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# UNIT 5 NOTE-TAKING -1

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## Structure

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- 5.10 Answers to Self-check Exercises

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## 5.0 OBJECTIVES

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The aim of this unit is to help you take notes for the purpose of study. For this you require a) the ability to read with a purpose, and to separate the essential information in a text from that which is repetitive and irrelevant, b) shortening devices to save time and condense your material, and c) a proper organization of the ideas contained in the text in terms of main points and subordinate points.

After you have completed this unit, you should be able to use these skills in preparing your notes.

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## 5.1 INTRODUCTION

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Almost anyone who studies at a college or university or works in an office has to take notes sometimes. As a student you generally take notes while listening to a lecturer in the classroom or a speaker at a seminar, or when reading your course books. In an office you may need to take notes when the boss gives you instructions, or when you attend a meeting or a conference. Sometimes you may have to take an examination to improve your qualifications or to compete for a better job. Then you have to take notes from the books you read. While taking notes, have you ever asked yourself the reason for taking them? There are usually two main reasons:

- i) to keep a record of the speaker's or the writer's main ideas (not to take down or copy every word);
- ii) to help your memory when, for example, you are revising for an examination, or preparing a report.

The tendency of many students is to try to write down as much as possible of what the teacher is saying. In this process, they often miss the main points of the lecture, but, on the other hand, take down a lot of unimportant information. Similarly, when you are taking notes from a book or an article, it is generally not a good idea to copy out large chunks of a text, unless you are going to quote from it.

In this unit we shall deal with taking notes from a reading text from the point of view of the organization of notes. In the next unit on Note-taking (Block 2, Unit 9) we shall discuss the organization of notes in terms of Tables and Diagrams.

## 5.2 HOW TO READ

When we read, we generally have a purpose in mind. The purpose may be to spend some time on a rainy afternoon by reading a detective novel or a love story.

Often our purpose is to obtain information on a particular topic. When you read a passage in order to obtain specific information, it is a good idea to acquaint yourself with the text by quickly going through it. You will notice that some paragraphs will contain the information you want, and they must be read carefully. Other paragraphs may contain a lot of repetition, and they can be skimmed, i.e. read faster and more superficially. There may be some passages that are of no interest to us or are completely irrelevant for our purpose, and they can be skipped.

### *Example 1*

In the passage that follows, your purpose in reading will be to obtain information about the various kinds of heart diseases, their causes and symptoms.

- A Heart disease is the enemy number one of the human body in our time. It accounts for the largest number of deaths in all affluent societies, outstripping cancer, accidents and infections as causes of death. In developing countries as well, this trend is apparent, now that fewer people die of infections, and more children survive the diseases of childhood.
- B There are four important types of heart disease. Firstly, congenital heart disease, which is present at birth; an example of this is the so-called 'blue baby'. It accounts for 2 per cent of all heart diseases. The second type, rheumatic, is quite common in some developing countries among the young people, and accounts for some 30 to 40 per cent of all heart cases. It is caused by an infection of the throat which, if untreated, causes damage to the heart. The symptoms are a chronic sore throat, painful joints and high fever. This disease is widespread in many developing countries, due to poor living conditions and overcrowding.
- C High blood pressure is also an important cause of heart disease, of the third type, hypertensive, and accounts for some 15 to 25 per cent of all heart cases. It is believed that among other factors such as stress and smoking, a higher salt intake in the diet leads to blood pressure.
- D Degenerative heart disease, commonly known as ischaemic heart disease, is the cause of heart attacks, and is one of the most important health problems among adults throughout the world. Ischaemic heart disease is due to blocking of the two blood vessels which supply blood to the heart muscle. At birth they are wide open, but in a diseased state one or more of these vessels is completely blocked, leading to defective blood supply to various portions of the heart. This results in the well-known symptom of pain on emotional or physical stress called angina. What causes this is the laying down of a fatty substance, called cholesterol, in the wall of the artery, which gradually blocks the vessel and may close it completely.
- E How does cholesterol get into the blood? It results partly from a diet rich in fats of animal origin, such as butter, cream, cheese, rich cuts of beef, ham and bacon, egg yolk, and saturated cooking fats, such as ghee.

