

PROVISIONAL ANSWER KEY (CBRT)

Name of The Post	Professor, Microbiology, General State Service, Class-1
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Suggestion (S)	

Instructions / સૂચના

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

- (1) All the suggestion should be submitted Physically in prescribed format of suggestion sheet.
- (2) Question wise suggestion to be submitted in the prescribed format of Suggestion Sheet published on the website.
- (3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key, 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 /response sheet. Objections shall not be considered, in case, if responses given in the answer sheet /response sheet and submitted suggestions are differed. For the purpose, the candidate shall attach a copy of his answersheet/ Response sheet along with his application(s).
- (6) Objection for each question shall be made on separate Suggestion sheet. Objection for more than one question in single Suggestion 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 વેબસાઈટ 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 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) 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. આ હેતુ માટે, ઉમેદવારે પોતાની અરજી(ઓ) સાથે પોતાની જવાબવહીની એક નકલનું બિડાણ કરવાનું રહેશે.
- (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. Most common protozoan parasite responsible for Steatorrhea is:
 (A) Giardia lamblia (B) Entamoeba histolytica
 (C) Entamoeba coli (D) Enteromonas hominis
002. Test done to differentiate between Pathogenic and non pathogenic strains of Staphylococcus aureus is
 (A) Oxidase test (B) Catalase test
 (C) Coagulase test (D) Glucose fermentation test
003. Generation time for Leprae bacilli is
 (A) 15 to 20 seconds (B) 15 to 20 minutes
 (C) 15 to 20 hours (D) 12 to 13 days
004. Dengue virus infection is transmitted by
 (A) Culex mosquito (B) Anopheles mosquito
 (C) Aedes aegypti (D) Ticks
005. Infection with Plasmodium falciparum is suspected if the infected RBC is
 (A) Normal in size (B) showing multiple infections
 (C) Both (A) and (B) (D) shows motile form inside the RBCs
006. The optimum amount of iron required for toxin production in Corynebacterium diphtheriae is
 (A) 1 mg/l (B) 0.1 mg/l
 (C) 0.5 mg/l (D) 10 mg/l
007. Tick acts as a vector for transmission of which of these diseases
 (A) Japanese B encephalitis (B) Chikungunya fever
 (C) Kyasanur forest disease (D) Western equine encephalitis
008. Which of these techniques is not used for cultivation of viruses
 (A) Inanimate culture media (B) Tissue culture
 (C) Animal inoculation (D) Embryonated egg
009. The generation time for Mycobacterium tuberculosis is
 (A) 14-15 Seconds (B) 14-15 hours
 (C) 14-15 days (D) 14-15 minutes
010. Toxin production in Corynebacterium diphtheria is due to presence
 (A) of beta phage (B) of mutant gene
 (C) of plasmid (D) of transposome
011. The technique used for staining capsule of Cryptococcus neoformans in biopsy material is
 (A) Modified Ziehl neelsen (B) India ink
 (C) Mayers mucicarmine staining (D) Giemsa staining
012. Transduction is a method of gene transfer from one bacteria to another by
 (A) Passage of genetic material through sex pilli
 (B) Direct cell to cell contact and protoplasmic fusion
 (C) Plasmids transfer
 (D) Cross infecting Bacteriophages
013. The staining technique used for demonstration of Spirochetes is
 (A) Vital staining (B) Silver impregnation technique
 (C) Dilute carbol fuschin (D) India ink staining

