1. Describe the role of the phlebotomist in the health care setting.

2. State 3 purposes for collection and analysis of samples.

3. Describe “professional ethics” as it applies to healthcare workers as well as the field of phlebotomy.

4. List 3 professional behavioral attributes of a “good” phlebotomist.

5. List 3 skills for successful teamwork.

6. Describe the appropriate “bedside manner” for a phlebotomist.

7. Describe communication issues in home and ambulatory care settings.

8. Compare and contrast the “patient interview” and “teaching patients”.

9. Describe effective verbal communication as it relates to: Language barriers, hearing disabled, English as a second language, and age.

10. Give 3 examples of positive and negative body language.

11. Define “active listening” and give 3 illustrations on how it is used.

12. State how posture, grooming and hygiene enhance one’s professional appearance.


A. General Practice of Phlebotomy

B. Professional Competencies

C. Communication Skills in the Patient Care Environment

D. Appearance, Grooming and Physical Fitness
14. List the protective equipment which must be supplied by your employer.

15. Describe the patients’ bill of rights, how it affects the performance of your job and list 5 items which should be addressed.

16. Describe how health care professionals should deal with family, visitors, clergy or physicians present in the patient room.

17. List and describe the types of health care facilities

18. Describe the organizational structure of the clinical laboratory.

19. List and discuss the roles of the different types of clinical laboratory personnel and their qualifications for these professional positions.

20. List the various departments in the clinical laboratory and describe the types of laboratory procedures performed in each.

21. Describe the process of interdepartmental relationships in aiding in the diagnosis of the patient.

22. Define “anatomy” and “physiology”.

23. Describe the frontal, sagittal and transverse body planes.

24. Define the following body directional terms:

   - anterior
   - posterior
   - medial
   - lateral
   - proximal
   - distal
   - superior
   - inferior

25. Describe the following body cavities:

   - cranial
   - spinal
   - ventral
   - thoracic
   - abdominal
   - pelvic

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2. Basic Anatomy and Physiology of Organ Systems

   A. Introduction
   B. Body Planes
   C. Body Directional Terms
   D. Body Cavities
   E. Patient Rights
   F. Family, Visitors and Significant Others
   G. The Health Care Team and Health Care Facilities
   H. Departments of Clinical Laboratory Medicine - Personnel
   I. Department of Clinical Laboratory Medicine - Laboratory Departments
   J. Interdepartmental Relationships
26. Define “body system” and how systems work together to maintain “homeostasis”.

27. Describe the structural organization of the human body.

28. List and describe the 10 organ body systems

29. State 2 lab tests ordered to aid in the diagnosis of problems associated with each of the 10 body systems.

30. Describe the function of the circulatory system.

31. Describe the composition of blood.

32. Describe and state the function of each of the cellular components of the blood.

33. Compare and contrast plasma and serum.

34. Describe the structures and functions of the different chambers of the heart.

35. State the only vein which carries oxygenated blood.

36. State the only artery which carries deoxygenated blood.

3. **The Circulatory System**

   30. Describe the function of the circulatory system.  
      **A. Introduction**

   31. Describe the composition of blood.  
      **B. Blood**

   32. Describe and state the function of each of the cellular components of the blood.  
      **C. Erythrocytes**
      **D. Leukocytes**
      **E. Platelets**

   33. Compare and contrast plasma and serum.  
      **F. Difference Between Plasma And Serum**

   34. Describe the structures and functions of the different chambers of the heart.  
      **G. Heart**
37. Describe the structures, function, and type of blood (venous/arterial) of the different types of blood vessels: arteries, arterioles, capillaries, venules and veins.

38. Describe the flow of blood through the cardiovascular system.

39. Define hemostasis and coagulation.

40. List and describe each of the four steps in the hemostatic process known as coagulation.

41. List the laboratory tests which aid in the diagnosis and monitoring of the circulatory system.

42. Define “nosocomial infection”.

43. List 3 types of patients or personnel that may be monitored in an infection control program.

44. Describe in detail how the chain of infection occurs including: source, mode of transmission and susceptible host.

45. Describe the methods utilized to break the chain of infection.

46. Describe the requirements mandated by the OSHA Needlestick Safety and Prevention Act.

47. State the information which must be included on the injury log after a needlestick.

48. State the two types of patients who are candidates for isolation procedures.


50. List the federal organizations which provide regulations regarding safety practices.
51. Describe the three categories of Standard Precautions: airborne, droplet and contact.

