



V. 1. Identify the given sample solution 'E' for the presence/activity of salivary amylase/ ammonia/urea.

2. Observe and write about the given 'F' experiment / specimen / picture.

Determine Your Blind Spot / Identify the sex of cockroach

1. TEST FOR AMMONIA

Aim : To test the presence of Ammonia in the given sample solution.

Materials Required: Test tube and holder.

Solution Required: Sample solution and Nessler's Reagent.

Procedure:

- 1) Take 2ml of the given sample solution in a clean test tube.
- 2) Add few drops of Nessler's reagent in the test tube containing sample solution.
- 3) Appearance of dark yellow/brown colour confirms the presence of Ammonia in the given sample.

Inference: It is inferred that ammonia is present in the given solution.





2. TEST FOR UREA

- Aim:** To test the presence of urea in the given sample solution.
- Material Required:** Test tube, sample solution, test tube holder and pipette / dropper.
- Required Reagents:** Phenol red and Horse gram powder (which contains the enzyme urease).

Procedure:

1. Take 2 ml of sample solution in a clean test tube.
2. Add few drops of phenol red in the test tube containing sample solution.
3. Add a pinch of horse gram powder in the test tube and mix well.
4. Appearance of dark pinkish colour indicates the presence of urea in the given sample.

Inference: It is confirmed that the given sample solution contains urea.

3. TEST FOR SALIVARY AMYLASE

- Aim:** To test the presence of Amylase enzyme in the human saliva.
- Materials Required:** Test tubes, Potato, Mortar and Pestle.
- Solutions Required:** Iodine solution, Human Saliva.

Procedure:

- 1) Add mashed potato pieces in a test tube and add warm water. Shake well.
- 2) Collect the clear supernatant in a test tube.
- 3) Add few drops of iodine solution to the liquid in the test tube.
- 4) Note the bluish black (dark blue) colour in the test tube.
- 5) Collect a few drops of saliva in a clean test tube.
- 6) Transfer the saliva into the test tube containing the sample solution and shake well.
- 7) Leave the sample undisturbed for 5 minutes. Observe the colour change in the sample solution.
- 8) The solution gradually becomes colourless.
- 9) This confirms the presence of amylase in the human saliva.

Inference: It is inferred that human saliva contains the enzyme amylase that digests the starch.

4. DETERMINE YOUR BLIND SPOT



Procedure:

1. Cover your left eye.
2. Hold the figure shown about 50 to 60 cm away from your face and directly in front of your right eye.





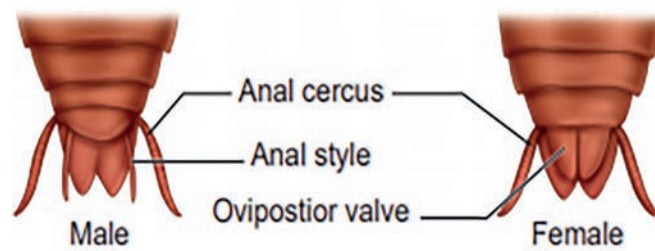
3. Stare at the cross in the shown figure. You can also see the circle.
4. Continue to stare and slowly bring the figure nearer to your eye.
5. Note the point at which the circle will seem to disappear. This is your blind spot.
6. Record the distance.
7. Test your other eye in a similar manner, but focus on the circle and watch for the cross to disappear.

Result:

- 1) Blind spot of my right eye is _____cm
- 2) Blind spot of my left eye is _____cm

5. Identify the sex of the cockroach by observing the given specimen/picture /model and write two reasons.

Identification :



Reasons: