



# Clinical Microbiology

MCQ

## Introduction

Welcome to **Clinical Microbiology MCQ**, a comprehensive question bank designed to enhance your understanding of microbiology. This ebook contains over 400 multiple-choice questions (MCQs) covering a wide array of topics within the field of Microbiology.

Whether you're a medical student preparing for exams, a postgraduate aspirant aiming for success in competitive entrance tests, or a healthcare professional looking to refine your expertise, this book will serve as an invaluable resource in your learning journey. The questions in this ebook are structured to reflect the patterns seen in major medical entrance exams such as NEET PG, USMLE, AIIMS, and others, making it a perfect tool for self-assessment and revision.

### Purpose

The primary goal of this ebook is to provide a reliable and extensive resource that students and professionals can use to test their knowledge, improve their diagnostic skills, and solidify key microbiological concepts. With the included detailed answers and explanations, this book goes beyond just helping you answer questions — it enables you to understand the reasoning behind each answer, facilitating deeper learning.

### How This Ebook Can Help You

- **For Students:** The MCQs in this book are designed to match the rigor and format of real exam questions. By practicing regularly, you'll not only enhance your knowledge but also gain confidence in approaching exam challenges.
- **For Professionals:** This ebook helps professionals stay updated with the latest developments in carbohydrates in medical science and refresh critical concepts required in day-to-day practice.
- **For Educators:** Teachers and educators can use this collection to formulate quizzes, exams, or as supplementary teaching material for their students.

### Compilation and Sources

This ebook is a compilation of publicly available online content. Each question has been carefully selected and curated to ensure relevance and accuracy. While this material is sourced from multiple platforms, it has been reorganized and edited to provide a streamlined learning experience.

We hope this book becomes an essential part of your academic and professional toolkit, helping you achieve your goals in Biochemistry.

## Copyright Page

---

### **Clinical Microbiology MCQ**

Compiled and Published by Vikas Bhardwaj /medicalmcq.in

© 2024

---

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in reviews and other non-commercial uses permitted by copyright law.

### **Sources of Content**

This ebook is a compilation of multiple-choice questions (MCQs) sourced from various publicly available online resources. The content has been carefully selected, curated, and edited to provide a comprehensive learning experience for medical students and professionals. Although the MCQs have been adapted and reorganized for educational purposes, we acknowledge that the original sources of the information remain in the public domain.

No part of this ebook is intended to infringe on any copyright or proprietary rights of the original authors or content providers. All references to publicly available materials, including textbooks, websites, journals, and other online content, are provided in compliance with fair use principles for the purpose of education, scholarship, and research.

### **Disclaimer**

While every effort has been made to ensure the accuracy and reliability of the information contained within this ebook, the publisher and author assume no responsibility for errors, omissions, or inconsistencies. The content is provided "as is" and is intended solely for educational purposes. Users are encouraged to verify any information independently before relying on it for professional practice or exam preparation.

By using this ebook, the reader agrees to hold the publisher and author harmless from any claims, damages, or liability arising from its use.

---

For inquiries regarding permissions, please contact:

[MedicalMCQ.in](http://MedicalMCQ.in)

# Questions

1-: True regarding lag phase is?

- 1: Time taken to adpt in the new environment
- 2: Growth occurs exponentially
- 3: The plateau in lag phase is due to cell death
- 4: It is the 2nd phase in bacterial growth curve

2-: Loeffler's medium is-

- 1: Indicator medium
- 2: Selective medium
- 3: Enrichment medium
- 4: Enriched medium

3-: Acid fast organisms are -

- 1: Spores
- 2: Nocardia
- 3: Legionella
- 4: Rodococcus

4-: Which of the following is the most widespread method of genetic transfer among bacteria?

- 1: Transformation
- 2: Transduction
- 3: Lysogenic conversion
- 4: Conjugation

5-: Chromosomal mutation can be identified by all except:

- 1: Single strand polymorphism
- 2: Agarose gel electrophoresis
- 3: Denaturing Gradient gel electrophoresis
- 4: Dideoxynucleotide trail sequencing

6-: Which one of the following bacteria is oxidase positive?

- 1: Vibrio
- 2: Pseudomonas
- 3: Clostridium
- 4: E.coli

7-: The major constituents in agar are

- 1: Fats
- 2: Aminoacids
- 3: Polysaccharides
- 4: Polypeptides

8-: Drug resistant in tuberculosis is due to ?

- 1: Transformation
- 2: Transduction
- 3: Conjugation
- 4: Mutation

9-: A chest physician performs bronchoscopy in the procedure room of the out patient department. To make the instrument safe for use in the next patient waiting outside, the most appropriate method to disinfect the endoscope is by -

- 1: 70 % alcohol for 5 min
- 2: 2% glutaraldehyde for 20 min
- 3: 2% formaldehyde for 10 min
- 4: 1% sodium hypochlorite for 15 min

10:- Which of the following is best to sterilize heat labile solutions?

- 1: Dry heat
- 2: Autoclave
- 3: Membrane filtration
- 4: Pasteurization

11:- Loeffler's serum slope doesn't contain

- 1: Nutrient Broth
- 2: Glucose
- 3: Horse serum
- 4: Sheep blood

12:- Specific reason to disallow the sample for culture -

- 1: Sample brought within 2 hr of collection
- 2: Sample brought in sterile plastic container
- 3: Sample brought in formalin
- 4: Sample obtained after cleaning the collection site

13:- Following are true of transferable drug resistance except :

- 1: Multiple drug resistance simultaneously
- 2: Virulence of bacteria same

3: Prevented by drug combinations

4: Very high degree of resistance

14-: Dark ground microscopy is used to see?

1: Refractile organisms

2: Flagella

3: Capsule

4: Fimbriae

15-: Oakley fulthroe procedure is

1: Agglutination test

2: Precipitation test

3: Flocculation test

4: None of the above

16-: Which of the following is true regarding lattice formation?

1: Associated with precipitation and not agglutination

2: Associated with agglutination and not precipitation

3: Associated with both

4: Neither associated with precipitation nor agglutination

17-: Bacterial cell wall is composed of all except -?

1: Muramic acid

2: Teichoic acid

3: Glucosamine

4: Mucopeptide

18-: Lipopolysaccharide structure is characteristic of -

- 1: Exotoxin
- 2: Endotoxin
- 3: Both
- 4: None

19-: Prokaryote among the following is?

- 1: Bacteria
- 2: Mycoplasma
- 3: Fungi
- 4: Blue green algae

20-: The typical temperature of an autoclave (operating at 30 psi of pressure is)

- 1: 121degC
- 2: 100degC
- 3: 63degC
- 4: 134degC

21-: All the following are features of Endotoxins Except

- 1: Lipopolysaccharides
- 2: Proteins
- 3: Heat stable
- 4: No enzymic action

22-: Organisms that have not been cultured successfully so far is?



- 1: Leptospira
- 2: Treponema pallidum
- 3: Bordetella
- 4: Staphylococcus

23-: The biological indicator used in various autoclave machines for quality check is-

- 1: Clostridium tetani
- 2: Bacillus stereothermophilus
- 3: Bacillus pumilus
- 4: Bacillus subtilis

24-: Louis Pasteur is associated with all except -

- 1: Vaccination of small pox
- 2: Germ theory
- 3: Pasteurization
- 4: Vaccination of rabies

25-: F plasmid of high frequency recombination is

- 1: Extrachromosomal
- 2: Chromosomal
- 3: Mesosome
- 4: Ribosomes

26-: NNN media used in?

- 1: Leishmania
- 2: Histoplasma

3: Trypanosoma

4: Entamoeba

27-: The ratio of anaerobe to aerobes in stool is

1: 10:01

2: 100:01:00

3: 1000:01:00

4: 10000 : 1

28-: Sterilisation by steam under pressure

1: Tyndall's Chamber

2: Koch's Arnold Steamer

3: Hot air oven

4: Autoclave

29-: Pasteur developed the vaccine for

1: Anthrax

2: Rabies

3: Chicken cholera

4: All of the above

30-: The animal used for monoclonal antibodies production is

1: Mouse

2: Rabbit

3: Guinea pig

4: Monkey

31-: A q from a tribal area of jharkhand repos with fever for last 3days Peripheral blood is collected and stained with Giemsa A diagnosisof malaria is made The smear is shown in the fig What is the likely cause

- 1: P falciparum
- 2: P Vivax
- 3: P Malariae
- 4: P Ovale

32-: Formaldehyde gas sterilization is employed for?

- 1: Sterilizing hea lung machines
- 2: Glass materials
- 3: Paper and cloth
- 4: Fumigation of operation theater

33-: Metachromatic Granules are stained by -

- 1: Ponder's stain
- 2: Negative stain
- 3: Gram's stain
- 4: Leishman stain

34-: Which of the following statements is false regarding the drug resistance?

- 1: In mutational drug resistance one drug resistance at a time is seen
- 2: Virulence is decreased in transferable resistance
- 3: Drug combinations can prevent Mutational drug resistance
- 4: High degree of resistance is seen in transferable drug resistance

35-: Bacterial indicator for dry heat sterilization is ?

- 1: Bacillus subtilis
- 2: Bacillus pumilis
- 3: Bacillus stearothermophilus
- 4: Coxiella burnetti

36-: Property of acquiring antibiotic resistance from the viral colony is by -

- 1: Transference
- 2: Conjunction
- 3: Transduction
- 4: Mutation

37-: Which of the following is used for antibiotic sensitivity testing

- 1: Thayer main medium
- 2: Mueller hinton agar
- 3: Chocolate agar
- 4: None of the above

38-: All are Phenolic disinfectant except-

- 1: Dettol
- 2: Cresol
- 3: Lysol
- 4: Carbolic acid

39-: Autotrophic requirements are

- 1: CO<sub>2</sub> as a carbon source

2: NH<sub>3</sub> as a nitrogen source

3: CO<sub>2</sub> and NH<sub>3</sub> together

4: Essential molecules that the bacteria are unable to synthesize

40:- Agent used for sterilization -

1: Ethylene oxide

2: Ionizing radiation

3: 2% gluteraldehyde

4: Formaldehyde with low pressure steam

41:- The mechanism of genetic transfer where a phage serves as a vehicle is -

1: Transformation

2: Translation

3: Conjugation

4: Lysogeny

42:- Heating and subsequent plating is a method used for isolating?

