Biology 121 **Test 3** Fall 2010

**DETERMINE THE BEST ANSWER FOR EACH QUESTION. PLACE YOUR ANSWER IN THE CORRESPONDING SPACE ON THE ANSWER SHEET.**

**1-15:** Identifications – Refer to the pictures and answer the questions. **MPO 1.6**

1. Name the tissue.

2. Name the tissue.

3. Name the tissue.

4. Name the tissue.

5. Name the tissue.

6. Name the structure indicated by the arrow.

7. Name the tissue.

8. Name the tissue.

9. Name the tissue.

10. Name the tissue.

11. Name the tissue.

12. Name the tissue.

13. Name the structure indicated by the arrow.

14. Name the tissue.

15. Name the structure indicated by the arrow.

16. The many types of epithelial tissues are classified according to **MPO 1.6**

a. cell shape and number of cell layers

b. degree of vascularity and cell shape

c. cell size (volume) and cell shape

d. cell function(s) and degree of vascularity

e. all of the above criteria are used to classify epithelial cells

17. With every breath of air, connective tissue fibers in the lungs help these organs expand and contract. Which of the following is most likely to be the major protein in the lung connective tissue?

a. collagen

b. elastin **MPO 1.6**

c. laminin

d. fibronectin

18. Which of the following play a role in wound healing and tissue repair? **MPO 3.2**

a. age

b. blood circulation

c. nutrition

d. vitamins

e. all of the above

19. Which type of muscle is voluntary? **MPO 1.6**

a. cardiac

b. nonstriated

c. skeletal

d. smooth

20. Which statement is **CORRECT** concerning muscle tissue? **MPO 1.6**

a. cuboidal shape enhances function

b. highly cellular and well vascularized

c. contains contractile units make of collagen

d. all types of muscle cells are multinucleate

21. Which statement best describes connective tissue? **MPO 1.6**

a. usually contains a large amount of matrix

b. always arranged in a single layer of cells

c. primarily concerned with secretion

d. usually lines a body cavity

22. Which of the following is a characteristic of sebum? **MPO 2.1**

a. lubrication of the surface of skin and hair

b. consists of broken cells and fatty substances from the gland

c. a bactericidal function

d. all of the above are correct

23. Blood vessels are lacking from **MPO 1.6**

a. epithelial tissue and cartilage

b. muscular tissue

c. dense irregular connective tissue

d. bone and cartilage

e. nervous tissue and bone

24. The gel of the extracellular matrix is composed mostly of water and **MPO 1.6**

a. proteoglycans

b. collagen

c. keratin

d. reticular fibers

25. The shape of a person’s ear is due mainly to **MPO 1.6**

a. dense regular connective tissue

b. dense irregular connective tissue

c. elastic cartilage

d. fibrocartilage

e. ligaments

26. \_\_\_\_\_ is a genetic lack of melanin which leaves the skin almost white. **MPO 3.2**

a. Jaundice

b. Erythema

c. Cyanosis

d. Albinism

e. Psoriasis

27. The formation of scar tissue is called **MPO 3.2**

a. regeneration

b. necrosis

c. neoplasia

d. metaplasia

e. fibrosis

28. All glands that release their products by way of ducts, rather than directly into the bloodstream, are called \_\_\_\_\_ glands. **MPO 1.6**

