UNIT 9 NOTE-TAKING-2 USE OF TABLES AND DIAGRAMS

Structure

9.0 OBJECTIVES

The aim of this unit is to show you different ways of organizing notes, such as the use of tables and diagrams, and to make you aware that different types of texts require different note-taking techniques.

After you complete this unit, you will be able to decide on the type of note-taking technique you require for different types of passages, and use that technique successfully.

9.1 INTRODUCTION

This is the second unit on Note-taking. In Unit 5 (Block 1) we discussed the taking of notes from reading material in terms of the following:

i) reading with a purpose in mind so as to differentiate between paragraphs that contain essential information and those that do not;

ii) the use of shortening devices such as the use of abbreviations and symbols which will save time and effort;

iii) the ability to organize the material in terms of headings and subordinate points.

In this unit we shall continue our discussion on notes from reading material. We shall, however, concentrate on the organization of notes in terms of tables, charts, and diagrams.

9.2 ORGANIZATION OF NOTES: TABLES

We often have to take notes from passages which contain figures, contrasts (that is, differences between two things or persons), or different aspects of a single topic. It is then convenient to organize your notes in the form of lists or tables. This will make it easier to read and memorize the information later.

9.2.1 A Passage Giving Information in the Form of Figures

Example 1

Your purpose in reading the following passage will be to find out the quantity of the different varieties of cooking oil used in the country and the regions where different kinds of oil are used.

> Edible oils are an important constituent of Indian diet. Besides being a source of energy, they add a special flavour to food and provide a lubricating action to body tissues. In recent years, their association with different human diseases and their adulteration have become a health problem for people.
>
> A variety of cooking oils are commonly used in different parts of the country. The major sources are groundnut oil (14,00,000 tonnes), mustard oil (6,00,000 tonnes) and sesame and coconut oil (1,50,000 tonnes). Sunflower oil (1,00,000 tonnes), safflower oil (25,000 tonnes) and soyabean oil (10,000 tonnes) have also become popular. Groundnut and sesame oils are common in the west coast and central India; coconut oil in the south; mustard oil in Bengal, Bihar and Orissa in the east and Kashmir in the north. The annual per capita consumption of edible oils in the country was about 6 kg in 1984, which is lower than the world average of 11 kg and the average of 26 kg in developed countries. It is higher in the high socio-economic status group due to their use of fried preparations. It is however desirable that the daily intake of fat should not contribute more than 15%-20% calories in the diet.
>
> (from *Science Reporter,* September 1987)

Glossary

edible /'edəbl/: fit to be eaten

con'stituent: any of the parts that make up a whole

'lubricating: making smooth (generally with oil), so that, in this case, the tissues of the body can function more easily

a'dulte'ration/ə,dʌl tə̩reɪʃən/:the act of making something impure or of a poorer quality by the addition of something of lower quality

'groundnut: a kind of nut (मूँगफली) which grows in a shell under the ground

'mustard: a plant with yellow flowers (सरसों) whose seeds are used for making oil

'sesame/'sesəmɪ/: a type of tropical plant grown for its seeds and their oil

'safflower: a plant bearing large orange-red flower heads and seeds abundant with oil

per capita: /pə'kæpɪtə/: for or by each person. Here it refers to the average consumption of oil by one person

'intake: the amount taken in

'calorie/:/'kælərɪ/:a measure used to state the amount of heat or energy that a food will produce

Self-check Exercise 1

1 Why are edible oils an important part of any diet?

.....

.....

.....

2 Why have edible oils become a health problem in recent years?

.....

.....

.....

3 Which social group has a higher per capita consumption of edible oils in India? Why?

.....

.....

.....

4 The daily intake of fat in our diet should be

i) less than 20%.
ii) more than 20%.
iii) around 40%.

Choose the correct answer.

.....

Self-check Exercise 2

The passage above has a lot of figures. These figures can be understood better if they are arranged in a table as shown below. Read the passage carefully again, and fill in the gaps in the table. Do not forget to write the main heading and the subordinate headings where required.

Notes : 1

	Name of Oil		Regions where used
1	Groundnut oil	.....	.....
2	.....	6,00,000 tonnes	.....
3	Sesame oil	.....	west coast & central India
4	Coconut oil	.....	.....
5	.....	.....	.....
6	.....	.....	.....
7	.....	10,000 tonnes	.....

9.2.2 A Passage Giving a Contrastive Description

When you have to take notes from a passage which points out the differences between two things, it is often most convenient to write the notes in the form of a table.

