# TEST YOURSELF

Test your knowledge on the material for the final lab practical. Write your answers on a sheet of paper. After you finish, click on the link for the answers. **This "Test Yourself" exercise does not attempt to cover all the material that will be on the practical.** There will be 50 questions on the final lab practical. Continue to study your lab manual to refresh your memory about the specimens, diseases, etc.   Because of the number of images, this page may take a few minutes to load.

1. In reference to oxygen requirements, what type of microorganism is growing in the tube to the right? (growth is near the top)
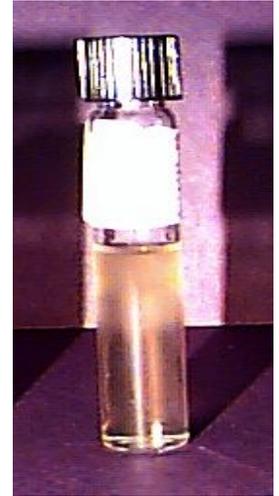
2. Which of the following could it be?
    a. *Escherichia coli*
    b. *Clostridium sporogenes*
    c. *Micrococcus luteus*

3.   Why would plates be incubated in this device?

4. Which of the following would grow in this jar?
    a. *Escherichia coli*
    b. *Clostridium sporogenes*
    c. *Micrococcus luteus*

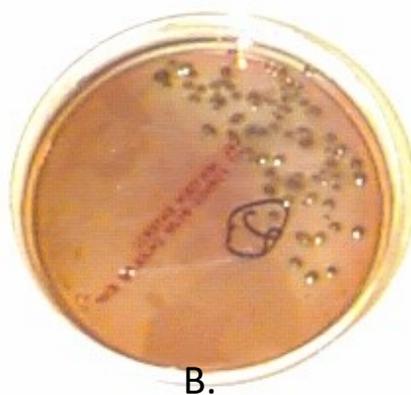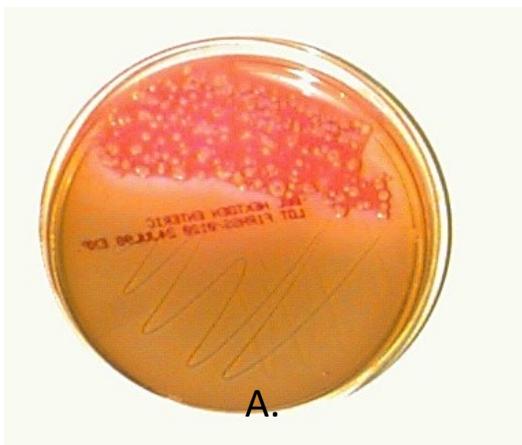5. The organism on this plate is resistant to _____ drug/s. (give a number)

6. This organism is growing on EMB. Is it a lactose fermenter or non-fermenter?
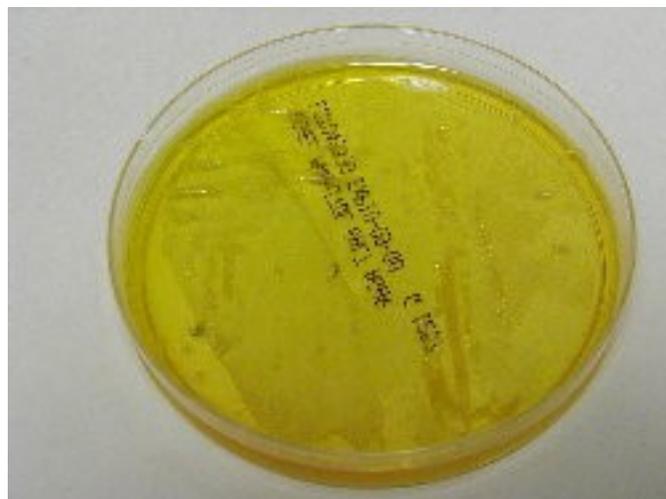

7. Which of the following could it be?
   a. *Salmonella*
   b. *Shigella*
   c. *Escherichia coli*
   d. *Enterobacter*
   e. *Proteus*

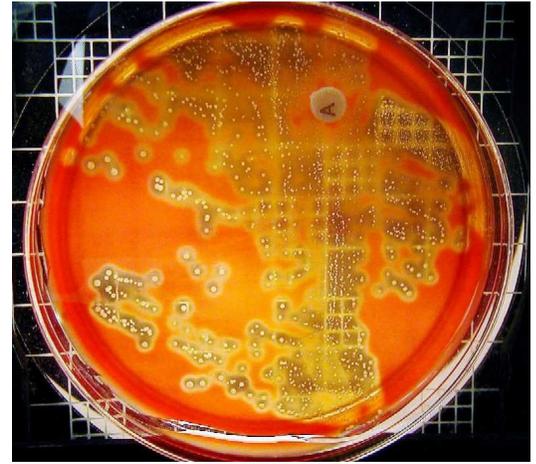8. Which Hektoen plate could be the same organism growing on the EMB plate in #7?

