

## Correct answers for Lab Quiz #2

1. The image shows two tubes with tube "B" containing medium with a slanted surface. The two tubes are tipped back, so the medium in tube "B" is liquid. The gelatin in tube "B" has been hydrolyzed, so **the correct answer is tube B**.
2. In the image the medium in tube "A" has a red slant and the medium in tube "B" has a yellow slant. The tube containing a culture that **cannot ferment lactose is tube "A"**.
3. The black precipitate shown in tube "A" is **iron sulfide**.
4. The formation of hydrogen sulfide (H<sub>2</sub>S) indicates the culture in question can catabolize **sulfur-containing amino acid molecules**. Cystein and methionine are examples of amino acids that contain sulfur.
5. In the image, the medium in tube "A" shows a clearly visible stab line and the Kovac's reagent is yellow while in the medium of tube "B" the stab line is not visible and the Kovac's reagent has turned red. The culture in tube "B" is positive for **indole formation and motility**. If you answered only one of these correctly your score for this question was 0.5/1.0.
6. The name of the enzyme involved in indole formation is **tryptophanase**. If you answered tryptophan, your score for this question was 0.5/1.0. Remember, enzyme names end in "ase".
7. In the image the three tubes range in color from yellow (A), to peach (B) to hot pink (C). The culture in **tube "C"** can hydrolyze urea and form ammonia (ammonia is alkaline).
8. The pH indicator in the urea agar is **phenol red**.
9. In the image, the medium in tube "A" has a red surface layer while the medium in tube "B" does not. Nitrate reagent-A and nitrate reagent-B have been added, and the red layer in tube "A" is prontosil. The culture in **tube "A"** can reduce nitrate to nitrite. We can't know about the culture in tube "B" until zinc is added.
10. The metallic catalyst is **zinc** in a nitrate reduction test. If zinc added to the medium in tube "B" of question nine caused the medium to appear as it does in the image shown in question 10, then tube "B" in question nine contains a culture that could not reduce nitrate to nitrite.
11. To answer this question you had to look at the data presented in association with the PUNK1 cultures. You also had to know which culture was PUNK1-A and which was PUNK1-B (*Acineobacter* is a "B" culture).

If you have not yet begun to identify your PUNK1 cultures and write the report required, you are officially behind in this class. We are moving on to PUNK2 this week.