningitis acquired through infected birth canal is due to:  
(A) S. Pyogenes (B) Viridans streptococci  
(C) S. Agalactiae (D) S. Pneumoniae

013. Carron coin appearance of colonies is seen for:  
 (A) *S. Pyogenes* (B) Viridans streptococci  
 (C) *S. Agalactiae* (D) *S. Pneumoniae*
014. Which is not a property of *S. pneumoniae*?  
 (A) Bile solubility (B) Animal pathogenicity in mice  
 (C) Growth in presence of 40% bile (D) Optochin sensitivity
015. The most common mode of transmission of gonorrhoea is:  
 (A) Venereal mode (B) Injection  
 (C) Blood transfusion (D) Inhalation
016. All of the following are causative agents of NGU except:  
 (A) *Chlamydia trachomatis* (B) *Mycoplasma hominis*  
 (C) *Candida albicans* (D) Meningococci
017. All of the following meningococcal serogroups cause invasive disease except:  
 (A) W135 (B) A  
 (C) D (D) Y
018. Gonococci can be differentiated by meningococci by following sugar fermentation test:  
 (A) Glucose (B) Sucrose  
 (C) Mannitol (D) Maltose
019. Selective media for *C. diphtheriae*:  
 (A) Nutrient agar (B) Chocolate agar  
 (C) TCBS agar (D) Potassium tellurite agar
020. Which of the following site is most commonly affected by *C. diphtheriae*?  
 (A) Skin (B) Conjunctiva  
 (C) Faucial (D) Kidney
021. *Diphtheriae* can be stained by all of the following special stains except:  
 (A) Neisser's stain (B) Ziehl-Neelsen stain  
 (C) Albert's stain (D) Ponder's stain
022. Gram-stain morphology of *Bacillus anthracis* is:  
 (A) Tennis racket appearance (B) Drum stick appearance  
 (C) Bamboo stick appearance (D) Spectacle glass appearance
023. "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
024. Incubation period for *B. cereus* food poisoning following consumption of contaminated fried rice:  
 (A) 1 – 5 hours (B) 8 – 16 hours  
 (C) 24 hours (D) > 24 hours
025. Characteristic of anaerobic bacteria is:  
 (A) Foul smelling discharge (B) Fail to grow in aerobic media  
 (C) Gas in tissue ( Crepitus ) (D) All of the above



039. Culture media used for diagnosis of EHEC O157:H7 is:  
 (A) O7 culture (B) Sorbitol MacConkey media  
 (C) XLD agar (D) Deoxycholate media
040. Most common cause of community-acquired urinary tract infection is:  
 (A) E. Coli (B) Proteus  
 (C) Pseudomonas (D) Klebsiella
041. Phenyl alanine deaminase test is characteristic of which of the following tribes of Enterobacteriaceae:  
 (A) Escherichieae (B) Salmonelleae  
 (C) Yersinieae (D) Proteeae
042. Which of the following *Shigella species* is mannitol nonfermenter?  
 (A) *S. sonnei* (B) *S. boydii*  
 (C) *S. dysenteriae* (D) *S. flexneri*
043. Plague is transmitted by:  
 (A) Rat flea (B) Soft tick  
 (C) Hard tick (D) Louse
044. Bipolar staining is characteristic of:  
 (A) *Yersinia pestis* (B) *Shigella*  
 (C) *Klebsiella* (D) *Proteus*
045. All of the following salmonellae are motile except:  
 (A) *S. typhi* (B) *S. enteritidis*  
 (C) *S. gallinarum* (D) *S. paratyphi A*
046. *S. Typhi* is the causative agent of typhoid fever. The infective dose of *S. Typhi*:  
