

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Past papers



Final – Lectures 1 to 4

# Bacteriology Labs

﴿ وَإِن تَتَوَلَّوْا يَسْتَبَدِلْ قَوْمًا غَيْرَكُمْ ثُمَّ لَا يَكُونُوا أَمْثَلَكُمْ ﴾

اللهم استعملنا ولا تستبدلنا

Written by:

Ragad Altiti



Q1-Which media is used to identify staphylococcus spp?

A- Blood agar

B- Chocolate agar

C- Mannitol salt agar

Ans:c

Q2- Most critical Step in G stain:

A -Alcohol

B- Fixation

C- Violate stain

Ans:a

Q3- what bacteria does this picture show?

A- Enterobacter

B- Proteus

C- Citrobacter



Ans:b

Q4-bacteria was taken from a wound and it has green color in muller Hinton+ sweet smell:

A- *Pseudomonas arginosa*

B- *Proteus*

C- *Citrobacter*

Ans:a

Q5-Klebsiella is a genus of Gram-negative, oxidase-negative, rod-shaped bacteria with a prominent polysaccharide-based capsule, when cultured on MacConkey agar it produces ?

A- Yellow colonies.

B-Black dots represents the production of H<sub>2</sub>S.

C- White strip represents the satellitism.

D- Pink colonies.

Ans:d



Q6-Colonies unit:

CFU/ ML\*\*

Q7- what bacteria does the picture show?

A- Klebsiella

B- E.coli

C- Proteus



Ans:a





Q8-Kirby Bauer test:

Muller hinton agar\*\*



Q9-Bile esculin positive:

A- Enterococcus

B- St.aureus

C-E.coli

Ans:a

Q10-St.aureus is most often associated with being:

A- Catalase positive

B- Coagulase positive

C- A+B

D- Coagulase negative

Ans:c

Q11-this bacteria was cultured in Maccankey Ager media and appeared as shown in the figure the most proper diagnosis of the bacteria is:

- A-gram-negative lactose non-fermenter
- B-gram positive lactose fermenter
- C-gram-negative lactose fermenter



Ans:c  
Enterobacter

Q12-which media is mostly recommended for Kirby Bauer test?

A- CLED

B- Muller Hinton

C- Macconkey agar

Ans:b

Q13- The coagulase test is done to differentiate between:

- A- St. epidermidis from Neisseria meningitidis
- B- Streptococcus pyogenes from St. aureus
- C- St. aureus from St. epidermidis

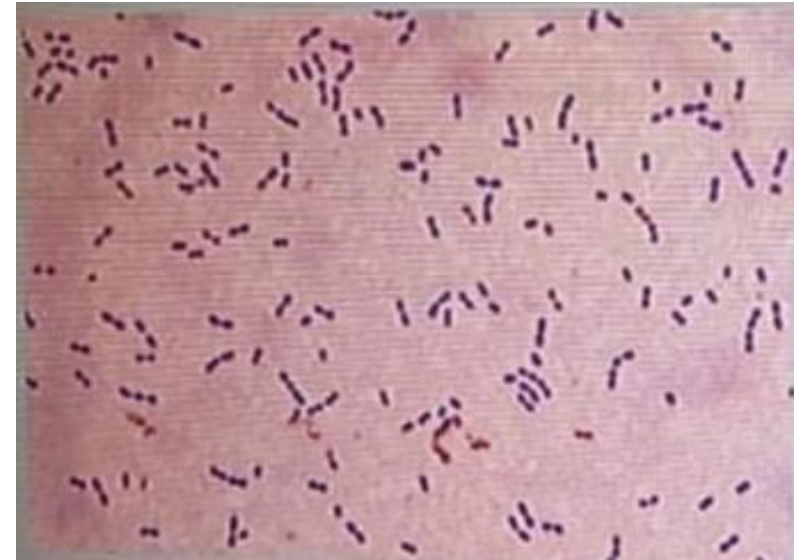
Ans:c

Q14-what is the name of the bacteria that shown in the figure that produces alpha hemolysis on blood agar?

A-Streptococcus pneumonia

B-St.aureus

C-Brucella



Ans:a

Q15-After the decolorization step, G-ve appears:

A-colorless

B-violet

C-yellow

Ans:a



Q16-procedures of gram stain in order:

A-crystal violet, iodine, decolorization, safranin

B-iodine, decolorization, safranin, crystal violet

C- safranin, decolorization, iodine, crystal violet

Ans:a

Q17-encapsulated lactose fermenter  
gram negative bacteria:

A-E-coli

B-klebsiella pneumonia

C-St.aureus

Q18-if we remove the iodine, what do the colors of gram-negative and gram positive bacteria be?.