Example 2

Read the following passage carefully and take down notes while you read it:

> The two main kinds of grasslands are tropical grasslands and temperate grasslands. Tropical grasslands occur in Africa (the savanna) and in parts of south-eastern Asia, northern Australia, India and South America. The major temperate grasslands are the North American prairies, the Russian steppes, the South African veld, the Australian and New Zealand downs and the South American pampas.
>
> Most tropical grasslands lie between forests and semi-deserts. The annual rainfall, although confined to one season, is usually high. Savanna grasslands are dotted with such trees as acacia and baobab. In moist areas, elephant grass may reach five meters but towards the deserts it becomes increasingly shorter.

Temperate grasslands have less rainfall than tropical grasslands, and winters that are often extremely cold and snowy. Trees are rare. Very little of true temperate grassland survives. Much is now farmland.

The major herbivores found in temperate grasslands are prong-horn, rodents and rabbits. Coyotes, badgers and snakes are also present and depend on the rodent population for food. However, herbivores such as bison, prairie chickens, and prairie dogs, as well as predatory wolves and mountain lions, have become almost extinct, and their range is greatly restricted. The occupation of the prairies and plains by greater numbers of people and domestic livestock has reduced the number and extent of native animals.

Wild life has been left relatively undisturbed in the tropical grasslands. Wildebeests, zebras, gazelles, along with predatory lions, hyenas, cheetahs, leopards and other carnivores, share the plains with numerous species of birds, rodents, and insects.

(Adapted from *Caxton Atlas of the Earth*)

Glossary

ˈgrassland: a stretch of land covered mainly with grass, especially wild land used for cattle to feed on

conˈfined/kənˈfaɪnd/ : limited

acaciə/əˈkeɪʃə/: a type of tree found mainly in hot countries, from which gum is obtained

ˈbaobab /ˈbeɪəbæb/ : a type of African tree with a very broad trunk

surˈvives: continues to remain

ˈherbivores: animals feeding on plants

ˈprong-horn: a type of antelope found in western North America

ˈrodent/ˈrəʊdənt/a member of the family of small plant-eating animals with strong sharp teeth, which includes rats and mice

ˈcoyote/ˈkɔɪəʊt/: a type of small wolf found in western North America and Mexico

ˈbadger /ˈbædʒə/ : an animal found in the northern half of the world, which is black and has some white fur on its face, lives in a hole in the ground, and is active at night

bison /ˈbaɪsən/ : a large, wild, cow-like animal with a very large head and shoulders covered with lots of hair, formerly very common in Europe and North America

extinct /ɪkˈstɪŋkt/ : no longer existing

range: the area within which a type of animal lives

reˈstricted: reduced, limited

ˈlivestock: animals kept on a farm

ˈwildebeest/ˈwɪldɪbiːst/ also called gnu /nuː/ a type of large South African antelope with a nuː/ type curved horns and a long tail.

gaˈzelle: a type of small deer, which jumps in graceful movements, and has beautiful, large eyes

ˈcarnivore: a flesh-eating animal

Self-check Exercise 3

Read the passage again and answer the following questions. These questions will help you understand the passage better.

1 What title would you give the passage?

.....

2 The temperate grasslands have been indicated by different names in different parts of the world. Make a table showing the different names of the grasslands and the places where they are found. Write the appropriate headings. You may refer to Notes 1 to help you.

.....

.....

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.....

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.....

.....

.....

.....

3 Why are the temperate grasslands gradually disappearing?

.....

4 a) Find a word in the passage somewhat similar in meaning to 'confined' .....

b) Find opposites of:
'survive' .....
'herbivores' .....

Passages which give a contrastive description can most clearly be presented if they are arranged in the form of a table. It is, however, not enough that two items are contrasted—in this case the tropical and temperate grasslands. You should arrange your table in such a way that at a glance you are able to find out the basis on which the contrast is made. For instance, in the case of Notes 2 below, the contrast is on the basis of location, rainfall, vegetation, and animals. This method of organization helps you to present a clearer picture of the information, which will be useful to you when you have to revise your work later.

Self-check Exercise 4

Read Example 2 again and fill in the gaps in the table below.

Notes: 2

Types of Grassland

	Tropical	Temperate
1 Location	(i)	N. America (prairies), Russia (steppes), S. Africa (veld), Australia and New Zealand (downs), and S. America (pampas)
2 Rainfall	high; occurs in one season	(ii)
3 Vegetation	(iii)	(iv)
4 Animals	wild life undisturbed; wildebeests, gazelles, zebras, lions, hyenas, cheetahs, and leopards; birds, rodents, insects	(v)

Notice that we have arranged the notes in the same order in which the information is presented in the passage given as Example 2. It is, however, not necessary to do this. Often you may have to arrange the notes in an order different from what it is in the original text. This will probably happen if you wish to highlight some points.

