

01	☐ A	☐ B	☐ C	☐ D	☐ E
02	☐ A	☐ B	☐ C	☐ D	☐ E
03	☐ A	☐ B	☐ C	☐ D	☐ E
04	☐ A	☐ B	☐ C	☐ D	☐ E
05	☐ A	☐ B	☐ C	☐ D	☐ E
06	☐ A	☐ B	☐ C	☐ D	☐ E
07	☐ A	☐ B	☐ C	☐ D	☐ E
08	☐ A	☐ B	☐ C	☐ D	☐ E
09	☐ A	☐ B	☐ C	☐ D	☐ E
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13	☐ A	☐ B	☐ C	☐ D	☐ E

14	☐ A	☐ B	☐ C	☐ D	☐ E
15	☐ A	☐ B	☐ C	☐ D	☐ E
16	☐ A	☐ B	☐ C	☐ D	☐ E
17	☐ A	☐ B	☐ C	☐ D	☐ E
18	☐ A	☐ B	☐ C	☐ D	☐ E
19	☐ A	☐ B	☐ C	☐ D	☐ E
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25	☐ A	☐ B	☐ C	☐ D	☐ E
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27	☐ A	☐ B	☐ C	☐ D	☐ E
28	☐ A	☐ B	☐ C	☐ D	☐ E
29	☐ A	☐ B	☐ C	☐ D	☐ E
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31	☐ A	☐ B	☐ C	☐ D	☐ E
32	☐ A	☐ B	☐ C	☐ D	☐ E
33	☐ A	☐ B	☐ C	☐ D	☐ E
34	☐ A	☐ B	☐ C	☐ D	☐ E
35	☐ A	☐ B	☐ C	☐ D	☐ E
36	☐ A	☐ B	☐ C	☐ D	☐ E
37	☐ A	☐ B	☐ C	☐ D	☐ E
38	☐ A	☐ B	☐ C	☐ D	☐ E
39	☐ A	☐ B	☐ C	☐ D	☐ E

PRACTICE QUESTIONS

Saudi Commission for Health Specialties (SCFHS)

LABTE

Laboratory - Technician

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

Before you begin

What this is

9 practice questions for Saudi Commission for Health Specialties (SCFHS) LABTE , each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, LABTE
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

QUESTION 1

SINGLE CHOICE

When reviewing Levey-Jennings quality control data, a run is considered out of control when one control value exceeds the mean by more than how many standard deviations?

- ☐ A 1 SD
- ☐ B 2 SD
- ☒ C 3 SD
- ☐ D 4 SD

ANSWER C

WHY Westgard rules establish that a control value exceeding ± 3 SD from the mean is a rejection rule (1_{3s} or R_{3s}). ± 2 SD is a warning rule, and ± 1 SD is also a warning. Exceeding 3 SD indicates random error and the run must be rejected.

QUESTION 2

SINGLE CHOICE

A blood sample is collected in a sodium fluoride/potassium oxalate (grey-top) tube. Which analyte is this additive combination specifically intended to preserve?

- ☐ A Coagulation factors
- ☒ B Glucose
- ☐ C Potassium levels
- ☐ D Trace metals

ANSWER B

WHY Sodium fluoride inhibits glycolysis (by inhibiting enolase), preserving glucose, while potassium oxalate acts as an anticoagulant. This combination prevents the in-vitro decrease of glucose that would otherwise occur in unpreserved samples.

QUESTION 3

SINGLE CHOICE

Which biosafety level (BSL) is required for handling clinical specimens that may contain potentially infectious materials such as blood and body fluids?

- ☐ A BSL-1
- ☒ B BSL-2
- ☐ C BSL-3
- ☐ D BSL-4

ANSWER B

WHY BSL-2 is appropriate for handling human clinical specimens, blood, body fluids, and tissues that may contain pathogens of moderate risk. BSL-1 is for non-pathogenic organisms; BSL-3 is for airborne pathogens like *Mycobacterium tuberculosis*; BSL-4 is for life-threatening agents with no treatment.

