

**Chapter 01: Historical Perspectives on Dental Hygiene and Periodontology**  
**Perry/Beemsterboer/Essex: Periodontology for the Dental Hygienist, 4th Edition**

**MULTIPLE CHOICE**

1. Periodontal diseases are as old as human civilization. Periodontal diseases in the early 1800s were considered incurable and beyond the reach of medical skill.
  - a. Both statements are TRUE.
  - b. Both statements are FALSE.
  - c. The first statement is TRUE, and the second statement is FALSE.
  - d. The first statement is FALSE, and the second statement is TRUE.

ANS: A

	Feedback
<b>A</b>	Correct! Both statements are true. Periodontal diseases were considered incurable because they were so commonly found and always led to tooth loss. Scientific advances over the centuries have led to cures for most forms of the disease.
<b>B</b>	Incorrect. Both statements are true. Periodontal diseases were considered incurable because they were so commonly found and always led to tooth loss. Scientific advances over the centuries have led to cures for most forms of the disease.
<b>C</b>	Incorrect. Both statements are true. Periodontal diseases were considered incurable because they were so commonly found and always led to tooth loss. Scientific advances over the centuries have led to cures for most forms of the disease.
<b>D</b>	Incorrect. Both statements are true. Periodontal diseases were considered incurable because they were so commonly found and always led to tooth loss. Scientific advances over the centuries have led to cures for most forms of the disease.

REF: Interrelationship of Early Periodontics to Dental Hygiene, page 4

2. Early evidence of the use of substances that acted similar to dentifrice comes from:
  - a. Aristotle and the use of scrapers
  - b. Albucasis and the use of scalpels
  - c. Weinberger and the study of skulls
  - d. Chewsticks with intrinsic substances

ANS: D

	Feedback
<b>A</b>	Incorrect. A dentifrice is the agent used on the instrument or toothbrush to clean or polish the teeth. Toothpaste is a dentifrice. Aristotle used scrapers to remove calculus.
<b>B</b>	Incorrect. Albucasis was a surgeon. He wrote a book on surgical procedures that included dental procedures. His book described the procedures and drawings of the instruments. He discussed calculus removal, extractions, and anchoring teeth.

<b>C</b>	Incorrect. Weinberger reported that prehistoric skulls showed evidence of dental diseases such as caries, bone resorption, and periapical abscesses.
<b>D</b>	Correct! Chewsticks were created from specific tree barks that contained abrasive materials.

REF: Ancient Evidence of Periodontal Disease and Its Treatment, page 3

3. Some primitive groups chewed fiber sticks to clean the teeth. These sticks are called:
- Arraks
  - Siwaks
  - Mastics
  - Chewers
  - Tooth sticks

ANS: B

	<b>Feedback</b>
<b>A</b>	Incorrect. Siwak is the name associated with chewsticks.
<b>B</b>	Correct! Siwak is the name associated with chewsticks.
<b>C</b>	Incorrect. Siwak is the name associated with chewsticks.
<b>D</b>	Incorrect. Siwak is the name associated with chewsticks.
<b>E</b>	Incorrect. Toothpicks are sometimes referred to as tooth sticks.

REF: Ancient Evidence of Periodontal Disease and Its Treatment, page 3

4. Pierre Fauchard is referred to as the “father of modern dentistry.” He was the first person to develop a systematic method for dental practice that included the cleaning of teeth.
- Both statements are TRUE.
  - Both statements are FALSE.
  - The first statement is TRUE, and the second statement is FALSE.
  - The first statement is FALSE, and the second statement is TRUE.

ANS: A

	<b>Feedback</b>
<b>A</b>	Correct! Both statements are true. Fauchard was the first dentist to address dental diseases systematically.
<b>B</b>	Incorrect. Both statements are true. Fauchard was the first dentist to address dental diseases systematically.
<b>C</b>	Incorrect. Both statements are true. Fauchard was the first dentist to address dental diseases systematically.
<b>D</b>	Incorrect. Both statements are true. Fauchard was the first dentist to address dental diseases systematically.

REF: The Development of Modern Dentistry, page 3

5. Dentists in the early 1900s trained individuals who would specialize in the cleaning of teeth because the skill was time consuming, difficult to perform, and limited the time for performing other dental procedures.
- Both the statement and the reason are correct and related.

