متن تخصصی جغرافیا

رشته جغرافیا و برنامه‌ریزی شهری

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In the name of God

Preface
This book has been designed to develop reading skills of Geography students to expand their vocabularies as a step towards reading, understanding, and using other similar English textbooks.

The reading passages have been taken from “Urban and Regional Planning”, fourth edition written by Peter Hall (2002). Care has been taken to include various topics related to different branches of planning in order to acquaint students with a variety of passages. Effort has been made to provide short passages which should be translated into Persian.

Since this book is designed for self-instruction, the Appendix I provides answers to all the questions. This volume also includes the definitions of all important key and general words which are derived from Longman Dictionary of American English, new edition (2008) and Oxford Advanced Learner’s Dictionary, fourth edition (1995).
Study Guide
The purpose of this volume is to improve the reading skills of administration or management majors and to help them to become autonomous readers in their fields of study. This book is divided into 6 chapters and each chapter consists of three parts.

Part One: Vocabulary
A: Word Study
A.1. General Words
This part includes the definitions and examples of general words of the main passages. Students should read this part carefully, and then do the vocabulary exercises of each chapter.

The vocabulary exercises are designed to build students' knowledge of vocabulary in meaningful contexts.

A.2. Key Words
This part includes the definitions and examples of key words and phrases that are supposed to be necessary to review and learn before reading the main passages of each chapter.

Part Two: Reading
This part consists of a reading passage that has been selected from recent planning resources. Efforts have been made to include various topics related to different branches of planning in order to acquaint students with different kinds of related passages.

The chapters are built from relatively simple to more difficult, so students can develop their knowledge of vocabularies and concepts as they progress through the book.
Part three: Exercises
This part contains three subdivisions:
Part B: vocabulary Exercises
This part consists of two sections: B.1.fill in the blank part and B.2. Matching exercise

Part C: Comprehension Questions
This part consists of three sections:

C.1: Open Ended Questions:
These questions check students' understanding of the text. Some of these questions can be answered by direct reference to individual sentences of paragraphs, while others require a thorough comprehension of the passage.

C.2: True/False Statements:
These questions direct student's attention to key points in each passage, and student's understanding of the content.

C.3: Multiple Choice Items
These questions check students' overall understanding of stated and implied facts and points in the passage.

Part D: Word Formation
This part consists of D.1: word formation Chart; and D.2. Fill in the blank section.

In Exercise D.1, The chart is presented in each chapter and includes different forms of the words in the reading passage. Exercise D.2 is aimed to increase students' vocabulary and to improve their ability in using the context clues.

Part E: Structure Review
Reading comprehension is often affected by unfamiliarity with certain grammatical points used in a passage or a text. The dominant or complex structural patterns of each unit are briefly discussed in this part. Exercise E.1 embraces other examples of the patterns already discussed and used in the relevant passage.

**Part F: Translation**

There is an increasing demand for students to become familiar with the translation skills. Care has been taken to provide short passages which should be translated into Persian. The final part of each chapter serves this purpose. Students are supposed to read the passage carefully and then translate them into Persian. Following this part, some words and phrases are given for students to find the Persian equivalent for each to help them understand the main passage and translate the part F.

**Appendixes**

**Appendix I: Answer Keys**

Since this book is designed for self-instructional study, students must do the exercises themselves. But they can check the answers to all the questions in Appendix I.

**Appendix II: Word List**

The English-Persian word list at the end of the book includes the definitions of all the important key and general words used in this book.
UNIT 1

Planning, Planners and Plans

General Aims
This unit has been designed to help you learn a number of key words of planning and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with typical passages of planning.

Behavioral Objectives
After carefully reading this unit, you are expected to:
1. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2, define the concept of planning, planners and plan, redefine planning as a general activity, realize the main technique for planning, and explain the main goal of any planning activity.
2. Do comprehension exercises C-1, C-2, C-3 and C-4
3. Do word formation Chart exercise D
4. Do Structure Review Exercise E-1
5. Be able to perform the parts F and F.1
Part 1: pre-Reading
Vocabulary List

General Words:
achievement, accompany, affluent, ambiguous, appeal, appropriate, arise, arrangement, blueprint, blur, boom, bureaucracy, colossal, combine, concerned, confusion, contingency, define, design, deliberately, democratic, desire, dignity, diplomat, distinction, elaborate, emphasis, enterprise, essential, evaluation, exact, extremely, forethought, illustrate, incidentally, intend, involve, locally, minimize, merely, misery, objective, orderly, particular, predetermined, preparation, proceed, prospect, realize, readily, representation, repute, require, sequence, slump, strike, statement, swing, unemployment, vaguely, virtually

Key Words:
advance, assemble, civilization, disaster, earthquake, formulae, foodstuff, lead, projection, quantify, supplement, target, trace

A. Word Study
Study the following definitions, synonyms, and examples.

A.1. General Words
Read through this selection and learn to recognize these words in sentences.

achievement n
something good and impressive that you succeed in doing/success in doing or getting what you worked for

Getting a good mark in the exam was quite an achievement for him.
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accompany v to go somewhere with someone; go with; go along
Children under 12 must be accompanied by an adult.

affluent adj having a lot of money, nice houses, expensive things, etc; rich; wealthy
His parents were very affluent.

ambiguous adj confusing; not clear because it can be understood in more than one way
Their response was somewhat ambiguous.

appeal v to make an urgent public request for help, money, information, etc; request; ask
The water company appealed to everyone to save water.

appropriate adj correct or good for a particular time, situation, or purpose; suitable; proper
It is a movie that is appropriate for all ages.

arise v to happen or appear
Some questions arose during the discussion.

arrangement n putting in order; plan; preparation
We have a special arrangement with the bank.
blueprint
n
a plan for achieving something; detailed plan or scheme

Plans have reached the blueprint stage.

blur
v
to become unclear or indistinct; to make difficult to see

Her eyes blurred with tears.

boom
n
a sudden increase in business activity or the popularity of something

The oil market is enjoying a boom.

bureaucracy
n
in a government or business who are employed rather than elected

Every detail of every class has to be planned by some bureaucracy.

colossal
adj
very large; huge; enormous

We have made a colossal mistake.

combine
v
to join two or more things together; blend; unite

The two chemicals combine to form a powerful explosive.

concerned
adj
involved in something or affected by it; worried about something important

We're concerned about the results of the test.
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confusion n
astate of not understanding what is happening or what something means; ambiguity; a state of uncertainty
The changes in the schedule have created confusion.

contingency n
an event that may or may not occur; events that happens by chance
Be prepared for all possible contingencies.

define v
to explain the exact meaning of a particular word or idea; specify
Please define what you mean by “democracy.”

design n
the way that something has been planned or made; plan; drawing
We're working to improve the design of the computer.

deliberately adv
done in a way that is intended; intentionally; purposefully; intentionally
Someone had set the fire deliberately.

democratic adj
organized by a system in which everyone has the same right to vote, speak, etc
People asked a democratic way of making decisions in election.
desire  n  
strong hope or wish
I have no desire to meet her.

dignity  n  
the quality of being serious and formal; nobleness of character
She spoke with courage and dignity.

diplomat  n  
someone who officially represents his/her government in a foreign country
For avoiding the war, diplomats make contingency plans to keep the peace.

distinction  n  
a clear difference between things
There is one definition that combines the others and blurs the distinction, as when we talk about a ‘plan’ for a new building.

elaborate  adj  
having a lot of small details or parts that are connected together in a complicated way: carefully
Please give an elaborate description for your plan.

emphasis  n  
special importance; special attention given to something important
Jamieson's report puts/places an emphasis on the need for better working conditions.
enterprise

a company, organization, or business; the activity of starting and running businesses

He got the job because he showed the spirit of enterprise.

essential

important and necessary; vital

It's essential that you attend in all meetings.

evaluation

the act of judging something or someone, or a document in which this is done; assessment

Evaluation refers to systematic gathering of information for the purpose of making decisions.

exact

correct and including all the necessary details; precise; accurate

I don't know the exact size of the room.

extremely

to a very great degree; very

She's extremely clever.

forethought

careful thought or planning before you do something, wise planning for future

One might regret when perhaps things happened without forethought.

illustrate

to explain or make something clear by giving example

The following examples illustrate how the system works.
incidentally  *adv*
used when giving additional information, or when changing the subject of a conversation

**Incidentally**, Jenny's coming over tonight.

**intend**  *v*
to have something in your mind as a plan or purpose; plan; have in mind

*I intended* to do it, but I'm afraid I forget.

**involve**  *v*
to include or affect someone or something; cause to become concerned; entangle

The scheme **involves** computers and other technological instruments.

**locally**  *adv*
in or near the area where you are or the area you are talking about; nearby; in the neighborhood

They sell **locally** grown apples in their stores.

**minimize**  *v*
to make the degree or amount of something as small as possible

To **minimize** the risk of getting heart disease, eat well and exercise daily.

**merely**  *adv*
simply; used in order to emphasize that an action, person, or thing is very small, simple, or unimportant, especially when compared to what it could be

For Ken, a job is **merely** a way to make money.
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misery n
great suffering or unhappiness; agony; distress
They suffer the misery caused by war.

objective n
something that you are working hard to
achieve; purpose; aim; goal
The company's main objective is to increase sales overseas.

orderly adj
well arranged or organized in a neat way;
regular; disciplined
Please put them in an orderly way so that you can find them immediately.

particular adj
single and different from others; specific
Here's one particular song I've been trying to find.

predetermined adj
decided or arranged before; decided in advance
The doors were unlocked at a predetermined time.

preparation n
the act or process of preparing something;
arrangement for future event
Flowers have been ordered in preparation for the wedding.

proceed v
to continue to do something that has already
been planned or started; progress
We will proceed with the negotiations.
**prospect**

n
something that is possible or likely to happen in the future; view; anticipation

I was excited at the **prospect** of going to Europe.

**realize**

v

to know or understand the importance of something that you did not know before; become aware; comprehend

It was only later that I **realized** my mistake.

**readily**

adv

quickly and easily; willingly

The information is **readily** available on the Internet.

**representation**

n
the state of having someone to speak, vote, or make decisions for you

There is no **representation** on the council for the Hispanic community.

**repute**

n
reputation; regard; credit

She is a pianist of great **repute**.

**require**

v

to need something; request; ask; demand

The program **requires** 16 megabytes of memory.

**sequence**

n
a group following each other in order; series; following

Try to place the following pictures in **sequence**.
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slump v
to suddenly go down in price, value, or number;
drop down suddenly
Car sales have slumped recently.

strike v
to deliberately stop working for a time because
of a disagreement about pay, working
conditions, etc.
The dock workers are striking for shorter work days.

statement n
something that you say or write officially and
publicly; report
The president gave a statement to the police.

swing v
to move backward and forward while hanging
from a particular point, or to make something
move in this way; wave; vibrate
Soldiers swing their arms as they march.

unemployment n
the condition of not having a job; jobless
The unemployment rate is falling.

vaguely adv
not clearly
His statement was very vaguely worded.

virtually adv
almost; very nearly
He was virtually unknown until the elections.
A.2. Key words
Read through this selection and learn to recognize these key words in sentences.

**advance** n planning, etc. that is done before something else happens

**Advance** planning is necessary if students seek a certain sort of education.

**assemble** v cause people or things to come together; collect; gather

A crowd had **assembled** in front of the White House.

**civilization** n a society that is well organized and developed; making or becoming somebody civilized

The book looks at the relationship between religion and **civilization**.

**disaster** n a sudden serious accident that causes great harm or damage; misfortune

The 1889 flood was the most spectacular natural **disaster** the state had ever seen.

**earthquake** n a sudden violent shaking of the earth's surface that often causes a lot of damage

In geography, scientists deal with natural phenomena such as **earthquakes**, flood, and etc.
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**formula**

*a method or set of principles that you use in order to solve a problem; rule expressed in a short form by letters, numbers, etc.*

The *formula* for water is H₂O.

**foodstuff**

*a substance used as food*

The word *foodstuff* is used especially when we talk about the business of producing or selling food.

**lead**

*to guide; to direct*

He *led* them to the station.

**projection**

*a guess of future possibilities based on known facts; prediction*

Whatever the aim, the first step will be a careful *projection* which leads from the present to the future.

**quantify**

*to measure something and express it as a number*

The damage to the company is difficult to *quantify*.

**supplement**

*a additional amount to supply what is needed; addition; extension*

The money I get from teaching is a useful *supplement* to my ordinary income.
target  n
an aim or result that you try to achieve; goal,
It will take a lot of hard work to achieve our target this year.

trace  v
find out something by following a course; discover; follow;
He traced his family history (back) to the 17th century.

Part 2: Reading

Planning, Planners and Plans
Planning is an extremely ambiguous and difficult word to define. Planners of all kinds think that they know what it means; it refers to the work they do. The difficulty is that they do all sorts of different things, and so they mean different things by the word; planning seems to be all things to all people. We need to start by defining what exactly we are discussing. The reference in the dictionary gives one clue to the confusion. Whether you go to the Oxford English Dictionary or the American Webster’s, there you find that the noun ‘plan’ and the verb ‘to plan’ have several distinct meanings. In particular, the noun can either mean ‘a physical representation of something’ – as for instance a drawing or a map; or it can mean ‘a method for doing something’; or ‘an orderly arrangement of parts of an objective’. The first meaning, in particular, is quite different from the others: when we talk about a street ‘plan’ of London or New York, we mean something quite different from when we talk about our ‘plan’ to visit London or New York next year. But there is one definition that combines the others and blurs the distinction, as when we talk about a ‘plan’ for a new building. This is simultaneously a physical design of that building
as it is intended to be, and a guide to realizing our intention to build it. And it is here that the real ambiguity arises.

The verb ‘to plan’, and the nouns ‘planning’ and ‘planner’ that are derived from it, have in fact only the second, general group of meanings: they do not refer to the art of drawing up a physical plan or design on paper. They can mean either ‘to arrange the parts of’, or ‘to realize the achievement of’, or, more vaguely, ‘to intend’. The most common meaning of ‘planning’ involves both the first two of these elements: planning is concerned with deliberately achieving some objective, and it proceeds by assembling actions into some orderly sequence. One dictionary definition, in fact, refers to what planning does; the other, to how planning does it.

The trouble arises because although people realize that planning has this more general meaning, they tend to remember the idea of the plan as a physical representation or design. Thus they imagine that planning must include the preparation of such a design.

Now it is true that many types of planning might require a physical design, or might benefit from having one: planning often is used in the production of physical objects, such as cars or airplanes or buildings or whole towns, and in these cases a blueprint of the desired product will certainly be needed. But many other types of planning, though they will almost certainly require the production of many symbols on pieces of paper, in the form of words or diagrams, may never involve the production of a single exact physical representation of the entity which is being produced.

For instance, the word ‘planning’ is today applied to many different human activities – in fact, virtually all human activities. One almost certainly needs a plan to make war; diplomats make contingency plans to keep the peace. We talk about educational planning: that does not mean that every detail of every class has to be planned by some bureaucracy (as happens, by repute, in France), but merely that advance planning is necessary if students are to find classrooms and libraries and teachers when they arrive at a certain age
and seek a certain sort of education. We talk about planning the economy to minimize the swings of boom and slump, and reduce the misery of unemployment; we hear about a housing plan and a social services plan. Industry now plans on a colossal scale: the production of a new model of a car or a personal computer has to be worked out long in advance of its appearance in the shops. And all this is true whatever the nature of the economic system. Whether labeled free enterprise or social democratic or socialist, no society on earth today provides goods and services for its people, or schools and colleges for its children, without planning. One might regret it and wish for a simpler age when perhaps things happened without forethought; but if that age ever existed, it has gone forever.

The reason is the fact of life everybody knows: that modern society is immeasurably more complex, technically and socially, than previous societies. Centuries ago, when education involved the simple repetition of a few well-understood rules which were taught to all, and when books were non-existent, the setting up of a school did not involve much elaborate plant or the training of specialized teachers. The stages of production were simpler: wood was cut in the forest, people wrought it locally into tools, and the tools were used by their neighbors, all without much forethought. But today, without elaborate planning, the complex fabric of our material civilization would begin to crack up: supplies of foodstuffs would disappear, essential water and power supplies would fail, and epidemics would rapidly break out. We see these things happening all too readily after natural or human disasters like earthquakes or wars or major strikes by railway or power workers. Though some of us may decide to opt out of technological civilization for a few years or for good, the prospect does not seem likely to appeal to the great mass of humankind even in the affluent world. Those in the less affluent world are in much less doubt that they want the security and dignity that planning can bring.

The point is that the sorts of planning which we have been discussing in these last two paragraphs either may not require physical
plans at all, in the sense of scale blueprints of physical objects, or may require them only occasionally or incidentally. They are more likely to consist, for the most part, of written statements accompanied by tables of figures, or mathematical formulae, or diagrams, or all these things. The emphasis throughout is on tracing an orderly sequence of events which will achieve a predetermined goal. The goal has first to be fixed. It may be given externally, as a situation which has to be met. Or there may be a more positive, active goal for instance.

Whatever the aim, the first step will be a careful projection which leads from the present to the future target date, year by year. To summarize, then: planning as a general activity is the making of an orderly sequence of action that will lead to the achievement of a stated goal or goals. Its main techniques will be written statements, supplemented as appropriate by statistical projections, mathematical representations, quantified evaluations and diagrams illustrating relationships between different parts of the plan. It may, but need not necessarily, include exact physical blueprints of objects.

Unit 1 Part 3: Exercises
B. Vocabulary Exercises
B.1. Fill in the Blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

achievement, appeal, arise, bureaucracy, combine, define, deliberately, extremely, elaborate, objective, boom, civilization, disaster, evaluation, illustrate, target

1. The purpose of final exam is that teachers want to evaluate their students’ … ……
2. The government ……… to everyone to save energy.
3. Whatever the aim, the first step will be a careful projection which leads from the present to the future ………….. date, year by year.
4. They need a(n) …………… design in order to complete their plan appropriately.
5. Planning is an …………… ambiguous and difficult word to define.
6. We talk about planning the economy to minimize the swings of …………… and slump, and reduce the misery of unemployment.
7. Prof. Smith's book …………. his opinions and feelings towards revolution.
8. The 1376 earthquake in Bam was the most spectacular natural ………… the country had ever seen.
9. He encountered with many problems that ……… from losing his job.
10. He told the teacher that he had pushed him …………..

B.2. Matching Items
Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.

| ………. | 1 | deliberately | a. request |
| ………. | 2 | affluent | b. comprehend |
| ………. | 3 | Blueprint | c. in the neighborhood |
| ………. | 4 | accompany | d. to go somewhere with someone |
| ………. | 5 | require | e. detailed plan or scheme |
| ………. | 6 | colossal | f. to hit someone or something |
| ………. | 7 | emphasis | g. intentionally |
| ………. | 8 | strike | h. very large |
| ………. | 9 | realize | i. special importance |
| ………. | 10 | supplement | j. having a lot of money, nice houses, expensive things |
| ………. | 11 | seek | k. addition |
| ………. | | | l. search for |

C. Comprehension Exercises
C.1. True/False Statements
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Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

……………... 1. The initial definition of planning is easy and not confused.

……………... 2. The verb 'to plan' and the nouns 'planning' and 'planner' have different meanings.
……………... 3. Planning can mean achieving some objective by gathering actions into orderly sequence.

……………... 4. Very few types of planning might require a physical design.
……………... 5. Planning may be varied according the aim of it.
……………... 6. All sort of plans require exact physical blueprint of objects.

C.2. Multiple Choice Items
Choose the best choices (a, b, c or d) for each statement.

1. Which of the following definitions is not mentioned for the noun 'plan' in the passage?
   a) the work the planners do
   b) a physical representation of something
   c) a method for doing something
   d) an orderly arrangement of parts of an objective

2. When we talk about a street 'plan' of London or New York, actually we mean ...........
   a) our plan to visit there next year
   b) a physical representation of their buildings
   c) a drawing or map of them as a physical representation
d) a plan for a new building

3. According to the passage, which of the following choice(s) is/are true about the definition of verb 'to plan'?
   a) to realize the achievement of an objective
   b) to arrange the parts of an objective
   c) To draw up a physical plan or design on paper of the art
   d) a and b

4. Which of the following actions may not require a physical plan?
   a) cars or airplane production
   b) visiting a building or a new town
   c) a plan to make war or keep peace
   d) economic plans to reduce the misery of unemployment

5. Which of the following statements is not true according to the passage?
   a) some societies provide services for their people without planning
   b) it is regretful if we realize that things happened without forethought
   c) modern society is more complex and so needs more planning than previous societies
   d) industry today plans on a colossal scale

6. Without elaborate planning in today societies, we will encounter with some problems. Which of the following does not refer to those problems?
   a) supplies of foodstuffs would disappear
   b) essential water and power supplies would fail
   c) epidemics would rapidly break out
   d) major strikes by railway or power workers may occur

7. The prerequisite for any planning is ............
   a) tracing an orderly sequence of events
   b) written statements accompanied by tables of figures
   c) mathematical formulae, or diagrams
d) fixing the goals at first

8. According to the passage, the first step for any planning is ……….
a) the making of an orderly sequence of action
b) a careful projection which leads from the present to the future target
c) the exact physical blueprints of objects
d) achieving the predetermined goal

C.3. Open-ended Questions
Answer the following questions in Persian on the basis of the passage.

1. What is the major difference between 'plan' as a verb and 'planning' as a noun?
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………

2. What is the difference between a street 'plan' of a town and the plan of visiting that town in next year?
…………………………………………………………………………………………
…………………………………………………………………………………………
………………………………

3. Redefine planning as a general activity briefly.
…………………………………………………………………………………………
…………………………………………………………………………………………
………………………………

4. What is the main technique for planning?
5. What is the main goal of any planning?

C.4. Relation of the Words
What do the following pronouns refer to?

1. it (line 2) .......................... 
2. they (line 3) .......................... 
3. there (line 8) .......................... 
4. that (line 16) .......................... 
5. that (line 21) .......................... 
6. they (line 32) .......................... 
7. they (line 39) .......................... 
8. its (line 56) .......................... 
9. which (line 66) .......................... 
10. them (line 85) .......................... 
11. which (line 88) .......................... 
12. its (line 96) .......................... 

D. Word Formation
D.1. Word Formation Chart

<table>
<thead>
<tr>
<th>Verb</th>
<th>Noun</th>
<th>Adjective</th>
<th>Adverb</th>
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<tbody>
<tr>
<td>achieve</td>
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</tbody>
</table>
D.2. Fill in the blank Exercise
Use the correct form of the words in D.1 to complete the following sentences.

1. I prepared a two-page ……………… as my long report.
2. His parents told him the news …………
3. The medication should be taken in …………… with vitamin C.
4. The sample of our research is …………… of the total population.
5. It was only later that I …………… my mistake.
6. John's suggestion was …………… supported.
7. The …………… of a goal is the major reason of planning.
8. May I …………… you to speak louder?
9. I am talking about childhood as …………… from adolescence.

E. Structure Review
Types of sentences

1. Simple sentence – contains one full subject and predicate:
   - He lives in New York.
   - Please close the door.
- How old are you?

2. Compound sentence – contains two or more sentences joined into one by:
   - punctuation alone (example a)
   - punctuation and a conjunctive adverb (example b)
   - a coordinate conjunction – and, or, but, yet, so, for- (example c)
   a. John was sick; he didn’t come to school.
   b. The weather was very bad; therefore, all classes were canceled.
   c. The new student was very shy, so the teacher didn't call on him.

3-Complex sentence – contains one or more dependent clauses.
A dependent clause contains a full subject and predicate beginning with a word that attaches the clause to an independent clause (main clause). Dependent clauses are divided into three categories: adverbial clause, adjective clause, and noun clause.

a. adverbial clause
An adverbial clause consists of a subject and predicate introduced by a subordinate conjunction like when, although, because, if. Such a clause is usually used to modify the verb of the main sentence.
   - All classes were canceled because the weather was bad.
   - If you study hard, you will pass the exam.

b. adjective clause
An adjective clause consists of a subject and predicate that modifies a preceding noun or pronoun (its antecedent). Such a clause begins with the introductory words such as who, whom, that, which, when, where, why and whose.
   - Children who are under twelve years must be accompanied by their parents.
   - This is the year when the Olympic Games are held.
A noun clause consists of a subject and predicate that function as a noun and begins with introductory words such as that, whether, how, what, when. Such a clause may function as the subject of the main verb, the object of the main verb or the complement of the sentence.

- I can't understand why you did such a thing.
- How he gets the money is his own affair.
- My understanding is that you are a hard working student.

E.1. Structure Exercise
Determine which one of the following sentences is simple, compound or complex and then write in front of each sentence.

1. Please open the door. ............
2. If we don't all eat the proper food, we'll get sick..........
3. This lesson is difficult.........
4. He will go straight home after he closes the store. ............
5. She lives in a large city.......... 
6. John was sick; he didn't come to school................
7. Mr. Smith doesn't like his aunt; therefore, he won't invite her to his wedding............
8. The tree which was planted last year already has blossoms.............

F. Translation
Translate the following passage into Persian.
In terms of community focus, the field of urban and regional planning is much more comprehensive in both subject matter and outcomes than is most tourism planning, as least as each is taught in higher education around the world. Tourism planning, however, draws upon a good portion of urban and regional planning methods, especially in the area known as rational planning. As such, the more narrow area of tourism planning could be considered a subfield of urban and regional
planning. One major shortcoming of tourism planning is an apparent lack of attention to the normative issues of (1) how planners should plan and (2) what issues planners should focus on in their planning efforts. These questions address the complexity of data and issues that planners deal with, including questions of what data or information is collected, how it is organized, and how the information will be used to make decisions.

F.1. Persian Equivalents

Find the Persian equivalents of the following words and phrases used in the passage of part 2.

<table>
<thead>
<tr>
<th>English Words</th>
<th>Persian equivalent</th>
<th>English Words</th>
<th>Persian equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>arrangement</td>
<td>merely</td>
<td></td>
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</tr>
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<td>labeled</td>
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### planning, planners and plans

<table>
<thead>
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<tr>
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<td>require</td>
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<td>an orderly</td>
<td>refer</td>
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</table>
UNIT 2

Application to Urban and Regional Planning

General Aims
This unit has been designed to help you learn a number of key words of application to urban and regional planning and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with typical passages of regional planning.

Behavioral Objectives
After carefully reading this unit, you are expected to:

1. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2, define the concept of planning application and regional planning, redefine the general objective of urban planning, recognize the difference between social planners and urban social planners, and explain the relationship between geography and other related social sciences.
2. Do comprehension exercises C-1, C-2, C-3 and C-4
3. Do word formation Chart exercise D
4. Do Structure Review Exercise E-1
5. Be able to perform the parts F and F.1
Part 1: pre-Reading
Vocabulary List

General Words
application, argue, assume, broadly, component, concentrate, constitute, controversy, coordination, curriculum, deny, description, disposition, evolving, harnessed, hotly, impact, lead, majority, neutral, obscured, output, pattern, peculiar, precise, process, reconversion, regional, spatial, stress, strictly, tautology

Key Words:
breakdown, consumption, culminate, distribution, division, household, location, mobility, phenomenon, region, statistics, suburb

A. Word study
Study the following definitions, synonyms, and examples.

A.1. General Words

application n
the use of a machine, idea, etc. for a practical purpose; usage
The research has many practical applications.

argue v
to disagree with someone, usually by talking or shouting in an angry way; quarrel; debate
Two men at the bar were arguing over/about politics.

assume v
believe without proof; suppose
Your light wasn't on so I assumed (that) you were out.
broadly  adv  
in a general way; widely; extensively  
I know broadly what to expect.

component  n  
one of several parts that make up a whole 
machine or system; element  
The components of an engine are essential for car production.

concentrate  v  
to think very carefully about something; direct 
all one's attention  
With all this noise, it's hard to concentrate on the matter.

constitute  v  
form when added together; establish; make  
The rise in crime constitutes a threat to society.

controversy  n  
a serious disagreement among many people 
over a plan; dispute; debate; argument  
There is controversy over the proposed development.

coordination  n  
the organization of people or things so that they 
work together well  
More coordination between departments is needed.

curriculum  n  
a course of study in a school, college, etc.  
The curriculum of Geography includes two ESP courses.
**deny**  
*v*  
to say that something is not true; refuse to allow; oppose

The judge **denied** a request to close down the school immediately.

**description**  
*n*  
a piece of writing or speech that gives details about what someone or something is like; explanation; illustration

Police have a detailed **description** of the missing child.

**disposition**  
*n*  
the way someone tends to behave; person's natural character; tendency

There was a general **disposition** to ignore the problem.

**evolving**  
*v*  
to develop and change gradually over a long period of time

He has **evolved** a new theory after many years of research.

**harnessed**  
*adj*  
controlled and used by the natural force or power

One can argue that spatial planning is essentially human geography in the various aspects, **harnessed** or applied to the positive task of action.

They could produce power through **harnessed** river.

**hotly**  
*adv*  
in an angry or excited way; angrily; eagerly

Recent reports in the press have been **hotly** denied.
impact  n
the effect that an event or situation has on
someone or something; effect; influence

Every decision at work has an impact on profit.

lead to  phv
to make something happen or exist as a result of
something else; result in

Opening the new lumber mill has led to the creation of 200 jobs.

majority  n
most of the people or things in a particular
group

The majority of people support the president.

neutral  adj
not supporting either side in an argument,
competition, or war;

Switzerland was neutral during World War II.

obscured  adj
difficult to know or understand; unclear;
indistinct

Recent successes have obscured the fact that the company is still in
trouble.

output  n
the amount of work, goods, etc. produced by
someone or something; production; outcome

Economic output is down 10% this year.
pattern  n  the regular way in which something happens, develops, or is done; design
Romantic novels tend to follow a similar pattern.

peculiar  adj  strange and a little surprising; mysterious, odd; mysterious
The new manager in the office seems a little peculiar.

precise  adj  exact or correct in every detail; definite; accurate
The precise location of the ship is still unknown.

process  n  a series of actions, developments, or changes that happen naturally; method for producing goods; procedure
Grady is in the process of collecting data for the study.

reconversion  n  the act of reconverting; rechanging to another form
Reconversion to gas control heating will save you a lot of money.

regional  adj  relating to a particular region
Regional economic planners will look at the same things, but always from the different point of view.
spatial adj
relating to the position, size, or shape of things; 
concerning or existing in space
The spatial qualities of the new concert hall are sufficient.

stress v
to emphasize a statement, fact, or idea; 
highlight; underline
She stressed the need for more health education.

strictly adv
in a way that must be obeyed; completely; 
rigidly; severely
Smoking is strictly forbidden.

tautology n
unnecessary repeating of the same idea in 
different words
Tautology means saying the same thing more than once in different 
ways without making one's meaning clearer or more forceful.

A.2. Key words

breakdown n
the failure of a system or relationship; fail; 
collapse
Negotiations between the two sides have broken down.

consumption n
consuming; using; amount consumed
The consumption of alcohol is not permitted on these places.
culminate (in)  v
to end with a particular event, especially a big or important one; the last and highest point
Her career culminated in her appointment as director.

distribution  n
the act of giving something to each person in a large group;
The distribution of wealth has become more unequal.

division  n
the act of separating something into two or more parts; separation
The division of areas into specific parts in the map needs a technical skill.

household  n
all the people who live together in one house
Today household expenses rise in a high degree.

location  n
a particular place or position; site; spot
His apartment is in a really good location.

mobility  n
ability to move or be moved easily
Elderly people with limited mobility need more help.

phenomenon  n
something that happens or exists in society, science, or nature that is unusual or difficult to understand; event; incident
Homelessness is not a new phenomenon.
Application to Urban and Regional Planning

**region**

a fairly large area of a state, country, etc., usually without exact limits; area; zone; district; neighborhood

The development of cities and **regions** could be controlled by an appropriate plan.

**statistics**

a collection of numbers which represents facts or measurements

**Statistics** show that the crime rate is falling.

**suburb**

an area away from the center of a city, where a lot of people live; area; region; neighborhood

We moved to the **suburbs** last year because living there is easier than living in the city.

Unit 2. Part 2: Reading

Application to Urban and Regional Planning

The difficulty now comes when we try to apply this description to the particular sort of planning that is the subject matter of this book: urban and regional planning (or, as it is often still called, town and country planning). In many advanced industrial countries, such as Britain, the United States, Germany or Japan, the phrase ‘urban planning’ or ‘town planning’ is strictly a tautology: since a great majority of the population are classed in the statistics as urban and live in places
defined as urban, ‘town planning’ seems simply to mean any sort of planning whatsoever. In fact, as is well known, ‘urban’ planning conventionally means something more limited and precise: it refers to planning with a spatial, or geographical, component, in which the general objective is to provide for a spatial structure of activities (or of land uses) which in some way is better than the pattern that would exist without planning. Such planning is also known as ‘physical’ planning; ‘spatial’ planning is perhaps a more neutral and more precise term.

If such planning centrally has a spatial component, then clearly it makes sense only if it culminates in a spatial representation. Whether this is a very precise and detailed map or the most general diagram, it is to some degree a ‘plan’ in the first, more precise meaning of the term. In other words, it seems that urban planning (or regional planning) is a special case of general planning, which does include the plan-making, or representational, component.

Broadly, in practice this does prove to be the case. It is simply impossible to think of this type of planning without some spatial representation – without a map, in other words. And whatever the precise organizational sequence of such planning, in practice it does tend to proceed from very general (and rather diagrammatic) maps to very precise ones, or blueprints. For the final output of such a process is the act of physical development (or, in some cases, the decision not to develop, but to leave the land as it is). And physical development, in the form of buildings, will require an exact design.

A great deal of discussion and controversy in recent years tends to have obscured this fact. In most countries spatial or urban planning as practiced for many years – both before the Second World War and after it – was very minute and detailed: the output tended to consist of very precise large-scale maps showing the exact disposition of all land uses and activities and proposed developments. During the 1960s such detailed plans were much attacked: planning, it was argued, needed to concentrate much more on the broad principles rather than on details;
it should stress the process, or time sequence, by which the goal was to be reached, rather than present the desired end state in detail; it should start from a highly generalized and diagrammatic picture of the spatial distributions at any point of time, only filling in the details as they needed to be filled in, bit by bit. This, as we shall see later, is the essential difference in Britain between the system of local town and country planning introduced by the historic Town and Country Planning Act of 1947, and the system which replaced it under the Town and Country Planning Act of 1968.

The central point, though, is that this type of planning is still essentially spatial whatever the scale and whatever the sequence. It is concerned with the spatial impact of many different kinds of problem, and with the spatial coordination of many different policies. Economic planners, for instance, are concerned with the broad progress of the economy, usually at national and sometimes at international level: they look at the evolving structure of the economy, in terms of industries and occupations, at the combination of the factors of production which brings forth the flow of goods and services, at the income thus generated and its reconversion into factors of production, and at problems of exchange. Regional economic planners will look at the same things, but always from the point of view of their particular spatial impact: they consider the effect of the variable, geographical space and distance, on these phenomena. Similarly, social planners will be concerned with the needs of the individual and the group; they will be concerned with the changing social structure of the population, with occupational mobility and its effect on lifestyles and housing patterns, with household and family structure in relation to factors like age and occupation and educational background, with household income and its variation, with social and psychological factors which lead to individual or family breakdown. Social planners in the urban planning office share the same interests and concerns, but see them always with the spatial component: they are concerned, for instance, with the effect of occupational mobility on the inner city
as against the new suburb – on changing household structure as it affects the housing market near the centre of the city, on household income in relation to items like travel cost for the low-income family whose available employment may be migrating to the suburbs.

The relationship between urban and regional planning and the various types of specialized planning, in these examples, is interestingly like the relationship of geography, as an academic subject, to other, related social sciences. For geography also has a number of different faces, each of which stresses the spatial relationship in one of these related sciences: economic geography analyses the effect of geographic space and distance on the mechanisms of production, consumption and exchange; social geography similarly examines the spatial impact upon patterns of social relationship; political geography looks at the effect of location upon political actions. One can argue from this that spatial planning, or urban and regional planning, is essentially human geography in these various aspects, harnessed or applied to the positive task of action to achieve a specific objective.

Many teachers in planning schools would hotly deny this. They would argue that planning, as they teach it, necessarily includes many aspects which are not commonly taught in geography curricula – even those that stress the applications of the subject. The law relating to the land is one of these; civil engineering is another; civic design is another.

This is true, though many would argue – both inside the planning schools, and out – that not all these elements are necessary to the planning curriculum. What does seem true is that the central body of social sciences which relate to geography, and whose spatial aspects are taught as parts of human geography – economics, sociology, politics and psychology – does form the core of the subject matter of urban and regional planning. By ‘subject matter’ I mean that which is actually planned. It is, however, arguable that there is another important element in planning education, not covered in this body of
social science: that is the study of the process of planning itself, the way we assume control over physical and human matter, and process it to serve defined ends. According to this distinction, ‘planning method’ would be what is common to the education of all kinds of planners – whether educational, industrial, military or any other; geography and its related social sciences would constitute the peculiar subject matter of that particular division of planning called urban and regional.

Unit 2. Part 3: exercises
B. Vocabulary Exercises
B.1. Fill in the Blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

application, output, precise, coordination, argue, peculiar, culminates, phenomena, division, assume, concentrate

1. The average ………. of the factory were 20 cars a day last year, but it has risen to 30 cars a day this year.
2. We must ………. him to be innocent until he is proved guilty.
3. Building the campuses of a university needs a ………. planning beforehand.
4. In geography, scientists deal with natural ………. such as earthquakes, flood, and etc.
5. More ………. between departments and stuff is needed to improve the quality of the organization.
6. They had a(n) ………. about the planning of the city.
7. Their negotiations finally ………. in an agreement.
8. One of the ………. in geography is urban and regional planning study.
9. Tiredness results in a lack of ………. on what you're reading.
B.2. Matching
Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.

<table>
<thead>
<tr>
<th>Number</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>constitute</td>
<td>a. the use of a machine, idea, etc. for a practical purpose</td>
</tr>
<tr>
<td>2</td>
<td>mobility</td>
<td>b. element</td>
</tr>
<tr>
<td>3</td>
<td>pattern</td>
<td>c. design</td>
</tr>
<tr>
<td>4</td>
<td>impact</td>
<td>d. district; neighborhood</td>
</tr>
<tr>
<td>5</td>
<td>obscured</td>
<td>e. ability to move or be moved easily</td>
</tr>
<tr>
<td>6</td>
<td>harnessed</td>
<td>f. controlled and used by the natural force or power</td>
</tr>
<tr>
<td>7</td>
<td>component</td>
<td>g. incident</td>
</tr>
<tr>
<td>8</td>
<td>phenomena</td>
<td>h. form when added together</td>
</tr>
<tr>
<td>9</td>
<td>region</td>
<td>i. the effect of an event or situation</td>
</tr>
<tr>
<td>10</td>
<td>application</td>
<td>j. result in</td>
</tr>
<tr>
<td>11</td>
<td>lead to</td>
<td>k. difficult to know or understand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>l. collapse</td>
</tr>
</tbody>
</table>

C. Comprehension Exercises
C.1. True/False Statements
Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

1. ‘Urban planning’ or ‘town planning’ is different from ‘spatial planning’.
   T

2. The main objective of ‘urban planning’ is to supply spatial structure activities.
   T

3. Physical planning is the other name for ‘urban planning’.
   T
43 Application to Urban and Regional Planning

4. During the 1960s detailed plans were accepted strongly.

5. Regional planning is essentially spatial planning but economic planners are different from regional economic planners.

6. Urban and regional planning are the same as geography.

7. According to some scholars’ civil engineering is not the same as civic design.

C.2. Multiple Choice Items

Choose the best choices (a, b, c or d) for each statement.

1. In advanced industrial countries the concept of ‘urban planning’
   a) is different from ‘town planning’
   b) means any sort of planning
   c) is a planning with a spatial component
   d) is better than physical planning

2. Which sentence is not correct about ‘urban planning’?
   a) It includes the plan-making or representational component.
   b) It is a special case of general planning.
   c) It can be done without spatial representation or a map.
   d) It tends to proceed from very general maps to very precise ones.

3. Regional economic planners are different from economic planners in that
   a) They concerned with the broad progress of the economy.
   b) They look at the evolving structure of the economy.
   c) They concerned with the combination of the factors of production which brings forth the flow of goods and services.
d) They both consider the effect of the variable, geographical space and distance.

4. The difference of the point of view of urban social planners with the social planners is ………
   a) They are concerned with the changing physical structure of the population
   b) They do not consider occupational mobility and its effect on lifestyles and housing patterns
   c) They are not concerned with social and psychological factors
   d) They concerned with the effect of occupational mobility on the inner city – as against the new suburb.

5. According to the passage, which of the following sentences is not true?
   a) Many teachers agree that spatial planning is essentially the same as human geography
   b) Civil engineering is not the same as civic design in planning schools
   c) The central body of social sciences which relate to geography forms the core of the subject matter of urban and regional planning
   d) The important element in planning education is the study of the process of planning itself

C.3. Open-ended Questions
Answer the following questions in Persian on the basis of the passage.

1. In advanced countries why is the meaning of urban planning the same as town planning?
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
2. What is the general objective of ‘urban planning’?

3. What was the output of ‘urban planning’ before and after the Second World War?

4. During the 1960s why were detailed plans much attacked and what was the reasoning?

5. What is the difference between social planners and urban social planners?

6. What is the relationship between geography and other related social sciences?

7. What does the writer mean by ‘subject matter’ in the passage?
C.4. Relation of the Words
What do the following pronouns refer to?

1. it (line 10) ..............................................
2. which ( line 11) ..............................................
3. It (line 23) ..............................................
4. It (line 35) ..............................................
5. which (line 46) ..............................................
6. they (line 54) ..............................................
7. its (64) ..............................................
8. Which (line 80) ..............................................
9. This (line 94) ..............................................
10. its (line 108) ..............................................

D. Word Formation
D.1. Word Formation Chart

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<th>Verb</th>
<th>Noun</th>
<th>Adjective</th>
<th>Adverb</th>
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<td>-</td>
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</tr>
<tr>
<td>-</td>
<td>statistic</td>
<td>statistical</td>
<td>statistically</td>
</tr>
</tbody>
</table>
D.2. Fill in the blank exercise
Use the correct form of the words in D.1 to complete the following sentences.

1. The teacher ........... Arnold to be able to read.
2. You should ........... your experience by traveling more.
3. Fifteen people ........... for the job before all the other people.
4. Their job is the production and ........... of goods around the country.
5. I cannot find the ........... of the city in the map.
6. The researchers have to test their hypothesis and prove it ...........
7. The rise in crime ........... a threat to society.
8. John is a(n) ........... worker who was born in France.

E. Structure Review
Adjective Clauses
Look at these sentences:
a. The doctor came to see the sick woman. He gave her some medicine.
b. The doctor who came to see the sick woman gave her some medicine.

Two sentences in 'a' can be combined to form a new sentence like 'b' by an adjective clause. In 'b', who came to see the sick woman, is an adjective clause used as an adjective, because it describes the noun phrase the doctor.