 (A) One bacillus (B)  $10^3 - 10^6$  bacilli  
 (C)  $10^8 - 10^{10}$  bacilli (D) 1- 10 bacilli
047. Which of the following media can be used as transport medium for vibrios?  
 (A) Selenite F broth (B) Nutrient broth  
 (C) Tetrathionate broth (D) Venkatraman – Ramakrishnan medium
048. All of the following tests can differentiate between classical and El Tor biotypes of *V. cholerae* except:  
 (A)  $\beta$  hemolysis on sheep blood agar (B) Chick erythrocyte agglutination  
 (C) Growth on TCBS agar (D) Polymyxin B (50 IU)
049. Pathogenesis of *V. cholerae* involves one of the following second messenger systems:  
 (A) cGMP (B) cAMP  
 (C)  $Ca^{2+}$  (D) IP3
050. Ecthyma gangrenosum is caused by:  
 (A) *Pseudomonas* (B) *Bordetella*  
 (C) *Brucella* (D) *H. Influenzae*

051. Drugs used in *Pseudomonas* treatment:
- (A) Vancomycin (B) Ceftriaxone  
(C) Ampicillin (D) Cotrimoxazole
052. Cause of melioidosis is:
- (A) *Burkholderia mallei* (B) *Burkholderia pseudomallei*  
(C) *Burkholderia cepacia* (D) None of the above
053. Which of the following bacteria known as Koch-Weeks bacillus?
- (A) *Neisseria meningitidis* (B) *Haemophilus aegyptius*  
(C) *Moraxella catarrhalis* (D) *Escherichia coli*
054. *Haemophilus influenzae* grows on all of the following media except:
- (A) Chocolate agar (B) Fildes' agar  
(C) Nutrient agar (D) Blood agar with *S. aureus* streak line
055. HACEK group includes all except:
- (A) *Kingella kingae* (B) *Haemophilus influenzae*  
(C) *Eikenella corrodens* (D) *Cardiobacterium hominis*
056. Mercury drop appearance colony of *B. pertussis* is seen on which of the following culture media?
- (A) Blood agar (B) Chocolate agar  
(C) Regan-Lowe agar (D) Nutrient agar
057. Pertussis toxin is produced by:
- (A) *B. pertussis* (B) *B. parapertussis*  
(C) *B. avium* (D) *B. bronchiseptica*
058. Which is the highly infective stage in whooping cough?
- (A) Catarrhal stage (B) Paroxysmal stage  
(C) Convalescent stage (D) All of the above
059. Malta fever is also called as:
- (A) Undulant fever (B) Relapsing fever  
(C) Hemorrhagic fever (D) Rat bite fever
060. All of the following serological tests would be helpful in the diagnosis of chronic brucellosis except:
- (A) Standard agglutination test (B) MAT Test  
(C) Complement fixation test (D) ELISA detecting IgG
061. Most common mode of transmission of *Legionella pneumophila* is:
- (A) Aspiration (B) Ingestion  
(C) Insect bite (D) Blood
062. Rat bite fever is caused by:
- (A) *Borrelia recurrentis* (B) *Streptobacillus moniliformis*  
(C) *Yersinia pestis* (D) *Leptospira*
063. Wrong about Bacterial vaginosis is:
- (A) Discharge has offensive smell (B) pH >4.5  
(C) Causative agent is Chlamydia (D) Clue cell is diagnostic

064. Weil's disease is caused by:  
 (A) *Leptospira interrogans* (B) *Borrelia recurrentis*  
 (C) *Treponema carateum* (D) *Treponema pallidum*
065. Pinta is caused by:  
 (A) *Borrelia recurrentis* (B) *Treponema endemicum*  
 (C) *Treponema pallidum*  (D) *Treponema carateum*
066. All of the following rickettsiae belong to spotted fever group, *except*:  
 (A) *R. rickettsii* (B) *R. conorii*  
 (C) *R. typhi* (D) *R. akari*
067. Tick is the vector for following rickettsial infections, *except*:  
 (A) *R. rickettsii*  (B) *R. akari*  
 (C) *R. africae* (D) *R. conorii*
068. All are true about *Coxiella burnetii*, *except*:  
 (A) It is obligate intracellular  
 (B) It causes 'Q fever'  
 (C) It is extremely fastidious  
 (D) It is killed by Holder's method of pasteurization
069. Cat scratch disease caused by :  
 (A) *Bartonella henselae* (B) *Bartonella quintana*  
 (C) *Brucella* (D) *Bordetella*
070. All of the following are true about Chlamydiae *except*:  
 (A) Elementary body is metabolically active (B) Reticulate body is the replicating form  