- b. Both the statement and the reason are correct but not related.
- c. The statement is correct, but the reason is not.
- d. The statement is not correct, but the reason is correct.
- e. Neither the statement nor the reason is correct.

ANS: A

	Feedback
A	Correct! Dentists developed the role of the dental hygienist to provide important preventive services to their patients while freeing some of their time for performing other procedures.
B	Incorrect. Dentists developed the role of the dental hygienist to provide important preventive services to their patients while freeing some of their time for performing other procedures.
C	Incorrect. Dentists developed the role of the dental hygienist to provide important preventive services to their patients while freeing some of their time for performing other procedures.
D	Incorrect. Dentists developed the role of the dental hygienist to provide important preventive services to their patients while freeing some of their time for performing other procedures.
E	Incorrect. Dentists developed the role of the dental hygienist to provide important preventive services to their patients while freeing some of their time for performing other procedures.

REF: The Development of the Profession of Dental Hygiene, page 4

6. Who erroneously believed that women did not have as many teeth as men?
- a. Leonard
  - b. Aristotle
  - c. Albucasis
  - d. Johannes Aranculus
  - e. Hippocrates

ANS: B

	Feedback
A	Incorrect. Leonard (nineteenth century) conservatively treated advanced cases of periodontal disease.
B	Correct! Aristotle did not believe that men and women possessed the same number of teeth.
C	Incorrect. Albucasis was a surgeon who wrote a book on surgical procedures that included information on dental procedures.
D	Incorrect. Johannes Aranculus researched the relationship between diet and oral health and disease.
E	Incorrect. Hippocrates prescribed the first known dentifrice.

REF: Ancient Evidence of Periodontal Disease and Its Treatment, page 3

7. The first dental hygiene educational program was established in what city?
- a. Boston

- b. Chicago
- c. Baltimore
- d. New York
- e. Bridgeport

ANS: E

	Feedback
A	Incorrect. In the early-to-middle 1900s, Boston was one of the three areas where dental hygienists were taught in clinics how to promote oral health and preventive measures and teach schoolchildren how to take care of their teeth.
B	Incorrect. Chicago is the current headquarters of both the American Dental Association and the American Dental Hygiene Association.
C	Incorrect. The first dental school was established in Baltimore, which is now the location of the Museum of Dentistry.
D	Incorrect. In the early-to-middle 1900s, New York was one of the three areas where dental hygienists were taught in clinics how to promote oral health and preventive measures and teach schoolchildren how to take care of their teeth. New York was one of the first states to require dental hygienists to have teaching credentials to work in the schools.
E	Correct! Dr. Alfred Fones developed the first dental hygiene educational program in Bridgeport, Connecticut.

REF: First Dental Hygiene Schools, page 4

8. The first school of dentistry was established in:
- a. Boston
  - b. Chicago
  - c. Baltimore
  - d. New York
  - e. Bridgeport

ANS: C

	Feedback
A	Incorrect. The first dental school associated with a university was at Harvard in Boston. In the early-to-middle 1900s, Boston was one of the three areas where dental hygienists were taught in clinics how to promote oral health and preventive measures and teach schoolchildren how to take care of their teeth. In addition, school dental clinics were in Boston.
B	Incorrect. Chicago is the home of the American Dental Association. G. V. Black, a well-known dental educator and scientist, taught at Northwestern Dental School in Chicago.
C	Correct! The first dental school was established in Baltimore, which is now the location of the Museum of Dentistry.
D	Incorrect. In the early-to-middle 1900s, New York was one of the three areas where dental hygienists were taught in clinics how to promote oral health and preventive measures and teach schoolchildren how to take care of their teeth.
E	Incorrect. Dr. Alfred Fones established the first school of dental hygiene in Bridgeport, Connecticut.