(Based on 'The Heart' in Sarah Freeman, *Study Strategies in English*)

### *Glossary*

- A **'affluent** (adj.)/'æfluənt/ : having plenty of money or other possessions; wealthy  
**out'stripping** : getting ahead of  
**trend** (n.) : a general direction or course of development  
**ap'parent**/'æ'pærənt/ : easily seen or understood
- B **'blue baby** : a baby whose skin is blue when it is born because there is something wrong with its heart  
**'symptom** (n.)/'sɪmptəm/ : a change in the body which shows disease  
**'chronic** (adj.)/'krɒnɪk/ : lasting a long time

D de'fective 'blood sup'ply : faulty (here, insufficient) supply of blood

ham : preserved meat from a pig's leg

'bacon : salted or smoked meat from the back or sides of a pig

### Self-check Exercise 1

Read the above passage carefully and answer the following questions :

- 1 In Paragraph A, the writer mainly wishes to inform the reader that
- a) more children survive the diseases of childhood than ever before.
  - b) heart disease is also quite prevalent in developing countries.
  - c) heart disease is the world's major killer of our times.

(Choose the correct answer.)

2 State whether the following are true (T) or false (F):

- a) A congenital heart disease is something that a baby is born with. ( )
- b) A continually bad throat and fever will always lead to a rheumatic heart disease. ( )
- c) Rheumatic heart disease is common among young people in some countries. ( )
- d) People who smoke, but take less salt in their diet, are not likely to get high blood pressure. ( )
- e) Angina is a signal that a person has high blood pressure. ( )

3 a) In what types of heart disease does diet play an important role?

.....

b) What are the food habits that contribute to heart disease in each case?

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4 State the main idea of the passage. Write it as a title for the passage.

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5 a) The purpose in reading the passage was to find out details of the four types of heart disease in terms of their causes and symptoms. Which paragraphs do you think are unimportant for this purpose?

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b) Were they unimportant because

- i) they did not contain the information you wanted, or
- ii) the same information was repeated again and again?

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6 Write a summary of the passage in the form of points keeping in mind the purpose stated above.

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### 5.3 SPECIMEN NOTES

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Compare your account of the 4 types of heart disease (Question 6 of Exercise 1) with the notes given below :

Notes (1)	
Types of Heart Disease: their Causes and Symptoms	
1	Congenital heart disease (h.d.) present at birth, e.g., blue baby
2	Rheumatic h.d. ← (caused by) untreated infection of throat; symptoms — chronic sore throat, painful joints, and high fever. widespread in develop <sup>g</sup> countries ∴ overcrowd <sup>g</sup> + poor living conditions. accounts for 30-40 % of all heart cases.
3	Hypertensive h.d. ← high blood pressure ← stress, smoking + higher salt intake in diet. = degenerative h.d.
4	Ischaemic h.d. ← blockage of arteries by cholesterol → angina, heart attacks.

You will notice that the sentences and some of the words have been reduced, and certain symbols and abbreviations used. We give below a list of these reduction devices, which you can use while taking notes yourself.

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### 5.4 REDUCTION DEVICES

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Reduction devices are an important technique in note-taking. They help you save time when you are noting down something from a book. They are particularly useful when you are taking down notes from a lecture, because otherwise it will be difficult to keep pace with the speaker. Since notes do not contain repetitive and unnecessary information, reduction devices help to give a more organized picture of what the writer/speaker is saying.

## 1 You can use **symbols** (lines, arrows, etc.) instead of words.

### a) Arrows

Look at this passage from the text :

'Blockage of arteries leads to a defective blood supply to the heart. This results in the well known symptom of pain on emotional or physical stress called angina.'

In the notes we can write :

Blockage of arteries → def. blood supply → angina

An arrow can also mean 'changes into', 'causes', 'contributes to', etc.