An adjective clause is usually placed after the noun it modifies.

As it was mentioned in chapter one, an adjective clause begins with introductory words who, whom, which, that, where, when, why and whose. These introductory words are known as relative pronouns. Keep in mind that the relative pronoun who or that and whom refer to person, which and that to a thing, when to a time, where to a place, why to a reason and whose to possession.
Examples
a. The rains came too late to save the crops. The farmers were expecting them.

b. The rains which the farmers were expecting came too late to save the crops.
   a. The boy is John's friend. You borrowed his book.
   b. The boy whose book you borrowed is John's friend.

   a. The house is very big. The Taylors live in the house.
   b. The house where the Taylors live in is very big.

E.1. Structure Exercise
Combine each pair of sentences in 'a's to form a new sentence. Use the second sentence as an adjective clause.

1. a. The police finally arrested the thieves. The thieves had participated in the great bank robbery.

2. a. The French pianist turned out to be a great disappointment. They had heard him praised very highly.

3. a. He picked up the toy. His son was playing with the toy.

4. a. The street is a very busy one. Our store is located on that street.
5. a. The president will see here on Saturday. On this day he will have more time to spend with you.

6. a. It seems that urban planning is a special case of general planning. It does include the plan-making, or representational, component.

F. Translation

Translate the following passage into Persian

The rapid growth of cities around the world is now seen as a major contributor to global biodiversity loss and many governments include biodiversity conservation as an explicit policy goal. To help prevent further loss of biodiversity, there is an urgent need for more strategic approaches to conservation planning in urban environments based on a scientific understanding of landscape patterns, species requirements and development pressures.

In Australia, the responsibility for protecting biodiversity rests with all levels of government. The Federal Government and all Australian State and Territory Governments are signatories to the National Strategy for the Conservation of Australia’s Biological Diversity (Department of Environment, Sport and Territories, 1996). The Federal Government also has the power to restrict activities (including urban development) that may have a significant impact on threatened species and communities though the Environment Protection and Biodiversity Conservation (EPBC) Act 1999. Despite these commitments, conflicts between biodiversity conservation and the development of land for population and economic growth are acute (Bekessy and Gordon, 2007).
F.1. Persian Equivalents

Find the Persian equivalents of the following words and phrases used in the passage of part 2.

<table>
<thead>
<tr>
<th>English Words</th>
<th>Persian equivalent</th>
<th>English Words</th>
<th>Persian equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>description</td>
<td>the broad principles</td>
<td>subject matter</td>
<td>rather than</td>
</tr>
<tr>
<td>urban and regional planning</td>
<td>occupations</td>
<td>conventionally</td>
<td>combination of the factors</td>
</tr>
<tr>
<td>advanced industrial countries</td>
<td>low-income family</td>
<td>to some degree</td>
<td>migrating</td>
</tr>
<tr>
<td>makes sense</td>
<td>distinction</td>
<td>spatial representation</td>
<td>particular</td>
</tr>
<tr>
<td>centrally</td>
<td>political actions</td>
<td>blueprints</td>
<td>political geography</td>
</tr>
<tr>
<td>controversy</td>
<td>disposition</td>
<td>obscured</td>
<td>concentrate</td>
</tr>
<tr>
<td>consist of</td>
<td></td>
<td></td>
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</tbody>
</table>
UNIT 3

‘Planning’ as an Activity

General Aims
This unit has been designed to help you learn a number of key words of ‘Planning’ as an activity and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with planning.

Behavioral Objectives
After carefully reading this unit, you are expected to:
1. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2, define the concept of planning as an activity, explain the planning education and the term cybernetic planning.
2. Do comprehension exercises C-1, C-2, C-3 and C-4
3. Do word formation Chart exercise D
4. Do Structure Review Exercise E-1
5. Be able to perform the parts F and F.1

Part 1: pre- Reading
Vocabulary List
General Words:
account, apparently, automation, comprise, core, corporate, curiously, cybernetic, debate, formerly, intense, interpretation, fundamental, harness, liberate, manifestation, mundane, modify, obtain, profoundly,
raise, refine, remarkable, replicate, sophisticated, succinctly, reveal, transform

**Key Words**
analog, evolve, simulate, spectrum, trend

**A. Word Study**
Study the following definitions, synonyms, and examples.

**A.1. General Words**

**account**
- **n**
  - a written or spoken description of an event or situation; report; description
  
  Can you give us an **account** of what happened?

**apparently**
- **adv**
  - clearly; obviously
  
  Apparently, the meeting went really well.

**automation**
- **n**
  - use of machine that need no human control
  
  Such systems were only a development of earlier experiments in **automation**.

**comprise**
- **v**
  - consist of; include
  
  The World Trade Organization **comprises** more than 100 nations.

**core**
- **n**
  - the central or most important part of something
  
  The **core** of the proposal is a tax credit.
‘Planning’ as an activity

corporate adj
shared by a whole group
She works in a corporate planning in the American business schools.

curiously adv
oddly; strangely
Curiously, she left without saying goodbye.

debate n
discussion; argument
After much debate, the committee decided to raise the fees.

formerly adv
in earlier times
New York was formerly called New Amsterdam.

intense adj
very extreme or having a very strong effect
The department's researchers have been under intense pressure.

interpretation n
an explanation for an event, someone's actions, etc.
They were listening to the one scientist's interpretation of the data on the subject.

fundamental adj
basic; essential; central
The fundamental problem is a lack of resources.

harness v
to control and use the natural force or power of something
Management education **harnessed** the thinking of a number of social sciences.

**liberate**  
v  
set free; release  
These gadgets **liberated** housewives from many hard chores.

**manifestation**  
n  
a very clear sign that a particular situation or feeling exists; expression; revealing  
The latest objection in the institution was a clear **manifestation** of growing unhappiness.

**mundane**  
adj  
ordinary and not interesting or exciting  
Initially, the job was pretty **mundane**.

**modify**  
v  
to make small changes to something in order to improve it; adapt; adjust  
The car's been **modified** to use less fuel.

**obtain**  
v  
to get something; acquire; gain; earn  
Information about passports can be **obtained** from the embassy.

**profoundly**  
adv  
greatly; importantly; strongly  
Their lives had been **profoundly** affected by the war.

**raise**  
v  
pose; mention; introduce something; bring up  
The article **raises** questions about the fairness of the trial.
‘Planning’ as an activity

refine  

v  
to make pure; to improve a method, plan, system, etc. by making small changes to it

The plans should be continuously **refined** during the cycles of the planning process.

remarkable  

adj  
unusual; noticeable

Josephine was a truly **remarkable** person.

replicate  

v  
to do or make something again; copy exactly

Scientists are trying to **replicate** Hudson's experiment.

sophisticated  

adj  
highly developed; advanced; made or designed well, and often complicated

He invented a highly **sophisticated** alarm system.

succinctly  

adv  
clearly expressed in a few words; briefly; shortly

The plan might be **succinctly** described as goals–continuous information–projection.

reveal  

v  
show something; make facts etc known

The report **revealed** that many children do not grow up in appropriate environment.

transform  

v  
change, alter, adapt, adjust
They've completely transformed the downtown area.

A.2. Key Words

**analogy**  
**n**
degree of likeness, similarity

We can make an analogy between the brain and a computer.

**evolve**  
**v**
to develop and change gradually

In our country, we have evolved legal structures to protect people's rights.

**simulate**  
**v**
to make or do something that is not real but looks as though it is real

Computer models have simulated conditions on Mars.

**spectrum**  
**n**
a complete or very wide range of opinions, ideas, people, etc.

The policy appeals to a wide spectrum of voters.

**trend**  
**n**
general direction or course of development; inclination; tendency

There's a trend toward more part-time employment.
What then would this core of planning education – the study of planning process – comprise?

This is a basic question, and one which ought to have been the subject of intense debate in schools of planning. But curiously, for a long time it was avoided – the reason being, apparently, that planning education was seen as education in making physical plans, not education in planning method. The first people to raise the question seriously were not teachers of physical planning, but teachers of industrial or corporate planning in the American business schools. There, down to about 1945, education in management was usually based on a rather narrow spectrum of skills in applied engineering and accounting; the aim was to obtain maximum efficiency in plant operation, both in an engineering sense and in an accounting sense, and little attention was given to the problems of decision-taking in complex situations. But during the 1950s, partly as the result of the work of such fundamental thinkers as Chester Barnard, Peter Drucker and Herbert Simon, management education was transformed. First, it developed into a science of decision-making, which borrowed freely from concepts in philosophy and politics; and second, it harnessed the thinking of a number of social sciences, such as economics, sociology and psychology. It was this new tradition in corporate planning which began, after about 1960, to affect the direction and content of education for physical planning.

By this time, however, management education had further evolved. With the development of computerization in management and planning of all kinds, there was increasing interest in the development of sophisticated control systems which would automatically control machinery. Such systems, of course, were only a development of earlier experiments in automation, which can be dated right back to the origins of the Industrial Revolution; but progress in
this field took a big leap forward with the rapid development of more complex computers during the 1950s. Yet even before this, a remarkable original thinker, Norbert Wiener of Harvard, had anticipated the development and much more. In a book published in 1950, *The Human Use of Human Beings*, he had suggested that automation would liberate the human race from the necessity to do mundane tasks. But further, he proposed that the study of automatic control systems was only part of a much larger science of cybernetics*¹ which he defined in the title of a book published in 1948 as the science of ‘control and communication in the animal and the machine’. According to Wiener, animals and especially human beings have long possessed extremely complex communication and control mechanisms – the sort of thing the computer was then replicating. Human societies, Wiener suggested, could be regarded as another manifestation of this need for communication and control.

Thus a new science was born. Rapidly developing in the late 1950s and 1960s, it had a profound influence on research and education in management, and particularly in planning.

For if human arrangements could be regarded as complex interrelating systems, they could be paralleled by similar systems of control in the computer which could then be used to monitor developments and apply appropriate adjustments.

The best analogy, much quoted at that time, was manned space flight. In an expedition to the moon, most of the adjustments to the spacecraft are made not by the astronauts but by an extraordinarily complex computer control system on earth at Houston, Texas. Similarly, it is argued, the development of cities and regions could be controlled by a computer which received information about the course of development in a particular area, related to the objectives which had been laid down by the planners for the development during the

¹ The word is derived from an ancient Greek word meaning ‘helmsman’ or ‘oarsman’.
next few years and thus produced an appropriate series of adjustments to put the city or the region ‘on course’ again.

In practice this insight has been very useful for the way we think about physical or spatial planning. Information systems are now used very widely in the planning process. And, as we shall see in later chapters of this book, it has profoundly affected the way planners think about their job and the way they produce plans. In essence it has led to a swing from the old idea of planning as production of blueprints for the future desired state of the area, and towards the new idea of planning as a continuous series of controls over the development of the area, aided by devices which seek to model or simulate the process of development so that this control can be applied. This in turn has led to a complete change in the sequence of planners’ work. Formerly, at any time from about 1920 until 1960, the classic sequence taught to all planning students was survey–analysis–plan.

The terms were self-explanatory. First the planner made a survey, in which s/he collected all the relevant information about the development of the city or region. Then s/he analyzed the data, seeking to project them as far as possible into the future to discover how the area was changing and developing. And third, s/he planned: that is, s/he made a plan which took into account the facts and interpretations revealed in the survey and analysis, and which sought to harness and control the trends according to principles of sound planning. After a few years – the British Planning Act of 1947 laid down that the period should be every five years – the process should be repeated: the survey should be carried out again to check for new facts and developments, the analysis should be reworked to see how far the projections needed modifying, and the plan should be updated accordingly.

The new planning sequence, which has replaced this older one as orthodoxy, reflects the approach of cybernetic planning. It is more difficult to represent in words because it is a continuous cycle; more
commonly, it is represented as a flow diagram. But, to break into the flow for purposes of exposition, it can be said to start with the formulation of goals and objectives for the development of the area concerned. (These should be continuously refined and redefined during the cycles of the planning process.) Against this background the planner develops an information system which is continuously updated as the region develops and changes. It will be used to produce various alternative projections, or simulations, of the state of the region at various future dates, assuming the application of various policies. (The aim is always to make this process as flexible and as varied as possible, so that it is possible to look at all sorts of ways of allowing the region to grow and change.) Then the alternatives are compared or evaluated against yardsticks derived from the goals and objectives, to produce a recommended system of policy controls which in turn will be modified as the objectives are re-examined and as the information system produces evidence of new developments. Though it is difficult to put this new sequence into a string of words like the older one, it might be succinctly described as goals–continuous information–projection and simulation of alternative futures–evaluation–choice–continuous monitoring.

Something like this sequence, with some differences in words and in ordering, can be found in several important and well known accounts of the planning process written in the 1960s and early 1970s.

Unit 3. Part 3: exercises
B. Vocabulary Exercises
B.1. Fill in the Blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

comprise, debate, intense, replicate, remarkable, transform, obtain, reveal, corporate, analogy, trend
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1. This organization .......... 15 separate departments.
2. The teachers of industrial or .......... planning in the American business schools were the first people to do the research.
3. We can draw an .......... between the new market and the old one.
4. The new plan of the town did not .......... the detail of the city.
5. She ........ a good knowledge of Geography in two years.
6. The researcher decided to .......... the project in the other country.
7. They were .......... which person to hire for the marketing management.
8. The worldwide tourism .......... is changing nowadays.
9. The town planner has a ........... characteristic, it means that it is very unusual and deserves attention and praise.
10. The city was not prepared for the .......... physical development.

B.2. Matching

Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.

| .......... | 1      | account     | a. | shared by a whole group |
| .......... | 2      | comprise    | b. | briefly                  |
| .......... | 3      | fundamental | c. | to make small changes    |
| .......... | 4      | trend       | d. | noticeable               |
| .......... | 5      | apparently  | e. | acquire                  |
| .......... | 6      | profoundly  | f. | strongly                 |
| .......... | 7      | modify      | g. | tendency                 |
| .......... | 8      | succinctly  | h. | essential                |
| .......... | 9      | evolve      | i. | clearly                  |
| .......... | 10     | remarkable  | j. | report                   |
| .......... | 11     | obtain      | k. | to develop and change gradually |
| .......... | l.     |             |   | consist of               |
C. Comprehension Exercises
C.1. True/False Statements
Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

……………… 1. Planning education was considered as studying making physical plans as well as studying planning method.
……………… 2. The concept of management education and planning was the same until 1945.
……………… 3. After 1950 in management education borrowed in some way from concept of philosophy and politics.
……………… 4. Management education never uses the concepts of economics, sociology and psychology.
……………… 5. The development of computerization was effective in development of cities and regions.
……………… 6. Information systems were very useful for planners in the way they produce plans.

