# \_\_\_\_\_\_\_\_\_ Basic Word Roots and Common Suffixes

In Unit 1 you will work with basic word roots and a handful of common suffixes. (These are listed in the Mini-Glossary, below.) You'll examine many compound medical terms and discover meanings for all the parts. You'll practice adding various endings to roots and combining forms. By study and practice you'll make more than 30 meaningful medical terms.

#### **Mini-Glossary**

acr/o (extremities)
cardi/o (heart)
cyan/o (blue)
cyt/o (cell)
dermat/o, derm/o (skin)
duoden/o (duodenum)

electr/o (electrical)

-algia (pain)

-ectomy (excision of)

-itis (inflammation of)

-ologist (one who studies, a specialist)

eti/o (cause)

gastr/o (stomach)

gram/o (record)

leuk/o (white)

megal/o (enlarged)

path/o (disease)

-ology (study of)

-osis, -a, -y (condition

of, usually abnormal)

-ostomy (forming a new opening)

-otomy (incision into)

-tome (instrument that cuts)

1

Acr/o means extremities (arms, legs, and the head). To refer to one or more extremities physicians use words containing

acr/o

2. Extremities are the parts of the body farthest from the center of the body. You could say these parts are located on the extreme ends of the main body. What parts are they? arms, legs, and head 3. Extremities in the human body are also known as limbs. When referring to the arms or legs we use the word acr/o. What term could designate the head as an extremity? acr, acr/o 4. When you read a term containing acr or acr/o (the combining extremities or limbs form), it should make you think of \_ Each of the terms acr/o/megaly, acr/o/cyan/osis, and acr/o/dermat/itis has a common word root that refers to what parts of the \_\_\_\_\_, \_\_\_\_\_, and \_ arms, legs, head Write the combining form of the word root meaning extremities. acr/o 6. Megal/o means enlarged or oversized. A word containing megal/o oversized, big, or means the part or organ of the body is \_ enlarged 7. enlargement of, The suffix -y denotes a condition, usually abnormal. Acr/o/megal/y oversized, or means the patient's abnormal condition involves extremities that are enlarged



Figure 1.1 Acromegaly

| acr/o/megal/y<br>acromegaly<br>ak rō meg′ a lē               | The illustration on page 2 shows a man with abnormally large hands and head. The term that describes this man's abnormal condition is / /             |
|--|---|
| acro/megaly  | 9. Occasionally you may see a person with very large hands, feet, nose, and chin. The abnormal condition may be                                       |
|  | 10. Here are two new suffixes: -ologist means one who studies, a specialist -itis means inflammation of (something) dermat/o refers to the skin.      |
| skin   | A dermat/ologist is a specialist in the field of medicine who specializes in treating disease of the  |
| inflammation of the  | Dermat/itis means   |
| skin   | Underline the word root in the following medical terms.   |
|  | Write what each means.  |
| <u>Dermat</u> itis   | Dermatitis means  |
| <u>Dermat</u> ologist  | Dermatologist means   |
|  | Now, circle the suffix in each term.  |
| acr/o/dermat/itis<br>acrodermatitis<br>ak rō der' ma tī' tis | 11. Acrodermatitis is a term meaning inflammation of the skin of the extremities. A person displaying red, inflamed hands may have a condition of / / |
| acrodermatitis   | 12. A busy homemaker may experience an inflammatory condition of her hands and lower arms. The physician may describe this abnormal condition as      |
| inflammation of<br>extremities<br>skin                       | 13. Remembering that the term acrodermatitis means inflammation of the skin of the extremities, explain the following:  -itis is a suffix that means  |

|  | 14. <i>Cyan/o</i> means blue or blueness. The suffix <i>-osis</i> denotes an abnormal condition. Cyan/osis means an abnormal condition of blueness.  |
|--|--|
| abnormal blueness of the extremities                 | What do you think acr/o/cyan/osis means?   |
| cyan or cyan/o                                       | The part of the medical term that tells you the color blue is present is   |
| -osis  | The part of the medical term denoting that an abnormal condition exists is the suffix  |
| -osis  | 15. To denote an abnormal condition, use the suffix  |
| condition extremities                                | Acrocyanosis may be defined as the abnormal of blueness of the   |
| acr/o/cyan/osis<br>acrocyanosis<br>ak rō sī ə nō'sis | 16. Blueness of the extremities is usually due to a reduced amount of oxygen supply to the hands and feet. If the lungs don't take in enough oxygen or the heart doesn't pump enough good blood around the body, the patient's hands and feet may exhibit an abnormal condition described as / / |
| acrocyanosis   | 17. When the lungs cannot move enough oxygen into the blood because of asthma, blueness of the extremities may result. This is another cause of  |
| the condition of<br>blueness of the<br>extremities   | 18. Acrocyanosis means   |
| -osis  | 19. Dermat/osis denotes an abnormal skin condition. The suffix that means abnormal condition is  |
| cyan/osis<br>cyanosis<br>sī ə nō'sis                 | 20.  Osis is a suffix meaning (usually abnormal) condition. Now, build a term that means an abnormal condition of blueness: /  |