9.2.3 A Passage Presenting Different Aspects of a Topic

When taking notes on different aspects of a single topic, it is often helpful to write them out in the form of a list or a table. It is then much easier to read or memorize the information later.

Self-check Exerice 5

Given below is a passage on the Maoris, an aboriginal tribe. Take down notes keeping in view the following items:

1 location
2 physical features
3 houses
4 food
5 clothing
6 entertainment

The Maoris

When Cook first visited the islands of New Zealand he found there the people whom we call Maoris. They had come apparently from more northerly islands to New Zealand, probably about four centuries earlier, crossing the wide seas in their long double canoes. They were a tall, well-built people, with brownish skins and long, wavy, black hair. Though they knew nothing of metals or of the making of pottery, they were skilled workers in other ways. Their houses were built largely of timber and decorated with elaborate carving. Near at hand were little patches of garden in which they cultivated roots for their food. From the forest they brought other roots and berries and birds, whilst the rivers and seas supplied fish in great abundance. A kind of native flax from the swamps was woven and used with feathers, grasses, and bark in the making of clothing. They were also expert basket-makers. They knew nothing of the cultivation of cereals such as wheat, had no domestic animals, and found few wild ones to hunt. The families were grouped into clans and tribes which fought fiercely with one another, each group living in a stockaded village in the midst of which was erected a tall look-out tower. Dancing was a favourite amusement of the women and girls whilst the men indulged in exciting canoe races.

(from *Geography for Today, Book II: The Southern Continents* by L. Dudley Stamp, Longman)

Glossary

canoe/kə'nu:/: a long, light narrow boat, pointed at both ends, and moved by a paddle

'pottery: pots and other objects made out of baked clay

'timber: wood for building

e'laborate(adj.): full of detail which is carefully worked out

'flax /flæks/: a plant with blue flowers, which is grown for its stem and oily seeds. The thread made from the stems of this plant is called linen.

'swamp: soft wet land

clan: a group of families, all originally descended from one family

stoc'kaded/stɒ'keɪdɪd:/having a wall or fence of upright pieces of wood built around it for defence

e'rected /ɪ'rektɪd/ : built

'look-out'tower: a tower built for the purpose of keeping a watch

Self-check Exercise 6

You have read the passage carefully and taken notes. Now arrange the notes that you have taken into a table. You may refer to Notes 2 to help you arrange your notes. After you finish, compare your notes with the specimen answer given at the end of the unit.

9.3 ORGANIZATION OF NOTES: DIAGRAMS

When the information in a paragraph can be presented visually, it is better to use a drawing, a flow chart, or a tree diagram. This is especially true of scientific material, where it is simpler and clearer to express information in the form of a labelled diagram than by using words only. The diagram should present a mental picture of what you understand from the paragraph. This will make it easier for you to understand the information given in the paragraph.

9.3.1 Flow-charts

Example 3

Your purpose in reading the passage below will be to learn about the process of photosynthesis. Take notes as you read.

> Photosynthesis is the process by which chlorophyll-containing organisms—green plants and algae — capture energy in the form of light and convert it to chemical energy. Almost all the energy available for life in the earth's biosphere — the zone in which life can exist — is made available through photosynthesis.
>
> In the first stage of photosynthesis, chlorophyll absorbs sunlight. Chlorophyll is the green substance in leaves, which is able to trap the energy of sunlight and use it in the process of making carbohydrates.
>
> Within the leaf there is a small amount of water. The energy which the chlorophyll has trapped of the sun is used to split the water in the leaf into hydrogen and oxygen. Most of the oxygen is released into the air.
>
> In the second stage, the chlorophyll uses the energy absorbed from sunlight to combine the hydrogen (which is obtained by splitting the water) with carbon dioxide (which the leaf obtained from the air). Then, after several complicated changes, the hydrogen and the carbon dioxide are combined in

such a way that a carbohydrate is produced. This carbohydrate is called glucose.

Later, using glucose as its most important building material the plant can make substances called amino acids and proteins. These chemicals are needed for the growth of both plants and animals.

Something else happens during photosynthesis that is of the greatest importance to us. A constant supply of oxygen is released into the air by plants. At the same time, carbon dioxide, which would poison us if we breathed too much of it, is nearly all used up.