a. exocrine

b. holocrine

c. apocrine

d. endocrine

29. Which type of epithelium is best suited for rapid filtration? **MPO 1.6**

a. simple squamous

b. stratified squamous

c. pseudostratified

d. transitional

e. stratified cuboidal

30. In melanized skin, the melanin accumulates mostly in **MPO 2.1**

a. the keratinocytes

b. the melanocytes

c. the Merkel cells

d. the stratum spinosum

31. The fastest rate of mitosis is seen in **MPO 2.1**

a. the stratum corneum

b. the stratum lucidum

c. the stratum granulosum

d. the stratum spinosum

32. The skin discoloration most likely to suggest physical abuse is **MPO 3.2**

a. pallor

b. erythema

c. hematoma

d. jaundice

e. albinism

33. The synthesis of \_\_\_\_\_ depends on the penetration of UV light through the epidermis.

a. collagen **MPO 2.1**

b. vitamin D

c. keratin

d. cholesterol

e. carotene

34. The glands most responsible for cooling the skin are **MPO 2.1**

a. ceruminous glands

b. sebaceous glands

c. sudoriferous (sweat) glands

d. exothermic glands

e. apocrine glands

35. The thickest layer of the skin generally is the **MPO 2.1**

a. epidermis

b. dermis

c. hypodermis

d. papillary layer

36. The most dangerous skin lesion is a **MPO 3.2**

a. malignant melanoma

b. squamous cell carcinoma

c. psoriasis

d. basal cell carcinoma

e. wart

**(37-40).** Match the epithelial membrane to the correct statement. **MPO 1.6**

a. cutaneous membrane c. serous membrane

b. mucous membrane

37. Moist membranes that line body cavities that are open to the exterior.

38. Membrane covering the soles of the feet.

39. Membrane composed of simple squamous epithelium over areolar connective tissue.

40. Membrane forming pericardium and pleura.

**(41-45).** Correctly identify the following major tissue types. **MPO 1.6**

1. connective c. muscle
2. epithelium d. nervous

41. Basis of the major controlling system of the body.

42. Surrounds and cushions body organs.

43. Allows you to smile, grasp, swim, ski, and throw a ball.

44. Forms the brain and spinal cord.

45. Supports and reinforces body organs.

**(46-50).** Identify the following connective tissue types. **MPO 1.6**

a. reticular tissue c. adipose tissue e. dense irregular

b. hyaline cartilage d. dense regular

46. Parallel bundles of collagenic fibers provide strength; found in tendons

47. Stores fat

48. The majority of the skin dermis

49. Firm, slightly “rubbery” matrix, milky white and “glassy” in appearance

50. Makes supporting framework of lymphoid organs

**(51 – 54).** Match the following terms and definitions. **MPO 3.2**

1. silvery white scar d. flat aggregation of melanocytes
2. inflammation of hair follicles e. benign tumor of blood capillaries
3. fluid filled pocket

51. hemangioma

52. blister

53. acne

54. freckle

Biology 121 – Test 3

Data obtained October 21, 2010

N = 37

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question #** | **MPO** | **# Correct** | **Percentage** | **Average for same MPO** |
| 1 | **1.6** | 29 | 78 |  |
| 2 | **1.6** | 29 | 78 |  |
| 3 | **1.6** | 12 | 32 |  |
| 4 | **1.6** | 22 | 59 |  |
| 5 | **1.6** | 18 | 49 |  |
| 6 | **1.6** | 9 | 24 |  |
| 7 | **1.6** | 14 | 38 | **62.3%** |
| 8 | **1.6** | 26 | 70 | **62.7%** |
| 9 | **1.6** | 22 | 59 | **70.8%** |
| 10 | **1.6** | 25 | 68 |  |
| 11 | **1.6** | 33 | 89 |  |
| 12 | **1.6** | 28 | 76 |  |
| 13 | **1.6** | 28 | 76 |  |
| 14 | **1.6** | 19 | 51 |  |
| 15 | **1.6** | 14 | 38 |  |
| 16 | **1.6** | 18 | 49 |  |
| 17 | **1.6** | 28 | 76 |  |
| 18 | **3.2** | 29 | 78 |  |
| 19 | **1.6** | 23 | 62 |  |
| 20 | **1.6** | 17 | 46 |  |
| 21 | **1.6** | 20 | 54 |  |
| 22 | **2.1** | 26 | 70 |  |
| 23 | **1.6** | 24 | 65 |  |
| 24 | **1.6** | 24 | 65 |  |
| 25 | **1.6** | 30 | 81 |  |
| 26 | **3.2** | 29 | 78 |  |
| 27 | **3.2** | 25 | 68 |  |
| 28 | **1.6** | 29 | 78 |  |
| 29 | **1.6** | 24 | 65 |  |
| 30 | **2.1** | 11 | 30 |  |
| 31 | **2.1** | 23 | 62 |  |
| 32 | **3.2** | 21 | 57 |  |
| 33 | **2.1** | 27 | 73 |  |
| 34 | **2.1** | 28 | 76 |  |
| 35 | **2.1** | 24 | 65 |  |
| 36 | **3.2** | 22 | 59 |  |
| 37 | **1.6** | 29 | 78 |  |
| 38 | **1.6** | 28 | 76 |  |
| 39 | **1.6** | 15 | 41 |  |
| 40 | **1.6** | 31 | 84 |  |
| 41 | **1.6** | 28 | 76 |  |
| 42 | **1.6** | 14 | 38 |  |
| 43 | **1.6** | 35 | 95 |  |
| 44 | **1.6** | 32 | 86 |  |
| 45 | **1.6** | 23 | 62 |  |
| 46 | **1.6** | 22 | 59 |  |
| 47 | **1.6** | 28 | 76 |  |
| 48 | **1.6** | 8 | 22 |  |
| 49 | **1.6** | 25 | 68 |  |
| 50 | **1.6** | 16 | 43 |  |
| 51 | **3.2** | 24 | 65 |  |
| 52 | **3.2** | 31 | 84 |  |
| 53 | **3.2** | 26 | 70 |  |
| 54 | **3.2** | 29 | 78 |  |

**MPO 1.6** **MPO 2.1** **MPO 3.2**