1: Corynebacterium

2: Vibrio

3: Salmonella

4: Clostridia

43:- Secular trend in influenza is due to -

1: Antigenic shift

2: Antigenic drift

3: Endemicity

4: Virulence

44-: The bacterial growth medium shown below belongs to

- 1: Enriched medium
- 2: Enrichment medium
- 3: Selective medium
- 4: Indicator medium

45-: Simplest and most effective method to prevent nosocomial infection-

- 1: Use of antibiotics
- 2: Use of laminar airflow
- 3: Use of filters
- 4: Hand washing

46-: In adults , blood culture ratio of blood to reagent is -

- 1: 1:05
- 2: 1:20
- 3: 1:10
- 4: 0.111111111

47-: True about hand hygiene -

- 1: Betadine can cause irritation
- 2: Alcohol based preparation are used
- 3: Hot water is best
- 4: Gluteraldehyde is used

48-: The Endotoxin from the gram-negative organism is -

- 1: Polysaccharide
- 2: Glycoprotein
- 3: Lipoprotein
- 4: Lipopolysaccharide

49-: Subclinical infection is common in-

- 1: Measles
- 2: Mumps
- 3: Rubella
- 4: Japanese encephalitis

50-: Conjugation does not involve -

- 1: Bacteriophages
- 2: HFr
- 3: Fr
- 4: Plasmids

51-: Which of the following statement is false regarding bacterial cell wall?

- 1: Cell wall of Gram-positive bacteria is thicker than that of Gram-negative bacteria
- 2: Teichoic acid is present in cell wall of Gram-negative bacteria
- 3: Region II of LPS is core polysaccharide
- 4: LPS is responsible for O antigen specificity of gram negative bacteria

52-: Gram stain is a?

- 1: Simple stain

2: Differential stain

3: Negative stain

4: Fluorescent stain

53:- Lyophilization means

1: Sterilizations

2: Freeze drying

3: Burning to ashes

4: Exposure to formation

54:- Bacteria with tuft of flagellae at one end are called-

1: Monotrichate

2: Bipolar

3: Peritrichate

4: Lophotrichate

55:- Insipisation is used to sterilise?

1: Needles

2: Endoscopes

3: Scissors

4: Culture medium

56:- Agent which on addition to a colony inhibits its growth and on removal the colony regrows is -

1: Bacteriostatic

2: Bactericidal



3: Antibiotic

4: Antiseptic

57-: Prions are best killed by -

1: Autoclaving at 121degC

2: 5% formaline

3: Sodium hydroxide

4: Sodium hypochloride

58-: Teichoic acid is present in the cell wall of

1: Gram positive bacteria

2: Gram negative bacteria

3: Acid fast bacteria

4: All of the above

59-: Steam at 100 degrees centigrade for 20min on 3 consecutive days is called as

1: Boiling

2: Tyndallization

3: Inspissation

4: Pasteurization

60-: Vaccines are sterilized by?

1: Seitz filtration

2: Hot air oven

3: Autoclaving

4: Heat inactivation

61-: All are methods of sterilization by dry heat except -

- 1: Flaming
- 2: Incineration
- 3: Hot air oven
- 4: Autoclaving

62-: The hot-cold phenomenon is seen due to which toxin-

- 1: Alpha lysin
- 2: Beta lysin
- 3: Gamma lysin
- 4: Theta lysin

63-: Safety pin appearance is shown by?

- 1: Hemophilus ducreyi
- 2: Chlamydia
- 3: Donovanian granulomatis
- 4: Mycoplasma

64-: Glass vessels and syringes are best sterilised by ?

- 1: Hot air oven
- 2: Autoclaving
- 3: Irradiation
- 4: Ethylene dioxide

65-: Noguchi's medium is used for?

- 1: Bordetella
- 2: Brucella
- 3: Borrellia
- 4: Corynebacterium

66:- As per national immunization schedule, 1ST DPT booster has to be given at

- 1: 5-6 yrs
- 2: 16-24 months
- 3: 18 weeks
- 4: 16 years

67:- Rose waaler test is?

- 1: Passive agglutination for rheumatoid ahiritis
- 2: Active agglutination for rheumatoid ahiritis
- 3: Passive agglutination for rheumatic fever
- 4: Active agglutination for rheumatic fever

68:- Intermittent sterilization

- 1: Pasteurization
- 2: Boiling
- 3: Autoclaving
- 4: Tyndallization

69:- Chronic graft rejection occurs due to what type of hypersensitivity reaction

- 1: Type IV
- 2: Type III

3: Type II

4: Type I

70:- Best method of skin disinfectant is -

1: Spirit

2: 100% alcohol

3: Tincture iodine

4: Cetrimide

71:- Plasma sterilization accuracy is assessed by using?

1: Bacillus subtilis

2: Bacillus stereothermophilus

3: Staphylococcus aureus

4: Clostridium tetani

72:- Which is a form of cold sterilization -

1: Gamma rays

2: Beta rays

3: Infrared rays

4: Autoclave

73:- Wasserman test is?

1: Agglutination test

2: Precipitation test

3: Neutralisation test

4: Complement fixation test

74-: In negative staining-

- 1: The structure to be demonstrated is stained
- 2: The structure to be demonstrated is not stained
- 3: The background is not stained
- 4: The background and structure are stained

75-: Heat labile instruments for use in surgical procedures can be best sterilized by?

- 1: Absolute alcohol
- 2: Ultraviolet rays
- 3: Chlorine releasing compounds
- 4: Ethylene oxide gas

76-: Wasserman test is

- 1: Agglutination test
- 2: Precipitation test
- 3: Neutralisation test
- 4: Complement fixation test

77-: Which of the following is an enrichment media:

- 1: Alkaline peptone water
- 2: Monsour's taurocholate Tellurite peptone water
- 3: Selenite F broth
- 4: All of the above

78-: Which of the following stain is used?

- 1: Methyl violet
- 2: Brilliant cresyl blue
- 3: Sudan black
- 4: Indigo carmine

79-: Best method of sterilizing disposable syringes is -

- 1: Hot air oven
- 2: UV rays
- 3: Boiling
- 4: Gamma rays

80-: All the following terms are used to describe bacterial chromosome Except

- 1: Haploid
- 2: Diploid
- 3: Nucleoid
- 4: Circular

81-: Robe Koch assistant advised him to use agar instead of gelatine for solidifying culture media for cultivation of bacteria as -

- 1: Agar has no more nutrition
- 2: Gelatin melts at 24degC
- 3: Gelatin is not easily available
- 4: Agar is cheaper

82-: The mechanism of direct transfer of free DNA involves \_\_\_\_\_

- 1: Transformation

2: Transduction

3: Conjugation

4: Mutation

83:- The arrangement of flagella in lophotrichous is

1: Single polar flagellum

2: Bipolar flagellum

3: Multiple polar flagellum

4: Distributed over the entire cell

84:- Who is the founder of Electron microscope?

1: Antonie Philips van Leeuwenhoek

2: Ernst Ruska

3: Robe Koch

4: Louis Pasteur

85:- Plasmid?

1: Involved in multidrug resistance transfer

2: Involved capsule formation

3: Impas capsule formation

4: Impas pili formation

86:- Most microorganisms pathogenic for humans grow best in the laboratory when cultures are incubated at

1: 15-20degC

2: 20-30degC

3: 30-37degC

4: 38-50degC

87-: Holding time for Hot air oven with a temperature of 1600C

1: 15 min

2: 30min

3: 45 min

4: 60 min

88-: Selenite F broth is an enrichment media for?

1: Salmonella

2: Shigella

3: E. coil

4: Campylobactor

89-: In a bacterial growth curve, the period in which maximum cell size is obtained is\_\_\_\_\_

1: Beginning of Lag phase

2: End of lag phase

3: Beginning of stationary phase

4: Log phase

90-: Microscope was invented by?

1: Ronald ross

2: Robe kock

3: Antonie van Leeuwenhoek

4: Louis pasteur



91-: The best skin disinfectant is -

- 1: Alcohol
- 2: Savlon
- 3: iodine
- 4: Phenol

92-: The following bacteria doesn't produce any spores

- 1: Bacillus anthracis
- 2: Clostridium
- 3: Pseudomonas
- 4: Bacillus subtilis

93-: Antonie van Leeuwenhoek is associated with

- 1: Telescope
- 2: Microscope
- 3: Staining procedure
- 4: Immunization

94-: Of the following pick the False option on Flagella

- 1: Locomotion
- 2: Attachment
- 3: Protein in nature
- 4: Antigenic

95-: Percentage of bleaching powder used to disinfect feces -

1: 2%

2: 5%

3: 10%

4: 15%

96-: Exaltation is:

1: Decreased virulence

2: Increased virulence

3: Increased susceptibility to antimicrobials

4: Loss of virulence

97-: Which of the following is not used for routine faecal culture

1: DCA

2: MacConkey

3: Tellurite blood agar

4: Blood agar

98-: Light microscope resolution is?

1: 200 nm

2: 20 nm

3: 0.2 nm

4: 300 nm

99-: Microorganism adhere to host cell with the help of -

1: Lipoic acid

2: Lectin

3: Fimbriae

4: Capsule

100:- Hot air oven is used for sterilization of all except -

1: Glass wares

2: Dusting Powder

3: L.J.media

4: Liquid paraffin

101:- Which of the following is an indicator for sterilization by autoclave method

1: B subtilis

2: B stereothermophilus

3: S aureus

4: Clostridium tetani

102:- Cetricimide is

1: Aldehyde

2: Halogen

3: Phenol

4: Quaternary ammonium compounds

103:- pH of Sabouraud dextrose agar is

1: 12

2: 10-Aug

3: 6-Apr

4: 8-Jun

104-: Not used in grams staining?

- 1: Methylene blue
- 2: Crystla violet
- 3: Iodine
- 4: Safranin

105-: Endoscope and bronchoscope instruments are under which category according to Spaulding classification

- 1: Critical item
- 2: Semi critical item
- 3: Noncritical item
- 4: None of the above

106-: Which statement concerning plasmids is true?

- 1: All plasmids possess the information for their own transfer by conjugation
- 2: Much of the information coded in the plasmid is essential to the survival of the bacteria cell
- 3: R plasmids carry genes for antibiotic resistance
- 4: R plasmids cannot be transferred to other bacterial cells

107-: What is the thermal death point?

- 1: Lowest temperature that kills all microbes in 10 min
- 2: Highest temperature that kills all microbes in 1 min
- 3: Temperature that kills 1% of a microbial population
- 4: Optimum temperature required to kill 50% of a microbial population

108:- Which of the following is true regarding Toll-like receptor?

- 1: Antigen specific
- 2: Acts by cytokine release
- 3: Pa of adaptive immunity
- 4: Antibodies

109:- Which of the following statements is false regarding transposons?

- 1: They are also known as "jumping genes"
- 2: It was first discovered by Barbara McClintock
- 3: Long transposons are known as insertion sequences
- 4: The ends of transposons carry "inverted repeat" sequences

110:- Gamma radiations are used for sterilizing?