Photosynthesis is one of the most important chemical processes in the world. This is because it is the primary method of food manufacture, and the primary method of oxygen manufacture.

(Adapted from Funk and Wagnall's *New Encyclopaedia*

Glossary

ˈalgae /ˈældʒiː/: plants of a very simple form that live in or near water and are usually very small

zone: a division or area marked off from others because of its particular qualities

abˈsorb /əbˈsɔːb/ : take in and make a part of itself

reˈleased /rɪˈliːst/ : set free

ˌcarboˈhydrate /ˌkɑːbəˈhaɪdreɪt/: any of the various type of substances, like sugar, which consist of oxygen, hydrogen and carbon, and provide the body with heat and energy

aˌminoˈacid: a substance necessary to living matter

Self-check Exercise 7

Read the passage carefully and answer the following questions.

1 What is the earth's biosphere?

.....

2 In the first stage of photosynthesis

i) sunlight causes chlorophyll to turn into carbohydrates.

ii) sunlight causes chlorophyll to split water.

iii) chlorophyll absorbs the energy of the sun and uses it to produce carbohydrates.

(Choose the correct answer.)

.....

3 Fill in the gaps with the words that seem most appropriate to you.

In the second stage of photosynthesis, the ____(i)____ absorbed from ____(ii)____ is used to combine ____(iii)____ with carbon dioxide. Then, after some complicated changes a ____(iv)____ called ____(v)____ is produced.

4 If the process of photosynthesis stopped, what would happen to animals and human beings? Why?

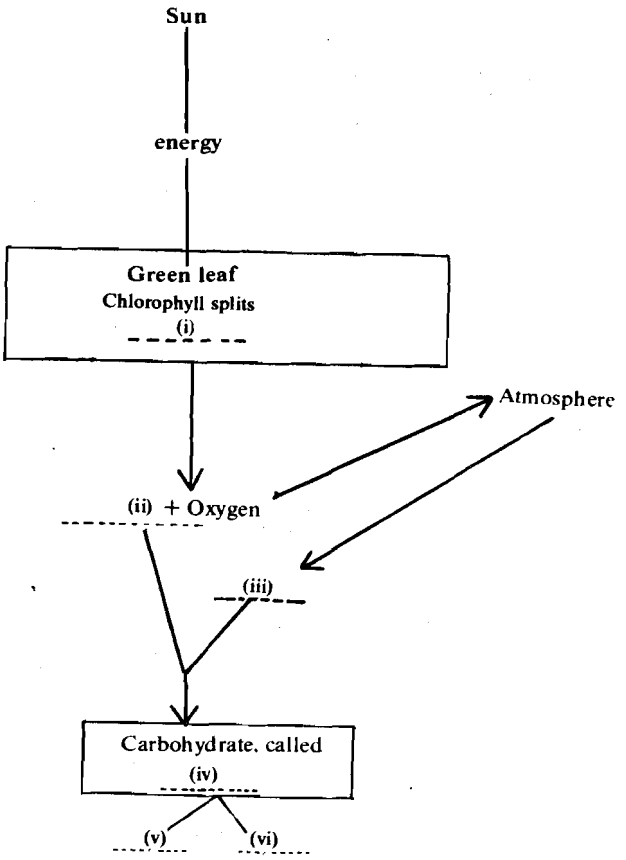
.....

.....

Self-check Exercise 8

Notes 3 below present the information taken from Example 3 in the form of a flow chart. Preparing a flow chart, especially for descriptions of processes, will help you to understand the texts. Later, when you are revising your work, it will be easier to recollect the information if it is available in a visual form. Fill in the gaps in the flow chart below.

Notes: 3



9.3.2 Tree Diagrams

You already know that different kinds of passages lend themselves to different kinds of organization when we take notes. Passages that have information of a classificatory nature, for instance, can be analysed by means of tree diagrams. Such diagrams are useful both in classifying the information, and presenting it in the right order.

The passage below deals with different modes of transport and their role in commerce. Read it carefully and take down notes as you read.

Example 4

The Role of Transport in Commerce

The economic system of any country is largely dependent upon the efficiency of its transport system. Without the help of a good transport system, the expansion in national and international trade would never take place.

Broadly, the means of transport both for purposes of trade and social activity can be classified into three main divisions, land, water and air. We are, here, concerned with transport for trade. Of all the forms of transport, road transport has shown the greatest growth in recent years. Road transport is also used as a complementary means of transport for other types of transport. Roads are indispensable links for carrying goods and people to and from railway stations, ports and airports.