| dermat/osis<br>dermatosis<br>der ma tō'sis                | 21. Build a term meaning a skin condition (abnormal, of course):  |  |  |
|---|---|--|--|
| skin  | 22. The Greek word <i>tomos</i> means a piece cut off. From this word we have many words that refer to cutting: ectomy (cut out), otomy (cut into), -tome (an instrument that cuts). A dermatome is an instrument that cuts |  |  |
| dermat/ome<br>dermatome<br>derm'ə tōm                     | 23. A dermatome is a surgical instrument. When a physician wants a thin slice of a patient's skin for a skin graft, the doctor asks for a   |  |  |
| a condition of bluish<br>discoloration of the<br>skin     | 24. Dermat, dermat/o refer to the skin. Cyan/o/derm/a means   |  |  |
| a disease or abnormal condition of the skin               | Dermat/osis means   |  |  |
| cyan/o/derm/a<br>cyanoderma<br>sī ə nō der'mä             | 25. Cyanoderma sometimes occurs when children swim too long in cold water. If a patient has a bluish discoloration of the skin, for any reason, the person may exhibit / / /  |  |  |
| leuk or leuk/o  | 26.  Leuk/o means white or abnormally white. In the term leuk/o/derm/a, the part that means white is  |  |  |
| a condition of white<br>skin, or abnormally<br>white skin | 27. Leukoderma means  |  |  |
| leuk/o/derm/a<br>leukoderma<br>l <del>oo</del> kō der' mä | 28. Some people have much less color in their skin than is normal. Their skin is white. They may have / / /   |  |  |

|   | 29. $Cyt/o$ refers to a cell or cellsology is a suffix that means the study of.  |  |
|---|--|--|
| the study of cells  | What does cyt/ology mean?  |  |
| white blood cell  | 30. There are several kinds of cells in blood. One kind is the leuk/o/cyte. A leukocyte is a   |  |
| leuk/o/cyt/e<br>leukocyte<br>lōo' kō sīt                          | 31. There are several different kinds of cells in the bloodstream. When a physician wants to know how many "infection-fighting" white blood cells are circulating, the doctor asks the lab technician to count the / /cytes. |  |
| leuk/emia<br>leukemia<br>l <del>oo</del> kē' mē ə                 | 32. <i>Emia</i> is a suffix meaning blood. When a person's blood contains far too many white blood cells, it may indicate a condition sometimes described as "blood cancer." A term meaning literally <i>white blood</i> is  |  |
| acr/o<br>megal<br>y   | 33. In the term <i>acromegaly,</i> the combining form used for extremities is, the word root for oversized is, and the suffix meaning <i>condition of</i> is   |  |
| a condition of oversized<br>heart, or enlargement<br>of the heart | 34. Now try this. <i>Cardi/o</i> means heart. Another suffix meaning condition of is -a. What does megal/o/cardi/a mean?   |  |
| megal/o/card/ia<br>megalocardia<br>meg ə lō kär' dē ä             | 35. When any muscle exercises, it gets larger. If the heart muscle overexercises, an enlarged condition of the heart may occur. It is described as / /   |  |
|   |  |  |

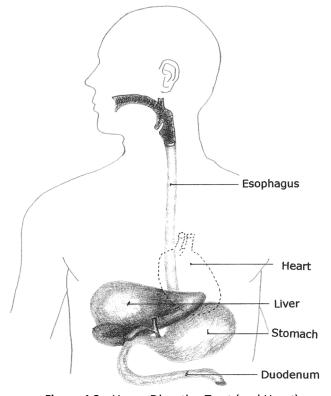


Figure 1.2 Upper Digestive Tract (and Heart)

The Digestive Tract begins with the oral cavity. The teeth pulverize ingested food and soften it. The action of the tongue moves the partly digested food into the *esophagus* by swallowing. Then strong muscular contractions move the food to the *stomach*. In the stomach the food is further processed mechanically and chemically. Then it passes into the highly coiled intestine. The first part of the intestine is called the *duodenum*.