- 1: Syringes
- 2: Cystoscopes
- 3: Dressing aprons
- 4: Metal instruments

111:- For hot air oven holding time at 160degC is

- 1: 2 hour
- 2: 15 minutes
- 3: 30 minutes
- 4: 20 minutes

112:- Flash process for pasteurisation of milk is

- 1: 63°C for 15-20sec

2: 720C for 15-20sec

3: 630C for 30minutes

4: 720C for 30min

113:- Natural method of horizontal gene transfer among bacteria includes -

1: Electroporation

2: Transduction

3: Transformation

4: Conjugation

114:- Gram negative cocci is/are -

1: Neisseria gonorrhoeae

2: Bacillus

3: Staphylococci

4: Streptococci

115:- In which of the following is throat swab transported to the lab?

1: Plastic tube

2: Plate and agar

3: Test tube

4: No covering

116:- Phenol Coefficient indicates -

1: Efficiency of a disinfectant

2: Dilution of a disinfectant

3: Quantity of a disinfectant

4: Purity of a disinfectant

117:- Which of the following is a feature of the cell envelope of Gram-negative bacteria?

- 1: Teichoic acid present
- 2: Lipopolysaccharide Present
- 3: Porin proteins are absent
- 4: Periplasm absent

118:- Jumping gene is ?

- 1: Transposon
- 2: Episome
- 3: Cosmid
- 4: Plasmid

119:- Which of the following statements regarding disinfectant is not true -

- 1: Hypochlorites are bactericidal and inactivated by organic matter
- 2: Glutaraldehyde is sporicidal and not inactivated by organic matter
- 3: Formaldehyde is bactericidal, sporicidal and virucidal
- 4: Phenol is bactericidal and readily inactivated by organic matter

120:- Following are least susceptible to disinfectants and antiseptics?

- 1: Spore
- 2: Protozoa
- 3: Prions
- 4: Fungi

121-: Conditions required for autoclave is?

- 1: 121degC temperature for 20min
- 2: 121degC temperature for 15 min
- 3: 100degC temperature for 60 min
- 4: 100degC temperature for 90 min

122-: A method of sterilization that involves exposure to 100degC for 20 minutes on 3 successive days is known as \_\_\_\_

- 1: Autoclaving
- 2: Tyndallization
- 3: Pasteurisation
- 4: Inspissation

123-: Endoscope tube is sterilized by -

- 1: Glutaraldehyde
- 2: Formalin
- 3: Autoclaving
- 4: Boiling

124-: Sterilising agents include -

- 1: Dry heat
- 2: Ethylene oxide
- 3: Ether
- 4: Alcohol

125-: Anaerobic gram-positive cocci causes



- 1: Puerperal infection
- 2: Food poisoning
- 3: Endocarditis
- 4: Septicemia

126:- Which of the following is an intermediate level disinfectant?

- 1: Glutaraldehyde
- 2: Quaternary ammonium compound
- 3: Hydrogen peroxide
- 4: Iodophores

127:- Dark ground microscopy is used for

- 1: TPI
- 2: Kahn's test
- 3: FTA-ABS
- 4: VDRL

128:- Which of the following bacteria is classified as facultative anaerobe?

- 1: Pseudomonas
- 2: Bacteroides
- 3: Escherichia
- 4: Clostridium

129:- Theory of web of causation was given by ?

- 1: Mc Mohan and Pugh
- 2: Pettenkoffe

3: John snow

4: Louis Pasteru

130:- The segment of DNA between chromosal and extrachromosal DNA molecules within the cells are -

1: Transposons

2: Cosmid

3: Plasmid

4: Episomes

131:- All are true except-

1: Exotoxin has enzymatic action

2: Endotoxin has enzymatic action

3: Exotoxin is highly antigenic

4: Endotoxin is weakly antigenic

132:- Irradiation can be used to sterilize all except :

1: Bone graft

2: Suture

3: Aificial tissue graft

4: Bronchoscope

133:- Recommended transpo medium for stool specimen suspected to contain enteric pathogen is

1: Amie's medium

2: Buffered glycerol saline medium

3: MacConkey medium

4: Stua's medium

134:- An &Antiseptic&; means -

- 1: An agent applied on skin to eradicate pathogenic microbes
- 2: Used to sterile inanimate objects
- 3: An agent which kills only bacteria but not spores
- 4: Kills all microorganism

135:- Length of most of the bacteria of medical impoance are about?

- 1: 0.5-1 micron
- 2: 1-3 micron
- 3: 3-5 micron
- 4: 5-10 micron

136:- Transfer of a poion of the DNA from one bacterium to another by the bacteriophage is known as

- 1: Transformation
- 2: Mutation
- 3: Transduction
- 4: Conjugation

137:- Which of the following bacteria is classified as facutative anaerobe?

- 1: Pseudomonas
- 2: Bacteroides
- 3: Escherichia
- 4: Clostridium

138-: Stain used in electron microscopy?

- 1: 2.5% glutaldehyde
- 2: Phosphotungstic acid
- 3: Saffranin
- 4: Coomassie blue

139-: Temperature of 121-degree centigrade for 15 in with pressure of 15lb per square inch is used in

- 1: Hot air oven
- 2: Autoclave
- 3: Incinerator
- 4: Steam sterilizer

140-: Sterilization of media containing serum is by

- 1: Autoclaving
- 2: Micropore filter
- 3: Gamma radiation
- 4: Centrifugation

141-: The indicator used in the autoclave is?

- 1: Clostridium tetani
- 2: Bacillus stereothermophilus
- 3: Bacillus pumilis
- 4: Bacillus subtilis Var Niger

142-: Which of the following is not a sporicidal agent?

- 1: Lysol
- 2: Formalin
- 3: Glutaraldehyde
- 4: Ethylene oxide

143-: Which of the following is used commercially for sterilization of disposable plastic items?

- 1: Autoclave
- 2: Glutaraldehyde
- 3: Ethylene oxide
- 4: Ethyl alcohol

144-: Patient having gastroenteritis after eating contaminated food. microscopy showed gram-positive bacillus with subterminal spore. The bacteria is

- 1: Clostridium per fringes
- 2: Staphylococcus
- 3: Clostridium tetani
- 4: Corynebacterium

145-: Stain used in staining fungal elements

- 1: Acid fast stain
- 2: Gram stain
- 3: Methenamine silver
- 4: All of the above

146-: All of the following organisms are known to survive intracellularly except?

- 1: Neisseria meningitides
- 2: Salmonella typhi.
- 3: Streptococcus pyogenes
- 4: Legionella pneumophila

147-: Composition of ZN stain is all Except

- 1: Basic fuschin
- 2: Acid fuschin
- 3: Phenol
- 4: Alcohol

148-: Kovac's reagent is used in \_\_\_\_

- 1: Methyl red test
- 2: Voges-Proskauer test
- 3: Indole test
- 4: Urease test

149-: All organisms show bipolar staining except -

- 1: Calymatobacter granulomatis
- 2: Yersinia pestis
- 3: H. influenzae
- 4: Burkholderia pseudomallei

150-: Thayer - Main media is used for -

- 1: Staphylococcus
- 2: Neisseria

3: Streptococcus

4: Haemophilus influenza

151:- Disinfectant used to disinfect blood spills in hospital floors?

1: Phenol

2: Quaternary ammonium compound

3: Alcohol

4: Chlorine based compounds

152:- Drug resistance transfer by bacteriophage involves?

1: Transduction

2: Conjugation

3: Transformation

4: Convocation

153:- The best antiseptic is? -

1: Alcohol

2: Betadine

3: Savlon

4: Phenol

154:- Growth on cell-free artificial solid medium is possible for following except ?

1: Ureaplasma urealyticum

2: Mycoplasma pneumoniae

3: C and L form of Proteus vulgaris

4: Chlamydia

155-: Which of the following is true about Extended spectrum beta lactamases?

- 1: Only seen in gram positive bacteria
- 2: Only seen in gram negative bacteria
- 3: Plasma mediated
- 4: Associated only in communityl acquired disease

156-: Recommended transpo medium for stool specimen suspected to contain enteric pathogen is -

- 1: Arnie's medium
- 2: Buffered glycerol saline medium
- 3: MacConkey medium
- 4: Stua medium

157-: Temperature and time period in hot air oven is

- 1: 140 degrees 1 hr
- 2: 160 degrees 2 hrs
- 3: 160 1hr
- 4: 140 2 hrs

158-: Commonly used Disc diffusion method is also known as:

- 1: Kirby Bauer method
- 2: E test method
- 3: MIC method
- 4: Stokes method



159:- A young male patient presented with UTI. On urine examination, pus cells were found but no organisms. Which method would be best for culture?

- 1: Mc Coy culture
- 2: Thayer Main medium
- 3: L,J medium
- 4: Levinthal medium

160:- Spores are disinfected by -

- 1: Ethylene oxide
- 2: Betapropiolactone
- 3: Formaldehyde
- 4: Hexachlorophen

161:- Who among the following used carbolic acid initially as an antiseptic for surgery and is known as the "Father of antiseptic surgery"?

- 1: Robe Koch
- 2: Edward Jenner
- 3: Louis Pasteur
- 4: Joseph Lister

162:- CCEY medium is used for culture of?

- 1: C jejuni
- 2: C difficile
- 3: Yersinia pestis
- 4: Actinomycosis

163:- The following pathogen does not satisfy 'Koch's postulates' -

- 1: Bacillus anthrax
- 2: Mycobacterium tuberculosis
- 3: Clostridium tetani
- 4: Lepra bacilli

164-: Defence mechanism by the bacteria which produce biofilm are all except?

- 1: Antibiotics are expelled from the surface
- 2: They stick to the surface strongly
- 3: Antibiotics penetration into the biofilm is less
- 4: They protect from the inflammatory mediators

165-: Stain is not taken by capsule in gram negative organisms because the capsule consists of -

- 1: Polysaccharides
- 2: Lipopolysaccharides
- 3: Lipids
- 4: Protein

166-: Which anticoagulant is used when blood is sent for blood culture?

- 1: Sodium
- 2: EDTA
- 3: Oxalate
- 4: SPS

167-: What is the acceptable limit of bacterial count in an OT for neurosurgery?

- 1: 50 per cubic feet

2: 1 per cubic feet

3: 10 per cubic feet

4: 5 per cubic feet

168:- The biologic standard used to test the efficiency of sterilization involves the use of

1: Spores of Clostridium tetani

2: Streptococcus pneumoniae

3: Spores of Vibrio

4: Mycoplasma

169:- Operation theatre sterilisation is done by

1: savlon cleansing

2: Carbolic acid spray

3: Ultra violet radiation

4: Autoclave

170:-  $\beta$  - Lactam ring is present in

1: Erythromycin

2: Penicillin

3: Tetracyclins

4: Chloramphenicol

171:- The dye in Fluorescent microscopy?