An arrow in the reverse direction (←) means 'is attributed to', 'is caused by' as in the following example :

'Rheumatic heart disease is caused by an infection of the throat which is not treated'.

Rheumatic h.d. ← untreated throat infection

An arrow with two heads (↔) can mean 'related to'.

### b) Underlining is used to show what is important.

### c) Mathematical symbols :

i) Figures instead of words for numbers (26 instead of 'twenty-six', for example).

ii) 'the same as' becomes =

iii) 'not the same as' becomes ≠

iv) 'is less than' becomes <

v) 'is more than' becomes >

vi) 'therefore' becomes ∴

vii) 'because' becomes ∵

## 2 You can use **abbreviations** (a few letters instead of the whole word).

### a) Units of measurement :

i) second — sec.

ii) minute — min.

iii) hour — hr.

iv) year — yr.

v) month — mth.

vi) meter — m.

vii) kilogram — kg.

### b) Useful abbreviations for words and phrases :

i) and so on — etc.

ii) compare — cf.

iii) that is — i.e.

iv) for example — e.g.

v) about, approximately — ca.

vi) twentieth century — C 20

### c) Shortening *-tion* or *-sion* at the end of a word, e.g.;

i) reaction — react<sup>n</sup>.

ii) conclusion — conclus<sup>n</sup>.

You can usually shorten words by omitting or shortening the ending or suffix, and putting a full-stop to show that something has been omitted. There are some words which are shortened in a standard way and others which you will have to shorten yourself on the pattern of the common words. Here are some examples of abbreviations of words taken from Example 1, which follow the pattern shown above:

- developing — develop<sup>s</sup>
- emotional — emot<sup>nl.</sup>
- defective — defect<sup>ve.</sup>
- important — import<sup>nt.</sup>

d) Shortening long words or phrases for which there is no symbol or abbreviation, or even a pattern that can be followed. Here are some examples from the passage that you have read :

- disease — dis.
- heart disease — h.d.
- blood pressure — b.p.
- cholesterol — cholestl.

Shortening of words as in (c) and (d) is probably more useful when you take down notes during a lecture, as it is difficult to keep pace otherwise.

Here it doesn't really matter what system you use, as long as you can understand your own notes when you return to them after some time. It may be a good idea when adopting your own abbreviations to write a word or a phrase in full with your abbreviation after it the first time it occurs. e.g., heart disease (h.d.)

The lists of symbols and abbreviations given here and the suggestions for shortening words and phrases are not, of course, complete and exhaustive. These are mere suggestions, which will enable you to use these abbreviations and symbols whenever you have to take down notes.

### Self-check Exercise 2

Shorten the following sentences, but do not shorten them so much that you may not understand your notes later.

1 At about the age of four, the school life of a child begins.

.....

2 For example, water covers seventy-one per cent of the earth's surface.

.....

3 Heart disease causes half a million deaths a year in the United States of America.

.....

4 Two important diseases caused by the deficiency of Vitamin A are Xerophthalmia and night blindness.

.....

.....

5 Road conditions also contribute to higher fuel consumption and this increases pollution.

.....

.....

### Glossary

**de'ficiency** /dɪ'fɪʃənsɪ/ : shortage

**Xeroph'thalma** : a disease of the eye, characterised by the failure of the functioning of the tear glands

**'night blindness** : inability to see things at night or in weak light

**fuel** /fjuəl/ : material used for producing heat or power by burning, e.g., oil, gas, etc.

**pol'lution** : impurity in air, water, etc.

## 5.5 PASSAGE FOR NOTE-TAKING

Now read the following passage. Your purpose will be to discover the different theories of aging. Once again, only some paragraphs in the passage will be useful to you.