Esophagus (esophag/o) Stomach (gastr/o) Duodenum (duoden/o) Heart (cardi/o)

36.

When the heart muscle doesn't receive an adequate supply of oxygen, the heart may beat more often. Inadequate oxygen makes the heart work harder and may lead to an enlarged heart described as

megalocardia or cardiomegaly

|                     | 37.   |                            |              |  |
|---------------------|---|----------------------------|--------------|--|
| magal/a/gastr/ia    | Try this one. Gastr is the wo   | ord root for stomach. When | the          |  |
| megal/o/gastr/ia    | Try this one. <i>Gastr</i> is the word root for stomach. When the stomach enlarges so that it crowds other organs, an undesirable |                            |              |  |
| megalogastria       |   |                            |              |  |
| meg ə lō gas' trē ä | condition exists known as   |                            |              |  |
| OR                  | //  | / /:                       | ıa.          |  |
| gastromegaly        | emarged   |                            |              |  |
|                     | ,   | OR                         |              |  |
| gas' trō meg' a lē  | //  | / /                        | у.           |  |
|                     | stomacn   | enlarged                   |              |  |
| oversized heart, or | 38.   |                            |              |  |
|                     |   |                            |              |  |
| enlargement of the  | Megalocardia means  |                            |              |  |
| heart               | -   |                            | •            |  |
| (the same thing)    | What does cardiomegaly m  | ean?                       |              |  |
| C/                  | <i>G .</i>  |                            |              |  |
|                     | 39.   |                            |              |  |
|                     | The suffix -itis means inflan   | nmation of (something).    |              |  |
| inflammation of the | What does carditis mean?  |                            |              |  |
| heart               | What does cardids incair.   |                            |              |  |
| licart              |   |                            |              |  |
| stomach             | Both gastr-, gastr/o mean _   |                            | <del>,</del> |  |
| inflammation of the | Gastritis means   |                            |              |  |
| stomach             |   |                            |              |  |
| 200                 |   |                            |              |  |
|                     | 40.   |                            |              |  |
|                     | Here's a quick review. Using the suggested answers, write the   |                            |              |  |
|                     | meaning of each of the following terms.   |                            |              |  |
|                     | meaning of each of the following  | swing terms.               |              |  |
|                     | SUGGESTED ANSWERS:  |                            |              |  |
|                     | abnormal condition of   | heart                      |              |  |
|                     | blueness  | inflammation of            |              |  |
|                     | cell  | skin                       |              |  |
|                     |   |                            |              |  |
|                     | cutting instrument  | stomach                    |              |  |
|                     | enlarged, oversized   | white                      |              |  |
|                     | extremities   |                            |              |  |
| extremities         | acr/o   |                            |              |  |
|                     |   |                            |              |  |
| blueness            | cyan/o  |                            |              |  |
| white               | leuk/o  |                            |              |  |
| stomach             | gastr/o   |                            |              |  |
| cell                | cyt/o   |                            |              |  |
| heart               | cardi/o   |                            |              |  |

| enlarged, oversized   | megal/o   |  |  |
|---|---|--|--|
| skin  | derm/o, dermat/o  |  |  |
| abnormal condition of   | -osis (-a, -y)  |  |  |
| inflammation of   | -itis   |  |  |
| cutting instrument  | -tome   |  |  |
|   | 41. Now build a medical term for each of the following: a condition of oversized extremities  |  |  |
| acro/megal/y  | extremities oversized /   |  |  |
| leuko/cyte  | a white cell /  |  |  |
| dermat/itis   | inflammation of the skin /  |  |  |
| megalo/cardi/a<br>OR<br>cardio/megal/y                              | a condition of enlarged heart / /   |  |  |
| carara, megar, y  |   |  |  |
| It's up to you, of course, but here are some key words.             | 42. Let's have a change of pace here. Professional health workers use some special words to talk about illness and sick people. Here are just a few you'll find very useful. Read each definition. Then underline a key word or words to help you remember the meaning of the term. |  |  |
| sickness, illness   | Disease is a condition in which bodily health is impaired. It means sickness or illness.  |  |  |
| <u>exhibition</u> , <u>display</u> ,<br><u>evidence</u>             | Manifestation is proof of impaired bodily health. It's a display, exhibition, or evidence of disease.   |  |  |
| <u>changes</u> (structural and functional)                          | Pathology is the scientific study of changes in the human body (structural and functional) produced by disease.   |  |  |
| causes (ētēology)   | Etiology is the scientific study of causes of disease.  |  |  |
|   | You may refer to the definitions if you need help answering the next few frames.  |  |  |
| The cause of the patient's disease is not yet known (and may remain | 43. If a physician says that a patient's disease is of unknown etiology, what would that mean to you?   |  |  |
| unknown).   | ·   |  |  |