C.2. Multiple Choice Items
Choose the best choices (a, b, c or d) for each statement.

1. Before 1945, management education .......... a) was based on skills of planning  
b) did not pay attention to applied engineering 
c) was only based on accounting skills  
d) had given little attention to decision-making in complex situations
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2. According to Wiener ………….
   a) animals unlike human beings have not possessed complex communication
   b) the computer cannot replicated complex communication and human behavior
   c) computers have not possessed control mechanisms
   d) human sciences could be regarded as a kind of manifestation of the need for communication and control

3. Which of the following is not correct about the influence of information systems on the way planners thought about their job?
   a) It led to a new idea of planning for the future desired state of the area
   b) It led towards the new idea of planning as a continues series of controls over the development of area
   c) A complete change in the sequence of planners’ work
   d) It obeyed the old idea of planning as the production of blueprint

4. Information systems developed by planners ………. .
   a) is fixed during the development of regions
   b) is continuously updated during the development of regions
   c) will be used to produce only one projection
   d) will apply limited policies

C.3. Open-ended Questions
Answer the following questions in Persian on the basis of the passage

1. What does the study of planning process comprise?
   .................................................................................................................................
   .................................................................................................................................
2. Why was debating about the concept of planning avoided in schools of planning?

3. What was the difference between management education before and after 1950?

4. What was the major effect of development of computerization in management development?

C.4. Relation of the Words

What do the following pronouns refer to?

1. this (line 3)
2. there (line 9)
3. it (line 17)
4. which (line 21)
5. which (line 26)
6. this (31)
7. which (37)
8. it (45)
9. they (48)
10. their (64)
11. which (75)
12. s/he (76)
13. it (90)
D. Word Formation

D.1. Word Formation Chart

<table>
<thead>
<tr>
<th>Verb</th>
<th>Noun</th>
<th>Adjective</th>
<th>Adverb</th>
</tr>
</thead>
<tbody>
<tr>
<td>replicate</td>
<td>replication</td>
<td>replicated</td>
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</tr>
<tr>
<td>manifest</td>
<td>manifestation</td>
<td>manifest</td>
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<tr>
<td>modify</td>
<td>modification</td>
<td>modified</td>
<td>-</td>
</tr>
<tr>
<td>formulate</td>
<td>formulation</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>apply</td>
<td>application</td>
<td>applied</td>
<td>-</td>
</tr>
<tr>
<td>refine</td>
<td>refinement</td>
<td>refined</td>
<td>-</td>
</tr>
<tr>
<td>simulate</td>
<td>simulator</td>
<td>simulated</td>
<td>-</td>
</tr>
<tr>
<td>transform</td>
<td>transformation</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

D.2. Fill in the Blank Exercise

Use the correct form of the words in D.1 to complete the following sentences.

1. The latest riots are a clear ............ of growing unhappiness.
2. We've made a few ............ to the original design.
3. What role does he have in ............ foreign policy?
4. Fifteen people ............ for the job.
5. We've added a number of ............ to the design.
6. Computer models have ............ conditions on Mars.

E. Structure Review

Adverb Clause

1. a. It is more difficult to represent in words.
   
   b. It is more difficult to represent in words because it is a continuous cycle.
2. a. They could be paralleled by similar systems of control in the computer.
   b. If **human arrangements could be regarded as complex interrelating systems**, they could be paralleled by similar systems of control in the computer.

An adverb clause is used as an adverb to modify the verb of main sentence.

An adverb clause may begin with *because, when, before, whether, unless, if,* etc. such a clause may be used before the main clause or after it. If an adverb clause appears before the main clause, a comma is usually used after the adverbial clause.

There are many forms of adverb clauses that are classified on the basis of the type of relationship they express. For example, the subordinate conjunctions such as *when, after, before* and *until* are used at the beginning of an adverbial clause for indicating the time of occurring the main verb, *where* for place, *if* for condition, *because* and *since* for cause and *although* or *though* for contrast.

**E.1. Structure Exercise**

**Write the adverb clauses in the following sentences in blank spaces given bellow each sentence.**

1. We moved to the suburbs last year because living there is easier than living in the city.
   
   ..............................................................................................................................
   ..............................................................................................................................

2. The difficulty now comes when we try to apply the description to the particular sort of planning.
   
   ..............................................................................................................................
   ..............................................................................................................................

3. Before the Second World War, it was very minute and detailed.
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4. Although people realize that planning has this more general meaning, they tend to remember the idea of the plan.

5. He got the job because he showed the spirit of enterprise.

6. Advance planning is necessary if students seek a certain sort of education.

7. Whether you go to the *Oxford English Dictionary* or the American *Webster’s*, there you find that the noun ‘plan’ and the verb ‘to plan’ have several distinct meanings.

8. When we talk about a street ‘plan’ of London or New York, we mean something quite different from when we talk about our ‘plan’ to visit London or New York next year.
F. Translation

Translate the following passage into Persian

A variety of information systems have been presented in the urban planning literature in the form of decision support tools. The full benefits of such tools continue to go unrealized. This paper suggests means for improving the effectiveness of urban information systems. This is accomplished by shifting emphasis from the computerized tools developed to support urban planning to true urban knowledge systems. Such systems are designed within the context of knowledge management where the technical, computerized aspects of the systems comprise one attribute among many integrated factors for providing urban planning support.

F.1. Persian Equivalents

Find the Persian equivalents of the following words and phrases used in the passage of part 2.
### ‘Planning’ as an activity

<table>
<thead>
<tr>
<th>English Words</th>
<th>Persian equivalent</th>
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<th>Persian equivalent</th>
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</thead>
<tbody>
<tr>
<td>decision-taking</td>
<td>survey–analysis–plan</td>
<td>anticipated</td>
<td>relevant information</td>
</tr>
<tr>
<td>complex situations</td>
<td>self-explanatory</td>
<td>mundane tasks</td>
<td>laid down</td>
</tr>
<tr>
<td>anticipated</td>
<td></td>
<td>profound influence</td>
<td>update</td>
</tr>
<tr>
<td>interrelating systems</td>
<td>orthodoxy</td>
<td>expedition</td>
<td>exposition</td>
</tr>
<tr>
<td>in essence</td>
<td>redefines</td>
<td>blueprints</td>
<td>cybernetic</td>
</tr>
<tr>
<td>extraordinarily</td>
<td>spacecraft</td>
<td>cybernetic planning</td>
<td>planning education</td>
</tr>
<tr>
<td>spatial planning</td>
<td>physical planning</td>
<td>British Planning Act</td>
<td></td>
</tr>
</tbody>
</table>
UNIT 4

Objectives in planning–Simple and Complex

General Aims
This unit has been designed to help you learn a number of key words of objectives in planning and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with typical passages of objectives in planning.

Behavioral Objectives
After carefully reading this unit, you are expected to:
1. Understand the objectives in planning, explain the basic difficulty in development of computerization in planning, recognize the difference between region and urban planning as spatial planning, and distinguish planning from the work of many other professions.
2. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2
3. Do comprehension exercises C-1, C-2, C-3 and C-4
4. Do word formation Chart exercise D
5. Do Structure Review Exercise E-1
6. Be able to perform the parts F and F.1
Unit 4. Part 1: pre-Reading
Vocabulary List

General Words
absurd, achieve, adequate, articulate, attribute, compatible, contradictory, controversy, daunting, diminish, distinguish, encompass, exhaustive, explicit, feasible, frame, inherently, intolerable, logical, obviously, oriented, pitfall, precise, regular, reliable, resemble, sanitary, skeptical, tedious, tempting

Key Words
aviation, cohesion, constitute, demolition, expertise, stability, territory, voyage

A. Word study
Study the following definitions, synonyms, and examples.

A.1. General Words

absurd adj
completely unreasonable or silly; unwise; irrational
It's absurd to pay all that money for something you're only going to use once.

achieve v
accomplish; fulfill; gain
You'll never achieve anything if you don't work harder.

adequate adj
enough; plenty; sufficient
We have not been given adequate information.
articulate  v
speak or say clearly
It's hard to articulate what I'm feeling.

attribute  n
characteristic, feature, quality, property
Kindness is just one of her many attributes.

compatible  adj
able to exist or work together Two things that are compatible are able to exist or be used together without problems.

contradictory  adj
in contrast, opposite
These objectives may not be readily compatible, and may indeed be contradictory.

controversy  n
argument; debate; dispute
There is controversy over the proposed development.

daunting  adj
frightening or worrying; discouraging
The computer system constitutes an impossible specification and a daunting task for the educationalist.

diminish  v
decrease, decline
The show's audience has slowly diminished.
**distinguish**  v
differentiate; separate; discriminate

Young children often can't **distinguish** between TV programs and commercials.

**encompass**  v
include; surround; enclose

A national park **encompassing** 400 square miles

**exhaustive**  adj
extremely thorough; complete

They found the results through an **exhaustive** enquiry.

**explicit**  adj
clear; plain; precise

The whole planning process is more clearly articulated, more logical and more **explicit**.

**feasible**  adj
possible, and likely to work

They prefer to work on a **feasible** plan.

**frame**  v
structure on which something is built

He **framed** his response to the question carefully.

**inherently**  adv
as a naturally or permanently feature or quality of sb/sth

Their plan was **inherently** weak so the manager immediately refused it.
intolerable  adj
too difficult, bad, or painful for you to bear;
unbearable; unendurable
It is intolerable to wait for hours in desert.

logical  adj
reasonable ; sensible
It's the logical place to build a new supermarket.

obviously  adv
clearly; evidently; apparently
Patrick is obviously a good teacher.

oriented  adj
giving attention to a particular type of person or thing
Because of the increasing influence of the general methods, it is oriented towards process rather than towards the production.

pitfall  n
problem or difficulty that is likely to happen
The alternative system has created many new problems and pitfalls of its own.

precise  adj
exact or correct in every detail; definite
The precise location of the ship is still unknown.

regular  adj
usual; ordinary; normal; orderly
Planes were taking off at regular intervals.
reliable adj
dependable; trustworthy
We need a more reliable babysitter.

resemble v
to look like; to be similar to
The new plan of the town resembles the old one in many ways.

sanitary adj
conscemed with protecting health, esp. by removing dirt
When sanitary engineers consider a sewer plan, their work certainly has a spatial component.

skeptical adj
doubting or not believing something
Voters are highly skeptical about/of the proposal.

tedious adj
boring; dull; not interesting
Removing the wallpaper was a long, tedious task.

tempting adj
attractive; inviting
That cake looks very tempting.

A.2. Key Words

aviation n
the science or activity of flying or making aircraft
Space travel or, indeed, commercial aviation presents many technical problems.
Objectives in planning – simple and complex

cohesion  
n  
the ability to fit together or stay together well; unity

One of the reasons why they didn't accept the plan was the lack of cohesion within the plan.

constitute  
v  
form when added together; establish; make

The rise in crime constitutes a threat to society.

demolition  
n  
destruction of a building

One possible line for the motorway goes through a slum district due for early demolition and rebuilding.

expertise  
n  
a special skill or knowledge that you learn by experience or training

The amount of necessary information and specialized expertise is so much greater than in most other planning activities.

stability  
n  
the condition of being strong, steady, and not changing; strength

Their country experienced a long period of political stability.

territory  
n  
land; province; region; country; domain

The plane was flying over enemy territory.

voyage  
n  
a long trip; travel; journey

Columbus's voyage across the ocean led to discovery of America.
Unit 4. Part 2: Reading

Objectives in Planning – Simple and Complex

In practice, as I have said above, this is a great improvement. It means that the whole planning process is more clearly articulated, more logical and more explicit. It is obviously better that planners should start with a fairly exhaustive discussion about what they are seeking to achieve and that they should go on having this discussion during the whole planning process. It is better, too, that different alternatives for the future should be developed, so that they can be openly discussed and evaluated. And the emphasis on specific evaluation, using certain fixed criteria, is an advance. Planning is now much more flexible, working with much greater information. And it is more rational – at least potentially so.

Nevertheless, the alternative system has created many new problems and pitfalls of its own. The development of computerization does not make planning easier, in the sense that it somehow becomes more automatic. There may be many automatic aids to smooth out tedious processes, such as detailed calculations; but they do not diminish the area of human responsibility – the responsibility to take decisions. And the basic difficulty is that it is harder, and finally just less feasible, to apply cybernation to most urban planning problems than it is to apply it to the job of getting human beings on the moon. At first sight this may seem absurd: nothing could be more complex than space travel.

But this is to mix up levels of complexity. Space travel (or, indeed, commercial aviation) presents many technical problems, but there are two features that make it basically simple. First, the objective is clearly understood. Second, the processes involved are nearly all
Objectives in planning – simple and complex

physical: they are subject to laws of physics, which are much better understood, and which appear to be more regular in their application, than laws of human behavior. (There are human beings involved, of course, but in practice they are reduced to little more than biological units for most of the voyage.) The kind of planning that most resembles space travel is transportation planning, and it is significant that this was where computerized systems planning had its earliest and most successful applications. Elsewhere, it has proved harder.

That is because it is inherently more complex. First, the basic objective is not well understood; there is clearly more than one objective, and perhaps dozens (economic growth, fair distribution of income, social cohesion and stability, reduction of psychological stress, a beautiful environment – the list seems endless). These objectives may not be readily compatible, and may indeed be contradictory. Second, most of the processes which need controlling are human processes, which are less well understood and work with much less certainty than laws in the physical sciences. Anyone who has studied any of the social sciences such as economics, sociology, psychology or human geography is familiar with this fact. Just as in these sciences we have to work with laws of statistical tendency rather than with laws which are constantly reliable in producing experimental results, so it will be in much of spatial or physical planning.

One point made in the last paragraph is relevant for our understanding of the particular nature of spatial planning. Earlier, I said that its method was shared with other sorts of planning activity; its subject matter was distinctively spatial, so that at some time, in some sense, it would produce spatial representations of how activities should be ordered on the ground. We now see that spatial planning, as we are using the term in this book – urban and regional planning, as it is conventionally termed – has another feature: it is multidimensional and multi-objective planning. It is necessary to specify these two linked attributes, because there are many types of planning which are
‘spatial’ in the sense that they are concerned with spatial arrangements on the earth’s surface, but have only a single dimension and a single objective. When sanitary engineers consider a sewer plan, their work certainly has a spatial component, but it is neither multidimensional nor multi-objective. (Or, to be more precise, even if the engineer thinks s/he has more than one objective, these are all engineering objectives within the same basic dimension.)