### Example 2

- A The average life span differs very widely for different organisms. While some live for short periods, others may have a life of several decades or even centuries. None, however, lives forever. Even if an individual meets with no fatal accident, is not eaten up by a predator, or does not suffer a killing disease, death still comes as the natural final result of old age.
- B Aging is defined as the process of progressive deterioration in the structure and function of the cells, tissues and organs of the organism as it grows older. The area of developmental biology which is concerned with the study of the processes of aging is known as gerontology.
- C Why should an animal age at all? Why do some animals age more rapidly and have a shorter life span than others? Why do different cell types and tissues within the same individual age at different rates? We still do not know enough about the process and causes of aging, although many theories have been proposed to explain this phenomenon.
- D Some biologists suggest that adverse changes in the environment are the causes of aging in the organisms. Others believe that aging is an intrinsic genetic property of the cells of an organism. According to a compromise theory, aging is due to an interaction between hereditary factors (genes) and the environment. We know, for example, that domestication of animals increases their life span. Another theory proposes that the cells and organisms with a high rate of metabolism age more rapidly and die sooner than those with a relatively lower rate of metabolic activity.
- E A more recently proposed immunity theory of aging suggests that the decline and disappearance of the thymus gland by late middle age in man is the primary cause of aging. With the disappearance of this gland, the defences of the body against foreign invasion weaken, and, at the same time, the number of defective, abnormal and harmful cells produced in the body itself goes up. This results in increasing damage and destruction of the tissues.
- F While each theory of aging is supported by some evidence, none of them comprehensively explains this phenomenon. A theory which explains aging in all kinds of organisms can be formulated only when more facts are known about aging processes in a variety of species living under different conditions.

(Adapted from *Biology*, a textbook for Higher Secondary Schools, Classes XI-XII, NCERT.)

### Glossary

- A **'organisms/'**o:gənɪzəmz/ : living beings  
**'decade** : a period of ten years  
**'fatal** (adj.) : resulting in death  
**'predators/'**predətəz/ : wild animals who live by killing and eating other animals
- B **de,terio'ration**: becoming worse  
**cell** : the smallest division of living matter able to act independently  
**'tissue/'** tʃu: / : animal or plant cells, especially those that are like in form and purpose and make up a particular organ, e.g. lung tissue, leaf tissue  
**bi'ology/ba'**ɒlədʒɪ/ : the scientific study of living things
- D **adverse/'**ædvɜ:s/ : unfavourable  
**in'ttrinsic/'**ɪn'trɪnzɪk/ : being part of the nature or character of someone or something

**genes**/dʒi:nz/ : small parts of the material which makes up the centre of a cell. Each of these parts controls the development of one or more qualities in a living thing which have been passed on from its parents.

**ge'netic**/dʒi'netɪk/ : concerning genes

**'compromise**/'kɒmpromaɪz/'**theory**: a middle position which takes something from both the competing theories

**he'reditary**/hɪ'redɪtəri/ : passed down from parent to child

**do,mesti'cation of 'animals**: making animals able to live with man and serve him, especially on a farm

**me'tabolism** : the chemical activities in a living being by which it gains energy, especially from food

E **decline**/dr'klaɪn/ (n.) : moving to a worse condition

**'thymus 'gland** : a gland which is located near the breast bone

**gland** : an organ of the body which produces a liquid substance, either to be poured out of the body or into the blood stream

F **,compre'hensively** /,kɒmpri'hensɪvl/ : thoroughly; including everything

### Self-check Exercise 3

The following questions will help you to understand both the content and the organization of the passage better.

1 What title would you give this passage?

.....

2 What are the various causes of death mentioned in the passage?

.....

3 Which theory, according to the author, explains aging 'Comprehensively'?

- a) the 'compromise' theory according to which hereditary factors and environment play an important rôle in aging;
- b) the immunity theory which suggests that the defence mechanism of a human being declines with the disappearance of the thymus gland in middle age;
- c) the rate of metabolism theory, which proposes that organisms with a higher rate of metabolic activity die earlier than those with a lower rate of metabolic activity;
- d) None of these.

.....

4 What could be the 'foreign invaders' referred to in paragraph E?

.....

.....

### Self-check Exercise 4

#### Notes (2)

Fill in the gaps to complete the following notes :

#### Theories of Aging

1 adverse changes in envt.