 (C) Reticulate body is intracellular form (D) Elementary body is infectious form
071. 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
072. The diagnostic assays of choice for chlamydiae currently are?  
 (A) Direct immunofluorescence test (DIF) (B) Culture on McCoy cell line  
 (C) Nucleic acid amplification tests (NAAT) (D) Microimmunofluorescence (MIF) test
073. Which is not a property of *Mycoplasma*?  
 (A) Susceptibility to beta lactams (B) They are pleomorphic  
 (C) Can grow in cell-free media (D) Extracellular survival
074. The agent of primary atypical pneumonia is:  
 (A) *H. Influanze* (B) *Klebsiella pneumoniae*  
 (C) *Mycoplasma pneumoniae* (D) *Streptococcus pneumoniae*
075. Fried egg colonies are produced by:  
 (A) *Bacillus cereus* (B) *Haemophilus influenzae*  
 (C) *Neisseria subflava*  (D) *Mycoplasma pneumoniae*

076. Which culture medium is preferred for processing of urine specimens?  
 (A) TCBS agar (B) CLED agar  
 (C) Chocolate agar (D) XLD agar
077. Naturally acquired active immunity would be most likely acquired through which of the following processes?  
 (A) Vaccination  
 (B) Drinking Colostrum  
 (C) Natural birth  
 (D) Infection with disease causing organism followed by recovery
078. 53-year old woman presents with headache, vomiting, and neck rigidity. Indian ink staining of CSF reveals spherical budding yeast cells with clear halo surrounding. What is the etiological agent?  
 (A) Neisseria (B) Haemophilus  
 (C) Cryptococcus (D) Streptococcus
079. Biochemical analysis of pyogenic meningitis reveals all of the following, *except*:  
 (A) CSF pressure: highly elevated  
 (B) Total leukocyte count: Highly elevated, neutrophilic  
 (C) Glucose: highly elevated  
 (D) Total proteins: markedly increased
080. CURB-65 score is used for prediction of prognosis in:  
 (A) Ventilator-associated pneumonia (B) Upper respiratory tract infections  
 (C) Community-associated pneumonia (D) Tuberculosis
081. Clinical-pulmonary infection score (CPIS) is used for:  
 (A) Ventilator-associated pneumonia (B) Upper respiratory tract infections  
 (C) Community-associated pneumonia (D) Tuberculosis
082. All of the following are true with respect to IgM antibodies EXCEPT:  
 (A) They are glycoproteins (B) They fix complement  
 (C) They mediate allergic reaction (D) They occur on the surface of lymphocytes
083. The agent of malignant otitis externa is:  
 (A) Staphylococcus aureus (B) Pseudomonas species  
 (C) Streptococcus pyogenes (D) Candida species
084. Which of the following sexually transmitted infection produces painful genital ulcers and painful lymph nodes?  
 (A) Syphilis (B) Chancroid  
 (C) Gonorrhoea (D) Donovanosis
085. All are yeast or yeast like fungi except:  
 (A) Candida (B) Saccharomyces cerevisiae  
 (C) Cryptococcus (D) Trichophyton
086. Fungi which do not have sexual stage:  
 (A) Zygomycota (B) Ascomycota  
 (C) Basidiomycota (D) Fungi imperfecti