014. Which of these, is the first immunoglobulin to appear in response to antigenic stimulus
 (A) IgG (B) IgD
 (C) IgM (D) IgA
015. Chronic Mucocutaneous candidiasis is primarily due to deficiency of
 (A) Cellular immunity (B) Humoral immunity
 (C) Complement components (D) Combined humoral and cellular immunity
016. Which of these salmonella species is not responsible for gastro-enteritis
 (A) Salmonella typhi (B) Salmonella Dublin
 (C) Salmonella enteritidis (D) Salmonella typhimurium
017. The sensitivity of VDRL test for diagnosis of Secondary syphilis is around
 (A) 70 - 80% (B) 65 - 70%
 (C) 75 - 80% (D) 100%
018. Bacitracin disk sensitivity test can be used for identification of
 (A) Streptococcus pneumoniae (B) Streptococcus agalactiae
 (C) Streptococcus viridans (D) Streptococcus pyogenes
019. The genomic structure of Hepatitis B virus consists of
 (A) Single stranded RNA (B) Double stranded RNA
 (C) 8 linear strands of RNA (D) 7 linear strands of RNA
020. In malarial parasite the stage infective to man is
 (A) Hypnozoites (B) Merozoites
 (C) Sporozoites (D) Gamatocytes
021. Rheumatic fever is a late sequelae of
 (A) Streptococcal skin infections
 (B) Lobar pneumonia caused by Streptococcus pneumoniae
 (C) Pyogenic meningitis caused by group 'B' beta haemolytic Streptococci
 (D) Pharyngitis caused by group 'A' beta haemolytic Streptococci
022. Selective media for cultivation of Corynebacterium diphtheriae is
 (A) Loeffler's serum slope (B) Hoyle's potassium tellurite agar
 (C) Ludlam's medium (D) Chocolate agar
023. Which of these cell line is a primary cell line
 (A) Hela cell line (B) Detroit cell line
 (C) Monkey kidney cell line (D) McCoy cell line
024. Production of germ tube within 2 hours serves as identification character for
 (A) Ray fungus (B) Cryptococcus neoformans
 (C) Rhizopus (D) Candida albicans
025. VDRL test done for diagnosis of syphilis, is an example of
 (A) Slide agglutination test (B) Slide flocculation test
 (C) Complement fixation test (D) Slide neutralization test
026. Bile solubility test is a diagnostic test done for identification of _____
 (A) Staphylococcus (B) Group A beta haemolytic streptococci
 (C) Streptococcus pneumoniae (D) Streptococcus viridans

027. The morphological forms of *Endamoeba histolytica* found in liver abscess is
 (A) Precyst (B) Binucleate cyst
 (C) Trophozoite (D) Quadrinucleate cyst
028. The subtype of HIV commonly found worldwide is
 (A) HIV-1 subtype A (B) HIV-1 subtype B
 (C) HIV-1 subtype F (D) HIV-1 subtype C
029. Name the first infection in human that was reported to be caused by virus
 (A) Yellow fever (B) Influenza
 (C) Chicken pox (D) Small pox
030. Which of the following parasites cause megaloblastic anemia
 (A) *Diphyllobothrium latum* (B) *Taenia solium*
 (C) *Ancylostoma duodenale* (D) *Echinococcus granulosus*
031. Graft between two individuals sharing same genetic constitution is referred to as
 (A) Allograft (B) Isograft
 (C) Xenograft (D) Autograft
032. Which of these stains is not used for staining *Corynebacterium diphtheriae*?
 (A) Ponder's stain (B) Albert stain
 (C) Neisser's stain (D) Ziehl - Neelsen stain
033. The type of cytopathic effect produced by measles virus when grown in cell lines is _____
 (A) Formation of cytoplasmic vacuolation (B) Formation of large granular clumps
 (C) Syncytium formation (D) Crenation and degeneration of cell lines
034. Cell lines of choice for cultivation of polio virus is _____
 (A) Monkey kidney cell lines (B) Hela cell lines
 (C) HEP 2 cell lines (D) Detroit cell lines
035. Griffith's experiment for demonstration of transformation as means for gene transfer was performed in ____
 (A) *Escherichia coli* (B) *Streptococcus pneumoniae*
 (C) *Streptococcus pyogenes* (D) *Mycoplasma pneumoniae*
036. Which of these organism is not a part of HACEK group of organisms
 (A) *Actinobacillus actinomycetecomitans* (B) *Haemophilus influenzae*
 (C) *Cardiobacterium hominis* (D) *Kingella kingae*
037. The rate at which the rabies virus travels along the axoplasm to reach Central nervous system is
 (A) 3 mm/hour (B) 6 mm/hour
 (C) 9 mm/hour (D) 12 mm/hour
038. Which of these fungus is more likely to cause opportunistic infection in HIV patients
 (A) *Aspergillus fumigatus* (B) *Penicillium marneffei*
 (C) *Aspergillus flavus* (D) *Penicillium verrucosum*
039. Which of these parasite is an oriental lung fluke
 (A) *Fasciola hepatica* (B) *Fasciola buski*
 (C) *Paragonimus wertermani* (D) *Clonorchis sinensis*