| sickness, illness                                  | 44. Another word for disease is  |  |
|--|--|--|
| evidence, or exhibition                            | 45. Manifestation is a display, or of disease.   |  |
| causes   | 46. Etiology is the scientific study of of disease.  |  |
| structural<br>functional<br>disease                | Pathology is the scientific study of and changes in the body produced by   |  |
|  | 48. Select the best term for each definition. Write your choice in the space provided.   |  |
|  | pathology etiology manifestation disease   |  |
| disease  | Another term for illness or sickness is  |  |
| manifestation                                      | Evidence, or proof, of disease is  |  |
| etiology   | The study of causes of disease is  |  |
| pathology  | The scientific study of changes in the body produced by disease is   |  |
| path/ologist<br>pathologist<br>path ol' ə jist     | 49. The suffix <i>-ology</i> means the study of, the suffix <i>-ologist</i> means one who studies (and becomes an expert). One who studies structural and functional changes in the body produced by disease is a/ |  |
| cardi/ologist<br>cardiologist<br>kär dē ol' ə jist | 50. Some physicians specialize in heart disease. The specialist who determines that a heart is deformed is a  heart  |  |
|  |  |  |



Figure 1.3 Electrocardiography (ECG)

Electrocardiography is a method of recording electrical currents

traversing the heart muscle just prior to each heart beat. An Electrocardiogram is a graphic record of heart action currents that are obtained by electrocardiography. 51. A heart doctor who reads an electr/o/cardi/o/gram (a record of electrical impulses generated by the heart) is a specialist in heart cardiologist 52. Complete the meaning of electr/o/cardi/o/gram: a record of electrical waves given off by Gram means a record or recording, electr/o means \_\_\_\_\_ the heart (or equivalent) heart cardi/o means \_\_\_\_\_ 53. electr/o/cardi/o/gram The electr/o/cardi/o/gram is a record obtained by electrocardiogram electr/o/cardi/o/graph/y. A technician can learn electrocardiogē lek' trō kär' dē ə raphy, but it takes a cardiologist to read the gram

54.

A physician specialist can look at a report that looks like this



Figure 1.4 Electrocardiogram (ECG)

| cardiologist<br>electrocardiogram  | and learn something about a patient's heart function. This specialist is probably a and can read an |  |  |
|--|---|--|--|
| cardi/algia cardialgia kär dē al' jē a (There is no need to add a vowel to the root cardi because -algia begins with a vowel.) | 55. The suffix -algia means pain. Form a word that means heart pain:  heart  heart                  |  |  |
| cardialgia   | 56. When a patient complains of pain in the heart, the symptom is known medically as  57.           |  |  |
|  | Gastralgia means pain in the stomach.   |  |  |
| stomach  | Gastr is the root for   |  |  |
| -algia   | The suffix for pain is  |  |  |
| stomach  | 58. Gastr/ectomy means excision (removal) of all or part of the stomach. Gastr means                |  |  |
| to cut out, excise, or remove surgically   | The suffix -ectomy means  |  |  |