This engineer, or colleagues like the highway engineer or telephone engineer, are doubtless all working with plans which are spatial representations of their territory. But none of them will be trying (for instance) to balance the advantages of preserving a long-established inner-city society against the advantages of building better housing on an estate some distance away, or the problem of reconciling higher car ownership with the preservation of public transport for those who have no access to cars and the preservation of a decent urban environment, or the merits of segregating factory zones versus the merit of having local factories nearer to people’s homes – all of these, and many more, being considered as part of the same planning process, and having finally each to be considered vis-à-vis all the others. This task of reconciliation is the essence of the job of the urban and regional planner; this is why, compared with most other sorts of job regarded as planning, it is so difficult.

It is difficult in two ways. First, the amount of necessary information and specialized expertise is so much greater than in most other planning activities: it covers almost the whole of human experience. The ideal urban and regional planner would have to be a good economist, sociologist, geographer and social psychologist in his or her own right, as well as having several other necessary physical-scientific skills, such as a good understanding of civil engineering and of cybernetics. To judge the quality of the information s/he was receiving, s/he would need to be a sophisticated (and even slightly skeptical) statistician. And s/he would need to be a highly competent systems analyst in order to develop the relationships with the
computer control system with which s/he related. All of which, of course, constitutes an impossible specification – and a daunting task for the educationalist.

But second, and even more problematically, there is the need to frame and then weigh up different objectives. Consider a very typical (and very topical) type of planning controversy, repeated almost daily: the line of a new urban motorway. Some critics say that it would be quite unnecessary if public transport were adequate; some that the line should be shifted. The fact is that car ownership is rising, and this seems outside the planner’s control; it is set by the political or social framework within which s/he acts.

The projections (which may not be entirely reliable) suggest that the traffic will overwhelm the present road network, giving an environment to many thousands of people which, by current standards, is judged intolerable. The quality of public transport is declining, but the available evidence shows that better quality would not have much result in tempting people back from their cars and reducing the case for the motorway.

One possible line for the motorway goes through a slum district due for early demolition and rebuilding; some sociologists say that the community should be rehoused in situ; others argue that many of the people would lead happier lives in a new town.

Another line goes through open space which contains playing fields as well as the nesting grounds of several species of birds; local sports clubs and nature conservationists are united in opposing this line. The costs to the public purse are known in the two cases, but the benefits are dependent on the valuation of travel time for the likely motorway users, on which two groups of economists are hotly disputing. And the costs, or disbenefits, for different groups of the public affected by the building of the motorway are almost incalculable.

There are many varying interests and special academic skills, some of the practitioners of which cannot agree among themselves;
the only person who seems competent to take any decision at all is someone whose training and thinking are supposed to encompass them all. This, of course, is the general urban and regional planner. This is not the point at which to discuss the resolution of the problem just mentioned; in fact, there simply is no clear resolution, and the most the planner can do is to try to reach a decision within a clear and explicit framework – which, one hopes, the new style of planning helps him or her to do.

The example has been given simply to illustrate the unique quality, and the unique difficulty, of the sort of planning that is the subject matter of this book. To sum up: urban and regional planning is spatial or physical: it uses the general methods of planning to produce a physical design. Because of the increasing influence of these general methods, it is oriented towards process rather than towards the production of one-shot (or end-state) plans. Its subject matter is really that part of geography which is concerned with urban and regional systems; but the planning itself is a type of management for very complex systems. And further, it is necessarily multidimensional and multi-objective in its scope; this is what distinguishes it from the work of many other professionals whose work can fairly be described as planning with a spatial component.

Unit 4. Part 3: exercises
B. Vocabulary Exercises
B.1. Fill in the Blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

obviously, feasible, diminish, precise, pitfall, stability, reliable, constitute, expertise, encompass, distinguish, adequate
1. Ecological studies .......... the interrelationships between all forms of life and the natural environment.
2. Someone or something that is .......... can be trusted or depended on.
3. The committee is .......... of members of all three parties.
4. Union membership .......... from 30,000 at its height to just 20 today.
5. The .......... cause of the accident is unknown.
6. It is not .......... to follow your plan.
7. Tom does not know what .......... the two research projects.
8. This text presents many .......... for the translator.
9. Her income is hardly .......... to pay the bills.

B.2. Matching
Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.

| .......... |     | voyage      | a.   | dependable |
| .......... |     | stability   | b.   | thorough   |
| .......... |     | tedious     | c.   | boring     |
| .......... |     | reliable    | d.   | strength   |
| .......... |     | exhaustive  | e.   | domain     |
| .......... |     | cohesion    | f.   | a long trip|
| .......... |     | constitute  | g.   | usual      |
| .......... |     | territory   | h.   | reasonable |
| .......... |     | resemble    | i.   | establish  |
| .......... |     | logical     | j.   | to be similar to |
| .......... |     | regular     | k.   | unity      |
| .......... |     |             | l.   | attractive |
C. Comprehension Exercises
C.1. True/False Statements
Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

..................... 1. Planning is now much more flexible, but less rational.

..................... 2. The development of computerization makes planning easier.

..................... 3. Computerization does not remove human responsibility to make decisions.

..................... 4. Urban and regional planning is oriented towards the production of one plan rather than towards the process.

..................... 5. Planning is multidimensional and multi-objective in its scope.

C.2. Multiple Choice Questions
Choose the best choices (a, b, c or d) for each statement.

1. The kind of planning that most resembles space travel is ……….
   a) transportation planning
   b) computerized systems planning
   c) law of physics
   d) biological unit

2. Planning is now much more ………., and it is more ……….
   a) flexible – informative
   b) informative – flexible
   c) flexible – rational
   d) rational- informative
3. Which of the following is not mentioned as the characteristic of an ideal regional planner?
   a) s/he has to be a good geographer
   b) s/he has to be an economist
   c) s/he has to be a philosopher
   d) all of them

4. I order to judge the quality of the information of a regional planner, s/he should be a(n) ………
   a) economist        b) sophisticated sociologist
   c) statistician     d) psychologist

5. One of the basic difficulties of the job of regional planners is ………
   a) the amount of necessary information and specialized expertise is less than in most other planning activities
   b) the ideal urban and regional planner should be only an economist
   c) the need to frame and then weigh up different objectives
   d) a little understanding of civil engineering and of cybernetics

C.3. Open-ended Questions

Answer the following questions in Persian on the basis of the passage

1. What is the basic difficulty in development of computerization in planning?

2. What is the difference between region and urban planning as spatial planning with other sort of planning?
3. What distinguishes planning from the work of many other professions?

4. What are the two major difficulties in the job of the urban and regional planners?

C.4. Relation of the Words
What do the following pronouns refer to?

1. they (line 15)                      
2. which (line 25)                    
3. their (line 26)                    
4. which (line 39)                    
5. who (line 41)                      
6. which (line 44)                    
7. its (line 49)                      
8. which (line 56)                    
9. their (line 59)                    
10. s/he (line 61)                    
11. his (line 83)                     
12. s/he (line 86)                    
13. this (line 97)                    
14. which (line 100)
D. Word Formation
D.1. Word Formation Chart

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<td>stabilize</td>
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</tr>
</tbody>
</table>

D.2. Fill in the Blank Exercise
Use the correct form of the words in D.1 to complete the following sentences.

1. A healthy diet can prevent the ........... of heart disease.
2. Employing part time staff gives companies greater ........... they can easily change to suit new conditions.
3. The number of staff was ............. from 40 to 25.
4. Be careful - the ladder doesn't look .............
5. It is not advisable to spend our time and energy on goals that are not .............
6. He gave me ............. directions on how to go to the downtown.
7. The place has ............. from a fishing part into a thriving tourist center.

E. Structure Review
Noun Clause
Look at these sentences:
1. Some critics say that it would be quite unnecessary if public transport was adequate.

2. What does seem true is that the central body of social sciences is taught as parts of human geography.

3. It seems that urban planning is a special case of general planning.

   A noun clause is a dependent clause or subordinate clause. It functions as a noun in the sentence.

   The noun clauses may be introduced by the following words:

   Who, what, which, whom, whose, whoever, whichever, whatever, where, when, how, why, whether, that

   Since a noun clause may be used in the same way in which a noun is used, it can occur anywhere in the sentence where a noun can occur. In sentence 1 and 3, the noun clause 'that it would be quite unnecessary if public transport was adequate' and 'that urban planning is a special case of general planning' are both objects of the sentences. In sentence 2, the noun clause 'What does seem true' is the subject of the sentence.

E.1. Structure Exercise

Find the noun clauses in the following sentences and write them in the spaces provided.

1. Planners of all kinds think that they know what planning means.

   ………………………………………………………………………………………..
   ……………………………………………………………………………………

2. One dictionary definition, in fact, refers to what planning does; the other, to how planning does it.

   ………………………………………………………………………………………..
   ……………………………………………………………………………………

3. Those in the less affluent world are in much less doubt that they want the security and dignity that planning can bring.
4. Rachel didn't mention names, but everyone knew who she was referring to.

5. The difficulty is that they do all sorts of different things.

6. There you find that the noun ‘plan’ and the verb ‘to plan’ have several distinct meanings.

7. Thus they imagine that planning must include the preparation of such a design.

F. Translation

Translate the following passage into Persian

Spatially explicit urban expansion models that can trace urban development in the past and predict the expansion scenarios in the future are indispensable for examining urban planning policies. Urban expansion is a complicated process that is determined by the interactions of biophysical factors and human factors in space and time at different scales (Barredo, Kasanko, McCormick, &Lavalle, 2003; Lambin & Geist, 2001). Modeling is a valuable way to understand a process (Costanza & Ruth, 1998). There still lacks spatially explicit urban expansion models that can effectively trace the urban development in the past and predict possible expansion scenarios in the future so that related urban planning policies can be
examined. Since land use models are useful tools to understand the land use process and support land use planning and policy making (Verburg, Veldkamp, de Koning, Kok, & Bouma, 1999), further development of urban land model to effectively describe the complicated process of urban expansion is still indispensable (Chen, Gong, He, Luo, & Tamural, 2002).

<table>
<thead>
<tr>
<th>English Words</th>
<th>Persian equivalent</th>
<th>English Words</th>
<th>Persian equivalent</th>
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<td>weigh up</td>
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<tr>
<td>system</td>
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### Objectives in planning – simple and complex

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<tr>
<td>transportation</td>
<td>practitioners</td>
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<tr>
<td>in some sense</td>
<td>resolution</td>
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<tr>
<td>distinctively</td>
<td>explicit framework</td>
</tr>
<tr>
<td>multidimensional</td>
<td>professionals</td>
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<td>conventionally</td>
<td>segregating factory</td>
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<td>multi-objective planning</td>
<td>preservation</td>
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<td>sewer plan</td>
<td>vis-à-vis</td>
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<td>public purse</td>
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UNIT 5

The Origins: Urban Growth from 1800 to 1940

General Aims
This unit has been designed to help you learn a number of key words of urban growth and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with typical passages of the origin of urbanization.

Behavioral Objectives
After carefully reading this unit, you are expected to:
1. Understand the solutions to the economic and social problems, and explain the major problems of London after Industrial Revolution
2. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2
3. Do comprehension exercises C-1, C-2, C-3 and C-4
4. Do word formation Chart exercise D
5. Do Structure Review Exercise E-1
6. Be able to perform the parts F and F.1
Part 1: pre - Reading
Vocabulary List

General Words
bypass, corresponding, corruption, draconian, dweller, immense, inertia, inherit, medieval, penalty, radical, off, trigger, uppermost

Key words
ban, chariot, provision

A. Word study
Study the following definitions, synonyms, and examples.

A.1. General Words

bypass v
to avoid a place by going around it
If we bypass the town, we'll save time.

corresponding adj
relating or similar to something
The workers demand a promotion and a corresponding increase in salary.

corruption n
dishonest or immoral behavior; demoralization
Violence on TV led to the corruption of young people.

draconian adj
very strict and severe
For avoiding chaos, they establish draconian laws in their country.
The origins: urban growth from 1800 to 1940

dweller
person or animal that lives in a city, town, etc.; inhabitant

They estimated that the dwellers of the city are the same as those in ten years ago.

immense
adj
extremely large, huge, enormous

We still have an immense amount of work to do.

inertia
n
a tendency to remain unchanged

Because of the sheer inertia of the system many badly needed reforms were never introduced.

inherit
v
receive something from someone after s/he has died

They inherited the house from their uncle.

medieval
adj
relating to the Middle Ages

His mother used to read medieval poetry for the family every weekend.

penalty
n
a punishment for not obeying a law, rule, or legal agreement

The maximum penalty for the crime is five years in prison.

radical
adj
thorough and complete; fundamental; essential

She is radical in her demands.
The incident triggered off a wave of violence.

Your safety is uppermost in my mind.

The city council banned smoking in public areas.

Rome banned chariot movement at night to deal with the first recorded case of urban noise pollution.

He has made provisions for his wife in his will
Modern urban and regional planning has arisen in response to specific social and economic problems, which in turn were triggered off by the Industrial Revolution at the end of the eighteenth century. It is important to notice that these problems did not all come at once, in the same form; they changed in character, and in their relative importance, so that the questions uppermost in the minds of city-dwellers in the 1930s were by no means the same as those experienced by their great-grandfathers in the 1840s. As problems were identified, solutions were proposed for them; but because of the inertia of people’s minds, and still more the inertia of social and political processes, these solutions – especially the more radical ones – might not be put into action until decades afterwards, when the problem itself had changed in character and perhaps also in importance.