2 intrinsic ..... (i) .....

3 ..... (ii) ..... + envt' factors

e.g. .... (iii) .....

4 ..... (iv) ..... metabolic activity → aging



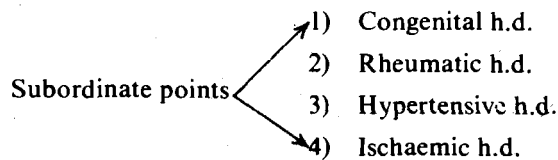
5 immunity theory ..... (v) ..... disappear<sup>ce</sup> of  
 ..... (vi) ..... in late middle age in man.  
 .....vii..... attack .....(viii) .....+  
 greater product<sup>n</sup> of ..... (ix)..... →  
 (x).....

You will notice that besides using symbols and abbreviations we have also omitted words like *the*, *a* and the verb *be* (*are*, *is*, *was*, *were*, etc.). In note-taking such omissions are quite common, because we want to save time. However, in normal writing you must not use any of these shortening devices.

## 5.6 HEADINGS AND SUBORDINATE POINTS

When the information content is small and not particularly well-organized, our notes may contain just a few phrases. However, when we study, our information content is often large and organized around a topic. In such a situation, it makes our notes clearer, if we have headings and subordinate points. For example, look at Notes (1) again.

Heading : Types of Heart Disease — Their Causes & Symptoms



It is perhaps helpful to follow a pattern where

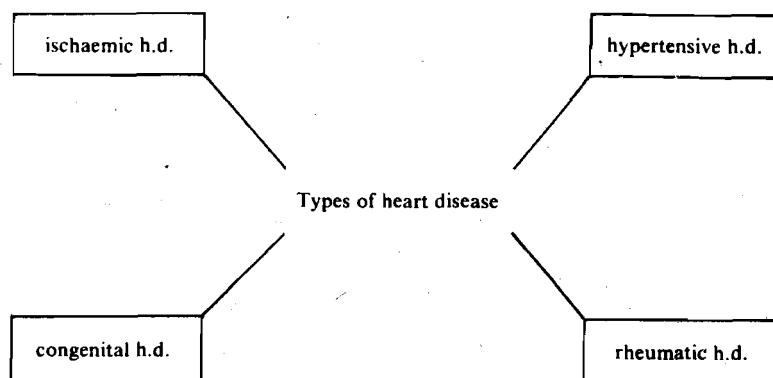
- a) the heading is underlined;
- b) the subordinate points are placed under the heading and indented, that is, the lines are started further into the page than the line for the heading. This shows that they are dependent on the main topic. The subordinate points are directly under each other. This shows they are of approximately the same importance.

### Two Types of Subordinate Points

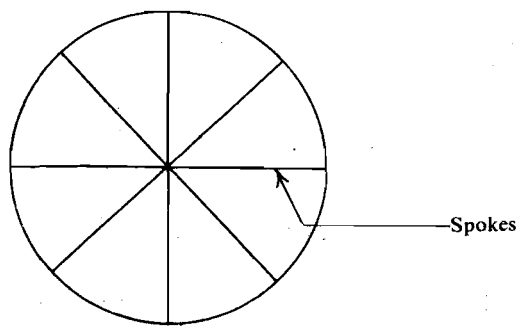
There are generally two types of subordinate points.

- a) Those that are independent of each other, depending only on the heading; for example, see Notes (1) and (2).
- b) Those that are related to each other, only the first depending directly on the heading.

If you look at Notes (1) again in Section 5.3, you will notice that the subordinate points can be reordered (e.g. 4 before 3 before 2, etc.). In fact, they can also be arranged like this:



These sub-points are all directly dependent on the heading. Some books call such sub-points **spokes**, because they can be arranged like the spokes on the wheel of a bicycle, as shown in the figure on the next page.



**Example 3**

Read the following passage carefully and find out where human settlements took place and why.