| gastr/ectomy<br>gastrectomy<br>gas trek' tō mē  | When a patient's stomach ulcer perforates, the surgeon may need to remove part of the stomach. The medical term for the procedure is  (stomach) / (excision of)   |  |  |
|---|---|--|--|
|   | (stomach) (excision of)   |  |  |
| gastrectomy   | 60. Cancer of the stomach may require a surgeon to remove all or part of the patient's stomach. This procedure is a   |  |  |
| gastr/itis<br>gastritis<br>gas trī' tis   | 61.  Form a word that means inflammation of the stomach.  |  |  |
| duoden/um<br>duodenum<br>dōō ōd' nəm (or<br>dōō ō dē' nəm)                                      | 62. The stomach empties its contents into the first section of the intestine, called the duodenum. <i>Duoden</i> is the word root for   |  |  |
| gastr   | What is the root for stomach?   |  |  |
| stomach and<br>duodenum   | 63. The suffix <i>-ostomy</i> means a procedure to form a new opening. Gastr/o/duoden/ostomy means forming a new opening between the and  |  |  |
| gastr/o/duoden/<br>ostomy<br>gastroduodenostomy<br>gas' trō d <del>o</del> o ō de nos'<br>tō mē | 64. A surgeon may need to remove a portion of a diseased stomach. If the natural connection is removed, then the surgeon must form a new opening between the stomach and duodenum. This procedure is called / / |  |  |
| a surgical procedure to<br>form a new opening<br>between the stomach<br>and duodenum            | When an abnormal condition exists between the stomach and the duodenum, a surgeon may need to perform a gastroduodenostomy, which means   |  |  |

| duodenum<br>dū ō dē' num   | The suffix -ectomy means excision of; -ostomy means forming a new opening. The form -otomy means incision into. A duo/den/otomy is an incision into the |
|--|---|
| -otomy   | 67. The suffix for incision into is   |
| duoden/otomy<br>duodenotomy<br>doo od ə not' ə mē                | If a physician makes an incision into the wall of the duodenum, the doctor has performed a /  |
| -itis  | 68. The suffix for inflammation is  |
| duoden/itis<br>duodenitis<br>doo od ə nī' tis                    | The word for inflammation of the duodenum is  |
|  | 69.<br>Duoden/al means of or pertaining to the duodenum.  |
| of, or pertaining to,<br>mother; of, or<br>pertaining to, father | -al is a suffix meaning of, or pertaining to. Therefore matern/al means and patern/al means   |
| duoden/al<br>duodenal<br>d <del>oo</del> ō dē' nəl               | 70. In the sentence "Duodenal carcinoma was present," the word meaning of, or pertaining to, the duodenum is  |
| duoden/ostomy<br>duodenostomy<br>d <del>oo</del> od ə nos' tō mē | 71. The suffix -ostomy means making a new opening. The word to form a new opening into the duodenum is  |
| gastroduodenostomy   | 72. Here's one for you to figure out. A duodenostomy can be formed in more than one manner. If it is formed with the stomach, it is called a            |
| -ostomy  | 73. The suffix for forming a new opening is   |

74.

Let's review what you've covered. Using the suggested answers, write the meaning of each of the following terms.

#### SUGGESTED ANSWERS:

blueness duodenum cell electrical

cause(s) enlarged, oversized

changes due to disease record of

duodenum changes due to disease record of cell electric cause enlarged, oversized blueness

| duoden/o          |      |  |
|-------------------|------|--|
| path/o            |      |  |
| gram/o            |      |  |
| cyt/o<br>electr/o | <br> |  |
| electr/o          | <br> |  |
| eti/o             | <br> |  |
| megal/o           | <br> |  |
| cyan/o            |      |  |

Now try it with the suffixes you just learned.

#### SUGGESTED ANSWERS:

(abnormal) condition of incision into cutting instrument inflammation of form a new opening of, or pertaining to

one who studies, specializes in pain

of, or pertaining to inflammation of (abnormal) condition form a new opening cutting instrument incision into pain one who studies

| -al           |  |
|---------------|--|
| -itis         |  |
| -osis, -a, -y |  |
| -ostomy       |  |
| -tome         |  |
| -otomy        |  |
| -algia        |  |
| alagist       |  |