52. Describe the focus of Standard Precautions.

53. List the 4 applications of Standard Precautions.

54. State the one fluid not included in these precautions.

55. List 5 procedures which must be followed to comply with Standard Precautions.

56. State the precautions to be utilized for patients with tuberculosis and patients requiring reverse or protective isolation.

57. List 5 measures which must be provided by employers to protect workers from exposure to biological hazards.

58. Describe in detail the procedure to follow after exposure to blood or body fluids, including the time frame in which these must be done.

59. State the infection control protocols for hospital outbreaks, in the nursery unit, burn unit, intensive care unit, postoperative unit and dialysis unit.

60. Describe the protocols in place in the clinical laboratory to prevent acquisition of infections.

61. Describe the correct method for entering and exiting a patients’ room.

62. Describe the double bagging procedure and state why this procedure is done.

63. State the conditions which will increase the chances of an infection occurring after exposure to a biohazardous substance.

64. State the three possible routes of infection which may occur from collected specimens and how this occurs.
Describe the role of the phlebotomist in preventing the spread of infection in the workplace and during blood collection.

Define “disinfectant” and “antiseptic” and state their use.

State how safety goals are achieved.

List the personal hygiene habits that will protect an employee's safety in the workplace.

Describe the proper handling of laboratory specimens including disposal and decontamination.

Describe the first aid measures to follow following an accidental exposure.

Discuss the phlebotomist’s role in fire safety.

List the components necessary for a fire.

List and describe the 4 classifications of fires.

List the 5 types of fire extinguishers and state the type of fire each is used for.

State what “PASS” stands for as it relates to the use of fire extinguishers.

State what “RACE” stands for and describe the procedure to follow when a fire is discovered in the workplace.

Describe the action to take when a coworker has contact with an electrical current.

Describe the preventative maintenance to perform to ensure the safety of electrical equipment.

State the three principles to protect oneself from radiation.

Recognize the universal symbol for radiation.

5. Safety and First Aid

A. Safety in Specimen Collection

B. Personal Hygiene in the Work Environment

C. Laboratory Safety

D. Fire Safety

E. Electrical Safety

F. Radiation Safety
81. State the proper use and maintenance of a laboratory centrifuge.

82. Describe how different chemicals and reagents can present hazards to workers.

83. State the proper storage of chemicals.

84. State the name of the OSHA hazard communication standard.

85. Define and describe a “chemical hygiene plane”.

86. Describe the information found in the “Material Safety Data Sheet”.

87. Describe the hazard identification system developed by the national Fire Protection Association (NFPA) including: shape, what each color represents, what the number represents.

88. Describe the routine safety precautions which should be followed when handling chemicals.

89. State the procedure to follow when a chemical spill or exposure occurs.

90. Describe the appropriate disposal method for chemicals, especially acids.

91. Discuss the safety rules which should be maintained in and outside of patient rooms.

92. Describe conditions which may require a disaster emergency plan for a healthcare facility.

93. List the types of emergency procedures/first aid plans phlebotomists should be familiar with.

94. Discuss the general guidelines for correct documentation and why it is so critical.
95. Describe the importance of the physician, patient and laboratory network.

96. Describe how the number of people and steps involved in communication will affect the overall process.

97. List 3 components which must be addressed in the communication cycle.

98. Discuss the importance of communication styles.

99. Describe the contents and use of each of the following manuals:
   policy manual
   procedure manual
   specimen collection manual
   administrative procedure manual
   safety and infection control manual
   quality control procedure manual

100. Describe the importance of continuing education.

101. State the purpose of staff meetings.

102. List 3 types of extra-laboratory communication which may be used to inform employees of important news or events.

103. Discuss the extra-laboratory communication network.

104. Describe the correct procedure for utilizing the telephone.

105. State how confidentiality of patient information is maintained in the healthcare setting.

106. Describe the Health Insurance Portability and Accountability Act and how this will impact laboratory reporting of results.

107. Describe or list 6 functions of a laboratory computer system.
108. Describe the 2 types of laboratory requisitions routinely utilized in the clinical laboratory and their use.