040. The normal habitat of *Giardia lamblia* is
 (A) Colon (B) Large intestine
 (C) Duodenum (D) Vagina
041. Common causative agent of subacute bacterial endocarditis is
 (A) *Streptococcus fecalis* (B) *Mycoplasma pneumoniae*
 (C) HEP 2 cell lines Chicken pox (D) *Streptococcus viridans*
042. Virulence of *Neisseria gonorrhoeae* _____ is linked to presence of
 (A) surface structure Pili (B) Cell membrane
 (C) Exotoxin (D) Cytolytic enzymes
043. Lyme disease is caused by
 (A) *Borrelia vincentii* (B) *Borrelia burgdorferi*
 (C) *Treponema pallidum* (D) *Treponema pertenuis*
044. Prions are extremely resistant to dry heat and can survive dry heat at
 (A) 180 degrees for one hour (B) 240 degrees for one hour
 (C) 360 degrees for one hour (D) 160 degrees for one hour
045. Ophthalmia neonatorum is the infection of eye, in new born babies caused by
 (A) *Staphylococcus aureus* (B) *Pseudomonas aeruginosa*
 (C) Anaerobic organisms (D) *Neisseria gonorrhoeae*
046. The gene that codes for core of HIV is
 (A) GAG gene (B) POL gene
 (C) TAT gene (D) ENV gene
047. Browne's tube is used for monitoring
 (A) Sterilization control (B) Anaerobiosis control
 (C) Humidity control (D) Detroit cell lines growth
048. The chemical structure of endotoxin is
 (A) Mucopeptides (B) Protein
 (C) Lipopolysaccharide (D) Polysaccharide
049. Herpangina is a clinical condition produced by
 (A) Herpes group of viruses (B) Coxsackie virus A
 (C) Corona virus (D) All Arboviruses
050. Bird seed agar is an effective media for primary isolation of
 (A) *Cryptococcus neoformans* (B) Dermatophytes
 (C) *Candida albicans* (D) *Histoplasma capsulatum*
051. Kauffmann -white scheme is a classification based on antigenic structure of the organism and is used for
 (A) *Shigella* species (B) *Salmonella* species
 (C) *Klebsiella* species (D) All members of Enterobacteriaceae
052. Which of these trematode is dieocious
 (A) *Schistosoma mansoni* (B) *Fasciolopsis buski*
 (C) *Clonorchis sinensis* (D) *Paragonimus westermani*

053. Which of these trematode is a intestinal trematode
 (A) Schistosoma mansoni (B) Fasciolopsis buski
 (C) Clonorchis sinensis (D) Paragonimus westermani
054. Which of these gene is a negative regulatory gene for HIV virus replication
 (A) vif gene (B) tet gene
 (C) nef gene (D) rev gene
055. Which of these technique was used by G Kohler and C Milstein in 1975 to produce monoclonal antibodies
 (A) Transgenic plant technology (B) Co-culture technique
 (C) Rcombinant gene technology (D) Hybridoma technology
056. DiGeorge syndrome is characterised by
 (A) Absence or presence of very few T-cells (B) Low complement levels
 (C) Absence of B cells (D) Presence of auto-antibodies
057. Deficiency of which complement component is associated with recurrent bacterial infections leading to glomerulonephritis
 (A) C 1 (B) C 2
 (C) C 3 (D) C 2 and C 4
058. Which of this parasitic infection is associated with hepatocellular carcinoma
 (A) Entamoeba histolytica (B) Echinococcus granulosus
 (C) Clonorchis sinensis (D) Fasciola hepatica
059. Which of this virus infection is linked to hepato cellular carcinoma
 (A) Influenza virus (B) Hepatitis B virus
 (C) Hepatitis E virus (D) Dengue virus
060. Choose the virus that is linked to nasopharyngeal carcinoma from the list below
 (A) Epstein barr virus (B) Coxsakei virus
 (C) Influenza virus (D) Measles virus
061. Which of this/these is/are an example of a defective virus
 (A) Hepatitis C virus (B) Delta virus
 (C) Rous sarcoma virus (D) Both (B) and (C)
062. Type II Interferon is produced by
 (A) Macrophages (B) B Lymphocytes and macrophages
 (C) T cells and NK cells (D) B lymphocytes only
063. A positive tourniquet test is a useful criteria to support clinical diagnosis of
 (A) Chikungunia fever (B) Dengue haemorrhagic fever
 (C) Rubella (D) Chicken pox
064. Schultz-Dale phenomenon is an example of
 (A) Type I hypersensitivity reaction (B) Type II hypersensitivity reaction
 (C) Type II hypersensitivity reaction (D) Type IV hypersensitivity reaction
065. Rosette formation with red blood cells is seen in
 (A) B cells (B) Macrophages
 (C) T cells (D) Monocytes

