

Chapter 02: Healthcare Structure**Warekois et al.: Phlebotomy: Worktext and Procedures Manual, 5th Edition****MULTIPLE CHOICE**

1. The hospital laboratory falls under which of the following categories of administrative services?
 - a. Fiscal
 - b. Nursing
 - c. Professional
 - d. Support

ANS: C

The laboratory is a part of a hospital's *professional* services. Fiscal services attend to financial matters; nursing services are in charge of the direct patient care; and support services include departments such as dietary and housekeeping.

DIF: Cognitive Level: 1

REF: p. 14

OBJ: 1

2. Which abbreviation represents a certified laboratory professional?
 - a. CCU
 - b. CLIA
 - c. MLS
 - d. RN

ANS: C

MLS stands for medical laboratory scientist (also known as a medical technologist [MT] or medical laboratory technologist [MLT]); these are laboratory professionals. CCU stands for cardiac care unit, CLIA refers to the Clinical Laboratory Improvement Act, and RN stands for registered nurse.

DIF: Cognitive Level: 2

REF: p. 15

OBJ: 4

3. Which abbreviation stands for a type of blood collection vacuum tube?
 - a. CCU
 - b. GTT
 - c. RBC
 - d. SST

ANS: D

SST stands for serum separator tube. GTT stands for glucose tolerance test, RBC stands for red blood cell, and CCU stands for cardiac care unit.

DIF: Cognitive Level: 2

REF: p. 18

OBJ: 7

4. Which of the following is the organization that accredits and inspects clinical laboratories?
 - a. POL
 - b. HMO
 - c. TJC
 - d. NAACLS

ANS: C

TJC (formerly JCAHO) stands for The Joint Commission which inspects and accredits laboratories, and this must be done every 2 years. *POL* is a physician office laboratory, *HMO* stands for health maintenance organization, and *NAACLS* is the National Accrediting Agency for Clinical Laboratory Sciences, which is an accrediting body for laboratory schools.

DIF: Cognitive Level: 2

REF: p. 22

OBJ: 9

5. Which department of the laboratory processes Pap smears?
- Cytology
 - Hematology
 - Microbiology
 - Serology

ANS: A

Cytology looks for cancerous cells in Pap smears. Hematology performs blood counts, microbiology processes cultures, and serology studies serum to detect antibodies.

DIF: Cognitive Level: 1

REF: p. 15

OBJ: 6

6. Which anticoagulant is used most often in collection tubes for hematology studies?
- Citrate
 - EDTA
 - Heparin
 - Fluoride

ANS: B

EDTA is used for blood counts. Heparin is not appropriate for RBC and WBC counts. Citrate is used for coagulation studies. Fluoride is most often used for glucose testing.

DIF: Cognitive Level: 1

REF: p. 19

OBJ: 7

7. Which of the following hematology tests measures the blood's capacity to carry oxygen?
- Differential
 - Hgb
 - MCV
 - WBC

ANS: B

Hemoglobin (Hgb) is the oxygen-carrying protein of blood. For a differential (diff), a blood smear is examined to determine the types and morphology of blood cells. *MCV* is the mean cell volume of the patient's red blood cells. *WBC* refers to the number of white blood cells.

DIF: Cognitive Level: 1

REF: pp. 19-20

OBJ: 7

8. Which laboratory department would normally perform a prothrombin time (PT) test?
- Coagulation
 - Chemistry
 - Serology
 - Urinalysis

ANS: A

PTs are normally performed in either the *coagulation* or the hematology department (in laboratories where coagulation is a section of the hematology department).

DIF: Cognitive Level: 1 REF: p. 19 OBJ: 7

9. Which color tube may be used to obtain serum for a laboratory test?
- Green
 - Gray
 - Lavender
 - Red

ANS: D

Red-top tubes contain no anticoagulant and therefore allow the blood to clot. Serum is obtained upon centrifuging a clotted sample. Green-, gray-, and lavender-top tubes all contain anticoagulants and produce plasma upon centrifugation.