109. State the advantages of computer transmitted requisitions.

110. State the procedure to follow when given a verbal request for drawing laboratory specimens.

111. Compare computer and manual requisition methods.

112. Describe the 2 options for proper labeling of laboratory samples.

113. Describe the different methods of delivering specimens to the laboratory: hand delivery, pneumatic tube, transportation department, and transportation by vehicle.

114. State the reason that samples must be delivered to the lab within 30-45 minutes.

115. In regard to processing and transporting blood specimens, describe the effects of time on test quality and patient care.

116. State the reasons for maintaining blood specimens in an upright position after collection.

117. List 3 tests which must be chilled and 3 which must be protected from light.

118. State the time frame within which blood samples must be processed and separated.

119. List 2 tests for which the sample must be kept warm.

120. Describe the proper methods for reporting results by: written report, computer report, and verbal report.

121. Describe how laboratory results are distributed.
122. State the purpose of the ABN, including how the ICD9 is utilized.

123. List 4 basic rules to follow for obtaining the ABN.

124. State the proper method of patient identification for inpatients and outpatients.

125. State the only individual who can order laboratory testing.

126. List 4 items of information which must be present on the laboratory requisition slip.

127. Discuss the importance of appearance, grooming and bedside manner of phlebotomists.

128. Describe in detail the steps for correctly performing a phlebotomy including the responsibilities of the phlebotomist in patient positioning and selection of equipment.

129. List and describe the sequential steps to follow in the blood collection process.

130. State the order of the draw for filling glass AND plastic evacuated tubes.

131. State the minimum information which must be on each tube of blood collected.

132. List 3 important considerations in the blood collection process such as number of sticks, volume collected, and information to give patient.

133. Describe the operation of 3 types of safety needle devices for the routine venipuncture.

134. State the importance of wearing gloves and describe the types of gloves available for use.

7. General Considerations in Blood Collection

A. Patient Identification Process

B. Test Requisitions

C. Performing the Phlebotomy

D. General Procedure in Blood Collection

E. Safety Needle Act

F. Gloves
135. Describe the guidelines for glove usage that may prevent the development of latex allergies.

136. State the use of antiseptics, sterile gauze pads and bandages.  

137. Define “timed specimen”, “fasting specimen” and “STAT” as they refer to specimen collection.

138. List and define the following:
   - **STAT**: Medical Emergency
   - **ASAP**: Priority 1
   - **Pre-Op**: Priority 2
   - **Routine**

139. List 10 situations which would lead to rejection of a blood sample.

140. Describe the importance of logging specimen rejection, especially as it relates to an individual phlebotomist’s performance.

141. State the prefixes used in the metric system and state the numerical equivalent.

142. State the metric units used for measuring length, volume, temperature and weight.

143. Describe the advantage of using the military time system and convert time to military time.

8. **Complications in Blood Collection**

   A. Complications During Blood Collection

144. List and describe 10 problems and/or complications which may arise during or after a blood collection procedure.

145. Describe the care to be given to a patient who has fainted.

146. State the cause of hematomas and patient treatment.
147. State the reason why laboratory samples must never be collected from above an IV site.

148. Define “basal state”.

149. State why specimens drawn during the basal state are preferred.

150. List 5 tests which should be drawn during the basal state.

151. Describe the effects of diet, exercise, stress, diurnal rhythms and posture on the composition of blood specimens.

152. List the instructions to give to a patient when a fasting specimen is required.

153. Define “lipemia” and state the cause.

154. State the maximum time a tourniquet may be left on the arm.

155. Lists three laboratory tests which may be affected by having patients pump their fist.

156. State the purpose of using a tourniquet for blood collection and describe testing interferences associated with tourniquet pressure.

157. List 5 potential causes of hemoconcentration.

158. List 5 laboratory tests which may be adversely affected by excessive hemoconcentration and how they are affected (increase/decrease).

159. List 4 laboratory tests which may be adversely affected by the presence of hemolysis.

160. Discuss the physiologic and geographical factors which may affect laboratory results.

161. State organ systems which may be affected by drugs and how this can affect laboratory results.
162. Describe the challenges of performing pediatric phlebotomy.

163. Define the term “age specific care” and describe how this will aid the phlebotomist.

164. Describe the patient group and general guidelines for dealing with patients in the following categories: infancy, pediatric, adolescent, adult, and older adult.

