



**DIPLOMATE EXAMINATION
(D-ABFT-FT)**

Study Guide for Examination Preparation

Examination Topics

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September 2026

STUDY GUIDE FOR EXAMINATION PREPARATION

Introduction

The purpose of the ABFT diplomate examination is to challenge the candidate's mastery of fundamental concepts applied to the practice of forensic toxicology.

It is recommended that the candidate successfully complete an in-house training program prior to sitting for this examination. Additionally, the candidate may find that in-house procedures and manuals, (e.g., safety, quality) may be of benefit during examination preparation.

Each diplomate examination consists of 130 single answer, multiple-choice questions, distributed over the content areas as shown below. At least 70% of the questions must be answered correctly to pass the examination. Questions will be distributed over the topics below. (Note: approximate percentages).

Candidates will be given three hours to complete the examination.

Topics:

1. Forensic Practices	25%
• Pharmacology/Toxicology	
• Legal applications	
2. Analytical Procedure Chemistry Sample Preparation	20%
3. Analytical Procedure Analytical Methodology	15%
4. Case Interpretation Human Performance	10%
5. Case Interpretation Postmortem	5%
6. Laboratory Practices	5%
7. Miscellaneous Topics	5%
• Alternative matrices	
• Historical	
8. Pathology and Specimens	5%
9. Quality Assurance	5%
10. Statistics and Measurements	5%

Recommended References

The references provided below are examples of texts that may be useful in exam preparation. This list is not exhaustive nor is it intended to suggest that test preparation requires studying each book in its entirety. Candidates are encouraged to access recent editions of texts that cover the topics included in the exam. Books, journals, scientific guidelines, and published standards (i.e. Academy Standards Board) should be used in conjunction with the candidate's training and practical experience.

Books

Baselt, R.C. (2020) *Disposition of toxic drugs and chemicals in man*, 12th edition. Biomedical Publications, Seal Beach, CA.

Baselt, R.C. (2001) *Drug effects on human performance*. Biomedical Publications, Foster City, CA.

Baselt, R.C. (2001) *Drug effects on psychomotor performance*. Biomedical Publications, Foster City, CA.

Brunton, L.L., Hilal-Dandan, R., and Knollman, B.C. (2011) *Goodman and Gilman's The pharmacologic basis of therapeutics*, 13th edition. McGraw-Hill Education, New York, NY.

Caplan, Y.H. and Goldberger, B.A. (eds.) (2015) *Garriott's medicolegal aspects of alcohol*, 6th edition. Lawyers & Judges Publishing, Tucson, AZ.

Klaassen, C.D. (ed.) (2013) *Casarett & Doull's toxicology: the basic science of poisons*, 8th edition. McGraw-Hill, New York, NY.

Levine, B. and Kerrigan, S. (eds.) (2020) *Principles of forensic toxicology*, 5th edition. AACC Press, Washington, DC.

Moffat, A.C., Osselton, M.D. and Widdop, B. (eds.) (2011) *Clarke's analysis of drugs and poisons*, 4th edition. Pharmaceutical Press, London, U.K.

Rifai, N. (2022) *Tietz Textbook of Laboratory Medicine*, 7th edition. W. B. Saunders Co, Philadelphia, PA.

Roper Miller, J. D. and Goldberger, B.A. (eds.) (2008) *Handbook for workplace drug testing*, 2nd edition. AACC Press, Washington, DC.

Other Resources

Mandatory Guidelines for Federal Workplace Drug Testing Programs using Urine, Federal Register. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services

- Federal Register, 82 FR 7920 – 2017
(<https://www.govinfo.gov/content/pkg/FR-2017-01-23/pdf/2017-00979.pdf>).

Mandatory Guidelines for Federal Workplace Drug Testing Programs using Oral Fluid, Federal Register. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services

- Federal Register, 84 FR 57554
(<https://www.govinfo.gov/content/pkg/FR-2019-10-25/pdf/2019-22684.pdf>).

Couper, Fiona J. et al. (2024). *Drugs and Human Performance Fact Sheets: 2024*.

- [Drugs and Human Performance Fact Sheets: 2024](#)

General Chemistry: Any introductory college/university text intended for science majors.

Statistics: Any introductory college/university text intended for science majors.

Laboratory Safety and Chemical Hygiene: Any manual appropriate for a toxicology laboratory.

Academy Standard Board Resources

Standard 036 – Standard Practices for Method Validation in Forensic Toxicology

Standard 054 – Standard for a Quality Control Program in Forensic Toxicology Laboratories

Standard 098 – Standard for Mass Spectral Analysis in Forensic Toxicology

Standard 113 – Standard for Identification Criteria in Forensic Toxicology

Standard 152 – Standard for the Minimum Content Requirements of Forensic Toxicology Procedures

Journals

Journal of Analytical Toxicology

Journal of Forensic Sciences

Forensic Science International

Sample Questions

Multiple Choice. Choose the best answer. Correct answer is in **BOLD**.

1. Which compound is a metabolite of methamphetamine?
 - A. Ephedrine
 - B. Lisdexamphetamine
 - C. **Amphetamine**
 - D. Methylenedioxyamphetamine
 - E. Phentermine
 - Topic: Forensic Practices
2. Which compound would yield a trimethylsilyl derivative?
 - A. Protriptyline
 - B. Desipramine
 - C. **11-nor-9-carboxy-THC**
 - D. Methamphetamine
 - E. Cocaine
 - Topic: Analytical Procedure Chemistry Sample Preparation
3. Which compound has the longest retention time on a 50% phenylmethyl or HP-17 liquid phase chromatography column?
 - A. Nicotine
 - B. Meperidine
 - C. Diazepam
 - D. **Strychnine**
 - E. Phentermine
 - Topic: Analytical Procedure Analytical Methodology
4. A 200-pound male consumes six 12-ounce beers and two 1-ounce shots of whiskey (100 proof) between 9:00 pm and 11:00 pm. What is the expected breath ethanol concentration range (g/210L) of a test performed at 1:00 am?
 - A. 0.04 – 0.06
 - B. 0.07 – 0.09
 - C. **0.10 – 0.12**
 - D. 0.13 – 0.15
 - E. 0.16 – 0.18
 - Topic: Case Interpretation Human Performance

5. Which specimen can assist with determining if alcohol consumption occurred antemortem or postmortem?

- A. Liver
- B. Kidney
- C. Urine
- D. Blood
- E. **Vitreous humor**

- Topic: Case Interpretation Postmortem

6. Which term best describes the “non-targeted analytes that may impact the ability to detect, identify, or quantitate a target analyte”?

- A. Ion suppression
- B. Precision
- C. Decision point
- D. **Interference**
- E. Accuracy

- Topic: Laboratory Practices

7. Who invented the Breathalyzer?

- A. Widmark
- B. Dragendorff
- C. **Borkenstein**
- D. Paracelsus
- E. Orfila

- Topic: Miscellaneous Topics

8. What color stopper blood collection tube is preferred for metal analysis?

- A. Red
- B. Purple
- C. **Royal blue**
- D. Green
- E. Lavender

- Topic: Pathology and Specimens

9. What term is used to describe a specimen that measures the quantitative reliability within a batch?

- A. Blank
- B. **Control**
- C. Calibrator

- D. Correlation coefficient
- E. Internal standard

- Topic: Quality Assurance

10. What is a nanogram?

- A. **One billionth of a gram**
- B. One hundredth of a microgram
- C. One hundredth of a milligram
- D. One millionth of a gram
- E. One thousandth of a milligram

- Topic: Statistics and Measurement