1: Thioflavin T

2: Congo Red

3: Brilliant Blue

4: Auramine

172:- Stain specific for DNA staining is

1: Feulgen

2: Malchite green

3: Crystal violet

4: Nigrosin

173:- Whitmore's bacillus is

1: H. influenzae

2: B. mallei

3: B. pseudomallei

4: B. cepaciae

174:- False statement regarding culture media in microbiology -

1: Blood agar is best for anaerobic organisms

2: Chocolate agar is best for hemophilic organisms

3: Lowenstein-Jenson media is best for mycobacteria

4: McConkey agar is best for gram negative enteric pathogens

175:- Blood spill in operation theatre is cleaned with?

1: Chlorine compound

2: Phenolic compound

3: Quaternary ammonium compounds

4: Alcoholic compounds

176:- Peracetic acid comes under which class of sterilizing agent or disinfectant

- 1: Surface active agent
- 2: Vapor phase disinfectant
- 3: Oxidizing agent
- 4: Halogen

177:- Methods used to see the bacteria are?

- 1: Microscopy
- 2: Stained preparations
- 3: Both
- 4: None

178:- Sterilization is defined as -

- 1: Disinfection of skin
- 2: Complete destruction of all microorganisms
- 3: Destruction of pathogenic organisms
- 4: Decrease bacterial count from objects

179:- Phage DNA becomes integrated with bacterial chromosome as prophage which codes new characteristics is referred to as

- 1: Transformation
- 2: Phage conversion
- 3: Conjugation
- 4: Transduction

180:- Steps of Gram stain sequence arrangement. a. Mordant- iodine treatment b. Safranin c. Crystal violet d. Alcohol wash

1: a>b>c>d

2: b>c>a>d

3: c>a>d>b

4: b>a>d>c

181-: Stain used in electron microscopy

1: 2.5% FAM

2: Phosphotungstic acid

3: Saffranin

4: Coomassie blue

182-: Which of the following is used as a control during sterilization of ionizing radiations

1: Bacillus stearothermophilus

2: Bacillus anthracis

3: Bacillus subtilis

4: Bacillus pumilus

183-: Which of the following can be reliably used for hand washing -

1: Chlorhexidine

2: Isopropyl alcohol

3: Glutaraldehyde

4: Cresol

184-: Which of the following sterilization/disinfection agents works by disrupting the cell membrane?

1: Phenols

2: Halogenated compounds

3: Heavy metals

4: Ethylene oxide

185:- All the following agents can be used as skin disinfectants, except

1: Chloroxylenol

2: Tincture iodine

3: Quaternary ammonium compounds

4: Isopropyl alcohol

186:- False regarding bacterial plasmid is?

1: Extrachromosomal DNA

2: Eliminated by treating with radiation

3: Transmission of different genes

4: Can cause lysogenic conversion

187:- Which of the following stimulate adenylate cyclase with G-protein coupled action?

1: Shiga toxin

2: Cholera toxin

3: Diphtheria toxin

4: Pseudomonas toxin

188:- Plasma sterilization accuracy is assessed using -

1: Bacillus subtilis

2: Geobacillus stearothermophilus

3: Staphylococcus aureus

4: Clostridium tetani

189-: Widal test is a method of?

- 1: Direct Coomb's test
- 2: Indirect Coomb's test
- 3: Tube agglutination test
- 4: Precipitation test

190-: Which is a eukaryote among the following

- 1: Mycoplasma
- 2: Bacteria
- 3: Fungus
- 4: Chlamydia

191-: MacConkey's Agar is -

- 1: Enriched medium
- 2: Enrichment medium
- 3: Differential medium
- 4: Synthetic medium

192-: Following grows in the cell free medium except -

- 1: Rickettsia
- 2: M leprae
- 3: Baonella
- 4: Syphilis



193:- The earliest discovery of a pathogenic microorganism was made by

- 1: Augustino Bassi
- 2: Pollender
- 3: Oliver Wendell
- 4: Louis pasteur

194:- Which among the following statements is false?

- 1: Muramic acid is not present in the cell wall of Eukaryotes
- 2: Extra-chromosomal DNA is present in mitochondria in Eukaryotes
- 3: 80S ribosome is present in prokaryotes
- 4: Multiple linear chromosomes present in Eukaryotes

195:- Reverse transcriptase is \_\_\_\_

- 1: DNA-dependent RNA polymerase
- 2: RNA-dependent DNA polymerase
- 3: DNA-dependent DNA polymerase
- 4: RNA-dependent RNA polymerase

196:- &Disinfectant& kills the following -

- 1: All microorganisms
- 2: Pathogenic microorganisms
- 3: Viruses and fungi
- 4: Non - pathogenic microorganisms

197:- Most effective method of sterilization by heat is

- 1: Hot air

2: Boiling

3: Steam

4: Steam under pressure

198:- Hospital dressing is best disposed off by -

1: Incineration

2: Dumping

3: Autoclaving

4: Burying

199:- In the Eijkman test, mac Conkey broth tubes are incubated at

1: 25 degree centigrade

2: 37 degree centigrade

3: 44 degree centigrade

4: 52 degree centigrade

200:- Which anticoagulant is used when blood is sent for blood culture-

1: Sodium citrate

2: EDTA

3: Oxalate

4: SPS

201:- Following statements are true on dark ground microscopy EXCEPT -

1: Suitable for slender organism like spirochetes

2: Dark field field condenser with a central circular stop used to illuminate the object -

3: Light falling on the object with a dark background reflects and objects appear self luminous

4: Transmitted light is used to illuminate the object

202:- Which of the following have More Peptidoglycans present in them-

1: Gram negative bacteria

2: Gram positive bacteria

3: Fungi

4: Protoza

203:- Bacterial transduction occurs by:

1: Plasmids

2: Sex pili

3: Bacteriophage

4: Uptake of genetic material by other bacteria.

204:- F plasmid of high frequency recombination is a -

1: Extrachromosomal

2: Chromosomal

3: Mesosomes

4: Ribosomes

205:- The endotoxin which leads to endotoxic shock is actually -

1: Lipoprotein

2: Lipopolysaccharide

3: Polysaccharide

4: Polyamide

206-: Eukaryotes are different in causing infection because:

- 1: Divide by binary fission
- 2: Highly structured cells with organized cell organelles
- 3: Don't have cell organelles
- 4: Evolutionally deficient

207-: Significance of Adhesin in Pathogenesis-

- 1: Motility
- 2: Bacterial attachment
- 3: Toxigenicity
- 4: Bacterial division

208-: The Browne's tube is used for?

- 1: Steam sterilization
- 2: Radiation
- 3: Chemical sterilization
- 4: Filtration

209-: Sporulation occurs in:

- 1: Lag phase
- 2: Log phase
- 3: Stationary phase
- 4: Decline phase

210-: Arrangement of lens from eye to source of light, in light microscope -

- 1: Ocular lens : Subjective lens : Condesor lens
- 2: Subjective lens : Ocular lens : Condesor lens
- 3: Condesor lens : Subjective lens : Ocular lens
- 4: Subjective lens : Condesor lens : Ocular lens

211-: Drug resistance is not transmitted by -

- 1: HFr
- 2: Transposons
- 3: Plasmid
- 4: Chromosomes

212-: Mesosomes in bacteria are functional unit for -

- 1: Lipid storage
- 2: Protein synthesis
- 3: Respiratory enzymes
- 4: carbohydrate breakdown

213-: Out of the following the true statement regarding sterilization is -

- 1: Dry heat is the best method of sterilization of liquid paraffin
- 2: All glass wares are best sterilized by boiling at 100o C
- 3: Bacterial vaccines are best sterilized by ethylene oxide
- 4: Pasteurization of milk by flash method is done by heating at 63degree C for 30 minutes.

214-: Blood agar is -

- 1: Enriched media
- 2: Indicator media
- 3: Enrichment media
- 4: Selective media

215:- False regarding bacterial plasmids is?

- 1: Extrachromosomal
- 2: Eliminated by treating with radiation
- 3: Transmission of different species
- 4: Can causes lysogenic conversion

216:- Cell wall can be demonstrated by :

- 1: Microdissection
- 2: Electron microscopy
- 3: Differential staining
- 4: All of the above

217:- The specialized type of microscope, which enables quantitative measurement of the chemical constituents of cells, is the -

- 1: Optical microscope
- 2: Interference microscope
- 3: Phase contrast microscope
- 4: Polarized microscope

218:- Temperature used in Pasteurization is:

- 1: 72 for 20 min

2: 63 for 30 min

3: 100 for 10 min

4: 94 for 20 min

219:- The difference between Gram + ve and Gram -ve organism is that Gram+ve org. contains -

1: Teichoic acid

2: Muramic acid

3: N-acetyl neuraminin acid

4: Aromatic amino acids

220:- Swarming growth on culture is characteristic of which Gram-negative organism -

1: Clostridium welchii

2: Clostridium tetani

3: Bacillus cereus

4: Proteus mirabilis

221:- Longest pathogenic Bacillus species is

1: Bacillus subtilis

2: Bacillus cereus

3: Bacillus anthracis

4: Bacillus megaterium

222:- Floppy baby syndrome is caused by

1: Staphylococcus aureus

2: Staphylococcus epidermidis

3: Clostridium botulinum

4: Bacillus cereus

223:- pH of Sabouraud's dextrose agar is adjusted to

1: 2-Jan

2: 4-Feb

3: 6-Apr

4: 8-Jun

224:- Bacteria with a tuft of flagellae at one end are called -

1: Monotrichate

2: Peritrichate

3: Bipolar

4: Lophotrichate

225:- Irradiation can be used to sterilize all Except-

1: Bone graft

2: Suture

3: Artificial tissue graft

4: Bronchoscope

226:- Example of anaerobic medium

1: Wilson Blair medium

2: MacConkey broth

3: Robeson's cooked meat medium

4: EMB agar



227:- Which of the following is most resistant to sterilization?

- 1: Cysts
- 2: Prions
- 3: Spores
- 4: Viruses

228:- Smith Noguchi's media is used for -

- 1: Salmonella
- 2: Klebsiella
- 3: Spirochetes
- 4: Bacillus

229:- Rideal-Walker coefficient is related with?

- 1: Disinfecting power
- 2: Parasitic clearance
- 3: Dietary requirement
- 4: Statistical correlation

230:- All are sporicidal except -

- 1: lysol
- 2: Glutaraldehyde
- 3: Ethylene oxide
- 4: Formaldehyde

231:- Moist heat kills of the following except -

- 1: Brucella
- 2: Mycobateria
- 3: Salmonella
- 4: Coxiella burnetti

232:- All of the following are used in Gram's staining except?

- 1: Iodine
- 2: Alcohol
- 3: Congo red
- 4: Crystal violet

233:- Dark ground microscopy is used for ?

- 1: TPI
- 2: FTA - ABS
- 3: Kahn's test
- 4: VDRL

234:- Non-motile bacteria include?

- 1: Salmonella
- 2: Klebsiella
- 3: Citrobacter
- 4: Escherichia

235:- Which of the following bacteria can survive in holder method of pasteurization?