165. Describe the interpersonal skills required for drawing pediatric patients.

166. Describe the methods for restraining a child during blood collection.

167. Describe the appropriate method for dealing with combative children.

168. Describe the advantages and disadvantages of using EMLA.

169. State special precautions which must be followed to prevent disease transmission.

170. List the different sites which may be used for blood collections on infants and children.

171. State when microcollection (capillary puncture) may be the procedure of choice on children.

172. State the precautions which must be followed when performing a heel stick blood collection.

173. State the purpose of performing the newborn screening test.

174. Describe the proper method of collecting blood on filter paper for newborn screening.
175. State the blood collection techniques for use on pediatric patients including:
- Fingerstick drawing from IV lines
- Dorsal vein hand heparin locks
- Scalp vein central venous catheters

176. State why monitoring of blood volume removed is critical in the infant.

177. State the tests which comprise “arterial blood gases”.

178. Describe the “capillary blood gas” and “arterial blood gas” specimen collection procedures.

179. Describe the “Allen Test” in detail and the expected results.

180. List the supplies required for blood gas specimen collection.

181. Describe the hazards associated with arterial blood gas collections.

182. State what the bleeding time is used to assess.

183. Describe in detail the steps involved in the proper performance of the bleeding time.

184. State the purpose of drawing blood for blood cultures.

185. Describe the technique for the proper preparation of the site for collection of a blood culture specimen.

186. State the special precautions for blood culture collections.

10. Arterial, IV and Special Collection Procedures

A. Collection of Capillary and Arterial Blood Gases
187. Describe the instructions which should be given to a patient who is about to undergo a glucose tolerance test.

188. State the timing of drawing blood for the glucose tolerance test.

189. State the labeling requirements for glucose tolerance test specimens.

190. Compare and contrast the glucose tolerance test and the post-prandial glucose test.

191. State the cause, substance detected and procedure utilized for the lactose tolerance test.

192. Define “peak”, “trough”, and “random” as it applies to drawing blood for TDM.

193. Describe the information which should be obtained prior to drawing the TDM specimen.

194. Describe the special requirements for equipment used for the collection of trace metals.

195. Define “vascular access device” (VAD).

196. List and describe the following VADs: Central venous catheter, implanted port, and peripherally inserted central catheter.

197. Define and state the use of each of the following: heparin lock, cannula and fistula.

198. State the two purposes for performing the donor interview and physical exam.

199. Describe the donor interview process and list reasons for temporary and permanent deferral.

200. For the each of the following parts of the physical exam state the criteria which must be met for donor eligibility:

   - weight
   - temperature
   - blood pressure
201. Briefly describe the donor blood collection process.


203. Discuss the role of the phlebotomist in the emergency room including important personal characteristics of the ER phlebotomist.

204. Define “triage”.

205. Describe how specimen collection and laboratory analysis has expanded beyond the traditional laboratory.

206. List 3 conditions in the geriatric population which would require special interpersonal skills.

207. List 3 special considerations when performing blood collections at a patient’s home.

208. Describe the proper performance of the bedside glucose test.

209. Describe why training of personnel in quality control of glucose meters is so critical.


211. State the instrument utilized for bedside PT and PTT testing.

212. List 3 other tests which may be performed at the patient bedside.

213. List the elements involved in proper training in the use of POCT instruments.

11. Elderly, Home, Hospital Bedside and Long Term Care Collections

A. Introduction

B. Glucose Monitoring

C. Blood Gas and Electrolyte Analysis

D. Blood Coagulation Monitoring

E. Hematocrits and Hemoglobin

F. Cholesterol Screening

G. Future Trends
12. Urinalysis and Body Fluid Collections

214. List and describe 8 other body fluids analyzed in the clinical laboratory.

215. List 8 types of specimens which may be submitted for microbiological analysis.

216. Properly instruct a patient in the collection of a midstream, clean catch and 24 hour urine collection.

217. List and describe 4 tests which may be ordered on urine specimens.

218. State the type of sample required for BUN and creatinine clearance.

219. For each of the following describe the specimen source, collection method and tests performed:
   - cerebrospinal fluid (CSF)
   - fecal specimens
   - seminal fluid
   - amniotic fluid

220. Describe the proper collection technique for throat cultures and nasopharyngeal swabs.

221. State the diseases which may be diagnosed from throat and nasopharyngeal swabs.

222. State what skin tests are used for.

223. Describe the skin test procedure.

224. State the purpose for performing the gastric analysis and Hollander test.

225. State the substances used for stimulation of acid secretion for each method.

226. Describe the disease “cystic fibrosis”.

227. State the name of the procedure used for the sweat chloride test and the substance that is measured.
228. State the organism responsible for causing peptic ulcers.