A.

B.

9. Would you further identify the organism in 8 by using theEnterotube?

10. A specimen from a wound abscess is streaked on mannitol salt. What organism is present?
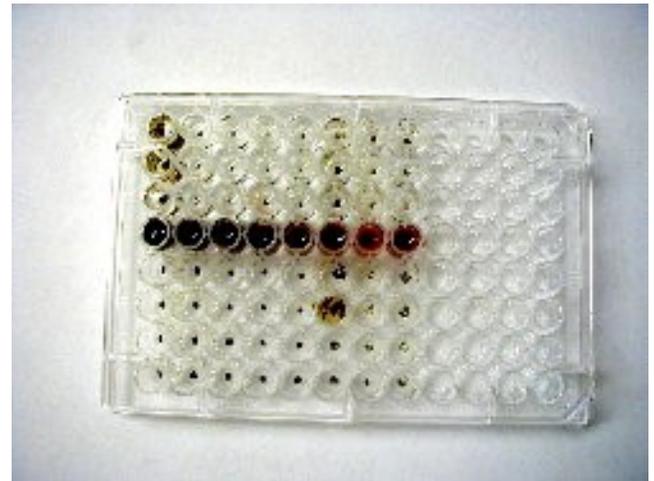
11 A throat specimen is streaked on blood agar. What organism is present? (notice the reaction to the "A" disk.)

12. The ELISA test for HIV is designed to detect the presence of _____.

13. The specimen in the first row (at the top) shows a negative result for HIV. Under what circumstances might this test show negative but the person actually be positive?

14 What specimen would be used to run the ELISA test for HIV?

15 A sputum sample is streaked on blood agar. Results show sensitivity to optochin (P disk) and there is alpha hemolysis on the plate. What organism is isolated?

A urine specimen was streaked on two different agars: blood, EMB and SAB.
The following were the results. The blood agar plate showed no hemolysis (gamma) and there was no growth on EMB. Non yeast-like growth was seen on SAB.

16. The infection is caused by
    a. mixed infection, yeast and bacteria
    b. Gram negative rods
    c. Gram positive cocci
    d. Gram negative cocci

17. Which organism is responsible for the infection?
    a. *Enterobacter aerogenes*
    b. *Staphylococcus aureus*
    c. *Staphylococcus epidermidis*
    d. *Escherichia coli*

18 A urine specimen was streaked on blood, EMB and SAB. Alpha-hemolysis was seen on blood, non yeast like growth on SAB and a metallic green on EMB..
What organism is causing the urinary tract infection?

19. There is no growth on the EMB plate of this urine specimen. Large raised creamy colonies as well as smaller flat colonies grew on SAB. The smaller colonies did not do hemolysis on blood agar. What do you know about this urine specimen?

a) it contains both yeast and bacteria
b) it contains only gram negative bacteria
c) it contains only gram positive organisms

20. Which organism/s could this be?
a) *Enterobacter* sp.
b) *Candida*
c) *Staphyloccus epidermidis*
d) *b and c*

Answers for Test Yourself

1. Microaerophilic

2. c. *Micrococcus luteus*

3. If an anaerobic organism is suspected of being the cause of an infection, the plates would be incubated in this jar.

4. a and b both will grow

5. 3

6. non-fermenter

7. a,b, or e Either *Salmonella*, *Shigella* or *Proteus*

8. a

9. yes

10 *Staphylococcus aureus*

11. *Streptococcus pyogenes*

12. antibody

13. If the person were recently infected, their antibody levels may not yet be detectable.

14. blood

15. *Streptococcus pneumonia*

16. c. Gram positive cocci

17. c. *Staphylococcus epidermidis*

18. *Escherichia coli*

19. a. it contains both yeast and bacteria

20. d. b and c, *Candida* and *Staphylococcus epidermidis*