087. Organism that does not affect nail:  
 (A) *Trichophyton violaceum* (B) *Epidermophyton*  
 (C) *Microsporum* (D) *Trichophyton rubrum*
088. An epitope is  
 (A) B cell (B) Hapten  
 (C) An antibody  (D) The antigen determinant site
089. Dermatophyte infecting hair & skin only :  
 (A) *Microsporum* (B) *Trichophyton*  
 (C) *Epidermophyton* (D) All of the above
090. Chromoblastomycosis is caused by:  
 (A) *Epidermophyton* (B) *Histoplasma*  
 (C) *Phialophora verrucosa* (D) *Penicillium*
091. Which of the following organism is not been isolated in artificial culture media?  
 (A) *Cryptococcus neoformans*  (B) *Rhinosporidium seeberi*  
 (C) *Aspergillus* species (D) *Candida* species
092. Most common fungus causing orbital cellulitis in a patient with diabetic ketoacidosis is:  
 (A) *Mucor* (B) *Aspergillus*  
 (C) *Candida* (D) *Cryptococcus*
093. Fluorescent dye used for detection of fungi in tissue specimen is:  
 (A) Methenamine silver stain  (B) Calcofluor white  
 (C) Hematoxylin and Eosin staining (D) India ink
094. Which of the following is added in Sabouraud's Dextrose Agar to suppress the growth of contaminating (saprophytic) fungi and bacteria?  
 (A) Cycloheximide (B) Chloramphenicol  
 (D) All of the above
095. Tinea versicolor is caused by:  
 (A) *Candida albicans* (B) *Trichophyton rubrum*  
 (D) *Malassezia furfur*
096. Broad-based budding is seen in:  
 (B) *Blastomyces*  
 (A) *Histoplasma* (D) *Penicillium*  
 (C) *Cryptococcus*
097. Aflatoxin is produced by:  
 (A) *Aspergillus flavus* (B) *Histoplasma*  
 (C) *Sporothrix schenckii* (D) *Penicillium marneffei*
098. Spherules are seen in:  
 (B) *Rhinosporidiosis*  
 (A) *Chromoblastomycosis* (D) *Aspergillosis*  
 (C) *Mucormycosis*
099. Barrel-shaped arthroconidia are seen in:  
 (C) *Coccidioidomycosis* (B) *Cryptococcosis*  
 (A) *Histoplasmosis* (D) *Paracoccidioidomycosis*

100. Sclerotic bodies are seen in:  
 (A) Mucormycosis (B) Aspergillosis  
 (C) Rhinosporidiosis (D) Chromoblastomycosis
101. Spaghetti and meatball appearance is seen in:  
 (A) Hortaea werneckii (B) Trichosporon beigeli  
 (C) Piedraia hortae (D) Malassezia furfur
102. The drug of choice for Pneumocystis pneumonia is:  
 (A) Amphotericin B (B) Flucytosine  
 (C) Cotrimoxazole (D) Voriconazole
103. Sickle-shaped large macroconidia is seen in:  
 (A) Microsporium (B) Epidermophyton  
 (C) Fusarium species (D) Pneumocystis jirovecii
104. The cysts resemble crushed ping-pong balls is seen with:  
 (A) Microsporium (B) Pneumocystis jirovecii  
 (C) Epidermophyton (D) Fusarium species
105. Azole active against mucormycosis is:  
 (A) Voriconazole (B) Fluconazole  
 (C) Itraconazole (D) Posaconazole
106. Candida species resistant to azoles is:  
 (A) C. albicans (B) C. krusei  
 (C) C. tropicalis (D) C. dubliniensis
107. Pasteurized Milk is most commonly tested by:  
 (A) Phosphatase test (B) Coliform test  
 (C) Catalase test (D) Oxidase test
108. Phage mediated transfer of cDNA into host is known as:  
 (A) Transduction (B) Transformation  
 (C) Transmission (D) Conjugation
109. Movement of DNA from one bacteria to another connection tube or pilus is called:  
 (A) Transformation (B) Transduction  
 (C) Conjugation (D) Lysogenic conversion
110. The mechanism of action of vancomycin is inhibition/alteration of:  
 (A) Cell wall synthesis (B) mRNA synthesis  
 (C) Cell membrane integrity (D) Protein synthesis via 50s ribosomal subunit
111. All of the following are diffusion methods for antibiotic sensitivity except:  
 (A) E test (B) Stokes  
 (C) Kirby Bauer's disk diffusion method (D) Broth dilution method
112. For antibiotic sensitivity test, the organism broth prepared should match with  
 (A) McFarland standard 0.5 (B) McFarland standard 1  
 (C) McFarland standard 2 (D) McFarland standard