REF: Establishing Formal Dental Education: 1800 to 1900, page 4

9. The first school of dentistry affiliated with a university was established in:
- Boston
  - Chicago
  - Baltimore
  - New York
  - Bridgeport

ANS: A

	Feedback
A	Correct! The first university to affiliate with a school of dentistry was Harvard in Boston.
B	Incorrect. Chicago is the home of the American Dental Association. G. V. Black, a well-known dental educator and scientist, taught at Northwestern Dental School in Chicago. Among his contributions are the development of a formula for amalgam, the caries classification system, and the recognition that too much fluoride causes mottling of the enamel.
C	Incorrect. The first dental school was established in Baltimore, which is now the location of the Museum of Dentistry.
D	Incorrect. In the early-to-middle 1900s, New York was one of the three areas where dental hygienists were taught in clinics how to promote oral health and preventive measures and teach schoolchildren how to take care of their teeth.
E	Incorrect. Dr. Alfred Fones established the first school of dental hygiene in Bridgeport, Connecticut.

REF: Establishing Formal Dental Education: 1800 to 1900, page 4

10. Dentistry came to be considered a profession because it developed educational and licensing standards. Consensus that dentistry was science-based and not a trade contributed to this recognition.
- Both statements are TRUE.
  - Both statements are FALSE.
  - The first statement is TRUE, and the second statement is FALSE.
  - The first statement is FALSE, and the second statement is TRUE.

ANS: A

	Feedback
A	Correct! Both statements are true. Science-based practices led to the recognition that dentistry is a profession that grows and changes with increasing knowledge.
B	Incorrect. Both statements are true. Science-based practices led to the recognition that dentistry is a profession that grows and changes with increasing knowledge.
C	Incorrect. Both statements are true. Science-based practices led to the recognition that dentistry is a profession that grows and changes with increasing knowledge.
D	Incorrect. Both statements are true. Science-based practices led to the

	recognition that dentistry is a profession that grows and changes with increasing knowledge.
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REF: Establishing Formal Dental Education: 1800 to 1900, page 3-4

11. Dr. Alfred Fones' first office dental hygienist had been trained in what profession?
- Nurse
  - Secretary
  - Homemaker
  - Schoolteacher
  - Dental assistant

ANS: E

	Feedback
<b>A</b>	Incorrect. Dr. Alfred Fones trained his dental assistant to be the first dental hygienist. Robin Adair, DDS, MD, in Atlanta, Georgia, reported to the Florida State Dental Society that he had trained a dental nurse in his office. He opened the fourth dental hygiene school in the United States in 1917.
<b>B</b>	Incorrect. Dr. Alfred Fones trained his dental assistant to be the first dental hygienist.
<b>C</b>	Incorrect. Dr. Alfred Fones trained his dental assistant to be the first dental hygienist.
<b>D</b>	Incorrect. Dr. Alfred Fones trained his dental assistant to be the first dental hygienist.
<b>E</b>	Correct! Dr. Alfred Fones trained his dental assistant to be the first dental hygienist.

REF: First Dental Hygienist, page 4

12. Dental hygienists have been licensed since:
- 1841
  - 1915
  - 1931
  - 1955
  - 1973

ANS: B

	Feedback
<b>A</b>	Incorrect. Dentists were first granted licenses by public agencies in 1841.
<b>B</b>	Correct! Connecticut was the first state to regulate dental hygiene practice extending licensure and verification of educational credentials to hygienists in 1915.
<b>C</b>	Incorrect. Connecticut was the first state to extend licensure to the first dental hygienist in 1915.
<b>D</b>	Incorrect. Connecticut was the first state to extend licensure to the first dental hygienist in 1915.
<b>E</b>	Incorrect. Connecticut was the first state to extend licensure to the first dental hygienist in 1915.

REF: Licensure and Regulation, page 5

13. The first state to pass a dental practice act that included licensure for dental hygienists was the state of:
- Georgia
  - Michigan
  - New York
  - Connecticut
  - Massachusetts

ANS: D

	Feedback
A	Incorrect. Robin Adair, DDS, MD, in Atlanta, Georgia, reported in 1911 that he had trained a dental nurse in his office. He opened the fourth dental hygiene school in the United States in 1917.
B	Incorrect. A Michigan dentist, Grace Rogers, helped form the American Academy of Periodontology in Cleveland, Ohio. School clinics were inside school buildings in Flint, Michigan. Primary teeth were extracted, 6-year molars were restored, and teeth were cleaned.
C	Incorrect. New York was one of the first states to require dental hygienists to have teaching credentials to work in the schools.
D	Correct! Connecticut was the first state to create a dental practice act that included dental hygiene practice.
E	Incorrect. The first dental school associated with a university was at Harvard in Boston. In the early-to-middle 1900s, Boston was one of the three areas where dental hygienists were taught in clinics how to promote oral health and preventive measures and teach schoolchildren how to take care of their teeth. In addition, school dental clinics were in Boston.