066. Which component of complement has highest concentration in serum
 (A) C 1 (B) C 2
 (C) C 3 (D) C 9
067. Which component of complement has lowest concentration in serum
 (A) C 1 (B) C 2
 (C) C 3 (D) C 9
068. Which of this virus will give rise to both intranuclear and intracytoplasmic inclusion bodies
 (A) Measles (B) Rabies
 (C) Cytomegalo virus (D) Herpes simplex-1
069. Organism commonly associated with pseudomembranous colitis is
 (A) Pseudomonas aeruginosa (B) Costridium welchi
 (C) Clostridium botulinum (D) Clostridium defficile
070. Quellung raction is used for identification of
 (A) Pseudomonas aeruginosa (B) Streptococcus pneumoniae
 (C) Streptococcus viridans (D) Staphylococcus aureus
071. Koplik's spots is a manifestation seen in
 (A) Hand foot mouth disease (B) Herpes
 (C) Measles (D) Chicken pox
072. Commonly used media for fungal culture is
 (A) Sabouraud's dextrose agar (B) Pottasium telurite medium
 (C) Lowenstein-Jensen medium (D) Chocolate agar
073. Sulphur granules seen in Actinomycosis consist of
 (A) Deposits of metallic sulphur (B) Bacterial colonies
 (C) Mass of pus cells (D) Keratin mass
074. Which of these fungus cannot be cultured in artificial medium
 (A) Candida albicans (B) Sporothrix schenckii
 (C) Rhinosporidium seeberi (D) Penicillim marnefei
075. The pigment produced by Penicillium marnefei in culture media is
 (A) Blue (B) Green
 (C) Black (D) Brick red
076. During window period in HIV infection, the plasma viral load is
 (A) Very high (B) Low below detectable level
 (C) Just around detectable level (D) Maybe high or low
077. The intracytoplasmic inclusion bodies seen in rabies virus infection are called
 (A) Cowdry type A bodies (B) Councilman bodies
 (C) Negri bodies (D) Tores bodies
078. In HIV infection the term Elite controllers refers to those cases where
 (A) The virus load is always high
 (B) The response to ART is very good
 (C) AIDS does not develop for 10 - 30, without being on antiretroviral therapy
 (D) Complex combination of ART drugs are required for their case management

079. Common causative agent of favus is
 (A) *Trichophyton rubrum* (B) *Epidermophyton floccosum*
 (C) *Trichophyton mentagrophytes* (D) *Trichophyton schoenleinii*
080. Potassium hydroxide (KOH 10 - 20%) is used to prepare wet mount for detection of fungus in skin scrapings. The role of KOH in this wet mount is
 (A) To preserve the fungus
 (B) To digest the keratin
 (C) KOH stabilizes the morphology of the fungus
 (D) KOH acts as a buffer adjusting the pH
081. The causative agent of red leg disease is
 (A) *Aeromonas hydrophila* (B) *Pseudomonas aeruginosa*
 (C) *Acinetobacter baumannii* (D) *Klebsiella pneumoniae*
082. Common organism responsible for toxic shock syndrome is
 (A) *Escherichia coli* (B) *Staphylococcus aureus*
 (C) *Pseudomonas aeruginosa* (D) *Klebsiella pneumoniae*
083. The temperature required for optimum production of interferon is
 (A) 37 degrees centigrade (B) 30 degrees centigrade
 (C) 40 degrees centigrade (D) 50 degrees centigrade
084. Routine concentration of agar used for media preparation is
 (A) 10% (B) 5%
 (C) 4% (D) 2%
085. The process of intermittent sterilization at 100 degrees for three consecutive days used for sugars and other delicate media is called
 (A) Cold sterilization (B) Inspissation
 (C) Pasteurisation (D) Tyndallisation
086. Which of this organism can cause aseptic meningitis
 (A) *Staphylococcus aureus* (B) *Pseudomonas aeruginosa*
 (C) Herpes simplex virus (D) HIV
087. The genome of Influenza virus type A is composed of
 (A) 7 segmented pieces (B) 8 segmented pieces
 (C) 9 segmented pieces (D) 10 segmented pieces
088. Which amongst the following viruses, is labile at acidic pH
 (A) Rhino viruses (B) Polio virus
 (C) ECHO viruses (D) Human enterovirus 70
089. The presumptive coliform counts in water are considered unsatisfactory if the counts exceed
 (A) 0 - 1/100 ml (B) 1 - 3/100 ml
 (C) 4 - 10/100 ml (D) >10/100 ml
090. Which of these enzyme is not found inside the core of the virus
 (A) DNA Polymerase (B) Reverse transcriptase
 (C) Neuraminidase (D) RNA Polymerase