113. Method used to detect DNA:
- (A) Southern blot (B) Northern blot  
(C) Eastern blot (D) Western blot
114. MALDI-TOF technology is used for:
- (A) Blood culture (B) Bacterial identification  
(C) Antimicrobial susceptibility (D) All of the above
115. Which of the following is Selective medium?
- (A) Chocolate Agar (B) Blood Agar  
(C) Nutrient Agar (D) Blood Tellurite Agar
116. Which of the following is true for Mycobacterium tuberculosis ?
- (A) Acid fastness (B) Spore formation  
(C) Capsulated (D) Gram negative
117. Who introduced methods of obtaining bacteria in pure culture using solid media?
- (A) Robert Koch (B) Joseph Lister  
(C) Louis Pasteur (D) Edward Jenner
118. Which bacterial spores are used as Biological sterilization control during Autoclaving?
- (A) Clostridium perfringens (B) Bacillus stearothermophilus  
(C) Bacillus cereus (D) Bacillus subtilis
119. All of the following are Non sense codons Except
- (A) UAG (B) UGA  
(C) UAA (D) AUG
120. The pre core mutants in Hepatitis B are characterized by notable absence of:
- (A) HBV DNA (B) HBeAg  
(C) HBcAg (D) Anti HBeAg
121. Paul Bunnell test is based on sharing of antigens between
- (A) Sheep erythrocytes & Epstein barr virus (B) Mycoplasma & Human Erythrocytes  
(C) Rickettsial antigen & Proteus antigen (D) None of the above
122. Presence of which immunoglobulin class in serum is a useful indicator for Diagnosis of Congenital infection ?
- (A) Ig G (B) Ig M  
(C) Ig A (D) Ig D
123. VDRL test is the example of
- (A) Agglutination Reaction (B) Immunofluorescence  
(C) Slide Flocculation Test (D) None of the above
124. Which of the following virus can cause cervical cancer?
- (A) Human Papilloma virus (B) Herpes simplex Virus  
(C) Epstein Barr virus (D) Norwalk virus
125. Which structural gene are present in genome of HIV – 1 and not in HIV – 2
- (A) gag gene (B) env gene  
(C) pol gene (D) vpu