- 1: Bordetella
- 2: Salmonella

3: Coxiella

4: Mycobacterium bovis

236:- Arrangement of lens from eye to source of light, in light microscope

1: Ocular lens: Objective lens: Condensor lens

2: Objective lens: Ocular lens: Condensor lens

3: Condensor lens: Objective lens: Ocular lens

4: Objective lens: Condensor lens: Ocular lens

237:- The discovery of "gene transformation" came from the study of one of the following bacteria?

1: Bacillus subtilis

2: Streptococcus pyogenes

3: Streptococcus pneumoniae

4: Escherichia coli

238:- All are sporicidal agents except ?

1: Formaldehyde

2: Glutaraldehyde

3: Ethylene oxide

4: Isopropyl alcohol

239:- The organ of adhesion in the bacteria is -

1: Capsule

2: Slime

3: Flagella

4: Fimbriae

240:- Which of the following is most resistant to antiseptics

1: Prion

2: Spore

3: Fungus

4: Cyst

241:- All of the following organisms are known to survive intracellularly except

1: Neisseria meningitides

2: Salmonella typhi.

3: Streptococcus pyogenes

4: Legionella pneumophila

242:- Griffith demonstrated transformation with -

1: H. influenzae

2: E. coli

3: Proteus

4: Pneumococcus

243:- False about alcohol in disinfection is -

1: Ethanol is used

2: Isopropyl alcohol is used

3: Has sporicidal activity

4: Has bactericidal activity

244-: The medium that is most ideal for antibiotic sensitivity testing of bacterial isolates is

- 1: Blood agar
- 2: Chocolate agar
- 3: Nutrient agar
- 4: MacConkey agar

245-: Which is the most common contaminant in a positive blood culture

- 1: Staphylococcus epidermidis
- 2: Bacteriodes
- 3: Candida
- 4: Aceinobacter

246-: Exaltation is defined as -

- 1: Decreased virulence
- 2: Increased virulence
- 3: No change
- 4: None

247-: Electron microscopy is used for the following except-

- 1: To differentiate T & B lymphocytes
- 2: IgG deposits in kidney
- 3: TPI
- 4: Flagella

248-: Dark ground microscopy is used for detection of?

- 1: Spirochetes

2: Chlamydia

3: Fungi

4: Virus

249-: Which of the following vaccines can be administered to a patient with known anaphylactic reactions to eggs?

1: Haemophilus influenzae type B vaccine

2: Influenza vaccine

3: Measles vaccine

4: Mumps vaccine

250-: PCR is used to :

1: Detect target plasmids

2: Amplify small amount of DNA

3: Seal the cut ends of DNA

4: Cleave the bacterial plasmid

251-: Gram-positive bacteria stain during Gram staining

1: Blue

2: Red

3: Violet

4: Green

252-: Which of the following is a constituent of MacConkey agar?

1: Lactose

2: Casein

3: Neutral Red

4: All of the above

253:- Sporulation occurs in?

1: Lag phase

2: Log phase

3: Stationary phase

4: Decline phase

254:- Which of the following is intracellular?

1: Virus

2: Chlamydia

3: Mycoplasma

4: Rickettsia

255:- The cell wall structure is found in all except-

1: Staph aureus

2: Pseudomonas aeruginosa

3: Mycoplasma pneumoniae

4: Corynebacterium diphtheriae

256:- Agent which on addition to a colony inhibits its growth and on removal the colony regrow is

1: Bacteriostatic

2: Bactericidal

3: Antibiotic

4: Antiseptic

257-: Transfer of a portion of the DNA from one bacterium to another by a bacteriophage is known as

1: Transformation

2: Mutation

3: Transduction

4: Conjugation

258-: Disinfection of sputum is done by?

1: Boiling

2: Autoclaving

3: Sunlight

4: Burning

259-: Which one of the following statements about cilia is true?

1: They possess a 9 + 0 configuration of microtubules.

2: They do not contain an axoneme.

3: They contain ciliary dynein arms.

4: They are nearly identical to centrioles.

260-: Bacteria that contaminates Dettol and savlon is

1: Pseudomonas

2: Staphylococcus

3: Enterococcus

4: All the above



261-: The role of plasmids in conjugation was first described by Lederberg and Tatum (1946) in which bacteria?

- 1: H. influenza
- 2: Pseudomonas
- 3: Escherichia coli
- 4: M. Tuberculosis

262-: The unit of measurement used in bacteriology is

- 1: Micron
- 2: Millimeter
- 3: Angstrom
- 4: Nanometer

263-: Which of the following is not a tube test?

- 1: VDRL
- 2: Kahn test
- 3: Widal test
- 4: Paul bunnell test

264-: Obligatory anaerobes cannot withstand oxygen because of absence -

- 1: Superoxide dismutase
- 2: Catalase
- 3: Peroxidase
- 4: Cytochrome oxidase

265-: Lactose fermentation is seen in?

- 1: Blood agar
- 2: Chocolate agar
- 3: MacConkey agar
- 4: LJ medium

266-: Which is the most common contaminant in a positive blood culture?

- 1: Staphylococcus epidermidis
- 2: Bacteriodes
- 3: Candida
- 4: E.coli

267-: Cell wall deficient organism is?

- 1: Chlamdia
- 2: Mycoplasma
- 3: Streptococcus
- 4: Anaerobes

268-: Sterilisation of culture media containing serum is by -

- 1: Autoclaving
- 2: Micropore filter
- 3: Gamma radiation
- 4: Centrifugation

269-: Silver impregnation technique is used in the identification of -

- 1: Spirochetes

2: Leptospira

3: Borrelia

4: All of the above

270:- True about Bacteria is

1: Mitochondria are always absent

2: Sterols are always present in cell wall

3: Divide by binary fission

4: Can be seen only under electron microscope

271:- Which of the following are AFB positive with 5% sulphuric acid -

1: M. avium

2: M. leprae

3: M. tuberculosis

4: Nocardia

272:- Smith Noguchi's media is used for

1: Salmonella

2: Klebsiella

3: Spirochetes

4: Bacillus

273:- Tyndallisation is a method of -

1: Growing bac teria in pure culture

2: Sterilization

3: Inoculation of media

4: Preserving cultures

274-: Reidel walker test measures efficacy of disinfection by using-

- 1: Phenol coefficient
- 2: Glutaraldehyde coefficient
- 3: Ethanal coefficient
- 4: Formalin coefficient

275-: A child is suffering from recurrent chronic infections with encapsulated bacteria; Which subclass of IgG does the child has deficiency

- 1: IgG1
- 2: IgG2
- 3: IgG3
- 4: IgG4

276-: Which color plastic bag is used for noninfectious waste?

- 1: White
- 2: Yellow
- 3: Red
- 4: Black

277-: Which one of the following specimen is not refrigerated prior to inoculation?

- 1: CSF
- 2: Plus
- 3: Urine
- 4: Sputum

278-: Mesophilic organisms are those that grow best at temperature of -

- 1: -20o C to -7o C
- 2: -7o C to +20oC
- 3: 25o C to 40o C
- 4: 55o C to 80o C

279-: Largest pathogenic Bacillus organism is -

- 1: Bacillum subtilis
- 2: Bacillum cereus
- 3: Bacillum anthrocis
- 4: Bacillum megaterism

280-: Capsulated organism -

- 1: Candida
- 2: Klebsiella
- 3: Histoplasma
- 4: Cryptococcus

281-: Flash autoclaves are done at a temperature of

- 1: 121C in 15 min
- 2: 134C in 3 minutes
- 3: 108C in 45 minutes
- 4: 160C in 120 minutes

282-: Which of the following is true about holders method of pasteurization

- 1: It kills all bacteria and spores
- 2: It kills all bacteria except *Coxiella burnetti*
- 3: It kills 95% of microorganisms
- 4: All bacteria are destroyed

283:- Which one of the following bacteria is facultative anaerobe?

- 1: *Pseudomonas*
- 2: *Bacteroides*
- 3: *Escherichia*
- 4: *Clostridia*

284:- 40% formalin is used to sterilize?

- 1: Plastic syringes
- 2: All microbes + spores
- 3: Clothes
- 4: Stitches

285:- Blood agar is an example of

- 1: Simple media
- 2: Selective media
- 3: Synthetic media
- 4: Enriched media

286:- Contact isolation is done for

- 1: Typhoid
- 2: Mumps

3: MRSA

4: Diphtheria

287:- Eukaryotes are different in causing infection because?

1: They divide by binary fission

2: Highly structured cell with organized cell organelles

3: Don't have all organelles

4: Evolutionally ancient

288:- The specialized type of microscope, which enables quantitative measurements of the chemical constituents of cells is the -

1: Optical microscope

2: Interference microscope

3: Phase contrast microscope

4: Polarization microscope

289:- The following phenomenon is responsible for antibiotic resistance in bacteria due to slime production -

1: Co-aggregation

2: Biofilm formation

3: Mutation evolving in altered target site for antibiotics

4: Mutation evolving a target by pass mechanism

290:- Horizontal transmission of  $\lambda$  factor is by -

1: Transduction

2: Transformation

3: Conjugation

4: Fusion

291:- Loeffler's medium is -

- 1: Indicator medium
- 2: Selective medium
- 3: Enrichment medium
- 4: Enriched medium

292:- One of the following staining methods is an example of Negative Staining -

- 1: Gram's staining
- 2: Fontana's staining
- 3: India Ink Preparation
- 4: Ziehl-Neelsen staining

293:- Sputum can be disinfected by all except

- 1: Autoclaving
- 2: Chlorhexidine
- 3: Boiling
- 4: Cresol

294:- Most common type of pathogenic bacteria grow in temperatures

- 1: 25 to 40 degrees centigrade
- 2: -20 degrees
- 3: 0 to 20 degrees
- 4: Above 50 degrees



295-: Shelf life of CPD blood is

- 1: 3 weeks
- 2: 6 weeks
- 3: 9 weeks
- 4: 12 weeks

296-: Which of the following is an important disinfectant on account of effectively destroying gram positive and gram negative bacteria viruses and even spores at low pH levels

- 1: Alcohol
- 2: Hexachlorophene
- 3: Phenol
- 4: Chlorine

297-: Exaltation refers to:

- 1: Enhancement of virulence
- 2: Removal of cell wall
- 3: Increasing rate of replication
- 4: Passage through unorable hosts

298-: Which of the following is a neutralization test?