091. Which viral infection is associated with Burkitt's Lymphoma is _____
 (A) HTLV I (B) HSV 8
 (C) HTLV II (D) Epstein Barr virus
092. In poliomyelitis involving the spinal cord, lesions are seen mostly in _____
 (A) Anterior horn cells (B) Posterior horn cells
 (C) Intermediate Column (D) Anterior and posterior horn cells
093. Haemagglutination property exhibited by rabies virus is due to presence of _____
 (A) Nucleoproteins (B) Membrane protein
 (C) RNA polymerase (D) Glycoprotein spike
094. Delhi boil is caused by _____
 (A) *Leishmania donovani* (B) *Leishmania tropica*
 (C) *Trypanosoma brucei* (D) *Trypanosoma cruzi*
095. Cerebral malaria is a complication of _____
 (A) *Plasmodium knowlesi* (B) *Plasmodium vivax*
 (C) *Plasmodium falciparum* (D) *Plasmodium malariae*
096. HRP II antigen detection test is used for diagnosis of _____
 (A) *Falciparum malaria* (B) *Vivax and falciparum malaria*
 (C) All human species of *Plasmodium* (D) Only for *vivax malaria*
097. Nezelof's syndrome is characterized by
 (A) T cell defect
 (B) B cell defect
 (C) Deficiency of Complement component C 3
 (D) Both T and B cell defect
098. Selective media used for *Staphylococcus aureus* is
 (A) Crystal violet blood agar (B) TCBS
 (C) Ludlam's media (D) Potassium tellurite
099. Genome of Influenza virus type C consists of
 (A) 6 linear segments of RNA (B) 7 linear segments of RNA
 (C) 8 linear segments of RNA (D) 9 linear segments of RNA
100. Which of these organisms, is a Gram-negative obligate anaerobe
 (A) *Pseudomonas* (B) *Bacteroides*
 (C) *Chlamydia* (D) *Campylobacter*
101. What is the causative agent of Chagas' disease
 (A) *Trypanosoma cruzi* (B) *Trypanosome brucei*
 (C) *Leishmania donovani* (D) *Leishmania tropica*
102. Number of pairs of flagella present in the trophozoite of *Giardia lamblia* is/are
 (A) One pair (B) Two pairs
 (C) Three pairs (D) Four pairs
103. Amastigote forms of *Leishmania donovani* are found in
 (A) The cells of Reticuloendothelial system (B) Red blood cells
 (C) Culture media (D) Digestive tract of insect vector

104. Presence of red blood cells in the endoplasm of trophozoite is a feature of
 (A) *Entamoeba coli* (B) *Entamoeba histolytica*
 (C) *Entamoeba dispar* (D) *Entamoeba hartmanni*
105. Which of these parasites is ovoviviparous ?
 (A) *Ascaris lumbricoides* (B) *Ancylostomaduodenale*
 (C) *Stroglyoides stercorals* (D) *Necator armericanus*
106. Which of these parasitic infections not acquired after walking bare foot
 (A) *Schistosomahaematobium* (B) *Ancylostomaduodenale*
 (C) *Stroglyoides stercorals* (D) *Ascaris lumbricoides*
107. Which of these bacteria has a capsule with polypeptide structure
 (A) *Bacillus anthracis* (B) *Streptococcus pneumoniae*
 (C) *Neisseria gonorrhoeae* (D) *Neisseria meningitidis*
108. Which of the following invitro test is used for identification of *Clostridium welchi*
 (A) CAMP tests (B) Nagler reaction
 (C) Elek's test (D) Biken test
109. Haemolyticuraemic syndrome is caused by
 (A) Eenteroinvasive *Escherichia coli* (B) Entero toxigenic *Escherichia coli*
 (C) *Escherichia coli* sero group O157:H7 (D) *Escherichia coli* sero group O127
110. In a case of significant bacteriuria, the bacterial counts in urine are
 (A) 100 to 1000 organisms/ml of urine (B) 1000 to 10000 organisms/ml of urine
 (C) 10000 to 100000 organisms/ml of urine (D) More than 100000 organisms/ml of urine
111. Which of the following organism will not break down urea into ammonia
 (A) *Escherichia coli* (B) *Proteus vulgaris*
 (C) *Proteus mirabilis* (D) *Helicobacter pylori*
112. Dienes phenomenon is used to ascertain the identity and non-identity of strains belonging to
 (A) *Salmonella* species (B) *Enterobacter* species
 (C) *Proteus* species (D) *Klebsiella* species
113. Weil-felix test is used for diagnosis of
 (A) Typhoid fever (B) Epidemic typhus
 (C) *Proteus* infection (D) Gram negative septicemia
114. Donovan bodies may be seen in the phagosomes in infection caused by, which of these organisms
 (A) *Klebsiella oxytoca* (B) *Leishmania donovani*
 (C) *Klebsiella pneumoniae* (D) *Klebsiella granulomatis*
115. Which of these is a selective media for *Campylobacter jejuni* ?
 (A) Wilson and Blair medium (B) Bile salt agar
 (C) Butzler's medium (D) TCBS medium
116. Which of the following tests is employed to identify *Pseudomonas aeruginosa*
 (A) Growth at 42 degrees centigrade (B) Positive urease test
 (C) Positive indole test (D) Positive nitrate test
117. What is the vector responsible for transmission of plague ?
 (A) Hard tick (B) Mite
 (C) Sandfly (D) Rat flea