126. Which of the following viral marker(s) is / are positive in simple carrier of Hepatitis B ?  
 (A) HBsAg  (B) HBeAg  
 (C) Both (A) and (B)  (D) None of the above
127. In malaria, the form of plasmodia that is transmitted from mosquito to human is  
 (A) Sporozoite  (B) Gametocyte  
 (C) Merozoite  (D) Hypnozoite
128. Chemical nature of Exotoxin is  
 (A) Lipopolysaccharides  (B) Proteins  
 (C) Carbohydrate  (D) None of the above
129. According to national immunisation schedule which of the following is recommended for a child of 5-year of age.  
 (A) Pentavalent vaccine and vitamin A  (B) DT booster  
 (C) DT, OPV and vitamin A  (D) DPT booster and vitamin A
130. HPV vaccine is:  
 (A) a live attenuated vaccine  (B) a killed vaccine  
 (C) a subunit vaccine  (D) a synthetic peptide vaccine
131. Viruses that can remain latent (usually in neurons) for many years are most likely:  
 (A) Togaviruses  (B) Herpesviruses  
 (C) Enteroviruses  (D) Retroviruses
132. Leishmania parasite can be cultured in  
 (A) Blood agar  (B) HeLa cell culture  
 (C) RPMI 1640  (D) NNN medium
133. Lawn culture is employed for:  
 (A) Viable count  (B) Antibiotic sensitivity  
 (C) Motility of bacteria  (D) Primary inoculation of clinical specimen
134. All are Beta lactam class of drug except:  
 (A) Carbapenem  (B) Penicillin  
 (C) Vancomycin  (D) Chloramphenicol
135. Calabar swelling occurs in infection by :  
 (A) Mansonella ozzardia  (B) Loa loa  
 (C) Onchocerca volvulus  (D) Mansonella perstans
136. Which of following acts as vector of Chaga's disease:  
 (A) Tsetse fly  (B) Deer fly  
 (C) Reduviid bug  (D) Sand fly
137. Paragonimus westermani affects:  
 (A) Intestine  (B) Lung  
 (C) Liver  (D) Blood vessels
138. The zoological name of beef tapeworm is:  
 (A) Taenia solium  (B) Taenia saginata  
 (C) Hymenolepis nana  (D) Echinococcus granulosus

139. Hookworm leads to deficiency of:  
 (A) Vitamin A (B) Iron  
 (C) Vitamin B12 (D) Folic acid
140. In humans, *Isospora belli* causes:  
 (A) Meningitis (B) Non bloody watery Diarrhea  
 (C) Pneumonia (D) None of the above
141. Which parasite causing autoinfection?  
 (A) *Plasmodium vivax* (B) *Leishmania donovani*  
 (C) *Entamoeba histolytica* (D) *Enterobius vermicularis*
142. Which of the following is true for Selenite F Broth ?  
 (A) Enrichment media (B) Differential media  
 (C) Enriched media (D) Transport media
143. Which of the following viruses has not been associated with human cancer?  
 (A) Varicella-zoster virus (B) Hepatitis C virus  
 (C) Hepatitis B virus (D) Human Papilloma Virus
144. Virulence of *Meningococcus* is due to :  
 (A) Capsule (B) Enterotoxin  
 (C) Neurotoxin (D) Flagella
145. All are non pathogenic *Entamoeba* except:  
 (A) *Entamoeba coli* (B) *Entamoeba histolytica*  
 (C) *Entamoeba hartmanni* (D) *Entamoeba gingivalis*
146. An immunoglobulin is a  
 (A) Carbohydrate (B) Fatty acid  
 (C) Glycoprotein (D) Protein
147. Which of the following acts as vector for *Trypanosoma brucei*?  
 (A) Reduviid bug (B) Tsetse fly  
 (C) Dear fly (D) Black fly
148. The classic complement pathway is initiated by interaction of C1 with  
 (A) Antigen (B) Antigen-Antibody complexes  
 (C) Factor B (D) Bacterial lipopolysaccharides
149. Which Hepatitis virus is associated with high risk in pregnancy?  
 (A) Hepatitis A (B) Hepatitis B  
 (C) Hepatitis C (D) Hepatitis E
150. Which is known as Australia antigen?  
 (A) HBsAg (B) HBeAg  
 (C) HBcAg (D) HBV DNA
151. Cholangiocarcinoma is associated with which of the following?  
 (A) *Clonorchis sinensis* (B) *Fasciola hepatica*  
 (C) *Fasciola gigantica* (D) *Schistosoma haematobium*