REF: Licensure and Regulation, page 5

14. Elementary school dental clinics were established because:
- Students missed school days as a result of dental problems.
  - Teachers wanted to provide dental services to students.
  - Civic-minded people were required to provide health services.
  - Dental hygienists needed to create places for their employment.

ANS: A

	Feedback
A	Correct! Elementary school children in underserved areas continued to miss school days as a result of dental problems.
B	Incorrect. Although teachers were concerned about finding ways to care for their students' teeth, school programs were established because the children were missing too many schools days because of dental problems.
C	Incorrect. Elementary school children in underserved areas continued to miss school days as a result of dental problems.
D	Incorrect. Elementary school children in underserved areas continued to miss

	school days as a result of dental problems.
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REF: School Programs for Children, page 6

15. When was the periodontal probe first used to assess periodontal disease?
- 1840 to 1860
  - 1913 to 1916
  - 1940 to 1960
  - 1970 to 1980
  - Impossible to determine, but it was recorded in ancient times.

ANS: C

Feedback	
<b>A</b>	Incorrect. The first dental school, the Baltimore College of Dentistry, opened in 1840. Thirteen more dental schools opened between 1840 and 1867. Periodontal probes were not yet used.
<b>B</b>	Incorrect. Dr. Alfred Fones opened the first school for dental hygienists in 1913. Periodontal probes were not yet used.
<b>C</b>	Correct! Periodontal probes came into use in the 1940s to the 1960s at the time when graduate programs in periodontics were first established. They were named after the schools where they were developed.
<b>D</b>	Incorrect. Periodontal probes came into use in the 1940s to the 1960s at the time when graduate programs in periodontics were first established.
<b>E</b>	Incorrect. Periodontal probes came into use in the 1940s to the 1960s at the time when graduate programs in periodontics were first established.

REF: Instruments for Evaluating and Treating Periodontal Diseases, page 6

16. What is the study of humanity?
- Biology
  - Anthropology
  - Histology
  - Psychology
  - Sociology

ANS: B

Feedback	
<b>A</b>	Incorrect. Biology is the study of life and living organisms.
<b>B</b>	Correct! Anthropology is the study of humanity.
<b>C</b>	Incorrect. Histology is the study of microscopic tissues and cells.
<b>D</b>	Incorrect. Psychology is the study of the mind and behavior of individuals.
<b>E</b>	Incorrect. Sociology is the study of the dynamics of society.

REF: Introduction, page 2

17. Who was the first person known to have developed toothpaste?
- Aristotle



- b. Hippocrates
- c. Albucasis
- d. Pliny the Elder

ANS: B

	Feedback
A	Incorrect. Aristotle used instruments similar to modern scalers.
B	Correct! Hippocrates prescribed the first known dentifrice or toothpaste. It consisted of the head of a hare, three mice, honey, and white wine. It was rubbed on the gums. It appears that this treatment may have been beneficial.
C	Incorrect. Albucasis, a surgeon, wrote a treatise, "De Chirurgia," which described how to perform dental procedures. In addition, he described calculus and wrote how to remove it.
D	Incorrect. Pliny the Elder was a naturalist (AD 79). He cured toothaches with remedies that included frogs, mice, and chants.

REF: Ancient Evidence of Periodontal Disease and Its Treatment, page 2

18. Who is considered to be the first periodontist?
- a. John M. Riggs
  - b. Leonard Koecker
  - c. F. H. Rehwinkel
  - d. D. D. Smith
  - e. Alfred Fones

ANS: B

	Feedback
A	Incorrect. In the United States, John Riggs introduced the idea that periodontal disease could be treated. He adopted the practice from Leonard Koecker.
B	Correct! Leonard Koecker was the first to treat advanced cases of periodontitis successfully. He is considered to be the first periodontist.
C	Incorrect. F. H. Rehwinkel renamed <i>periodontoclasia</i> to <i>pyorrhea alveolaris</i> .
D	Incorrect. D. D. Smith published articles and lectured on oral prophylaxis. Dr. Alfred Fones attended his lectures.
E	Incorrect. Dr. Alfred Fones trained the first dental hygienist.

