

Chemical Examination of Urine

Clinical Laboratory Science · Answer Key · 15 Questions

1. What is the detection limit of Ascorbic acid interference in reagent strip parameters?

- A) 5 mg/dL
- B) 10 mg/dL**
- C) 20 mg/dL
- D) 50 mg/dL

2. Which reagent strip parameter is NOT reported qualitatively?

- A) pH**
- B) Ketones
- C) Bilirubin
- D) Blood

3. What is the clinical range for microalbuminuria?

- A) 5 to 10 mg/L
- B) 20 to 200 mg/L**
- C) 250 to 500 mg/L
- D) Above 1000 mg/L

4. Which test is used for the confirmatory detection of bilirubin?

- A) Clinitest
- B) Acetest
- C) Ictotest**
- D) Hoesch Test

5. What phenomenon occurs when high concentrations of reducing substances cause a color change to orange and back to green-brown?

- A) False positive
- B) Pass-through phenomenon**
- C) Reaction inhibition
- D) Buffer depletion

6. Which test is used to differentiate urobilinogen from porphobilinogen?

- A) Watson-Schwartz Test**
- B) Benedict's Test
- C) Rubner's Test
- D) Mucic Acid Test

7. What reagent is used in the Hoesch test for porphobilinogen?

- A) Lead acetate
- B) Sulfosalicylic acid
- C) Ehrlich reagent in 6M HCl**
- D) Copper sulfate

8. Which sugar is detected by the Mucic Acid Test?

- A) Glucose
- B) Fructose
- C) Galactose**
- D) Lactose

9. What is the principle of the ImmunoDip test for microalbumin?

- A) Reduction
- B) Immunochromatography**
- C) Enzyme immunoassay
- D) Precipitation

10. In the Clinitest, what is copper sulfate reduced to in the presence of alkali and heat?

- A) Cupric oxide
- B) Cuprous oxide**
- C) Copper carbonate
- D) Copper chloride

11. Which drug-related substance can cause a false-positive result in the Ketone test?

- A) Ascorbic acid
- B) Free sulfhydryl-containing drugs**
- C) Glucose
- D) Bilirubin

12. What is the normal concentration range for Urobilinogen?

- A) 0.0 to 0.1 mg/dL
- B) 0.2 to 1.0 mg/dL**
- C) 1.1 to 2.0 mg/dL
- D) Above 5.0 mg/dL

13. Which test utilizes Seliwanoff's Reagent to detect fructose?

- A) Resorcinol Test**
- B) Rubner's Test
- C) Hoesch Test
- D) SSA Test

14. What does the 'Trace' result represent in chemical urine testing?

A) +/-

B) 1+

C) 2+

D) 4+

15. Which enzyme deficiency is associated with Hereditary Fructose Intolerance?

A) Galactokinase

B) Aldolase B

C) Lactase

D) GALT