152. Which of the following uses an oxygen sensitive fluorescent compound to detect presence of microorganisms?  
 (A) BACTEC  (B) RT PCR  
 (C) ESP culture system  (D) Conventional PCR
153. All of the following are tests for Disinfectants except:  
 (A) Ridel walker Test  (B) Chick Martin test  
 (C) Schick test  (D) Kelsey and Maurer test
154. During the window period of patient with AIDS, Best diagnostic test is:  
 (A) ELISA  (B) Western Blot  
 (C) Rapid test  (D) Viral RNA detection
155. Isotypes refer to variations in the:  
 (A) Heavy chain constant region  (B) Heavy chain variable region  
 (C) Light chain constant region  (D) Light chain variable region
156. Sabin-Feldman dye test is used for the diagnosis of:  
 (A) Toxoplasmosis  (B) Histoplasmosis  
 (C) Leishmaniasis  (D) Chaga's disease
157. Which category of hypersensitivity BEST describes hemolytic disease of the newborn caused by Rh incompatibility?  
 (A) Type I  (B) Type II  
 (C) Type III  (D) Type IV
158. Diarrhea in AIDS patient may be caused by:  
 (A) Cryptosporidium parvum  (B) Cyclospora  
 (C) Cystoisospora  (D) All of the above
159. Bacterial fimbriae present on the outer cell surface are used for:  
 (A) Protein synthesis  
 (B) Motility  
 (C) Cell wall synthesis  
 (D) Adherence and exchange of genetic information.
160. Which of the following viral agents can cause diarrhoea?  
 (A) Norovirus agent  (B) Rotaviruses  
 (C) Adenovirus  (D) All of the above
161. Hand rub should not be used in which condition?  
 (A) Before touching the patient  (B) After touching the patient  
 (C) After touching patient's surrounding  (D) Hands are visibly soiled
162. In which of the following parasites domestic cats is the definitive host?  
 (A) Plasmodium falciparum  (B) Leishmania donovani  
 (C) Toxoplasma gondii  (D) Trichomonas vaginalis
163. The commonly used screening test for HIV is:  
 (A) Western Blot Assay  (B) PCR  
 (C) ELISA test  (D) Branched DNA Assay

164. Generation time of *Mycobacterium tuberculosis* is about  
 (A) 20 seconds (B) 20 minutes  
 (C) 20 hours (D) 20 days
165. Triple sugar iron agar (TSI) medium contain all the following carbohydrates EXCEPT  
 (A) Glucose (B) Lactose  
 (C) Sucrose (D) Mannitol
166. The larva form of *Hymenolepis nana* is called  
 (A) Hydatid cyst (B) Coenurus  
 (C) Cysticercus (D) Cysticercoid
167. All the following are killed Vaccine EXCEPT  
 (A) Salk Vaccine (B) Hepatitis A Vaccine  
 (C) Typhoid Vaccine (D) BCG Vaccine
168. Steam Sterilization at 100<sup>0</sup> C for 20 minutes on the three successive days is known as  
 (A) Tyndallisation (B) Inspissation  
 (C) Pasteurisation (D) Incineration
169. Contamination of contact lenses could lead to eye infection with :  
 (A) Acanthamoeba (B) Entamoeba coli  
 (C) Onchocerca volvulus (D) Toxocara canis
170. Which organism is considered an index of fecal pollution of drinking water supplies?  
 (A) Rota Virus  (B) E. coli  
 (C) Salmonella spp (D) Hepatitis E virus
171. Artificial passive immunity may be induced by:  
 (A) Immunoglobulin injection (B) Vaccination  
 (C) Maternal antibody (D) All of the above
172. Which of the following substances will not stimulate an immune response unless they are bound to a carrier molecule?  