- 1: Schick test
- 2: ASLO
- 3: Haemagglutinin test
- 4: VDRL test

299-: Rose waaler test is

- 1: Passive agglutination for Rheumatoid arthritis
- 2: Active agglutination for Rheumatoid arthritis
- 3: Passive agglutination for Rheumatic fever
- 4: Active agglutination for Rheumatic fever

300:- The scientist below contributed to all of the following except

- 1: Chicken Cholera vaccine
- 2: Rabies vaccine
- 3: Diphtheria toxoid
- 4: Anthrax vaccine

301:- None of the following are true about N95 masks except

- 1: They were designed for influenza viruses during the H1N1 outbreak
- 2: N- stands for National Institute of Occupational safety and Health
- 3: It filters 95% of all particles smaller than 3nm
- 4: A beard doesn't allow for a proper seal and makes the N95 ineffective

302:- Which among the following statements regarding disinfectants is not true -

- 1: Hypochlorites are bactericidal and inactivated by organic matter
- 2: Glutaraldehyde is sporicidal and not inactivated by organic matter
- 3: Formaldehyde is bactericidal, sporicidal and virucidal
- 4: Phenol is bactericidal and readily inactivated by organic matter

303:- Bacteria may acquire characteristics by all of the following except -

- 1: Taking up soluble DNA fragments across their cell wall from other species -
- 2: Incorporating part of host DNA

3: Through bacteriophages

4: Through conjugation

304:- Sporicidal agents are -

1: Gluteraldehyde

2: Ethylene oxide

3: Formaldehyde

4: Benzaalkonium chloride

305:- All of the following pathogenic bacteria fulfill Koch's postulates, except?

1: Treponema pallidum

2: Yersinia pestis

3: Bacillus anthracis

4: Helicobacter pylori

306:- An outbreak of sepsis caused by Staphylococcus aureus has occurred in the newborn nursery. You are called upon to investigate. According to your knowledge of the normal flora, what is the most likely source of the organism?

1: Nose

2: Colon

3: Vagina

4: Throat

307:- Sporicidal disinfectant is following except-

1: Glutaraldehyde

2: Formaldehyde

3: Ethylene oxide

4: Benzalkonium chloride

308:- Transfer of a portion of DNA from one bacterium to another by the bacteriophage is known as -

- 1: Transformation
- 2: Transduction
- 3: Transcription
- 4: Lysogenic conversion

309:- The role of plasmids in conjugation was first described by Lederberg and Tatum (46) in -

- 1: H.influenzae
- 2: Corynebacterium
- 3: Pseudomonas
- 4: Esch.Coli

310:- Sputum can be disinfected by?

- 1: Autoclaving
- 2: Boiling
- 3: Cresol
- 4: Chlorhexidine

311:- True about the bacterial capsule is following except -

- 1: Prevents phagocytosis
- 2: Stains by Gram stain
- 3: Protects bacteria from enzymes
- 4: Lost by repeated subcultures

312-: True about exotoxins -

- 1: Lipopolysaccharide
- 2: Not antigenic
- 3: Can be toxoided
- 4: Heat stable

313-: Feces are disinfected best by -

- 1: 1% formaldehyde
- 2: 5% cresol
- 3: 5% phenol
- 4: Isopropyl alcohol

314-: Following are true of Gram negative bacterial cell wall compared to Gram positive bacteria except:

- 1: Presence of lipopolysaccharide
- 2: Presence of Teichoic acid
- 3: Presence of Sulphur containing amino acids
- 4: Thinner

315-: The disposable plastic syringes are best sterilized by?

- 1: Formaldehyde
- 2: Ethylene oxide
- 3: Hexachloride
- 4: UV radiation

316:- Cell wall deficient organisms are -

- 1: Chlamydia
- 2: Mycoplasma
- 3: Staphylococcus
- 4: Clostridium

317:- Tyndallisation is a type of-

- 1: Intermittent sterilization
- 2: Pasteurisation
- 3: Boiling
- 4: Autoclaving

318:- Which of the following do not have ribosomes for protein synthesis

- 1: Bacteria
- 2: Viruses
- 3: Fungi
- 4: Rickettsia

319:- Northern blotting used in separation and diagnosis of:

- 1: Histones
- 2: Proteins
- 3: RNA
- 4: DNA

320:- Sterrad is a gas plasma sterilizer used in operation theaters for disinfecting OT aicles. Which of the following is the active agent used in it?

- 1: H<sub>2</sub>O<sub>2</sub>
- 2: N<sub>2</sub>O
- 3: Ozone
- 4: ETO gas

321:- Prokaryotes are characterized by?

- 1: Absence of nuclear membrane
- 2: Presence of microvilli on its surface
- 3: Presence of smooth Endoplasmic Reticulum
- 4: All of the above

322:- Fiber optic instruments like endoscopes should be disinfected by

- 1: Formaldehyde
- 2: Cetrimide
- 3: Gamma radiation
- 4: Glutaraldehyde

323:- The most common mechanism of resistance to the drug in staphylococcus is

- 1: Conjugation
- 2: Plasmids
- 3: Episomes
- 4: Transduction

324:- The following is a killed vaccine

- 1: Varicella
- 2: BCG

3: OPV

4: Meningococcal vaccine

325-: Biosafety precaution grade III is practiced in all of the following organisms except?

1: Human influenza virus

2: St. louis encephalitis virus

3: Coxiella burnetii

4: Mycobacterium tuberculosis

326-: Microscope used in microbiology are

1: Light microscope

2: Phase contrast microscope

3: Fluorescent microscope

4: All

327-: Growth on a cell-free artificial solid medium is possible for following except -

1: Ureaplasma urealyticum

2: Mycoplasma Pneumoniae

3: C & L form of proteus vulgaris

4: Chlamydia

328-: Which of the following is a neutralisation test?

1: Kahn test

2: ASLO

3: Haemagglutinin test

4: Megakaryocytic thrombocytopenia



329:- Dye which is NOT used in fluorescent microscopy:

- 1: Thioflavin
- 2: Lissamine
- 3: Rhodamine
- 4: Auramine

330:- Multidrug resistance is transferred among bacteria through plasmids by -

- 1: Transduction
- 2: Transversion
- 3: Conjugation
- 4: Transformation

331:- All are motile except?

- 1: *Cl. histolyticum*
- 2: *Cl. Tetanosporum*
- 3: *Cl. perfringens*
- 4: *Cl. septicum*

332:- Which of the following is not a selective media

- 1: Blood agar
- 2: Thayer main media
- 3: Wilson blair media
- 4: LJ media

333:- Autoclaving is done in

- 1: Dry air at 120°C and 15 psi
- 2: Steam at 100°C for 30 minutes
- 3: Steam at 121 °C for 15 minutes
- 4: Dry air at 160°C for 30 minutes

334:- In blood culture the ratio of blood to reagent is?

- 1: 1:05
- 2: 1:20
- 3: 1:10
- 4: 0.1111111111

335:- Medium for growth of anaerobic bacteria?

- 1: chocolate agar
- 2: LJ medium
- 3: Blood agar
- 4: Robeson cooked meat medium

336:- A chest physician performs bronchoscopy in the procedure room of the out patient department. To make the instrument safe for use in the next patient waiting outside, the most appropriate method to disinfect the endoscope is by:

- 1: 70% alcohol for 5 min
- 2: 2% glutaraldehyde for 20 min
- 3: 2% formaldehyde for 10 min
- 4: 1% sodium hypochlorite for 15 min

337:- Which one of the following following is true -

- 1: Agar has nutrient properties

- 2: Chocolate medium is selective medium
- 3: Addition of selective substances in a solid medium is called enrichment media
- 4: Nutrient broth is basal medium

338:- The Haemophilus influenzae vaccine contains which of the following

- 1: Lipopolysaccharide (LPS)
- 2: Live attenuated H. influenzae
- 3: Polypeptide antigens containing D-glutamate
- 4: Polyribitol phosphate antigens

339:- Sputum can be disinfected by

- 1: Autoclave
- 2: Boiling
- 3: Cresol
- 4: All the above

340:- All are true regarding disinfectants except -

- 1: Gluteraldehyde is sporicidal
- 2: Hypochlorites are virucidal
- 3: Ethylene oxide is intermediate disinfectant
- 4: Phenol usually requires organic matter to act

341:- Diluent for trimethoprim in antibiotic disc for sensitivity testing is

- 1: Na OH solution
- 2: Na hco<sub>3</sub>
- 3: Ethanol

4: Acetic acid

342-: The best method of sterilization of dusting powder is?

1: Autoclaving

2: Hot air oven

3: Inspissation

4: Tyndallisation

343-: The culture media of choice for growing most of the fungi is

1: Dorsett egg media

2: LJ media

3: Loeffler serum slope media

4: Sabouraud's agar

344-: Inverted fir tree appearance on gelatin stab is characteristic of?

1: Mycoplasma

2: Bacillus anthracis

3: Clostridium

4: Bacteriodes

345-: Hand washing is most important method for prevention of nosocomial infection because -

1: It is most common mode of transmission

2: It can enhance Airborne infection

3: Hands can generate droplets

4: All of the above

346:- In a patient with UTI, LED (Cystine, Lactose Electrolyte Deficiency) Media is preferred over MacConkeys media because -

- 1: It is differential medium
- 2: In inhibits swarming of proteus
- 3: Promotes growth of Pseudomonas
- 4: Promotes growth of staph aureus and Candida

347:- Not a component of Gram stain -

- 1: Methylene blue
- 2: Ethanol
- 3: Iodine
- 4: Gentian violet

348:- Glassware sterilization is done by?

- 1: Hot air oven
- 2: Autoclaving
- 3: 5% cresol
- 4: Hotbath

349:- The term ble but not cultivable is used for -

- 1: M. leprae
- 2: M. tuberculosis
- 3: Treponema pallidum
- 4: Salmonella

350:- According spaulding classification system of sterilization, following is true except -

- 1: "Non-critical devices" come into contact with intact skin
- 2: Semicritical equipment need low-level sterilization
- 3: "Semi-critical devices" come into contact with non-sterile mucous membranes or non-intact skin
- 4: Cardiac catheter is critical equipment

351:- Phenol test or Reidel walker test is done to determine?

- 1: Hardness of water
- 2: Chlorine demand
- 3: Quality of disinfectant
- 4: Efficacy of a disinfectant

352:- Of the following Exotoxins are -

- 1: Lipopolysaccharide in nature
- 2: Produced by grma -ve bacilli
- 3: Highly antigenic
- 4: Very stable and resistant to chemical agents

353:- Pasteurised milk is most commonly tested by

- 1: Phosphate test
- 2: Coliform test
- 3: Catalase test
- 4: Oxidase test

354:- Which of the following used as skin antiseptic?

- 1: Cidex
- 2: Cresol
- 3: Chlorhexidine
- 4: Lysol

355:- Bacteria that grow optimally at 25-40oC are called as

- 1: Thermophiles
- 2: Cryophiles
- 3: Psychrophiles
- 4: Mesophiles

356:- pH of sabourauds dextrose agar is adjusted to?