|                | 76.   |                                  |  |
|----------------|---|----------------------------------|--|
|                | Now build some new words.   |                                  |  |
| cyan/osis      | A condition of blueness is  | ess condition.                   |  |
|                |   | condition.                       |  |
| oath/ologist   | One who studies bodily changes produced by disease is a   |                                  |  |
|                | changes in the body one who studies   |                                  |  |
| luoden/ostomy  | A surgical procedure that forms a new opening in the duodenum is  |                                  |  |
|                | a / form a new  | opening ·                        |  |
| eti/o/logic/al | A term meaning of, or pertaining to, the study of causes of disease is / / /  causes of disease the study of /  |                                  |  |
|                | causes of disease th  | e study of pertaining to         |  |
|                | 77. While working through Unit 1, you formed the following new medical terms. Read them one at a time and pronounce each aloud several times until you can articulate each term clearly and correctly If a friend pronounces each term for you, could you spell it correctly? Try it. |                                  |  |
|                | acrocyanosis (ak rō sī ə nō' sis)   | dermatologist                    |  |
|                | acrodermatitis  | (der ma tol' ə jist)             |  |
|                | (ak rō der' ma tī'tis)  | dermatome (derm' ə tōm)          |  |
|                | acromegaly (ak rō meg' a lē)  | dermatosis (der ma tō' sis)      |  |
|                | cardialgia (kär dē al' jē a)  | disease (diz ēz')                |  |
|                | cardiologist (kär dē ol' ə jist)  | duodenal (dōo ō dē' nəl)         |  |
|                | carditis (kär dī' tis)  | electrocardiogram                |  |
|                | cyanoderma (sī ə nō der' mä)  | (ē lek' trō kär' dē ə gram)      |  |
|                | cyanosis (sī ə nō' sis)   | etiological (ē' tē ō loj' i kəl) |  |
|                | cytology (sī tol' ə jē)   | gastralgia (gas tral' jē a)      |  |
|                | gastrectomy   | manifestation                    |  |
|                | (gas trek' tō mē)   | (man' ə fes tā' shən)            |  |
|                | gastritis (gas trī' tis)  | megalocardia                     |  |
|                | gastroduodenostomy  | (meg ə lō kär′ dē ä)             |  |
|                | (gas' trō d <del>oo</del> ō de nos' tō mē)  | megalogastria                    |  |
|                | leukemia (lōo kē' mē ə)   | (meg ə lō gas' trē ä)            |  |
|                | leukocyte (loo' ko sīt)   | pathologist (path ol' ə jist)    |  |
|                | leukoderma (l <del>oo</del> kō der' mä)   | pathology (path ol' ə jē)        |  |

Before going on to Unit 2, take the Unit 1 Self-Test that follows.

# **Unit 1 Self-Test**

#### Part 1

From the list of definitions on the right, select the correct meaning for each of the terms in the left-hand column. Write the letter in the space provided.

| 1.  | Megalocardia        |
|-----|---------------------|
| 2.  | Cardiology          |
| 3.  | Duodenostomy        |
| 4.  | Leukemia            |
| 5.  | Dermatologist       |
| 6.  | Electrocardiography |
| 7.  | Acromegaly          |
| 8.  | Gastritis           |
| 9.  | Dermatome           |
| 10. | Manifestation       |
| 11. | Gastroduodenostomy  |
| 12. | Etiology            |
| 13. | Acrocyanosis        |
| 14. | Pathologist         |
| 15. | Gastralgia          |
|     |                     |

- a. Study of, or pertaining to, causes (of disease)
- b. A specialist in the field of skin diseases
- c. A condition of blueness of the extremities
- d. Enlargement of the heart
- e. A surgical procedure forming a new opening in the duodenum
- f. Display, evidence of disease
- g. One who specializes in the study of structural and functional changes in the body
- h. Pain in the stomach
- i. Inflammation of the stomach
- j. Recordings of electrical waves of the heart
- k. An abnormal condition of enlarged extremities
- 1. A surgical instrument for cutting skin
- m. A surgical operation to make a new opening between the stomach and duodenum
- n. The study of disease of the heart
- o. An abnormal condition of too many white blood cells

#### Part 2

Write a medical term for each of the following:

1. Impaired bodily health
2. Bluish discoloration of the skin
3. White cell
4. Oversized or enlarged stomach
5. Evidence of disease
6. The study of causes of an illness
7. Excision or removal of the stomach
8. Pertaining to the duodenum
9. Generalized condition of blueness
10. Heart pain
11. Inflammation of the heart
12. An abnormal condition of white skin
13. Inflammation of the skin of the extremities

# **ANSWERS**

14. Study of cell(s)

15. An abnormal condition of the skin

| Part 1 | Part | <b>:</b> 2     |
|--------|------|----------------|
| 1. d   | 1.   | disease        |
| 2. n   | 2.   | cyanoderma     |
| 3. e   | 3.   | leukocyte      |
| 4. o   | 4.   | megaloga stria |
| 5. b   | 5.   | manife station |
| 6. j   | 6.   | etiology       |
| 7. k   | 7.   | gastrectomy    |
| 8. i   | 8.   | duodenal       |
| 9. l   | 9.   | cyanosis       |
| 10. f  | 10.  | cardialgia     |

11. m 11. carditis

12. a 12. leukoderma

13. c 13. acrodermatitis

14. g 14. cytology

15. h 15. dermatosis