Transport by road may be both vehicular and non-vehicular. Non-vehicular transportation includes both animal and man. Animals such as horses, mules and yaks are frequently used for carrying goods and passengers in hilly areas. Camel is the only means of transport in desert areas. Man is also sometimes used to carry goods. In hilly areas, porters and coolies carry goods on their backs and heads. This type of transport is generally used when animals, carts or vehicles cannot be used. Vehicular transport in developing countries includes the ancient bullock carts, as well as the modern automobiles. The invention of the automobiles has been of great significance to modern industry and commerce because of their high speed and low cost per kilometer.

The introduction of the railways has been vital in the growth of industrialization. Railways are useful in carrying heavy and bulky goods over long distances. They are especially favoured because, unlike other modes of transport, they are unaffected by weather conditions.

Water transport is one of the oldest forms of cargo transport. Though it is slow, it is the cheapest form of transport. Water transport includes inland transport and ocean transport. Inland waterways are rivers and canals. While rivers are "naturally" created, canals are artificial waterways. Inland waterways are not always reliable. Sometimes rivers change their course abruptly, which may cause dislocation of traffic. In times of drought they may run dry.

Ocean or sea transport is very important for the growth of foreign trade of any country, especially as it is cheaper than air transport. It is particularly useful for carrying bulky goods over long distances, especially when time is not the essential factor.

The greatest advantage of air transport is that it has reduced the time and distance barrier to a great extent. However, air transport is the costliest means of transport because of the high cost of planes, their operation and maintenance. It is generally used rather sparingly for carrying light freight.

Glossary

expansion(n.) /ɪk'spænʃən/ : growth

con'cerned with: dealing with, interested in

ˌcomple'mentary /ˌkɒmplɪ'mentərɪ/: supplying what is lacking or needed by another for completion

ˌindi'spensable (adj.): absolutely necessary; essential; what we cannot do without

port(n.) /pɔ:t/ : a town or place along the sea, which has facilities for the loading and unloading of ships

ve'hicular: concerning vehicles on roads

yak /jæk/ : an ox of Tibet having long, shaggy hair

'vital : very necessary

re'liable: dependable

a'bruptly: suddenly and unexpectedly

ˌdislo'cation: a case of being put out of order

drought /draut/ **a long period of very little rainfall**

Self-check Exercise 9

1 In what way is road transport 'a complementary means of transport for other types of transport'?

.....

.....

.....

2 When is man used as a means of transporting goods?

.....

.....

.....

.....

3 What types of vehicles do you think are included in the word 'automobiles'?

.....

4 Fill in the gaps below:

___(i)___ is one of the oldest forms of transport. It is also .....

___(ii)___ than any other means of transport. Water transport includes both ___(iii)___ and ___(iv)___ transport.

5 What are some of the disadvantages of inland waterways as a means of transport?

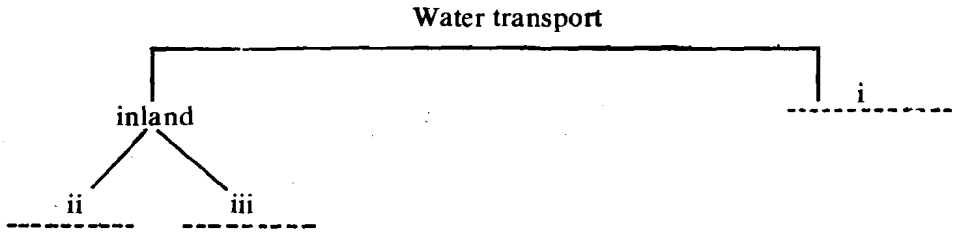
.....

.....

.....

.....

6 Read the passage on water transport again. Then organize your notes in the form of a tree diagram. Some help is provided for you.