118. Accessory growth factors required by *Haemophilus influenzae* is/are
 (A) X (B) X and V
 (C) V (D) Thiamine
119. The causative agent of Chancroid is
 (A) *Haemophilus influenzae* (B) *Haemophilus parainfluenzae*
 (C) *Haemophilus ducreyi* (D) *Haemophilus aegyptius*
120. Rose-Waaler test is done for diagnosis of
 (A) Brucellosis (B) Syphilis
 (C) Rheumatic fever (D) Rheumatoid arthritis
121. Rose Bengal card test is done for diagnosis of
 (A) Brucellosis (B) Rheumatoid arthritis
 (C) Rheumatic fever (D) Syphilis
122. Which *Mycobacteria* will show eugonic growth when grown in presence of glycerol
 (A) *Mycobacterium bovis* (B) *Mycobacterium ulcerans*
 (C) *Mycobacterium tuberculosis* (D) *Mycobacterium kansasii*
123. The number of bacilli required in the sputum to yield a positive culture report for *Mycobacterium tuberculosis* is
 (A) 1 to 10 bacilli per ml (B) 10 to 100 bacilli per ml
 (C) 100 to 1000 bacilli per ml (D) More than 1000 bacilli per ml
124. Which test can be used to differentiate between *Mycobacterium tuberculosis* and non tuberculous *Mycobacteria*
 (A) Catalase test (B) Peroxidase test
 (C) Aryl sulphatase test (D) P-nitrobenzoic acid (PNB) test
125. Paul Bunnell test is done for diagnosis of
 (A) Infectious mononucleosis (B) Brucellosis
 (C) Rheumatoid arthritis (D) Streptococcal septicaemia
126. Swimming pool granuloma is caused by
 (A) *Mycobacterium ulcerans* (B) *Mycobacterium chelonae*
 (C) *Mycobacterium marinum* (D) *Mycobacterium kansasii*
127. Concentration of sulphuric acid used for acid fast staining of *Mycobacterium leprae* is
 (A) 0.1% (B) 5%
 (C) 10% (D) 20%
128. Hard chancre is a diagnostic feature of
 (A) Primary syphilis (B) *Haemophilus ducreyi* infection
 (C) Secondary syphilis (D) Tertiary syphilis
129. The causative agent of Trench fever is
 (A) *Bartonella bacilliformis* (B) *Haemophilus ducreyi*
 (C) *Bartonella quintana* (D) *Bartonella*
130. Miyagawa's granulocorpuscles are seen in a Giemsa stained smear from an inguinal bubo in cases of
 (A) Donovanosis (B) Bubonic plague
 (C) *Haemophilus ducreyi* infection (D) Lymphogranuloma venereum

131. Which of these is not a live attenuated vaccine
 (A) TAB (B) MMR
 (C) Sabin's vaccine (D) BCG
132. Which of these organisms is acid fast
 (A) Actinomyces (B) Norcadia
 (C) Actinomadura (D) Streptomyces
133. Which of these Mycoplasma do not require sterol for growth
 (A) Mycoplasma pneumoniae (B) Mycoplasma hominis
 (C) Ureaplasma (D) Acholeplasma
134. Tumbling motility is shown by
 (A) Listeria monocytogenes (B) Proteus vulgaris
 (C) Vibrio cholerae (D) Proteus mirabilis
135. Which Immunoglobulin takes part in type I hypersensitivity reaction
 (A) IgM (B) IgG
 (C) IgE (D) IgA
136. If under cooked pork meat is consumed it can lead to infection with
 (A) Taenia saganata (B) Taenia solium
 (C) Diphyllbothrium latum (D) Echinococcus granulosus
137. Which amongst these animals is responsible for transmission of Toxoplasma gondii infection
 (A) Cat (B) Cattle
 (C) Dog (D) Pig
138. In which of these parasitic infections man is the intermediate host
 (A) Taenia solium (B) Taenia saganata
 (C) Echinococcus granulosus (D) Ancylostoma duodenale
139. NIH swab is useful for demonstration of ova of which of these parasite
 (A) Ancylostoma duodenale (B) Ascaris lumbricoides
 (C) Hymenolepsis nana (D) Enterobius vermicularis
140. Cholengio carcinoma is associated with which of these parasites
 (A) Clonorchis sinensis (B) Schistosoma haematobium
 (C) Fasciola buski (D) Hymenolepsis nana
141. Consumption of raw fish is often associated with, which of this infection
 (A) Diphyllbothrium latum (B) Clonorchis sinensis
 (C) Both (A) and (B) (D) Taenia solium
142. Glycogen mass and chromidial bars are absent in the cyst of Entamoeba histolytica in
 (A) Uninucleate cyst (B) Binucleate cyst
 (C) Qudrinucleate cyst (D) Octanucleate cyst
143. Intestinal ulcers in amoebic dysentery are
 (A) Extensive ulcers with necrotic base
 (B) Hipped up borders
 (C) Show indurate edges
 (D) Discrete Pin head size to 2.5 cm, flask shaped

144. In primary amoebic meningitis, the characteristic feature of cerebrospinal fluid is
 (A) It is purulent
 (B) Cell count is 0 - 500 cells/ul (predominant Lymphocyte)
 (C) Has low protein content
 (D) Glucose levels are high
145. Which parasite is cultured in Trussell and Johnson's medium ?
 (A) *Giardia lamblia* (B) *Trichomonas vaginalis*
 (C) *Trypanosome cruzi* (D) *Leishmania dondovani*
146. Promastigote forms of *Leishmani donovani* are found in
 (A) Red blood cells (B) Hepatocytes
 (C) Macrophages (D) Culture media
147. Choose the yeast like fungi from the list
 (A) *Cryptococcus neoformans* (B) *Candida albicans*
 (C) *Epidermophyton* (D) *Trichophyton*
148. Identify the dimorphic fungi
 (A) *Trichophyton rubrum* (B) *Candida albicans*
 (C) *Penicillium marneffeii* (D) *Cryptococcus neoformans*
149. What is the skin test used for diagnosis of Kala-azar
 (A) Frei's test (B) Kveim test
 (C) Montenegro test (D) Pirquet's test
150. Pityriasis versicolor is caused
 (A) *Epidermophyton floccosum* (B) *Trichophyton rubrum*
 (C) *Trichophyton mentagrophytes* (D) *Malurassezia furfur*
151. Name the obligatory aerobe in the given list below
 (A) *Escherichia coli* (B) *Klebsiella species*
 (C) *Lactobacillus acidophilus* (D) *Pseudomonas aeruginosa*
152. Bacterial chromosome consists of double stranded DNA, in a circular configuration the length of which is about
 (A) 100 micro meters (B) 1000 micro meters
 (C) 10000 micro meters (D) 100000 micro meters
153. Lactose fermentation by *Escherichia coli* involves the activity of one of these enzymes
 (A) Transacetylase (B) Lactate dehydrogenase
 (C) Aldolase (D) Urease
154. Mutation involving deletion of a nucleotide resulting in premature polypeptide chain termination, by generating codon UAG, UAA or UGA is called
 (A) Missense mutation (B) Nonsense mutation
 (C) Lethal mutation (D) Silent mutation
155. Evidence of fungal elements showing dichotomous branching at acute angle in a haematoxylin-Eosin stained tissue section is suggestive of
 (A) *Trichophyton rubrum* infection (B) *Epidermophyton floccosum* infection
 (C) *Trichophyton mentagrophytes* (D) *Aspergillus* infection

156. Ascoli's thermoprecipitation test is used for diagnosis of which of these infection in animals
 (A) Streptococcus agalactiae (B) Brucellosis
 (C) Anthrax (D) Bovine tuberculosis
157. Biken test is done for detection of
 (A) Shiga like toxin (B) Heat labile (LT) of Escherichia coli
 (C) Heat stable (ST) of Escherichia coli (D) Cholera toxin
158. Craigie tube is used for
 (A) Monitoring autoclave procedures (B) Antigen extraction
 (C) Demonstration of motility (D) Sub culture and stock cultures
159. Sereny test is done to test
 (A) Entero invasive Strains of Escherichia coli
 (B) Entero haemorrhagic strains of Escherichia coli
 (C) Entero pathogenic strains of Escherichia coli
 (D) Entero aggregative strains of Escherichia coli
160. Congo red dye test is done for detection of
 (A) Entero aggregative strains of Escherichia coli
 (B) Entero haemorrhagic strains of Escherichia coli
 (C) Entero pathogenic strains of Escherichia coli
 (D) Entero invasive Strains of Escherichia coli
161. Diphtheria toxin has especial affinity for
 (A) Skeletal muscle (B) Heart muscle
 (C) Lungs (D) Gut
162. Choose one virus from the list which is not inactivated at 60 degrees centigrade for 30 minutes
 (A) Polio virus (B) Hepatitis B virus
 (C) Rabies virus (D) Influenza virus
163. Identify one virus from the list below that is transmitted from infected mother to the new born
 (A) Cytomegalovirus (B) Adenovirus
 (C) Rabies virus (D) Influenza virus
164. Which of the following infections is caused by Herpes simplex virus
 (A) Kaposi sarcoma (B) Chicken pox
 (C) Infectious mononucleosis (D) Acute gingivostomatitis
165. What is the causative agent of Bornholm disease
 (A) Adeno virus (B) Coxsackievirus group A
 (C) Coxsackievirus group B (D) Influenza virus
166. Following Infections are seen only in humans except
 (A) Polio virus (B) Syphilis
 (C) Measles (D) Brucellosis
167. Commonly encountered Larva in stool sample is
 (A) Rhaditiform larva of Storngyloides stercoralis
 (B) Larva of Ascaris lunbricoides
 (C) Larva of Ancylostoma sduodenale
 (D) Larva of Trichuris trichiura