- 1: 6-Apr
- 2: 2-Jan
- 3: 8-Jun
- 4: 10-Aug

357:- Lysis of bacterial colony in culture is seen by which -

- 1: Pox
- 2: HSV
- 3: Bacteriophage
- 4: CMV

358:- Non motile organism -

- 1: E. coli
- 2: Vibrio cholera

3: Proteus vulgaris

4: Shigella dysentery

359:- Louis pasteur is not associated with -

1: Introduction of Complex media

2: Discovery of Rabies vaccine

3: Discovery of M.tuberculosis

4: Disproved spontaneous generation theory

360:- The operating temperature in an ethylene oxide sterilization during a warm cycle is -

1: 20-35 o C

2: 49-63 o C

3: 68-88 o C

4: 92-110 o C

361:- Which of the following is an impoant disinfectant on account of effectively destroying gram positive and gram negative bacteria, viruses and even spores at low pH levels?

1: Phenol

2: Alcohol

3: Chlorine

4: Hexachlorophene

362:- In stokes disc diffusion, if zone of size of inhibition(test bacterium) is small by 2mm, bacterial strain is

1: Sensitive

2: Resistant

3: Intermediate sensitive



4: None

363-: Which of the following antibiotic acts by inhibition of cytoplasmic membrane function?

1: Penicillin

2: Polymycin

3: Streptomycin

4: Novobiocin

364-: Tyndallization is a method of sterilization using;

1: Moist heat above 100 C

2: Moist heat below 100 C

3: Dry heat above 100 C

4: Moist heat at 100 C

365-: Metachromatic granules are found in -

1: Diphtheria

2: Mycoplasma

3: Gardenella vaginalis

4: Staphylococcus

366-: which of the following is the principle of this test

1: Immuno chromatography

2: Chemiluminescence

3: ELISA

4: Immunofluorescence

367-: Spores of bacteria are destroyed by -

- 1: Alcohol
- 2: Lysol
- 3: Halogen
- 4: Ionizing radiation

368-: Method of choice for sterilization of liquid paraffin:

- 1: Flaming
- 2: Moist heat
- 3: Autoclave
- 4: Hot air oven

369-: Which of the following is true about pasteurization -

- 1: it kills all bacteria and spores
- 2: It kills all bacteria except thermoduric bacteria
- 3: It kills 95% of microorganisms
- 4: All bacteria are destroyed

370-: The mechanism by which specific information encoded in a nucleic acid chain in a virus transferred to mRNA is known as -

- 1: Transcription
- 2: Translation
- 3: Transformation
- 4: Transduction

371:- Inspissation is used to sterilise?

- 1: Needles
- 2: Endoscopes
- 3: Scissors
- 4: Culture medium

372:- Which of the following takes place during latent phase of growth curve

- 1: Bacterial cell number increase
- 2: Bacterial cell size increase
- 3: Bacterial cell size decrease
- 4: Sporulation

373:- All are physical methods of sterilisation except

- 1: Sunlight
- 2: Gases
- 3: Filtration
- 4: Heat

374:- The cytoplasmic membrane of bacteria is responsible for -

- 1: Selective permeability
- 2: Motility
- 3: Cell division
- 4: Conjunction

375:- Blood agar is an example for -

- 1: Simple media

2: Complex media

3: Enriched media

4: Selective media

376:- Choose the Non motile organism from the following-

1: E. coli

2: Vibrio cholera

3: Proteus mirabilis

4: Shigella dysentery

377:- Virus mediated transfer of host DNA from one cell to another is known as -

1: Transformation

2: Conjugation

3: Transduction

4: None

378:- Obligatory intracellular organism is -

1: Mycoplasma

2: Chlamydae

3: Cryptococcus

4: H.pylori

379:- Which of the following are a Bacteria taxonomically?

1: Chlamydia

2: Rickettsia

3: Mycoplasma

4: Prion

380:- In &Hotair oven&; for holding period of one hour, temperature required is -

1: 100o C

2: 120o C

3: 140o C

4: 160 o C

381:- All are capsulated bacteria except -

1: Neisseria

2: Corynebacterium diphtheriae

3: Haemophilus

4: Streptococcus salivarius

382:- Which of the following is not true about inertization?

1: Relatively inexpensive

2: It is done for pharmaceutical waste

3: It involves mixing the waste with cement before disposal

4: It causes water pollution

383:- Endoscopic instrumental disinfection is done by using-

1: Formalin

2: Glutaraldehyde

3: Ethylene oxide

4: Gamma radiation

384:- Best method of preventing transmission of MRSA infection is

- 1: Hand wash
- 2: Antibiotics
- 3: Disinfecting surfaces
- 4: Fumigation of the ward

385:- Which of the following is not a component of MYPa medium

- 1: Mannitol
- 2: Egg yolk
- 3: Polymixin
- 4: Azithromycin

386:- Autoclaving is done in?

- 1: Dry air 121o C and 151 B pressure
- 2: Steam at 100o C for 30 minutes
- 3: Steam at 121o C for 15 minutes 15pascal
- 4: Dry air at 160o C for 30 minutes

387:- Bacterial spores are best destroyed by -

- 1: UV rays
- 2: Autoclaving at 121o C for 20 mints
- 3: Hot air oven
- 4: Infrared rays

388:- All the following pathogenic bacteria fulfill Kochs postulates except

- 1: Treponema pallidum

2: Yersinia pestis

3: Bacillus anthracis

4: Helicobacter pylori

389:- Operation theatres are sterilized by?

1: Carbolic acid spraying

2: Washing with soap and water

3: Formaldehyde

4: ETO gas

390:- The bacterium that is most commonly used in genetic engineering is

1: Escherichia

2: Klebsiella

3: Proteus

4: Serratia

391:- Type of graft, best suited for renal transplantation

1: Allograft

2: Autograft

3: Xenograft

4: Isograft

392:- Disinfectant used for blood spills

1: Phenol

2: Glutaraldehyde

3: Ethanol

4: Sodium hypochlorite

393:- Swarming growth on culture is characteristic of which Gram-negative organism

1: Clostridium welchii

2: Clostridium tetani

3: Bacillus cereus

4: Proteus mirabilis

394:- In blood culture the ratio of blood to reagent is -

1: 1:05

2: 1:20

3: 1:10

4: :100

395:- Staphylococcus is?

1: Gram-positive cocci

2: Gram-negative cocci

3: Gram-positive bacillus

4: Gram-negative bacillus

396:- The operating temperature in an ethylene oxide sterilization during a warm cycle is

1: 49-63oC

2: 92- 110oC

3: 20-35oC

4: 68-88oC



397-: Saccharolytic reaction in cooked meat broth is produced by

- 1: Pseudomonas
- 2: Clostridium perfringes
- 3: Clostridium tetani
- 4: C.diphtheriae

398-: Percentage of glutaraldehyde used -

- 1: 1%
- 2: 2%
- 3: 3%
- 4: 4%

399-: Prokaryotes are characterized by -

- 1: Absence of nuclear membrane
- 2: Presence of microvilli on its surface
- 3: Presence of smooth endoplasmic reticulum
- 4: All of the above

400-: F factor integrates with bacterial chromosome to form -

- 1: HFr
- 2: F+r
- 3: F-
- 4: F

401-: ELISA for virulence marker antigen (VMA) is done to detect virulence in -

- 1: A typical mycobacteria

- 2: Hemophilus influenzae
- 3: Streptococcus pyogenes
- 4: Enteroinvasive Escherichia coli

402:- Bile solubility is used for?

- 1: Differentiation of staphylococcus from streptococcus
- 2: Differentiation of group B streptococci from other streptococci
- 3: Differentiation of pneumococci from streptococci
- 4: Differentiation of streptococci from neisseria

403:- Hea-lung machines are sterilized by?

- 1: Glutaraldehyde
- 2: Ethylene oxide
- 3: Carbolic acid
- 4: Aqueous solution of iodine

404:- Best disinfectant for endoscopes is: (D. REPEAT 2012)

- 1: Hypochlorite
- 2: Formaldehyde
- 3: Glutaraldehyde
- 4: Chlorhexidine

405:- Browne's tube is used for -

- 1: Steam sterilization
- 2: Radiation
- 3: Chemical sterilization

4: Filtration

406:- Which agent is effective in killing spores?

1: Alcohol

2: Phenol

3: Chlorine

4: Formaldehyde

407:- Silver impregnation technique is used in the identification of ?

1: Spirochaetes

2: Leptospira

3: Borrelia

4: All of the above

408:- Robe Koch assistant advised him to use agar instead of gelatin for solidifying culture media for cultivation of bacteria because

1: Agar has more nutrients

2: Gelatin melts at 37oC

3: Gelatin is not easily available

4: Agar is cheaper

409:- Which of the following takes place during the stationary phase of growth curve?

1: Bacterial cell number increases

2: Bacterial cell size decreases

3: Bacterial cell size increases

4: Sporulation



## Answers

Question No	Answer Option	Answer
1	1	Time taken to adpt in the new environment
2	4	Enriched medium
3	1	Spores
4	4	Conjugation
5	2	Agarose gel electrophoresis
6	1	Vibrio
7	3	Polysaccharides
8	4	Mutation
9	2	2% glutaraldehyde for 20 min
10	3	Membrane filtration
11	4	Sheep blood
12	3	Sample brought in formalin
13	3	Prevented by drug combinations
14	2	Flagella
15	2	Precipitation test
16	3	Associated with both
17	2	Teichoic acid
18	2	Endotoxin
19	1	Bacteria
20	4	134degC
21	2	Proteins
22	2	Treponema pallidum

---

23	2	Bacillus stereothermophilus
24	1	Vaccination of small pox
25	1	Extrachromosomal
26	1	Leishmania
27	3	1000:01:00
28	4	Autoclave
29	4	All of the above
30	1	Mouse
31	1	P falciparum
32	4	Fumigation of operation theater
33	1	Ponder's stain
34	2	Virulence is decreased in transferable resistance
35	1	Bacillus subtilis
36	3	Transduction
37	2	Mueller hinton agar
38	1	Dettol
39	1	CO <sub>2</sub> as a carbon source
40	1	Ethylene oxide
41	1	Transformation
42	4	Clostridia
43	1	Antigenic shift
44	2	Enrichment medium
45	4	Hand washing
46	3	1:10
47	2	Alcohol based preparation are used

---

48	4	Lipopolysaccharide
49	4	Japanese encephalitis
50	1	Bacteriophages
51	2	Teichoic acid is present in cell wall of Gram-negative bacteria
52	2	Differential stain
53	2	Freeze drying
54	4	Lophotrichate
55	4	Culture medium
56	1	Bacteriostatic
57	3	Sodium hydroxide
58	1	Gram positive bacteria
59	2	Tyndallization
60	4	Heat inactivation
61	4	Autoclaving
62	2	Beta lysin
63	1	Hemophilus ducreyi
64	1	Hot air oven
65	3	Borrellia
66	2	16-24 months
67	1	Passive agglutination for rheumatoid ahiritis
68	4	Tyndallization
69	1	Type IV
70	3	Tincture iodine
71	2	Bacillus stereothermophilus