7 What is the advantage and disadvantage of air transport?

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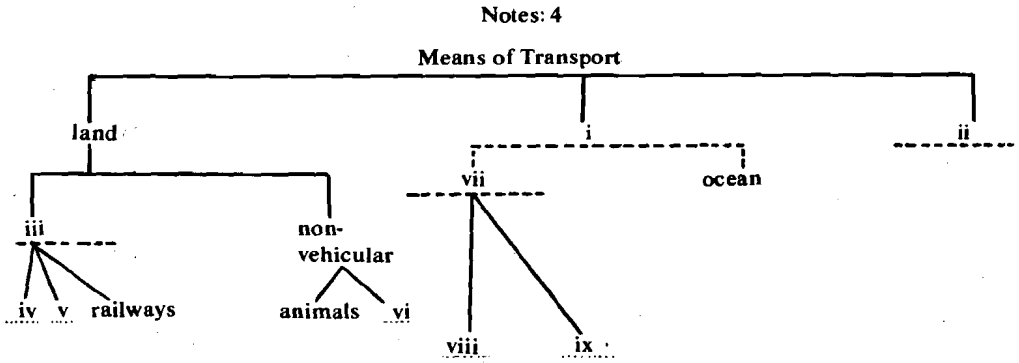
Self-check Exercise 10

Notes 4 below (based on Example 4) are organized into a tree diagram. Fill the gaps to complete the tree diagram.



9.3.3 Other Diagrams

Besides flow charts and tree diagrams, there are other kinds of diagrams as well which are used to summarize the written material. Descriptive passages on scientific topics or passages which show processes can sometimes lend themselves to such diagrams. You must realize that this is not a common note-taking technique. Only when you feel that a diagram will help you understand and memorize a piece of information better, is it wise to use it.

Read the passage below on 'The Atmosphere' carefully and take notes as you read along.

Example 5

The Atmosphere

Although we cannot see it, taste it, or smell it, the air that surrounds the earth is vital for life. It provides the gases needed for human, animal and plant life. Of these gases, oxygen makes up about 21 per cent and nitrogen about 78 per cent of the volume of dry air. Other gases, such as argon, carbon dioxide, hydrogen, neon, krypton and xenon, comprise the remaining one per cent. The amount of water vapour and its variation in amount and distribution is of great importance in weather changes. The atmosphere has no definite upper limits, but gradually thins until it becomes imperceptible. However, the atmosphere has three well-defined layers. The layer of air next to the earth, which extends upwards for about ten miles, is known as the troposphere. Most of the air and water vapour are in the troposphere. It is the warmest part of the atmosphere because most of the solar radiation is absorbed by the earth's surface, which warms the air immediately surrounding it. The temperature decreases by about 11.2°C for every mile as one travels upwards through the troposphere. Most of the features that govern our weather, including most clouds and wind systems, occur in the troposphere. Strong winds moving at more than 160 kms an hour are located at the upper levels of the troposphere. These are known as JET STREAMS and are important to pilots of jet aircrafts who fly in this zone.

Above the troposphere to a height of about 50 miles is a zone called stratosphere. The stratosphere is separated from the troposphere by a zone of uniform temperatures called the tropopause. Within the lower portions of the stratosphere is a layer of ozone gases which filters out most of the ultraviolet rays from the sun. If this zone was not there, the full blast of the sun's ultraviolet light would burn our skins, blind our eyes, and eventually result in our destruction. Within the stratosphere, the temperature and atomospheric composition are relatively uniform.

The ionosphere extends to a height of 300 miles above the earth. The air, here, is extremely rarefied. It is called the ionosphere because it consists of electrically charged particles called ions, thrown from the sun. The northern lights (aurora borealis) originate within this highly charged portion of the atmosphere. Its effect upon weather conditions, if any, is as yet unknown.

(Adapted from *Caxton Atlas of the Earth)*

Glossary

vital /'vaɪtl/ : very necessary

ˌvariˈation/ˌveərɪ'eɪʃən/ : the state of changing in terms of amount, rate, or degree

ˌimperˈceptible: which cannot be noted

ˈsolar radiˈation: the energy (heat, light, etc.) sent out by the sun

ˈuniform: the same throughout

ˈrarefied: thin

ˈparticles: very small pieces

ion: an electrically charged atom formed by the loss or gain of one or more electrons

Self-check Exercise 11

1 Read the passage again and state whether the following statements are true (T) or false (F).

i) The major gases in the atmosphere are nitrogen and oxygen. ( )

ii) The distribution of gases in the atmosphere is of vital importance for changes in the weather. ( )

iii) The warmest part of the atmosphere is the stratosphere. ( )

iv) Features that affect weather conditions are found in the troposphere. ( )

v) In the tropopause, the temperature is relatively stable. ( )

vi) If the ozone layer is destroyed or damaged, gradually all life on earth will be destroyed. ( )

vii) The air in the ionosphere is extremely thick. ( )