REF: Interrelationship of Early Periodontics to Dental Hygiene, page 4

19. Who is considered to be the "father of American dentistry"?
- a. John Riggs
  - b. Arthur D. Black
  - c. T. B. Hartzell
  - d. Percy Howe
  - e. G. V. Black

ANS: E

	Feedback
A	Incorrect. John Riggs introduced the idea that gingivitis and periodontal disease

	could be treated with calculus débridement and subgingival curettage.
<b>B</b>	Incorrect. Arthur D. Black is G. V. Black's son. He taught at Northwestern University, where his father taught, and is credited with advocating periodontal surgery for diseased gingiva and bone.
<b>C</b>	Incorrect. T. B. Hartzell reported bacterial infection as the cause of periodontal-related diseases.
<b>D</b>	Incorrect. Percy Howe studied the effect of nutritional deficiency on supportive tissues of the periodontium.
<b>E</b>	Correct! G. V. Black is known as the "father of American dentistry." His many contributions modernized dentistry. He was an educator and researcher. He was a licensed physician, helped write the Illinois Dental Practice Act, served as the President of the Board of Dental Examiners, taught at several dental schools, and served as Dean of Northwestern Dental School. His caries classification system and amalgam formulation are still used today.

REF: Understanding the Causes of Periodontal Diseases, page 6

20. The first hygienist was:
- Ambroise Paré
  - Irene Newman
  - Grace Rogers Spaulding
  - Gillette Hayden

ANS: B

	<b>Feedback</b>
<b>A</b>	Incorrect. Ambroise Paré was the first apprentice dentist to be admitted to the College of Surgeons in Paris.
<b>B</b>	Correct! Irene Newman was the first dental hygienist. She was trained by Dr. Alfred Fones in 1906. She was also the first dental hygienist to be licensed in the United States. She was licensed by the state of Connecticut in 1915.
<b>C</b>	Incorrect. Grace Rogers Spaulding and Gillette Hayden formed the American Association of Periodontology.
<b>D</b>	Incorrect. Grace Rogers Spaulding and Gillette Hayden formed the American Association of Periodontology.

REF: First Dental Hygienist, page 4

21. Operating stools were first introduced to dentistry:
- By Maria Schitonstool in 1749
  - By Alfred Fones when he taught dental hygiene to Irene Newman
  - By G. V. Black; it was one of his many inventions
  - When four-handed dentistry was introduced in the 1960s

ANS: D

	<b>Feedback</b>
<b>A</b>	Incorrect. The stool was actually invented by Maria Schitonstool in 1749 in Switzerland, but it was not introduced to dentistry until the 1960s when

	four-handed dentistry was introduced.
<b>B</b>	Incorrect. Dr. Alfred Fones taught Irene Newman how to perform dental care in the standing position.
<b>C</b>	Incorrect. Although G. V. Black is credited with many things, the dental operator stool is not one of them.
<b>D</b>	Correct. Four-handed dentistry, which became popular in the 1960s, necessitated the use of sit-down dentistry. The operator stool was used.

REF: Care Delivery Techniques Improve, page 10

22. Which of the following duties is *not* an expanded-duty dental hygiene skill?
- Cavity preparation
  - Placing and carving amalgam restorations
  - Placing and finishing composite restorations
  - Placement and the removal of periodontal sutures and periodontal packs

ANS: A

	Feedback
<b>A</b>	Correct! Cavity preparation is not a function of an expanded-duty dental hygienist.
<b>B</b>	Incorrect. Placing and carving amalgam restorations are permitted as part of the expanded-duty of a dental hygienist in some states.
<b>C</b>	Incorrect. Placing and finishing composite restorations are permitted as part of the expanded-duty of a dental hygienist in some states.
<b>D</b>	Incorrect. Placement and the removal of periodontal sutures and periodontal packs are permitted as part of the expanded-duty of a dental hygienist in some states.