DIF: Cognitive Level: 1 REF: p. 18 OBJ: 7

10. What term is used to describe serum that is darker yellow than normal?
- Clotted
 - Hemolyzed
 - Icteric
 - Lipemic

ANS: C

Icteric serum is yellow due to the presence of bilirubin. Hemolyzed serum is pink or slightly red due to the presence of plasma hemoglobin that has leaked out of broken RBCs. Lipemic samples are milky or cloudy in appearance due to increased triglycerides.

DIF: Cognitive Level: 1 REF: p. 18 OBJ: 7

11. Which term is used to describe serum that is cloudy or milky?
- Clotted
 - Hemolyzed
 - Icteric
 - Lipemic

ANS: D

Lipemic samples are milky or cloudy in appearance due to increased triglycerides. Hemolyzed serum is pink or slightly red due to the presence of plasma hemoglobin that has leaked out of broken RBCs. Icteric serum is yellow due to the presence of bilirubin.

DIF: Cognitive Level: 1 REF: p. 18 OBJ: 7

12. Which term is used to describe serum that is pink-tinged?
- Clotted
 - Hemolyzed
 - Icteric
 - Lipemic

ANS: B

Hemolyzed serum is pink or slightly red due to the presence of plasma hemoglobin that has leaked out of broken RBCs. Icteric serum is yellow due to the presence of bilirubin. Lipemic samples are milky or cloudy in appearance due to increased triglycerides.

DIF: Cognitive Level: 1 REF: p. 18 OBJ: 7

13. Sodium, potassium, and chloride are all part of which panel of tests?
- Electrolytes
 - Immune function
 - Lipid
 - Liver function

ANS: A

Electrolytes normally include sodium, potassium, chloride, and bicarbonate (or carbon dioxide).

DIF: Cognitive Level: 1 REF: p. 17 OBJ: 7

14. Culture and sensitivity tests are performed by which of the laboratory departments?
- Chemistry
 - Hematology
 - Immunohematology
 - Microbiology

ANS: D

The *microbiology* department looks for the presence of bacteria in cultures. The chemistry department tests the chemical components of blood such as glucose and enzymes. The hematology department processes CBCs (complete blood counts). The immunohematology department is the blood bank.

DIF: Cognitive Level: 1 REF: p. 20 OBJ: 7

15. Which of the following is the term for blood donated by a patient for his or her own use during a planned future surgical operation?
- Autologous donation
 - Blood typing
 - Compatibility testing
 - Directed donation

ANS: A

An *autologous donation* is for use by oneself. A directed donation is intended for another specific person's use.

DIF: Cognitive Level: 1 REF: p. 16 OBJ: 5

16. Which laboratory department uses genetic and biochemical techniques to analyze DNA in specimens?
- Chemistry
 - Hematology
 - Histology
 - Molecular diagnostics

ANS: D

The *molecular diagnostics* department detects DNA in samples. The histology department examines tissues from biopsies. The chemistry department tests the chemical components of blood, such as glucose and enzymes. The hematology department processes CBCs.

DIF: Cognitive Level: 1

REF: p. 21

OBJ: 7

17. The director of a hospital clinical laboratory is usually which of the following?
- Medical technologist
 - Pathologist
 - Phlebotomist
 - Registered nurse

ANS: B

A *pathologist* directs most clinical laboratories. Medical technologists and phlebotomists work in the laboratory.

DIF: Cognitive Level: 1

REF: p. 15

OBJ: 4

18. Which laboratory department performs blood typing?
- Chemistry
 - Hematology
 - Immunohematology
 - Urinalysis

ANS: C

The *immunohematology* department is the blood bank. The chemistry department performs chemical analyses, the hematology department performs blood counts, and the urinalysis department examines urine.

DIF: Cognitive Level: 1

REF: p. 16

OBJ: 7

19. Which kind of laboratory is independent and analyzes samples from other healthcare facilities?
- HMO laboratory
 - POL laboratory
 - PPO laboratory
 - Reference laboratory

ANS: D

A *reference laboratory* performs specialized tests for other healthcare facilities that cannot perform them. HMO and PPO are health insurance terms, and POL refers to a physician's office laboratory.

