Chapter 14: Fingerprints – Review Questions

Directions: Fill in the blank with word or term that best completes the statements or answers the questions below; circle the word TRUE if the statement is true, FALSE if the statement is false; circle the given word to make the statement correct.

1. The first systematic attempt at personal identification was devised and introduced by ____________.

2. A system of identification relying on precise body measurements is known as ________________.

3. The fingerprint classification system in most English-speaking countries was devised by ________.

4. TRUE or FALSE: The first systematic and official use of fingerprints for personal identification in the United States was adopted by the New York City Civil Service Commission. _____________

5. The individuality of a fingerprint (is, is not) determined by its pattern.

6. A point-by-point comparison of a fingerprint’s ________________ must be demonstrated in order to prove identity.

7. ________________ are a reproduction of friction skin ridges.

8. The form and pattern of skin ridges are determined by the (epidermis, dermal papillae).

9. A permanent scar forms in the skin only when an injury damages the ________________.

10. Fingerprints (can, cannot) be changed during a person’s lifetime.

11. The three general patterns into which fingerprints are divided are ______________________, ________________ and ________________.

12. The most common fingerprint pattern is the ________________.

13. Approximately 5 percent of the population has the ________________ fingerprint pattern.

14. A loop pattern that opens toward the thumb is known as a(n) (radial, ulnar) loop.

15. The pattern area of the loop is enclosed by two diverging ridges know as ________________.

16. The ridge point nearest the type-line divergence is known as the ________________.

17. All loops must have (one, two) delta(s).

18. The approximate center of a loop pattern is called the ________________.

19. If an imaginary line drawn between the two deltas of a whorl pattern touches any of the spiral ridges, the pattern is classified as a (plain whorl, central pocket loop).

20. The simplest of all fingerprint patterns is the ________________. 
21. Arches (have, do not have) type lines, deltas, and cores.

22. The presence or absence of the ____________ pattern is used as a basis for determining the primary classification in the Henry system.

23. The largest category (25 percent) in the primary classification system is (1/1, 1/2)

24. A fingerprint classification system (can, cannot) unequivocally identify an individual.

25. TRUE or FALSE: Computerized fingerprint search systems match prints by comparing the position of bifurcation and ridge endings. ________________

26. A fingerprint left by a person with soiled or stained fingerprints is called a ________________.

27. ________________ fingerprints are impressions left on a soft material.

28. Fingerprints that are not readily visible are called ________________.

29. Fingerprints on hard and nonabsorbent surfaces are best developed by the application of a(n) ________________.

30. Fingerprints on porous surfaces are best developed with ________________ treatment.

31. ________________ vapors chemically combine with fatty oils or residual water to visualize a fingerprint.

32. The chemical ________________ visualizes fingerprints by its reaction with amino acids.

33. Chemical treatment with ________________ visualizes fingerprints on porous articles that may have been wet at one time.

34. TRUE or FALSE: A latent fingerprint is first treated with Physical Developer followed by ninhydrin. ________________

35. A chemical technique known as ________________ is used to develop latent prints on nonporous surfaces such as metal and plastic.

36. ________________ occurs when a substance absorbs light and reemits the light in wavelengths longer that the illumination source.

37. High-intensity light sources known as ________________ are effective in developing latent fingerprints.

38. Once a fingerprint has been visualized, it must be preserved by ________________.

39. The image produced from a digital file is composed of numerous square electronic dots called ________________.

40. A (high-pass filter, frequency Fourier transform analysis) is used to identify repetitive patterns such as lines or dots that interfere with the interpretation of a digitized fingerprint image.