168. Egg inoculation technique for cultivation of Viruses was first reported by
 (A) Louis Pasteur (B) Ellermann and Bang
 (C) Goodpasture (D) Lord Lister
169. Sporulation occurs in which phase of Bacterial growth curve
 (A) Lag phase (B) Log phase
 (C) Stationary phase (D) Phase of decline
170. Which of these organisms is capnophilic
 (A) Brucella abortus (B) Staphyococcus aureus
 (C) Pseudomonas aeruginosa (D) Bacillus anthracis
171. What percentage of mass of bacterial cell is it's dry weight
 (A) 10 - 15% (B) 20 - 25%
 (C) 30 - 35% (D) 40 - 45%
172. Which organism is responsible for fermenting the glycogen deposited in the vaginal epithelium, produce lactic acid and maintain an acidic pH in the vagina
 (A) Streptococcus agalactiae (B) Doderlein's bacilli
 (C) Gardnerella vaginalis (D) Klebsiella pneumoniae
173. Which of these Microfilariae is unsheathed
 (A) Onchocerca vulvulus (B) Wuchereria bancrofti
 (C) Burugia malaya (D) Loa loa
174. Katayama fever is caused by
 (A) Schistosoma mansoni (B) Fasciola hepatica
 (C) Clonorchis sinensis (D) Fasciola buski
175. Babesiosis is transmitted by
 (A) Culex mosquito (B) Female anopheles mosquito
 (C) Ixodid ticks (D) Haemaphysalis spinigera
176. Sabin-Feldman Dye test is a serological test done for diagnosis of
 (A) Hydatid cyst disease (B) Toxoplasmosis
 (C) Babesiosis (D) Kala azar
177. Which is the commonest media used for Bordetella pertussis ?
 (A) Chocolate agar (B) Bordet-Gengou
 (C) MacConkey agar (D) Tinsdale
178. Which of these is not a acute phase protein
 (A) C Reactive protein (B) Manose binding protein
 (C) Antistreptolysin O (D) Alpha-1-acid glycoprotein
179. Rheumatoid factor is an antibody usually directed against Immunoglobulin with
 (A) γ (gamma) chain (B) μ (meu) chain
 (C) J chain (D) κ (kappa) chain
180. In a case of uncomplicated non typhoidal salmonella (gastroenteritis) should be treated with
 (A) Third generation Cephalosporins (B) Quinolone and Ampicillin combination
 (D) No treatment at all

194. Which of these technique for antimicrobial sensitivity testing, has a built in control strain along with the test strain
 (A) Kirby Bauer disc diffusion technique (B) Stokes disc diffusion technique
 (C) Epsilometer test (D) Broth dilution technique
195. Which of these dermatophytes is zoophilic
 (A) *Microsporum audouinii* (B) *Epidermophyton floccosum*
 (C) *Trichophyton rubrum* (D) *Microsporum canis*
196. In which of these fungi Microconidia are absent
 (A) *Trichophyton mentagrophytes* (B) *Trichophyton rubrum*
 (C) *Epidermophyton floccosum* (D) *Microsporum canis*
197. Which of these fungi is an important pathogen in immunocompromised patient ?
 (A) *Pneumocystis jiroveci* (B) *Trichophyton rubrum*
 (C) *Trichophyton mentagrophytes* (D) *Aspergillus flavus*
198. Which fungus can be demonstrated within the cytoplasm of Macrophages
 (A) *Pneumocystis jiroveci* (B) *Hitoplasma capsulatum*
 (C) *Cryptococcus neoformans* (D) *Escherichia coli*
199. The amount of blood sucked by a single adult worm- *Ancylostoma duodenale* in the intestine per day is
 (A) 0.03 ml (B) 0.10 ml
 (C) 0.20 ml (D) 0.50 ml
200. Which of these non structural genes is absent in HIV- 2 virus
 (A) *tat* gene (B) *rev* gene
 (C) *vpu* gene (D) *vpx* gene