There is hardly any part of the globe in which people have not settled. In some cases the settlement may be no bigger than one or two families and their livestock, in others the settlement may be a city as large as New York.

There is always a good reason for a settlement being where it is. If you look in the atlas you will see that most of the world's major cities are located on an important river or on a coastline. This is because they grew up as trading centres, importing and exporting goods to serve their surrounding areas. Inland towns and cities are often at the meeting point of two or more land or river trading routes. With trade comes prosperity, so towns and cities can support increasing populations.

Agricultural settlements — farms and villages — need fertile soil and a supply of water for both crops and drinking. River valleys have both, and so are often densely settled — a large proportion of India's population, for example, lives in the plain of the Ganges river.

Another factor determining the siting of a settlement is that it can be easily defended against enemy attack in time of war. Many towns and villages were originally founded on hill sites for this reason.

(from Dougal Dixon : *Geography*, Franklin Watts)

**Glossary**

'livestock : animals kept on a farm, such as cows, sheep, goats, etc.

pro'sperity/pro'speriti/ : success and good fortune, especially in money matters

'densely (adv.) : in such a way that they are closely packed

o'riginally : in the beginning

**Self-check Exercise 5**

1 If you were taking notes, what heading would you give this passage?

.....

2 Are the subordinate points of this passage dependent on each other?

.....

3 Take notes from the passage above, keeping in mind the heading and the subordinate points. Some help is provided for you.

Notes (3)	
.....	(i) .....
1 Location.....	(ii) .....
Reason .....	(iii) .....
2 Location.....	(iv) .....
Reason .....	(v) .....
3 Location.....	(vi) .....
Reason .....	(vii) .....

**Example 4**

Read the following paragraph on the formation of coal.

The process of formation of coal is thought to have begun over 250 million years ago. At that time much of the world was covered with luxuriant vegetation growing in swamps. Many of these plants were types of ferns, some as large as trees. When this vegetation died, it sank into the muddy water, where it gradually decomposed. As decomposition took place, the vegetable matter lost oxygen and hydrogen atoms, leaving a deposit with a high percentage of carbon. In this way peat bogs were formed. As time passed, layers of sand and mud settled from the water over some of the peat deposits. The pressure of these overlying layers, as well as movements of the earth's crust and sometimes volcanic heat, acted to compress and harden the deposits and raise the carbon content in them, thus producing coal.

(from Funk and Wagnall's *New Encyclopaedia*, Harper and Row Publishers Inc.)

**Glossary**

**lux'uriant**/lʌg'zjʊəriənt/ (adj.) : growing in plenty

**vege'tation** : plant life in general

**swamp**/swɒmp/ : soft wet land

**fern** : a type of green plant with feathery shaped leaves and no flowers

**decom'posed** : decayed; broken up and separated into simple parts

**peat** : partly decayed vegetable matter which takes the place of ordinary soil in a certain area (peat bog) and is used for burning instead of coal

**over'lying 'layers** : layers lying over something else, here layers of sand and mud lying over peat deposits.

**com'press**/kəm'pres/ : force into less space; press together

**Self-check Exercise 6**

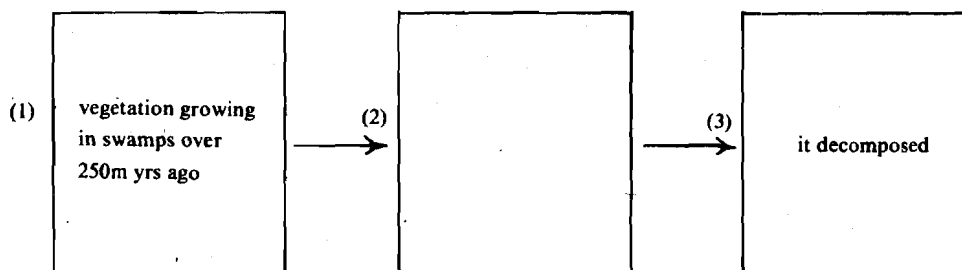
Read the passage carefully and take notes from it, keeping in mind the heading and the subordinate points. Some help is provided for you. Note how the relationship of the subordinate points here is different from that in Notes (3).