2 Fill in the gaps with suitable words/phrases.

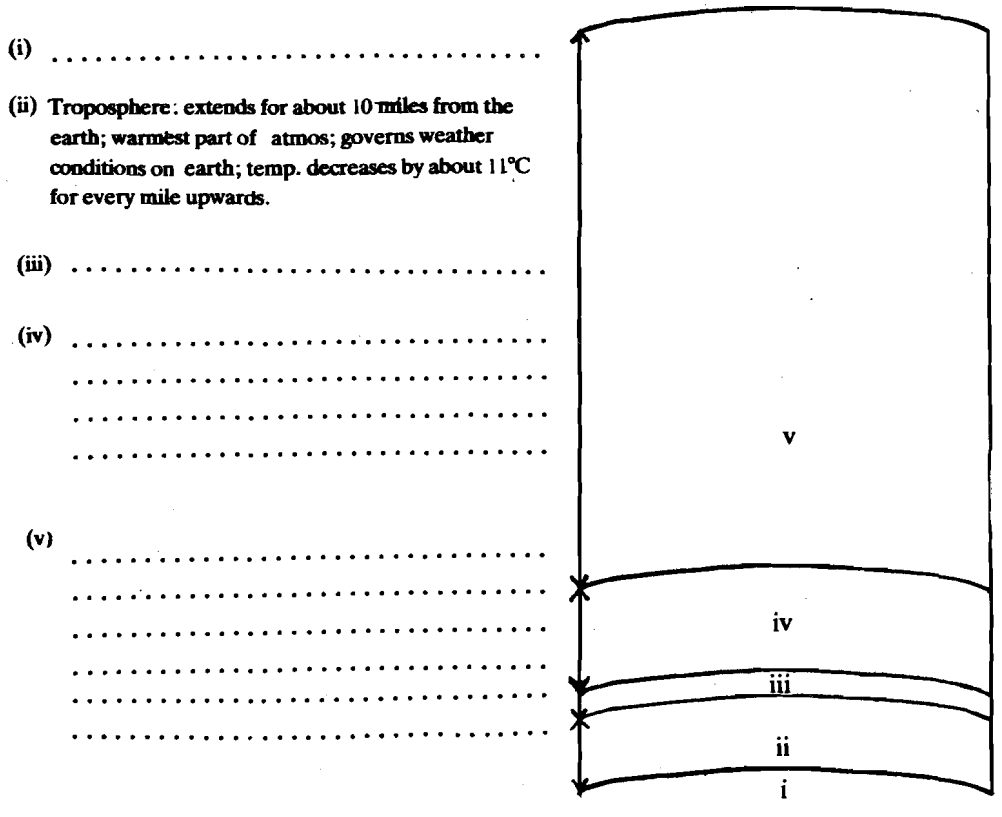
The atmosphere is a region of gases ____(i)____ the earth. It is divided into ___ (ii)_____ layers. The ____ (iii)_____ is called the troposphere. It extends upwards ____(iv)_____. The _____(v)____ is called the stratosphere and it extends to a height _____(vi)____.The presence of _____(vii)____ in the _____(viii)____ of the stratosphere prevents the _____(ix)____ of life._____ (x)_____ the stratosphere is the ____ (xi)_____.

Self-check Exercise 12

Given below is a diagrammatic representation of the atmosphere. Put the correct labels on the diagram. Then summarize the information given in the passage as shown in the diagram.

Notes: 5

Layers of the Atmosphere



9.4 LET US SUM UP

In the first unit on note-taking (Block 1, Unit 5), we described the technique of note-taking in terms of the organization of notes into headings and subordinate points. In this unit we have discussed the organization of notes in the form of tables, charts and diagrams. We have also suggested that different kinds of material lend themselves to different techniques of note-taking.

9.5 KEY WORDS

'aspect: a way of looking

'atmosphere: the air surrounding the earth

'chlorophyll: colouring-matter of green parts of plants

'commerce: exchange of goods or services, especially on a large scale

con'trastive: showing the differences between two things

'diagram: a graphical representation of a process, etc.

downs: open high lands, especially treeless chalk uplands of southern England and elsewhere, used for pasture

'figures: numbers

'flow chart: a diagram showing the movement of things in a complex activity

'ionosphere: ionized region of upper atmosphere able to reflect radio waves for long distance transmission round the earth

jet: a stream of water, gas, etc. shot forward, especially from a small opening

'layer: a thickness of some matter spread over a surface

'maoris: members of a brown Polynesian aboriginal race in New Zealand

'pampas: large treeless plains in South America, south of the Amazon, especially in Argentina

'photo-'synthesis: the process in which the energy of sunlight is used by green plants to build up complex substances from carbon dioxide and water