Red,Red

Q19-wrong statement about blood agar:

A-media of mycobacteria tuberculosis

B-media for fastidious bacteria

C-media for streptococcus

Ans:a



Q20-All of the following are media for gram negative except:

MSA

Q21-growth area surrounding antibiotic disk indicates:

A- susceptibility of the microorganism for antibiotic

B- resistance of microorganisms for antibiotics

C- none of the above

Ans:a+c

انحسب السؤال صح  
للكل لأنهم ما حددو  
ال diameter

Q22-Streptococcus Pyogene test:

A- Bacitracin

B- Catalase test

C- Coagulase test

Ans:a



Q23-Negative result for E. coli:

A- MacConkey agar

B- Citrate

Ans:b





Q24-Autoclave:

A-121° C

B-15 pound/inch

C-30 min

D-All of the above (true)

Ans:D

Q25-Common media for antibiotic susceptibility test:

A-Mueller Hinton agar

B-Chocolate agar

C-Hekton agar

Q26-Salmonella-shigella growth medium is:

A-Mueller Hinton agar

B-Chocolate agar

C-Hekton agar

Ans:c



Q27-MSA is used for the detection of:

*Staphylococcus aureus*

Q28-Which of the following is a Gram-positive Bacteria that is Sensitive to bacitracin:

- A- Streptococcus Pneumonia
- B- Streptococcus agalactiae group (B)
- C- Streptococcus Pyogens group (A)
- D- Streptococcus viridans

Ans:c

Q29-Temperature and pressure used for autoclaving:

A- 121°C – 56 P/ inch for 60 min

B- 121°C – 15 P/inch for 30 min

C- 100°C – 15 P/ inch for 15 min

D- 121'C - 30 P/ inch for 30 min

Ans:b

Q30-The importance of an E-Test is:

A- Semi Quantitative

B- Semi Qualitative

C- Quantitative

D- Qualitative

Ans:c

Q31- The standard concentration of McFarland that used in antimicrobial susceptibility test is:

- A- 1.0 McFarland
- B- 1.5 McFarland
- C- 5.0 McFarland
- D- 0.5 McFarland

Ans:d



Q32-Name the technique that is used to determine the minimum inhibitory concentration of antimicrobial drug against a particular microbe:

- A- Coagulase test
- B- Kirby-Bauer testin
- C- Catalase test
- D- E-test

Ans:d

Q33-If drug A produces a larger zone of inhibition than drug B on Kirby-Bauer disk diffusion test, Drug A should always be prescribed:

A- True

B- False

Ans:b

It only means that the microbe is more sensitive to drug A

Q34-Mannitol Salt agar is an example of which of the following:

- A- Selective and differential medium
- B- Selective medium only
- C- Differential medium only
- D- None of the above

Ans:a

Q35-A microorganism was isolated from a clinical sample for a patient with endocarditis with the following laboratory result. Gram positive coccus / Catalase test = positive / Coagulase = Negative Name the bacteria.

- A- Staphylococcus aureus
- B- Streptococcus viridans
- C- Staphylococcus epidermidis
- D- Streptococcus pneumonia

Ans:c

Q36-The media that is commonly used for the proper isolation of gram-negative pathogens such as Haemophilus species and Neisseria species is:

- A- Potato dextrose agar
- B- Nutrient agar
- C- MacConkey agar
- D- Chocolate agar

Ans:d

Q37- Enterococcus faecalis can be differentiated from other Enterococcus spp by the following test:

- A- Coagulase test
- B- Citrate test
- C- Catalase test
- D- Bile esculin test

Ans:d

Q38-A microorganism isolated from an infected urine sample; the culture shown swarming phenomena on blood agar with a fishy smell. What is of the bacteria?

- A- Pseudomonas spp
- B- Salmonella
- C- Shigella
- D- None of the above

Ans:d

Q39- media for hemophilus and  
Gonorrhoea Neisseria test:

A- Chocolate agar

B- Catalase test

C- Coagulase test

Ans:a



Q40-Name the culture Media used to identify Salmonella in stool:

A- MSA Medium

B- Sabouraud Dextrose Agar medium

C- TCBS medium

D- Hektoen enteric agar medium

Ans:d

Q41-Haemophilus species may grow on sheep blood agar very close to the colonies of \_\_\_\_\_ as it produces NAD-factor V; this phenomenon is known as \_\_\_\_\_:

- A- E.coli / Satellitism.
- B- Streptococcus viridans / Satellitism.
- C- Proteus / swarming
- D- Staphylococcus aureus/ Satellitism.

Ans:d

Q42-A 14-year-old kid was presented to the emergency room complaining of pain in his arm after he was injured due to fall, the inspection of the skin wound shows an enlarged tissue with awful smell and green bluish color, after you give the kid the medication and culture the bacteria to find out what caused this inflammation, the most probably aerobic bacteria that caused this infection is ?

- A- E.coli.
- B- Klebsiella pneumoniae.
- C- Pseudomonas aeruginosa.
- D- Enterococcus faecalis.
- E- Streptococcus pneumoniae.

Ans:c

Q43-24-year-old sexually active male presented to your clinic complaining of penial secretions and dysuria, after a blood smear was taken to know the type of bacterial infection you found that there's a sort of diplococci bacteria living inside the neutrophils, further culturing and testing was carried to know the particular type of this bacterial infection, most probably this bacteria infection is caused by which of the following ?