REF: Expanding Role of the Dental Hygienist, page 11

23. Dental hygienists practice in which of the following settings?
- Specialty dental practices
  - Public health settings
  - Nursing homes
  - Educational settings
  - All of the above

ANS: E

	Feedback
<b>A</b>	Incorrect. More than one answer is correct. Dental hygienists can practice in all of the settings listed.
<b>B</b>	Incorrect. More than one answer is correct. Dental hygienists can practice in all of the settings listed.
<b>C</b>	Incorrect. More than one answer is correct. Dental hygienists can practice in all of the settings listed.
<b>D</b>	Incorrect. More than one answer is correct. Dental hygienists can practice in all of the settings listed.
<b>E</b>	Correct! Dental hygienists can practice in all of the settings listed.

REF: Responsibilities of the Profession of Dental Hygiene, page 13

24. What was the first journal published by the American Dental Hygienists' Association (ADHA)?
- Access*
  - Dimensions of Dental Hygiene*
  - The Journal of the American Dental Hygienists' Association*
  - Registered Dental Hygienist (RDH) Magazine*

ANS: C

	Feedback
A	Incorrect. <i>Access</i> is a national journal published by the ADHA, but it was not the first journal. Its focus is on issues related to practice.
B	Incorrect. <i>Dimensions of Dental Hygiene</i> is a peer-reviewed scholarly journal. It was first published in 2003. It is not published by the ADHA.
C	Correct! <i>The Journal of the American Dental Hygienists' Association</i> was the first journal published by the ADHA. It is a refereed scientific journal and is currently called the <i>Journal of Dental Hygiene</i> .
D	Incorrect. PennWell Corporation publishes the <i>RDH Magazine</i> . It is not published by the ADHA.

REF: Role of Dental Hygienists in Periodontics: 1913 and Beyond, page 10

25. What medical emergency in the dental office decreased when dentists and dental hygienists began practicing while sitting down?
- Asthma attack
  - Heart attack
  - Syncope
  - Orthostatic hypotension

ANS: C

	Feedback
A	Incorrect. Asthma attacks tend to occur at night while a person is sleeping in the supine position.
B	Incorrect. Positioning patients in the supine or Trendelenburg position decreases syncope.
C	Correct! The occurrence of syncope decreases when patients are placed in the supine or Trendelenburg position. Laying the patient in the supine or Trendelenburg position is the treatment for syncope.
D	Incorrect. A common cause of orthostatic hypotension in the dental office is bringing the patient to the upright position from the supine or Trendelenburg position too quickly.

REF: Care Delivery Techniques Improve, page 10

26. The first state to allow dental hygienists to practice beyond the scope of normal practice (expanded functions) was:
- California

- b. Colorado
- c. Alaska
- d. Minnesota

ANS: B

	Feedback
A	Incorrect. California began testing the possibility of independent practice for hygienists between 1987 and 1990 under the Health Manpower Pilot Project. In 1998, the California legislature approved Registered Dental Hygienists in Alternative Practice (RDHAP) licensure for the hygienists in the pilot project. Hygienists in California are now eligible to become RDHAP with additional training.
B	Correct! In 1986, hygienists in Colorado were able to practice without the supervision of a dentist.
C	Incorrect. Alaska now has the Dental Health Aid Therapist.
D	Incorrect. Minnesota recently began training dental therapists and advance dental therapists.

REF: Dental Hygiene Practices, page 12

27. Albucasis described a connection between calculus and tooth loss. He indicated that calculus could be found supragingivally and subgingivally.
- a. Both statements are TRUE.
  - b. Both statements are FALSE.
  - c. The first statement is TRUE, and the second statement is FALSE.
  - d. The first statement is FALSE, and the second statement is TRUE.

ANS: A

	Feedback
A	Correct! Albucasis described a connection between calculus and tooth loss. In addition to describing the location of calculus, he described its appearance.
B	Incorrect. Albucasis described a connection between calculus and tooth loss. In addition to describing the location of calculus, he described its appearance.
C	Incorrect. Albucasis described a connection between calculus and tooth loss. In addition to describing the location of calculus, he described its appearance.
D	Incorrect. Albucasis described a connection between calculus and tooth loss. In addition to describing the location of calculus, he described its appearance.