QUESTION 4

SINGLE CHOICE

In a complete blood count (CBC), the MCV (Mean Corpuscular Volume) is calculated as:

- ☒ A Hematocrit $\times 10$ / RBC count
- ☐ B Hemoglobin $\times 10$ / RBC count
- ☐ C Hemoglobin / Hematocrit
- ☐ D RBC count $\times$ Hematocrit / 100

ANSWER A

WHY MCV is calculated as Hematocrit (%) $\times 10$ divided by RBC count ($\times 10^6/\mu\text{L}$), giving the result in femtoliters (fL). It indicates the average volume of red blood cells and is used to classify anemias as microcytic, normocytic, or macrocytic.

QUESTION 5

SINGLE CHOICE

Which of the following is the most appropriate specimen type and handling for measuring blood ammonia levels?

- ☐ A Serum collected and refrigerated at 4°C
- ☐ B Plasma from EDTA tube, kept at room temperature
- ☒ C Plasma from lithium heparin tube, placed on ice and analyzed immediately
- ☐ D Serum from clot tube, frozen at -20°C

ANSWER C

WHY Ammonia is produced by red blood cells and other metabolic processes after collection, so it must be analyzed quickly. Plasma from a lithium heparin tube placed on ice and analyzed within 30 minutes minimizes falsely elevated results. EDTA may interfere with the assay.

QUESTION 6

SINGLE CHOICE

A urine culture grows greater than 100,000 colony-forming units (CFU)/mL of a single organism. This result is interpreted as:

- ☐ A Contamination
- ☐ B Indeterminate; requires repeat culture
- ☒ C Significant bacteriuria
- ☐ D Normal flora

ANSWER C

WHY Standard urine culture criteria (Kass criteria) define significant bacteriuria as $\geq 100,000$ CFU/mL of a single organism in a clean-catch specimen, indicating acute urinary tract infection. Counts of 10,000-100,000 CFU/mL are indeterminate and may require repeat testing.

QUESTION 7

SINGLE CHOICE

In the ABO blood group system, a person with blood group O has which antigens and antibodies?

- ☐ A A and B antigens; anti-A and anti-B antibodies
- ☐ B A antigen; anti-B antibody
- ☐ C B antigen; anti-A antibody
- ☒ D No A or B antigens; both anti-A and anti-B antibodies

ANSWER D

WHY Group O individuals lack both A and B antigens on their red blood cells but produce both anti-A and anti-B antibodies in their plasma. This is why group O is considered the universal red cell donor but universal plasma recipient.

QUESTION 8

SINGLE CHOICE

A glucose concentration is reported as 180 mg/dL. What is the equivalent value in mmol/L? (Molecular weight of glucose = 180 g/mol)

- ☐ A 5 mmol/L
- ☒ B 10 mmol/L
- ☐ C 18 mmol/L
- ☐ D 100 mmol/L

ANSWER B

WHY To convert mg/dL to mmol/L: $(\text{mg/dL} \times 10) / \text{molecular weight} = (180 \times 10) / 180 = 10 \text{ mmol/L}$. The factor of 10 converts dL to L (1 dL = 0.1 L, so dividing by 0.1 multiplies by 10).

QUESTION 9

MULTIPLE CHOICE

Which of the following are pre-analytical variables that can affect laboratory test results? (Choose two.)

- ☒ **A** Patient fasting status
- ☒ **B** Body position during venipuncture
- ☐ **C** Calibration of the analyzer
- ☐ **D** Reagent expiration date

ANSWER **A - B**

WHY Pre-analytical variables occur before the sample is analyzed and include patient preparation factors (fasting status, exercise, stress), collection variables (body position, tourniquet time, hemolysis), and specimen handling. Calibration and reagent expiration are analytical phase concerns.