- A- Neisseria meningitidis.
- B- E.coli.
- C- Klebsiella.
- D- Neisseria gonorrhoea.

Ans:d

Q44-The following phenomena which is caused by proteus spp. Is most likely to be ?

- A- swarming.
- B- Zone of inhibition
- C- alpha homolysis.
- D- beta homolysis.
- E- Coagulation.



Ans:a

Q45-Haemophilus spp. Requires hemoglobin for growth and other factors, these factors are describe by which of the following ?

A- X-factor (hemin) is heat stable, V-factor (NAD) is heat stable.

B- X-factor (hemin) is heat stable, V-factor (NAD) is heat labile.

C- X-factor (hemin) is heat labile, V-factor (NAD) is heat stable.

D- X-factor (hemin) is heat labile, V-factor (NAD) is heat labile.

Ans:b

Q46-Which One of the following is not used in stool culturing ?

- A- MacConkey agar.
- B- CLED agar.
- C- Mannitol salt agar.
- D- Blood agar.
- E- Hekton enteric agar.

Ans:c

Q47-The Zone of inhibition in E test is best described as ?

A- Zone of bacterial growth.

B- Zone at which the bacteria is resistant to certain antibiotic.

C- Zone of no bacterial growth.

D- Zone at which is the bacteria has high metabolic activity.

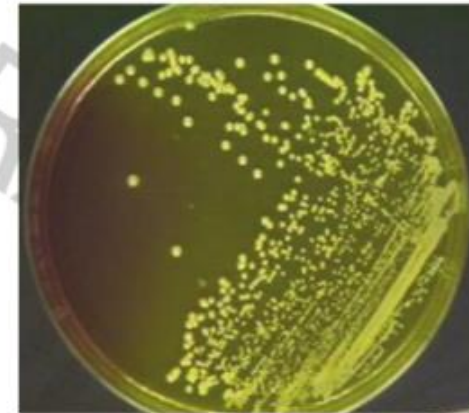
E- None of the above describe the zone of inhibition.

Ans:c



Q48-After doing this two test for a cultured bacteria, this bacteria is most probably ?

- A- Streptococcus viridans.
- B- Staphylococcus albus.
- C- Staphylococcus epidermidis.
- D- Staphylococcus aureus.
- E- Streptococcus pyogenes.



MSA test



Citrate test

Ans:d

Q49-The main difference between gram positive bacteria and gram negative bacteria is ?

A- The presence of plasma membrane.

B- Antibiotic susceptibility.

C- Membrane bound proteins.

D- Way of grow.

E- Presence of cell wall

Ans:e

Q50-One of the most used tests to differentiate between some types blood hemolytic bacteria is bacitracin test which is carried to differentiate between beta hemolytic bacteria, which one of the following bacteria is resistant to bacitracin ?

- A- Staphylococcus pneumoniae
- B- Staphylococcus viridins.
- C- Streptococcus agalcticae.
- D- Streptococcus pyogenes.
- E- Staphylococcus albus.

Ans:c

Q51-.The most crucial step in gram stain process which determines whether the bacteria is going to retain the crystal violet or lose it is ?

A- Decolorization by alcohol.

B- Wash by water.

C- Stain it by safranin stain.

D- Heat the smear.

E- Addition of malachite green stain.

Ans:a

52-The bile-esculin test is carried out to test the presence of ?

- A- Streptococcus pyogenes
- B- Staphylococcus albus.
- C- Streptococcus agalactiae.
- D- Enterococcus.

Ans:d

Q53-The MIC in the quantitative antibiotic E-test represents ?

A- At MIC the edge of inhibition zone intersects with the side of E-test strip.

B- This point represent the maximal antibiotic concentration.

C- It represent where the bacteria is at its highest growth.

D- At this point the bacteria has the highest resistance to antibiotics.

E) None of the above is correct regarding the MIC.

Ans:a

Q54-The gram stain is a type of stain used to differentiate between bacteria according to ?

- A- Shape of bacteria.
- B- Cell wall components.
- C- Presence or absence of fimbria.
- D- Presence or absence of capsule.
- E- Presence or absence of flagella.

Ans:b

Q55-.The MacConkey agar differentiation based ?

A- Glucose fermentation.

B- Lactose fermentation.

C- Galactose fermentation.

D- H<sub>2</sub>S production.

E- Cystine utilization.

Ans:b



Q56-Thiosulfate, citrate, bile salts, sucrose agar is a selective media for:

A- Candida

B- none of the above

C- Pseudomonas aeruginosa

D- Mycobacterium tuberculosis

Ans:b

For any feedback, scan the code or click on it.



| Versions | Slide # and Place of Error | Before Correction | After Correction |
|----------|----------------------------|-------------------|------------------|
| V0 → V1  |                            |                   |                  |
| V1 → V2  |                            |                   |                  |