REF: The Middle Ages, page 3

## MATCHING

*Match the following:*

- a. John Greenwood
- b. Percy Howe
- c. John M. Riggs
- d. Anton van Leeuwenhoek
- e. G. V. Black

- f. T. B. Hartzell
- g. D. D. Smith

1. At a time when the standard of care for periodontal disease was extraction, he advocated thorough calculus removal and subgingival curettage.
  2. He published an article describing the cause of periodontal disease as a local infectious agent.
  3. He identified streptococcal infection as the cause of the destruction of the periodontal membrane, supporting bone, and tissue.
  4. He wrote about the effects of dietary deficiency on the periodontium.
- 
1. ANS: C                      REF: Interrelationship of Early Periodontics to Dental Hygiene, page 4
  2. ANS: E                      REF: Understanding the Causes of Periodontal Diseases, page 6-7
  3. ANS: F                      REF: Understanding the Causes of Periodontal Diseases, page 7
  4. ANS: B                      REF: Systemic Influences on Periodontal Diseases, page 7

*Match the following:*

- a. Funding for dental schools to teach practice management
  - b. Legislation in California that allowed hygienists to train in alternative practice
  - c. Trained public health dental hygienists
  - d. Provided grants to teach mothers about child care and oral health
- 
5. Social Security Act of 1935
  6. Children's Bureau
  7. Teaching Expanded Auxiliary Management (TEAM) Grant Program
  8. Health Manpower Pilot Project

5. ANS: C                      REF: Role of Dental Hygienists in Periodontics: 1913 and Beyond, page 9
6. ANS: D                      REF: Role of Dental Hygienists in Periodontics: 1913 and Beyond, page 9
7. ANS: A                      REF: Expanding Role of the Dental Hygienist, page 12
8. ANS: B                      REF: Dental Hygiene Practices, page 12

**TRUE/FALSE**

1. Clinical attachment loss, probing depths, bone loss on radiographic films, and gingival bleeding are assessments that are used to measure disease activity.

ANS: F

Clinical attachment loss, probing depths, bone loss on radiographic films, and gingival bleeding are measures of periodontal disease. Active disease is not currently measured.

REF: Dental Hygiene in Dental Education Programs, page 8

2. A look into the past reveals that periodontal disease began in the 1800s with the advent of processed foods.

ANS: F

Periodontal disease has "plagued humans since the beginning of time." Prehistoric skulls show evidence of extensive caries, alveolar bone resorption, and periapical abscesses.

REF: Introduction, page 2

3. As early as the 1400s, Johannes Aranculus related diet to oral health and warned against eating sweets and biting hard things.

ANS: T

Johannes Aranculus wrote about a connection between diet and oral health. In addition to avoiding sweets and hard things, he warned against eating onions and advocated cleaning the teeth with wood and rinsing with wine.

REF: The Middle Ages, page 3

4. In 2009, a study showed that the majority of hygienists worked less than 20 hours per week.

ANS: F

The 2009 study showed that 42% of the hygienists worked 31 or more hours a week, 27% worked between 21 and 30 hours each week, and only 30% worked less than 20 hours per week.

REF: Changes in Dental Hygiene Practice, page 10

### SHORT ANSWER

1. Today, the majority of dental hygienists practice in \_\_\_\_\_.

ANS:

dental offices

Today, the majority of dental hygienists practice in dental offices. In 2003, 170,500 of the 177,000 licensed hygienists reported working in dental offices.

REF: Changes in Dental Hygiene Practice, page 10

2. In 2009, \_\_\_\_\_% of the practicing hygienists were between 40 and 59 years of age.

ANS:

55

In 2009, 55% of the hygienists were between 40 and 59 years of age. Only 35% were 39 years of age or younger.

REF: Changes in Dental Hygiene Practice, page 10

3. The \_\_\_\_\_ position places the patient's head lower than his or her heart.

ANS:

Trendelenburg

The Trendelenburg position places the patient's head lower than his or her heart.

REF: Care Delivery Techniques Improve, page 10

4. In the sixteenth century, \_\_\_\_\_ and \_\_\_\_\_ were anatomists who studied tooth anatomy.

ANS:

Andreas Vesalius; Bartolomeo Eustachio

Andreas Vesalius and Bartolomeo Eustachio were anatomists from Italy. Their works were some of the earliest studies of tooth anatomy.

REF: The Development of Modern Dentistry, page 3