 (A) Antigen (B) Virus  
 (C) Hapten (D) Antibody
173. Post exposure Prophylaxis is given for :  
 (A) Measles (B) Polio  
 (C) Rabies (D) Tuberculosis
174. Pernicious Malaria can present as  
 (A) Blackwater fever (B) Algid Malaria  
 (C) Septicaemic malaria (D) All of the above
175. Lose of ability to induce full blown disease but retaining immunogenicity known as:  
 (A) Attenuation (B) Endotoxin  
 (C) Cytopathic (D) Chronic
176. Amastigote forms of *Leishmania* are seen in  
 (A) Sand fly  (B) Vertebrate Host  
 (C) Culture media (D) All of the above

177. Consumption of uncooked pork is associated with which of the following helminthic infection  
 (A) *Tinea saginata* (B) *Tinea solium*  
 (C) *Trichuris trichura* (D) Hydatid cyst
178. Intermediate host in *Dracunculus medinensis* is:  
 (A) Sand fly (B) Reduviid bug  
 (C) Cyclops (D) Anopheles
179. All of the following belong to the family of Herpesviridae except:  
 (A) Herpes simplex virus (B) Varicella zoster virus  
 (C) Cytomegalovirus (D) Human papilloma virus
180. The most commonly used antibiotic substance of the last century i.e penicillin was discovered by:  
 (A) Paul Ehrlich (B) Alexander Fleming  
 (C) Robert Koch (D) Ernst Ruska
181. World Health Organisation names the new Coronavirus as:  
 (A) Covid-19 (B) Co-vi-23  
 (C) CIV-6 (D) CiV-8
182. Which of the following is causative agent of Donovanosis:  
 (A) *H. ducreyi* (B) *Leishmania donovani*  
 (C) *K. granulomatis* (D) *T. pallidum*
183. Which of the following is a CCR-5 receptor inhibitor?  
 (A) Emtricitabine (B) Retonavir  
 (C) Maraviroc (D) Fosamprenavir
184. The most common subtype of HIV found worldwide:  
 (A) HIV-1 subtype A (B) HIV-1 subtype B  
 (C) HIV-1 subtype C (D) HIV-1 subtype D
185. Japanese encephalitis is transmitted by:  
 (A) *Culex mosquito* (B) *Anopheles mosquito*  
 (C) Hard Tick (D) Soft Tick
186. In dengue infection earliest detectable number of petechial spots per square inch in cubital fossa should be  
 (A) >5 (B) >10  
 (C) >15 (D) >20
187. CYD-TDV is a vaccine given for:  
 (A) Yellow fever (B) Chikungunya  
 (C) Dengue Hemorrhagic fever (D) JE
188. Certificate for Yellow Fever vaccination is valid for :  
 (A) 1 Year (B) 5 Year  
 (C) 10 Year (D) lifelong

189. All of the following belong to flaviviridae family except ?  
 (A) Yellow fever (B) Chikungunya  
 (C) Dengue Hemorrhagic fever (D) JE
190. Currently the first choice for treatment of Hepatitis B infection is:  
 (A) Tenofovir (B) Lamivudine  
 (C) Interferon alfa (D) Ribavirin
191. All are true about SARS except:  
 (A) It is DNA virus (B) Spread by droplet  
 (C) Diagnosed by RT - PCR (D) Type of Corona virus
192. Recent explosive outbreak of Ebola occurred in :  
 (A) 2014 (B) 2010  
 (C) 2019 (D) 2008
193. Which of the following belong to Filoviridae family:  
 (A) Rotavirus (B) Norwalk virus  
 (C) Marburg virus (D) Adenovirus
194. Rabies is identified by:  
 (A) Guarneri bodies (B) Negri bodies  
 (C) Cowdry A bodies (D) Paschen body
195. Types of ELISA used for dengue:  
 (A) Direct (B) MAC  
 (C) Competitive (D) ELISPOT
196. The trivalent vaccine for influenza includes all, except:  
 (A) A/H1N1 (B) A/H5N1  
 (C) A/H3N2 (D) Influenza B strain
197. Which toxin is not coded by bacteriophage?  
 (A) Diptheria toxin (B) Cholera toxin  
 (C) Tetanospasmin (D) Verocyto toxin
198. ZIKA virus belongs to which family?  
 (A) Flaviviridae (B) Togaviridae  
 (C) Bunyaviridae (D) Reoviridae
199. Chandipura virus is transmited by?  
 (A) Culex (B) Tick  
 (C) Sand fly (D) Aedes
200. MRSA is mediated due to  
 (A) Plasmid (B) Transposons  
 (C) Chromosome (D) None of the above