72	1	Gamma rays
73	4	Complement fixation test
74	2	The structure to be demonstrated is not stained
75	4	Ethylene oxide gas
76	4	Complement fixation test
77	4	All of the above
78	2	Brilliant cresyl blue
79	4	Gamma rays
80	2	Diploid
81	2	Gelatin melts at 24degC
82	1	Transformation
83	3	Multiple polar flagellum
84	2	Ernst Ruska
85	1	Involved in multidrug resistance transfer
86	3	30-37degC
87	3	45 min
88	1	Salmonella
89	2	End of lag phase
90	3	Antonie van Leeuwenhoek
91	3	iodine
92	3	Pseudomonas
93	2	Microscope
94	2	Attachment
95	2	5%
96	2	Increased virulence



97	3	Tellurite blood agar
98	4	300 nm
99	3	Fimbriae
100	3	L.J.media
101	2	B stereothermophilus
102	4	Quaternary ammonium compounds
103	3	6-Apr
104	1	Methylene blue
105	2	Semi critical item
106	3	R plasmids carry genes for antibiotic resistance
107	1	Lowest temperature that kills all microbes in 10 min
108	3	Pa of adaptive immunity
109	3	Long transposons are known as insertion sequences
110	1	Syringes
111	1	2 hour
112	2	720C for 15-20sec
113	2	Transduction
114	1	Neisseria gonorrhoeae
115	2	Plate and agar
116	1	Efficiency of a disinfectant
117	2	Lipopolysaccharide Present
118	1	Transposon
119	4	Phenol is bactericidal and readily inactivated by organic matter
120	3	Prions

---

121	2	121degC temperature for 15 min
122	2	Tyndallization
123	1	Glutaraldehyde
124	1	Dry heat
125	1	Puerperal infection
126	4	Iodophores
127	1	TPI
128	3	Escherichia
129	1	Mc Mohan and Pugh
130	1	Transposons
131	2	Endotoxin has enzymatic action
132	4	Bronchoscope
133	2	Buffered glycerol saline medium
134	1	An agent applied on skin to eradicate pathogenic microbes
135	3	3-5 micron
136	3	Transduction
137	3	Escherichia
138	2	Phosphotungstic acid
139	2	Autoclave
140	2	Micropore filter
141	2	Bacillus stereothermophilus
142	1	Lysol
143	4	Ethyl alcohol
144	1	Clostridium per fringes

---

145	3	Methenamine silver
146	3	Streptococcus pyogenes
147	1	Basic fuschin
148	3	Indole test
149	3	H. influenzae
150	2	Neisseria
151	4	Chlorine based compounds
152	1	Transduction
153	2	Betadine
154	4	Chlamydia
155	3	Plasma mediated
156	2	Buffered glycerol saline medium
157	2	160 degrees 2 hrs
158	1	Kirby Bauer method
159	1	Mc Coy culture
160	3	Formaldehyde
161	4	Joseph Lister
162	2	C difficile
163	4	Lepra bacilli
164	1	Antibiotics are expelled from the surface
165	1	Polysaccharides
166	4	SPS
167	2	1 per cubic feet
168	1	Spores of Clostridium tetani
169	3	Ultra violet radition

170	2	Penicillin
171	4	Auramine
172	1	Feulgen
173	3	B. pseudomallei
174	1	Blood agar is best for anaerobic organisms
175	1	Chlorine compound
176	3	Oxidizing agent
177	3	Both
178	2	Complete destruction of all microorganisms
179	2	Phage conversion
180	3	c>a>d>b
181	2	Phosphotungstic acid
182	4	Bacillus pumilus
183	1	Chlorhexidine
184	1	Phenols
185	3	Quaternary ammonium compounds
186	4	Can cause lysogenic conversion
187	2	Cholera toxin
188	2	Geobacillus stercophilus
189	3	Tube agglutination test
190	3	Fungus
191	3	Differential medium
192	1	Rickettsia
193	1	Augustino Bassi
194	3	80S ribosome is present in prokaryotes

---

195	2	RNA-dependent DNA polymerase
196	2	Pathogenic microorganisms
197	4	Steam under pressure
198	1	Incineration
199	3	44 degree centigrade
200	4	SPS
201	4	Transmitted light is used to illuminate the object
202	2	Gram positive bacteria
203	3	Bacteriophage
204	1	Extrachromosomal
205	2	Lipopolysaccharide
206	2	Highly structured cells with organized cell organelles
207	2	Bacterial attachment
208	1	Steam sterilization
209	3	Stationary phase
210	1	Ocular lens : Subjective lens : Condesor lens
211	1	HFr
212	3	Respiratory enzymes
213	1	Dry heat is the best method of sterilization of liquid paraffin
214	1	Enriched media
215	4	Can causes lysogenic conversion
216	4	All of the above
217	2	Interference microscope
218	2	63 for 30 min

---

219	1	Teichoic acid
220	4	Proteus mirabilis
221	3	Bacillus anthracis
222	3	Clostridium botulinum
223	3	6-Apr
224	4	Lophotrichate
225	4	Bronchoscope
226	3	Robeson's cooked meat medium
227	2	Prions
228	3	Spirochetes
229	1	Disinfect ing power
230	1	lysol
231	4	Coxiella burnetti
232	3	Congo red
233	1	TPI
234	2	Klebsiella
235	3	Coxiella
236	1	Ocular lens: Objective lens: Condensor lens
237	3	Streptococcus pneumoniae
238	4	Isopropyl alcohol
239	4	Fimbriae
240	1	Prion
241	3	Streptococcus pyogenes
242	4	Pneumococcus
243	3	Has sporicidal activity

---

244	3	Nutrient agar
245	1	Staphylococcus epidermidis
246	2	Increased virulence
247	3	TPI
248	1	Spirochetes
249	1	Haemophilus influenzae type B vaccine
250	2	Amplify small amount of DNA
251	3	Violet
252	4	All of the above
253	3	Stationary phase
254	1	Virus
255	3	Mycoplasma pneumoniae
256	1	Bacteriostatic
257	3	Transduction
258	1	Boiling
259	3	They contain ciliary dynein arms.
260	4	All the above
261	3	Escherichia coli
262	1	Micron
263	1	VDRL
264	2	Catalase
265	3	MacConkey agar
266	1	Staphylococcus epidermidis
267	2	Mycoplasma
268	2	Micropore filter

269	4	All of the above
270	1	Mitochondria are always absent
271	2	M. leprae
272	3	Spirochetes
273	2	Sterilization
274	1	Phenol coefficient
275	2	IgG2
276	4	Black
277	1	CSF
278	3	25o C to 40o C
279	3	Bacillum anthroicis
280	2	Klebsiella
281	2	134C in 3 minutes
282	2	It kills all bacteria except Coxiella burnetti
283	3	Escherichia
284	2	All microbes + spores
285	4	Enriched media
286	4	Diphtheria
287	2	Highly structured cell with organized cell organelles
288	2	Interference microscope
289	2	Biofilm formation
290	3	Conjugation
291	4	Enriched medium
292	3	India Ink Preparation



293	2	Chlorhexidine
294	1	25 to 40 degrees centigrade
295	1	3 weeks
296	4	Chlorine
297	1	Enhancement of virulence
298	1	Schick test
299	1	Passive agglutination for Rheumatoid arthritis
300	3	Diphtheria toxoid
301	4	A beard doesn't allow for a proper seal and makes the N95 ineffective
302	4	Phenol is bactericidal and readily inactivated by organic matter
303	2	Incorporating part of host DNA
304	1	Glutaraldehyde
305	1	Treponema pallidum
306	1	Nose
307	4	Benzalkonium chloride
308	2	Transduction
309	4	Esch.Coli
310	2	Boiling
311	2	Stains by Gram stain
312	3	Can be toxoided
313	2	5% cresol
314	2	Presence of Teichoic acid
315	2	Ethylene oxide
316	2	Mycoplasma

317	1	Intermittent sterilization
318	2	Viruses
319	3	RNA
320	1	H <sub>2</sub> O <sub>2</sub>
321	1	Absence of nuclear membrane
322	4	Glutaraldehyde
323	4	Transduction
324	4	Meningococcal vaccine
325	1	Human influenza virus
326	4	All
327	4	Chlamydia
328	1	Kahn test
329	1	Thioflavin
330	3	Conjugation
331	3	<i>Cl. perfringens</i>
332	1	Blood agar
333	3	Steam at 121 oC for 15 minutes
334	3	1:10
335	1	chocolate agar
336	2	2% glutaraldehyde for 20 min
337	4	Nutrient broth is basal medium
338	4	Polyribitol phosphate antigens
339	4	All the above
340	3	Ethylene oxide is intermediate disinfectant
341	4	Acetic acid

342	2	Hot air oven
343	4	Sabouraud's agar
344	2	Bacillus anthracis
345	1	It is most common mode of transmission
346	4	Promotes growth of staph aureus and Candida
347	1	Methylene blue
348	1	Hot air oven
349	1	M. leprae
350	2	Semicritical equipment need low-level sterilization
351	4	Efficacy of a disinfectant
352	3	Highly antigenic
353	1	Phosphate test
354	3	Chlorhexidine
355	4	Mesophiles
356	1	6-Apr
357	3	Bacteriophage
358	4	Shigella dysentery
359	3	Discovery of M.tuberculosis
360	2	49-63 o C
361	3	Chlorine
362	2	Resistant
363	2	Polymycin
364	4	Moist heat at 100 C
365	1	Diphtheria

366	1	Immuno chromatography
367	3	Halogen
368	4	Hot air oven
369	2	It kills all bacteria except thermoduric bacteria
370	1	Transcription
371	4	Culture medium
372	4	Sporulation
373	2	Gases
374	1	Slective permeability
375	3	Enriched media
376	4	Shigella dysentery
377	3	Transduction
378	2	Chlamydae
379	1	Chlamydia
380	4	160 o C
381	2	Corynebacterium diphtheriae
382	4	It causes water pollution
383	2	Glutaraldehyde
384	1	Hand wash
385	4	Azithromycin
386	3	Steam at 121o C for 15 minutes 15pascal
387	2	Autoclaving at 121o C for 20 mints
388	1	Treponema pallidum
389	3	Formaldehyde
390	1	Escherichia

---

391	4	Isograft
392	4	Sodium hypochlorite
393	4	Proteus mirabilis
394	3	1:10
395	1	Gram-positive cocci
396	1	49-63oC
397	2	Clostridium perfringes
398	2	2%
399	1	Absence of nuclear membrane
400	1	HFr
401	4	Enteroinvasive Escherichia coli
402	3	Differentiation of pneumococci from streptococci
403	2	Ethylene oxide
404	3	Glutaraldehyde
405	1	Steam sterilization
406	4	Formaldehyde
407	4	All of the above
408	2	Gelatin melts at 37oC
409	4	Sporulation