DIF: Cognitive Level: 1

REF: p. 23

OBJ: 10

20. In addition to the clinical laboratory, which professional service in a hospital may perform arterial blood gases?
- Occupational therapy
 - Nuclear medicine
 - Radiology
 - Respiratory therapy

ANS: D

Arterial blood gases are normally performed by either the laboratory or *respiratory therapy* depending on the facility.

DIF: Cognitive Level: 1

REF: p. 15

OBJ: 5

21. Which department within the laboratory performs complete blood counts (CBCs)?
- Chemistry
 - Hematology
 - Immunohematology
 - Microbiology

ANS: B

The *hematology* department performs CBCs. The chemistry department performs chemical analyses, the immunohematology department is responsible for blood typing and transfusion services, and the microbiology department processes cultures.

DIF: Cognitive Level: 1

REF: p. 19

OBJ: 7

22. Which section within the chemistry laboratory identifies unknown drugs within specimens?
- Electrophoresis
 - Endocrinology
 - Immunochemistry
 - Toxicology

ANS: D

The *toxicology* section performs all types of drug testing. Electrophoresis separates proteins based on their electrical charges. The endocrinology section measures hormones, and the immunochemistry section uses antigen/antibody reactions to detect certain substances within the blood.

DIF: Cognitive Level: 1

REF: p. 18

OBJ: 7

23. What is another name for a reference laboratory?
- In-Patient laboratory
 - Physician's office laboratory
 - Private testing laboratory
 - Collection laboratory

ANS: C

A reference laboratory can also be called a private testing laboratory.

DIF: Cognitive Level: 1

REF: p. 23

OBJ: 10

24. What is an example of a clerical task?
- Obtaining a sample
 - Patient registration
 - Transporting a specimen
 - Patient preparation for a UA

ANS: B

Patient registration is a clerical task. All of the other tasks are clinical tasks.

DIF: Cognitive Level: 1

REF: p. 23

OBJ: 10

25. How often do Joint Commission laboratories need to be inspected and accredited?
- Monthly
 - Annually
 - Every 2 years
 - Every 5 years

ANS: C

Joint commission laboratories need to be inspected and accredited every 2 years.

DIF: Cognitive Level: 2

REF: p. 22

OBJ: 9

26. What are the proteins that help fight infection by binding to surface molecules of the infective agent?
- Antibody
 - Agglutinin
 - Antigen
 - Aerobe

ANS: A

Proteins that help fight infection by binding to surface molecules of the infective agent are antibodies. The remaining choices are all infection causing organisms.

DIF: Cognitive Level: 1

REF: p. 21

OBJ: 7

27. The role of Clinical & Laboratory Standards Institute (CLSI) is to
- accredit laboratories.
 - work with CAP to accredit laboratories and hospitals.
 - set standards for laboratories to ensure accurate patient results.

ANS: C

CLSI sets laboratory standards with the express goal of laboratories producing accurate patient test results.

DIF: Cognitive Level: 1

REF: p. 22

OBJ: 9

28. CLSI standards are determined and set by
- accreditation agency professionals.
 - volunteer members globally.
 - pathologists and physicians.
 - TJC and CAP inspectors.

ANS: B

Laboratory standards set by CLSI are determined by volunteer members of the global community.

DIF: Cognitive Level: 1

REF: p. 22

OBJ: 9

29. Which of the following agencies provides proficiency testing of unknown samples to laboratories?

- a. TJC
- b. CLSI
- c. CLIA
- d. CAP

ANS: D

Proficiency testing of unknown samples is provided by *CAP* and other approved proficiency organizations. TJC and CLIA require labs to enroll in a CMS (Centers for Medicare and Medicaid Services) approved proficiency testing program for each regulated analyte tested for in each laboratory.

DIF: Cognitive Level: 1

REF: pp. 22-23

OBJ: 10