**Planning before the Industrial Revolution**

There were important cities before the Industrial Revolution: ancient Rome had an estimated population of 1,000,000 by the year AD 100; Elizabethan London numbered about 200,000 people. Correspondingly, these cities had problems of economic and social organization: Rome had to be supplied with water brought over considerable distances by aqueduct (the word itself is Roman in origin), and the city developed immense problems of traffic congestion – which unfortunately have been inherited by the modern city two thousand years later. London by the fourteenth century had to draw on coalfields by the River Tyne, 270 miles (430 km) away, for fuel, and on distant countries for more specialized provisions, such as
dyestuffs or spices; by the seventeenth century it, too, was drawing water from 35 miles (56 km) away by aqueduct. (The New River, which runs through north London, is part of it.) These problems in turn brought forth a host of regulations for the better ordering of the city, sometimes dealing with strangely modern problems: Rome banned chariot movement at night to deal with the first recorded case of urban noise pollution; in London in the fourteenth century a man was hanged for burning ‘sea coal’ – a somewhat draconian penalty for medieval air pollution. Furthermore, many cities in both the ancient and the medieval world were planned, at least in the sense that their existence and their location were laid down consciously by some ruler or some group of merchants; and among this group, a large proportion even had formal ground plans with a strong element of geometric regularity. In Britain the group of medieval planned towns is larger than many people think: a small town like Baldock, on the Great North Road (A1) before it was bypassed, was actually a creation of the Knights Templar, and the name itself is a corruption of Baghdad; modern urban and regional planning has arisen in response to specific social and economic problems, which in turn were triggered off by the Industrial Revolution at the end of the eighteenth century. It is important to notice that these problems did not all come at once, in the same form; they changed in character, and in their relative importance, so that the questions uppermost in the minds of city-dwellers in the 1930s were by no means the same as those experienced by their great-grandfathers in the 1840s. As problems were identified, solutions were proposed for them; but because of the inertia of people’s minds, and still more the inertia of social and political processes, these solutions – especially the more radical ones – might not be put into action until decades afterwards, when the problem itself had changed in character and perhaps also in importance.
Unit 5. Part 3: Exercises
B. Vocabulary Exercises
B.1. Fill in the blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

provision, ban, uppermost, trigger off, inherit, immense, bypass

1. The country's government has ………. foreign journalists from the area.
2. Heavy rain may …………… mudslides.
3. Suzy ………….. her mother's good looks.
4. We have made a/n …………. mistake in that plan.
5. He ……………. the complaints procedure and wrote straight to the chairman.
6. The children's future is always …………… in my mind.

B.2. Matching
Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.

| ……… | 1 | provision | a. | demoralization |
| ……… | 2 | draconian | b. | supplying |
| ……… | 3 | corruption | c. | result in |
| ……… | 4 | ban | d. | enormous |
| ……… | 5 | medieval | e. | forbid |
| ……… | 6 | immense | f. | fundamental |
| ……… | 7 | radical | g. | severe |
| ……… | 8 | trigger off | h. | relating to the Middle Ages |
C. Comprehension Exercises
C.1. True/False Statements
Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

……………… 1. Modern urban and regional planning has not been related to any social and economic problems.

……………… 2. The social and economic problems in 1930s were not the same as ones in 1940s.

……………… 3. The population of London was more than ancient Rome before Industrial Revolution.

……………… 4. Elizabethan London had economic problems before Industrial Revolution.

……………… 5. Baldock is a medieval planned town in Britain.

C.2. Multiple Choice Items
Choose the best choices (a, b, c or d) for each statement.

1. Modern urban and regional planning has arisen in response to

………………

a) economic problems before Industrial Revolution
b) Industrial Revolution problems
c) Social problems before Industrial Revolution
d) Economic and social problems after Industrial Revolution

2. The problems of London before Industrial Revolution were …….

a) the supply of water over considerable distances by aqueduct
b) traffic congestion which have been inherited by the modern city
The origins: urban growth from 1800 to 1940

c) formal ground plans with a strong element of geometric regularity
d) the large amount of water and fuel in the city

3. The estimated population of ancient Rome was ……… .
a) less than the Elizabethan London's in that time
b) was more than Elizabethan London's before Industrial Revolution
c) was the same before and after Industrial Revolution
d) was the same as Elizabethan London by the year AD 100

4. Which of the following is not among the medieval planned towns in Britain?
a) Baldock    b) Winchelsea
b) Baghdad    d) Caernarfon

c) Baghdad     d) Caernarfon

5. In London in the fourteenth century a man was hanged for burning ‘sea coal’ because of ……… .
a) the lack of fuel in that days
b) the difficulty of supplying ‘sea coal’
c) a penalty for medieval air pollution
d) the much more population in that days

C.3. Open-ended Questions

1. Why solutions to the economic and social problems were not put into actions for decades?

……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………

2. Why Rome banned chariot movement at night?

……………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………
3. What was/were the major problems of London after Industrial Revolution?

C.4. Relation of the Words
What do the following pronouns refer to?

1. which (line 2)  
2. they (line 5)  
3. those (line 7)  
4. them (line 8)  
5. which (line 21)  
6. it (line 25)  
7. their (line 35)  
8. itself (line 41)  
9. which (43)  
10. their (line 46)  

D. Word Formation
D.1. Word Formation Chart

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D.2. Fill in the Blank Exercise
Use the correct form of the words in D.1 to complete the following sentences.

1. Nobody in the classroom could answer the problem, but she could easily ……….. it.
2. Accurate …………… is very important in geography and physics.
3. Mary's ………….. problems got her into trouble.
4. The red light ………….. that you must stop.
5. Mentally retarded people are …………. by their low IQ scores.

E. Structure Review
Pronoun
Look at these sentences:

1. It is more difficult to represent in words because it is a continuous cycle.
2. First the planner made a survey, in which s/he collected all the relevant information about the development of the city or region
3. It is difficult to put this new sequence into a string of words like the older one.
4. As problems were identified, solutions were proposed for them.

In sentence 1, 'it' refers to 'to represent in words because it is a continuous cycle'. 'It' is a pronoun. In sentence 2, 'which' refers to 'a survey'. 'which' is a pronoun. In sentence 3, 'it' refers to 'to put this new sequence into a string of words like the older one'. ‘It’ is a pronoun. In sentence 4, 'them' refers to 'problems'. 'Them' is a pronoun.

Most pronouns function like nouns or noun phrases. Pronouns share several characteristics, most of which are not found in nouns. Their name implies that they replace nouns, but this is to a great extent far from true.
E.1. Structure Exercise
Find the pronouns in the following sentences and write their references in the spaces provided.

1. Social planners in the urban planning office share the same interests and concerns, but see them always with the spatial component: they are concerned, for instance, with the effect of occupational mobility on the inner city.

2. This engineer, or colleagues like the highway engineer or telephone engineer, are doubtless all working with plans which are spatial representations of their territory.

3. It was argued that they imposed an increasingly insufferable burden on their inhabitants.

4. The verb ‘to plan’, and the nouns ‘planning’ and ‘planner’ that are derived from it, have in fact only the second, general group of meanings: they do not refer to the art of drawing up a physical plan or design on paper.
F. Translation

Translate the following passage into Persian

The purpose of designating “non-urban planned districts” is for the conservation of environmentally sensitive areas and to protect rural landscape (Lee et al., 2007). The conversion of land use in “non-urban planned districts” is regulated under the Regional Planning Act through a permit system. Within “urban planned districts”, municipal governments exercise land use control through strict and inflexible zoning ordinances. In “non-urban planned districts”, each piece of land is designated a use zone with density limits lower than in urban planned districts. Land owners in these areas can choose among a list of permitted uses. Although the non-urban planned districts might be re-zoned to urban planned districts, the difference in flexibility and intensity allowed for land development in urban planned districts and non-urban planned districts has resulted in markedly different spatial configurations of land use patterns. Several studies have examined socioeconomic changes in urban areas, however, studies of the physical processes associated with urban land use change and the underlying social, economic, and political factors that can lead to certain spatial configurations and land use change have received little attention in the literature (Setoand Fragkias, 2005).
### F.1. Persian Equivalents

Find the Persian equivalents of the following words and phrases used in the passage in part 2.

<table>
<thead>
<tr>
<th>English Words</th>
<th>Persian equivalent</th>
<th>English Words</th>
<th>Persian equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>afterwards</td>
<td>coalfield</td>
<td>estimated population</td>
<td>congestion</td>
</tr>
<tr>
<td>ancient Rome</td>
<td>spice</td>
<td>regulations</td>
<td>inertia</td>
</tr>
<tr>
<td>laid down</td>
<td>draconian</td>
<td>consciously</td>
<td>penalty</td>
</tr>
<tr>
<td>geometric regularity</td>
<td>afterwards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIT 6

Planning before the Industrial Revolution

General Aims
This unit has been designed to help you learn a number of key words of Planning before the Industrial Revolution and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with typical passages of Industrial Revolution.

Behavioral Objectives
After carefully reading this unit, you are expected to:
1. Explain the development of public transport system of London during 1870s to 1900s; understand the meaning of 'the early public transport city' in the development of London, recognize the economic forces affected on the suburban movement in London between the two world wars, and define development of technology in transportation.
2. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2
3. Do comprehension exercises C-1, C-2, C-3 and C-4
4. Do word formation Chart exercise D
5. Do Structure Review Exercise E-1
6. be able to perform the parts F and F.1
Unit 6. Part 1: pre- Reading
Vocabulary List

General Words
absolute, affluent, aspire, border, charming, clerical, commute, conscious, deploy, depression, dominate, deserve, equaled, extraordinary, enthusiasm, imitation, mortgage, penetrate, regal, scattered, speculative, warfare

Keywords
accelerate, aristocracy, commentator, colonize, contribute, density, erect, radius, spread, subsidy, tram

A. Word Study
Study the following definitions, synonyms, and examples.

A.1. General Words

**absolute** adj
complete or total
I have **absolute** confidence in you.

**affluent** adj
rich; wealthy; having a lot of money
They moved to an **affluent** suburb of Baltimore.

**aspire** v
to have a strong desire to achieve something
Milligan **aspires** to be Governor of the state.

**border** v
to share a border or edge with another country
Spain **borders** Portugal.
charming adj  
very pleasing or attractive

They live in a **charming** house.

clerical adj  
relating to office work

It is now easier for the average clerical or skilled manual worker to buy a house by using a bank loan.

commute v  
travel regularly in order to get to work

Jerry **commutes** from Scarsdale to New York every day.

conscious adj  
noticing or realizing something; aware

I became **conscious** of the fact that someone was watching me.

deploy v  
arrange for effective action; use something effectively

Nuclear missiles were being **deployed** in Europe.

depression n  
a feeling of sadness and a loss of hope; recession

During the **depression**, many young people were unable to find any work at all.

dominate v  
to have power and control over someone or something

Five large companies **dominate** the auto industry.
deserve

v

be worthy of

After all that work, you deserve a rest.

equaled

adj

to be the same; balanced; equivalent

He has equaled the Olympic record!

extraordinary

adj

unusual and surprising

He spends an extraordinary amount of money on clothes.

enthusiasm

n

a strong feeling of interest and enjoyment

The new students were full of enthusiasm.

imitation

n

a copy of someone's speech, behavior, etc; reproduction

Harry does an excellent imitation of Elvis.

mortgage

n

borrowed money from the bank

We took out a bigger mortgage to pay for the work on the house.

penetrate

v

to enter or pass through something which is difficult

Explorers penetrated deep into unknown regions.

regal

adj

like a king or queen; very splendid

These were nearly all expressions of absolute regal or paper power in 18th century.
scattered adj
spread over a wide area or over a long period of time
The weather forecast is for scattered showers (short periods of rain).

speculative adj
based on guessing, not facts; subjective
His major problem caused by a speculative investment.

warfare n
fighting in a war; conflict; combat
One thousand people have died during the chemical warfare.

A.2. Key Words
accelerate v
quicken; hasten; hurry
We tried to accelerate the process by heating the chemicals.

aristocracy n
the people in the highest social class
The aristocracy and the new merchant class dominated the growth of cities.

commentator n
someone on television or radio describes an event
She married with a news commentator last week.

colonize v
to control a country or area
Argentina was colonized by Spain.
contribute v
to help make something happen; cooperate
Several hundred people contributed articles, photographs, and cartoons.

density n
(of the area) very crowded
They live in a high density neighborhood in this town.

erect v
build; construct
Officials plan to erect a monument in Lindbergh's honor.

radius n
the distance from the center to the edge of a circle; within a distance of 10 miles, etc. in all directions from a particular place
Radius is the distance from the center to the edge of a circle, or a line drawn from the center to the edge.

spread v
open; expand; extend; stretch
The population is evenly spread across the state.

subsidy n
money that is paid by a government or organization in order to reduce the cost of something
Government subsidies for small farmers help them to expand their productions.
electric bus that runs on metal lines set in the road; streetcar

It took a long time to use tram in the city in order to reduce the traffic.

**Unit 6. Part 2: Reading**

**Planning before the Industrial Revolution**

The greatest flowering of formal town planning before the Industrial Revolution, though, came in what is known in continental Europe as the Baroque era: the seventeenth and eighteenth centuries. There it produced such masterpieces of large-scale architectural design as the reconstruction of Rome during the late sixteenth and early seventeenth centuries; or the great compositions of the Toiletries gardens and the Champs-Elysees, in Paris; or the palace of Versailles and its bordering planned town; or the completely planned town of Karlsruhe, in Germany; or the seventeenth-century quarters of Nancy, in the province of Lorraine in eastern France; as well as many other smaller, but fine, examples. These were nearly all expressions of absolute regal or paper power, and some commentators have claimed to see in them the expression of a new style of warfare; instead of the medieval walled town, cities must now be planned along broad formal avenues along which mobile armies could deploy themselves. Britain, after Cromwellian times, had no such absolute monarchy; here the aristocracy and the new merchant class dominated the growth of cities and determined their form. The result was a different but equally distinctive form of town planning: the development of formal residential quarters consisting of dignified houses built in terraces or
rows, generally on a strongly geometrical street plan which was modified by charming squares with gardens.

The original development of many of the quarters of London’s West End, now sadly much damaged by later reconstruction – areas like St James’s, Mayfair, Marylebone and Bloomsbury – still provides the best examples in Britain of this type of planning attached to an existing major city; Edinburgh’s New Town, facing the medieval city across the deep cut now occupied by the railway, is another. But perhaps the best example of eighteenth-century British town planning is the development of Bath, up to then a small medieval town, as the result of a new enthusiasm for spa cures among the aristocracy at that time.

All these examples, and many other imitations, have great interest for the student of architecture or the origins of planning. And similarly, the creation of the rural landscape of Europe – a process which involved much more conscious planning than most people, looking at the result casually, would imagine – is important for the planner, understanding how previous generations adjusted to the opportunities and the limitations the region presented. But the subject deserves much fuller treatment than it can receive here; and it is excellently written up in the book *The Making of the English Landscape* by W.G. Hoskins. Our main concern now is a subject that has little relation with the past: the unprecedented impact of modern industrialism on urban development and upon consequent urban planning problems.