'prairie: a large treeless tract of level grassland, especially in North America

'process: a series of operations

'steppe: a level grassy plain devoid of forest, especially in south-east Europe and Siberia

'stratosphere: the layer of atmosphere above the troposphere, in which the temperature remains constant

'table: a list of facts, numbers, etc., systematically arranged, especially in columns

'temperate: of mild temperature

'transport: conveyance from one place to another

'troposphere: the layer of atmosphere extending about ten miles upward from the earth's surface, in which the temperature falls with increasing height

veld: (in South Africa) open country, neither cultivated nor true forest

9.6 ANSWERS TO SELF-CHECK EXERCISES

Exercise 1

1 because they are a source of energy, add flavour to food, and provide a lubricating action to body tissues.

2 mainly because they are often adulterated and have in recent years also been associated with some diseases.

3 the group that has a higher socio-economic status. This group uses more fried preparations.

4 (i)

Exercise 2

Notes 1

Edible Oils

Name of Oil	Quantity	Regions where used
1 Groundnut oil	14,00,000 tonnes	west coast & central India
2 Mustard oil	6,00,000 tonnes	Bengal, Bihar, Orissa, Kashmir
3 Sesame oil	1,50,000 tonnes	west coast & central India
4 Coconut oil		southern India
5 Sunflower oil	1,00,000 tonnes	no particular regions
6 Safflower oil	25,000 tonnes	
7 Soyabean oil	10,000 tonnes	

Exercise 3

1 Temperate and Tropical Grasslands

2

Notes 2

Temperate Grasslands

Names of grasslands	Places where found
Prairies	North America
Steppes	Russia
Veld	South Africa
Downs	Australia and New Zealand
Pampas	South America

3 because they are being turned into farmlands.

4 a) restricted
b) becomes extinct; carnivores

Exercise 4

i) Africa, parts of S.E. Asia, N. Australia, India and S. America

ii) less.(winters cold and snowy)

iii) acacia & baobab trees — esp. in Savannas; elephant grass

iv) trees rare; not much grassland now — mostly turned into farmland

v) several animals now extinct.
coyotes, badgers, snakes, pronghorns, rodents, and rabbits are the main animals found.

Exercise 6

Notes

The Maoris

	Details
1 Country	New Zealand
2 Physical Features	tall, well-built, brown skin, long, wavy black hair
3 Houses	made of timber, decorated with fine carving
4 Food	roots, berries, birds & fish
5 Clothing	flax from swamps woven and used with feathers, grasses and bark
6 Entertainment	women and girls: dancing men: canoe races

Exercise 7

1 the zone in which life can exist

2 (iii)

3 i) energy
ii) sunlight
iii) hydrogen
iv) carbohydrate
v) glucose

4 They would die, because there would be too little oxygen in the atmosphere.

Exercise 8

i) water
ii) Hydrogen
iii) CO_2 (Carbon dioxide)
iv) glucose
v) amino acids
vi) proteins

Exercise 9

1 Roads are important links for carrying goods and people to and from railway stations, ports and airports.

2 When other forms of transport, such as animals, carts or vehicles, cannot be used. This generally happens in hilly areas, where porters and coolies carry goods on their backs or heads.

3 cars, vans, buses, trucks

4 i) water transport
ii) cheaper
iii) inland
iv) ocean

5 Inland waterways are not always reliable. For example, rivers may change their course abruptly, which may cause dislocation of traffic. In times of drought, they may become dry.

6 i) ocean
ii) canals
iii) rivers

7 The advantage is that we can save time, and goods can be sent to places much faster. The disadvantage is that it is the costliest means of transport, because of the high cost of planes, their operation and maintenance.

Exercise 10

i) water
ii) air

iii) vehicular
iv) bullock carts
v) automobiles
vi) man
vii) inland
viii) rivers
ix) canals

Exercise 11

1 i) T
ii) F
iii) F
iv) T
v) T
vi) T
vii) F

2 i) surrounding
ii) three
iii) layer of air next to the earth
iv) for about 10 miles
v) next layer
vi) of about 50 miles
vii) ozone gases
viii) lower portions
ix) destruction
x) Above
xi) ionosphere

Exercise 12

i) The Earth
ii) Troposphere
iii) Tropopause
iv) Stratosphere: extends to a height of about 50 miles above the earth. Ozone gases present in lower portions; temperature and atmospheric composition stable.
v) Ionosphere: extends to about 300 miles above the earth; air thin; effect on weather conditions unknown.