Notes (4)	
(heading) .....	(i) .....
1 vegetation growing in swamps (over 250m. yrs ago).	
2 .....	(ii) .....
3 it decomposed	
4 decomposition → .....	(iii) .....
5 peat bogs formed	
6 .....	(iv) .....
7 .....	(v) .....

Check your answers with those given by us at the end of the unit.

In Notes (4) the sub-points are again arranged vertically, but they cannot be reordered, because each point leads to another. To show clearly that one point leads to another, they can be arranged horizontally, like this :

**Formation of Coal**



Some books call these subordinate points links in a chain.

We would suggest that you arrange your notes vertically rather than in spokes or chains. It is, however, useful to know whether the subordinate points in a text are dependent or independent of each other.

This will help you read with greater understanding.

Subordinate points that are independent of each other need not all be noted. If one or more is omitted, it will not affect the rest.

Subordinate points that are dependent on each other must all be noted.

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## 5.7 LET US SUM UP

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In this unit we have suggested that it is necessary to read with a clear purpose in mind, so that you can separate the essential information in a text from what is repetitive or irrelevant. We have also told you about the techniques of note-taking in terms of

- shortening devices such as abbreviations and symbols, and
- the organization of notes in terms of headings and subordinate points.

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## 5.8 KEY WORDS

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**con'dense** : put into fewer words

**con'genital** : present from birth

**de'tective** (novel) : one in which the main interest is a puzzling crime and the process of solving it

**en,cyclo'paedia** : a book giving information about every branch of knowledge

**'heading** : words at the top of a section of written matter

**note** : a short record made to help the memory

**'specimen** : an example of a class

**sub'ordinate** : less important

**'symbol** : a sign looked upon as representing something

**'symptom** : a change in the body's condition that indicates illness

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## 5.9 SUGGESTED READING

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Sarah Freeman: *Study Strategies in English*, Orient Longman.

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## 5.10 ANSWERS TO SELF-CHECK EXERCISES

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### Exercise 1

1 c)

2 a) T b) F c) T d) F e) F

3 a) Hypertensive and Ischaemic heart diseases.

b) A high intake of salt can lead to hypertensive heart disease.

A diet rich in fats of animal origin, such as butter, cream, cheese, beef, ham, bacon, egg-yolk and ghee can increase the level of cholesterol in the blood and cause ischaemic heart disease.

4 Types of Heart Disease : their Causes and Symptoms

5 a) Paragraphs A and E

b) (i) for both A and E.

### Exercise 2

1 At 4 child begins school.

2 e.g. water covers 71% of earth's surface.

3 Heart dis. → 1/2m. deaths p.a. in U.S.

4 def<sup>cy</sup> of Vit. A → Xerophthalmia  
→ Night blindness

5 Road conditions → higher fuel consump<sup>n</sup> → more pollution

### Exercise 3

1 Theories of Aging

2 accident, being eaten up by a predator, disease, old age.

3 (d)

4 These could be various kinds of disease-causing bacteria, germs, and virus.

### Exercise 4

i) genetic property of cells

ii) hereditary

iii) domestication of animals increases life span

iv) higher

v) suggests

vi) thymus gland

vii) foreign invaders

viii) body

ix) defective, abnormal cells in body

x) damage to tissues.

### Exercise 5

1 The Location of Human Settlements:

2 No; they are dependent on the Heading.

3 i) The Location of Human Settlements v) agriculture

ii) on rivers or coastlines vi) hill sites

iii) trading centres vii) defence against enemy attack

iv) in river valleys

### Exercise 6

i) Formation of Coal

ii) when it died, it sank in muddy water

iii) loss of O+H atoms in veg. matter → high % of C.

iv) sand + mud settled on peat.

v) pressure of overlying layers + movements of earth's crust + volcanic heat → compress<sup>n</sup> and harden<sup>g</sup> of deposits + more C → coal.