229. State the phlebotomist’s role in the performance of the breath analysis test.

230. State the role of the collector for ensuring the integrity of drug and forensic testing.

231. Define the following terms:

   Toxicology
   Forensic Specimens
   Chain of custody

232. Describe the “chain of custody” procedure.

233. State the governmental agency responsible for monitoring workplace drug testing.

234. List 4 instances in which drug testing in the workplace or sports medicine may be performed.

235. List the 4 minimum requirements that specimen collections sites must meet to ensure specimen integrity.

236. List 4 security measures which must be enforced to ensure specimen integrity.

237. List the procedures involved in obtaining the samples for drug and alcohol testing, especially in ensuring sample integrity.

238. List 4 substances which may be added to samples which may interfere with testing.

239. List 2 methods which may be utilized to detect sample tampering.
240. State the purpose of the total quality management process.

241. Define stakeholder and list 3 which may be involved in the quality process.


243. Describe the 3 components of Total Quality Management and Continuous Quality Improvement as described by Avedis Donabedian.

244. List 4 ways that phlebotomists may be monitored or evaluated for quality improvement.

245. Describe the total quality management process.

246. List 3 methods for determining customer satisfaction with services provided.

247. List 4 analytical and non-analytical methods of documentation of performance trends.

248. Describe each element of “RUMBA”.

B. Tools and Trends for Performance Assessment

249. List the 3 areas monitored to ensure quality collection.

C. CQI for Specimen Collection Services

250. Describe the pre-analytic requirements for a quality specimen.

D. Collection Procedures to Ensure Quality

251. State the purpose of the Clinical Laboratory Standards Institute (CLSI).

E. Anticoagulants and preservatives: Quality Assurance

252. Define “shelf life” as it pertains to collection equipment and supplies.

253. Describe the importance of adequate volume as it pertains to specimen collection.

254. List 5 requirements for a “quality” specimen.
255. State the reason that the number of collection attempts must be monitored.

256. State the importance of monitoring volume of blood loss due to phlebotomy.

257. List 3 strategies that may be implemented to reduce blood loss due to phlebotomy.

258. List 3 pieces of equipment in the phlebotomy area that may require routine maintenance.

259. List 2 goals of competency and performance assessment in the phlebotomy area.

260. List and describe the 3 areas in the process of competency and performance assessment.

261. List 3 items which demonstrate professional and respectful behavior.

15. Legal and Regulatory Issues

262. Describe the three levels of courts at the state and federal levels.

263. Define the following terms: assault, battery, breach of duty, civil law, consent, criminal actions, defendant, false imprisonment, felony, invasion of privacy, liable, litigation process, malpractice, misdemeanor, negligence, plaintiff, respondeat superior and tort.

264. Describe the 4 key points in “negligence”.

265. Describe the types of patient information/material which is regarded as confidential.

266. Describe “malpractice”.

267. Describe “standard of care” as it pertains to the field of phlebotomy.

268. Describe “informed consent” and compare that term with “implied consent”.

269. Define “statute of limitations”.

F. Competency and Performance Assessment
270. Describe the guidelines to follow when giving a legal deposition.

271. Define “expert witness”.

272. List 4 steps to take to avoid lawsuits.

273. List 2 requirements for entries made into a patient’s medical record.

274. List the 4 purposes served by quality medical records.

275. List 5 problems arising in blood collection which may adversely affect the patient and result in legal action.

276. Describe the compensation available to phlebotomists who contract HIV during the performance of their job.

277. Describe the purpose of malpractice insurance and list 3 items which should be considered when purchasing it.

278. List and describe 4 goals and objectives of a risk management program.

279. Discuss the process of how risks are identified.

280. List and discuss the two elements of risk treatment.

281. Describe the transfer of risk in the healthcare setting.

282. Discuss the purpose of CLIA and how it will affect you in the work place.

I. Legal Claims and Defense

J. Medical Records

K. Cases Resulting from Improper Technique and Negligence

L. HIV Related Issues

M. Malpractice Insurance

N. Management of Risk

O. Clinical Laboratory Improvement Amendment (CLIA)

The End

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