### The phenomenon of urban spread

But by and large, the period after 1870 marks a significant change in the development of British cities – and, as far as can be seen from international studies by the economist Colin Clark, in other countries’ cities too. In fact, the trend is quite marked for London after the 1861 census. Up to that time, as we noted earlier, densities were actually rising within a radius of about 3 miles (4.8 km) from the centre of
British cities – the radius within which people could walk to their work within about an hour, there being no effective public or private transport of any kind for most of the population. If we look at a town like Preston (Plate 1.6), which had changed little in the hundred years or so between the time when most of the buildings were erected and the time of the photograph (about 1935), we should realize that most of the people living in these gardenless houses, without public parks, nevertheless could walk to open fields within about twenty minutes. (This was as true in 1935 as in 1835) And since the cotton mills – then, the chief and almost the sole source of work for many – were scattered fairly evenly across the town, journeys to work on foot were quite extraordinarily short: an average mill hand could walk to and from work four times a day, coming home for a midday meal, in rather less time than the average modern commuter spends on his or her outward morning journey. Even the biggest European city, London, grew relatively little in area as it doubled in population from 1 to 2 million people between 1801 and 1851.

But then, between about 1870 and 1914, virtually all British cities rapidly acquired a cheap and efficient public transport system – first (in the 1870s and 1880s) in the form of horse trams and buses, then (at about the turn of the century) of electric trams, and lastly (just before the First World War) in the form of motor buses. In very large cities like London there were also commuter trains. The early railways had neglected the possibilities of suburban traffic, even in London, but most of them awoke to the possibilities after 1860; and one, the Great Eastern, serving north-east London, was compelled by Parliament to run cheap trains for workmen, allowing them to live in suburbs as distant as Edmonton and Leytonstone. London even had a steam-operated underground railway, the world’s first, by 1863; its first electric tube railway opened in 1890 and its first electrified suburban lines in 1905–9.
The impact on urban growth was profound, as can clearly be seen in the series of maps for London at different dates (Figure 1.6). London in 1801, with 1 million people, was still a remarkably compact city, mainly contained within a radius about 2 miles (3.2 km) from the centre; and by 1851, with double the number of people, the radius had not increased to much more than 3 miles (4.8 km), with higher densities in the inner areas. Then the city began to spread in all directions, but particularly to the south and north-east – as seen in the map for 1880 and, even more clearly, for 1914. This last represents the apogee of what can fairly be called the early public transport city.

(Plate 1.6) Aerial photograph of Preston in the 1930s. This demonstrates the high density and closely built-up nature of the early industrial town. Though open space is lacking, the town is small, and open countryside is not far away (though not visible here); and, with factories scattered among houses, the journey to work is short. Today the cotton mills are all derelict. Much of the housing in the picture has been replaced. Many of the inhabitants’ doubtless travel further to work, for many of Preston’s jobs are on the town’s periphery; and many of the new owners have cars.

The steam trains gave fairly easy and rapid access to middle-class commuters (and, in east London, the working class too) at distances up to 15 miles (24 km) from the centre. But they accelerated
and decelerated poorly; stops tended to be widely spaced; and feeder
services, in the form of horse buses or trams, were poorly developed,
or slow. The result is a typically tentacular form of growth, with
development taking the form of blobs (or beads on a string, to change
the metaphor) around each station.

Between the two world wars the whole process of suburban growth
and decentralization began to speed up; in doing so it changed its
form. The forces behind the suburban movement during those years
were partly economic, partly social, and partly technological.
Economic forces in the world outside – world depression between
1929 and about 1934, a general depression in the prices of primary
products – meant that both labor for construction and building
materials were cheap. Social changes, too, were produced by
economic development: more and more workers were becoming
white-collar employees in offices or shops or other non-factory
occupations, enjoying regular salaries which allowed them to borrow
money on credit, and regarding themselves as members of an
enlarging middle class. In large numbers, these people began to aspire
to buy a house of their own with the aid of a mortgage.
(Figure 1.6) The growth of London, 1800–2000. Until 1850 London’s extent was constrained by walking distances. Steam trains from 1850 to 1914, and electric trains, tubes and buses from 1914 to 1939, allowed suburban spread – but then the green belt stopped it.

Lastly, and perhaps most fundamentally, further developments in transport technology extended the effective commuting range:
electric trains in London, motor buses elsewhere, allowed the effective area of the city to extend up to four or five times the previous limits. Such growth was particularly well marked in London. In 1914 London had a population of about 61/2 million; by 1939, 81/2 million. Yet in that period the capital’s built-up area extended about three times. The underground railways before 1914 had barely extended beyond the existing developed area; but after 1918 they began to colonize new territory, extending quickly above ground on to previously undeveloped areas. The result was as predicted: a vast flood of speculative building, cheaply built for sale. Plate 2.3 shows the result around just one station: Edgware in Middlesex, some 12 miles (19 km) from central London, in 1926 – two years after the line was opened – and 1948 – a quarter of a century later.

The precise impact of this sort of development upon the urban structure can be well seen by comparing the maps of London in 1914 and 1939 respectively in Figure 1.6.

London in 1914, as we have already noted, had the characteristically tentacular shape associated with the early public transport city – the city of the steam train and the horse bus. By 1939 it had assumed a completely different shape: growth was much more even in any direction, producing a roughly circular city with a radius about 12 to 15 miles (19 to 24 km) from the centre. The basic reason for this was a change in the technology of transportation. First, electric trains were more efficient carriers than the steam trains had been: accelerating and decelerating rapidly, they could serve more frequently spaced stations. Second, and even more importantly, the motor bus allowed a fairly rapid urban transport service to penetrate in any direction from these stations, along existing roads, without the need for elaborate capital investment on the part of the operator; it therefore served as a highly efficient feeder service. These changes altered the pattern of accessibility within the urban area. The isochrones (lines of equal accessibility to the centre, in terms of time) were in 1914 very irregular; they fingered out a long way along the
railway lines. By 1939 they had become more even and circular (or concentric) in form; and the development of the urban area followed accordingly. This form we can call typical of the later public transport city; it was not at all a creation of the private car, since in London by 1939 only about one family in ten owned one.

The same process was repeated around the provincial cities too, though on a smaller scale, and dependent on the tram or bus rather than the train. In some of the bigger cities – Manchester, Liverpool and Leeds – the local authorities themselves contributed to the process. They re-housed many thousands of slum-dwellers and other people in need of public housing by developing new estates of single-family homes generally at distances from 4 to 7 miles (7–11 km) from the city centre, in the case of the biggest cities, and connected to it by rapid, frequent and cheap public transport. Like the private housing, this was cheaply built (and, unlike most of the private housing, it was aided by central government subsidy as the result of a 1919 Housing Act). It was also of a standard never before reached in public housing: equipped with basic facilities like bathrooms, and with generous private garden space around. These authorities built fairly faithfully according to the recommendations of an influential official report, the Tudor Walters Report, which had been published at the end of the First World War in 1918; it had recommended development of single-family homes at about 12 per net residential acre (30/hectare), or about one-quarter the density of the old by-law housing.

This also was the density of much of the private housing developed around London and other big cities; many private estates were built at even lower densities: 10 or 8 or even 6 houses to the acre (15–24/hectare). For the general feeling was that more spacious housing standards were a healthy reaction to the cramped terraces of the Nineteenth-century industrial town; the bus and the electric train had liberated the manual workers in their rented council houses and the white-collar workers in their mortgaged semi-detached houses alike.
(Plate 2.6) Edgware, north-west London: (a) 1926; (b) 1948, showing the impact of the extension of the underground railway (station in centre of pictures) on suburban development. Typical are the uniform rows of semi-detached housing, built at about 12 dwellings to the acre (30/hectare), with generous gardens. Better transportation allowed the city to spread.
And because the improved transportation made so much land potentially developable, the price of land was low. Indeed, it is clear from later research that land prices and house prices, which are always so closely related, reached a low point in relation to income in the 1930s that has never been equaled before or since (Figure 1.7). It was actually easier for the average clerical or skilled manual worker to buy a house in the 1930s than it is in the more affluent Britain of seventy years later.

Unit 6. Part 3: Exercises
B. Vocabulary Exercises
B.1. Fill in the Blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

absolute, affluent, deploy, imitation, accelerate, colonize, depression, erect, spread, warfare

1. I can't give you any ........... promises in doing the task.
2. The infantry began to ........... at dawn.
3. He sat with books and papers ........... over the table.
4. Britain ............ many parts of Africa.
5. It took five years to ........... the skyscraper.
6. After her son died she went into a long period of ............
7........... refers to the activity of fighting in a war especially when talking about particular methods of fighting.
8. It's not an antique; it's an ............

B.2. Matching
Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.
123  Planning before the Industrial Revolution

<table>
<thead>
<tr>
<th>Number</th>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>spread</td>
<td>fighting in a war</td>
</tr>
<tr>
<td>2</td>
<td>absolute</td>
<td>Use something effectively</td>
</tr>
<tr>
<td>3</td>
<td>erect</td>
<td>extend</td>
</tr>
<tr>
<td>4</td>
<td>regal</td>
<td>complete</td>
</tr>
<tr>
<td>5</td>
<td>depression</td>
<td>build</td>
</tr>
<tr>
<td>6</td>
<td>density</td>
<td>recession</td>
</tr>
<tr>
<td>7</td>
<td>tram</td>
<td>very crowded</td>
</tr>
<tr>
<td>8</td>
<td>warfare</td>
<td>streetcar</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>splendid</td>
</tr>
</tbody>
</table>

C. Comprehension Exercises
C.1. True/False
Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

……………... 1. The greatest flowering of formal town planning has been taken place after Industrial Revolution.

……………... 2. The development of Bath town was as the result of eighteenth – century British town planning.

……………... 3. The first public transports system in Britain cities developed during 1801 and 1851.

……………... 4. The first public transport system in London was commuter trains.

……………... 5. The suburban growth in London began to step up after the First World War.

……………... 6. The development in transport technology was not effective in decentralization in London.
The basic reason for development of London in 1939 was a change in the technology of transportation.

C.2. Multiple Choice Items
Choose the best choices (a, b, c or d) for each statement.

1. The first public transport system in Britain was ….
   a) in the form of electric trams
   b) in the form of motor buses
   c) in the form of horse trams and buses
   d) commuter trains

2. The suburban growth in London began to speed up between the two world wars because of ……..
   a) economic forces    b) social forces
   c) technological factors d) all of them

3. Which of the following expressions is not correct in suburban growth of London according to the passage?
   a) economic changes were produced by social development
   b) workers were able to own a house with the aid of a mortgage
   c) electric trains in London was a form of development in transport technology
   d) the low prices of both labour and building materials was the economic force in development

4. The change in the technology of transportation was the basic reason of development of London by 1939 because ……..
   a) electric trains were more efficient than the steam trains
   b) the motor buses allowed a rapid urban transport service to penetrate in any direction
   c) electric buses served as a highly efficient feeder service
d) both a and b

5. According to the passage, the price of land in London and other big cities was low because ...........
   a) the improved transportation made so much land potentially developed
   b) land prices and housed prices are so closely related
   c) the rate of income in the 1930s was low
   d) it was easier for skilled manual workers to buy a house

C.3. Open-ended Questions
Answer the following questions in Persian on the basis of the passage.

1. How was the development of public transport system of London during 1870s to 1900s.
   ..................................................................................................................
   ..................................................................................................................
   ..................................................................................................................

2. What does the writer mean by 'the early public transport city' in the development of London?
   ..................................................................................................................
   ..................................................................................................................
   ..................................................................................................................

3. How did economic forces affect on the suburban movement in London between the two world wars?
   ..................................................................................................................
   ..................................................................................................................
   ..................................................................................................................
4. Why was the development of technology in transportation the basic reason of circular development of London by 1939?
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………

5. Why was the price of land in London low in 1930s?
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………

C.4. Relation of the Words
What do the following pronouns refer to?

1. which (line 14) ..........................................................
2. which (20) ..........................................................
3. when (53) ..........................................................
4. them (75) ..........................................................
5. its (77) ..........................................................
6. which (105) ......................................................
7. them (105) ......................................................
8. their (109) ......................................................
9. they (118) ......................................................
10. it (129) .........................................................
11. this (132) ......................................................

D. Word Formation
D.1. Word Formation Chart

<table>
<thead>
<tr>
<th>Verb</th>
<th>Noun</th>
<th>Adjective</th>
<th>Adverb</th>
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<td>aspire</td>
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<td></td>
</tr>
<tr>
<td>colonize</td>
<td>colonization</td>
<td>colonial</td>
<td>-</td>
</tr>
</tbody>
</table>
D.2. Fill in the Blank Exercise
Use the correct form of the words in D.1 to complete the following sentences.

1. The Mayo Clinic has made important ......... to cancer research.
2. The spokesman would not ............ on the investigation.
3. The end of ........ rule in India was the beginning of their independency.
4. Nuclear missiles were being ............ in Europe.
5. They contributed in the ............ of the new church.
6. A young man with political ............. was elected as the leader.

E. Structure Review
Gerunds

Look at the following sentences:

1. All these examples, and many other imitations, have great interest for the student of architecture or the origins of planning.
2. The precise impact of this sort of development upon the urban structure can be well seen by comparing the maps of London in 1914 and 1939.
3. Planning education was seen as education in making physical plans, not education in planning method.
4. It harnessed the **thinking** of a number of social sciences, such as economics, sociology and psychology.

**Gerunds** are participial forms used in noun function. A gerund is a noun that is derived from a verb. A verb can be turned into a gerund by adding *-ing* to the simple form of the verb. Although gerunds function as nouns, they are similar to verbs, i.e. they can take an object, a complement, and other modifiers. Whenever a gerund has its objects and adjectival or adverbial modifiers, it is called a **gerund phrase**. As they function as a noun, they can appear in any places in the sentence that nouns are used.

In the sentence 'l' and '2' planning and comparing are used as the **prepositional phrase** (after the preposition of and by). In sentence '3' planning education is a gerund phrase that is used as the subject of the sentence. And in sentence '4' the **thinking** of a number of social sciences is a gerund phrase and functions as the object of the sentence.

**E.1. Structure Exercise**

Find the gerunds in the following sentences and write them in the spaces provided.

1. In practice this insight has been very useful for the way we think about physical or spatial planning.
   
   2. In essence it has led to a swing from the old idea of planning as production of blueprints for the future desired state of the area.

3. The analysis should be reworked to see how far the projections needed modifying, and the plan should be updated accordingly.

4. They look at the evolving structure of the economy, in terms of industries and occupations.

5. It is obviously better that planners should start with a fairly exhaustive discussion about what they are seeking to achieve and that they should go on having this discussion during the whole planning process.

6. Planning is now much more flexible, working with much greater information. And it is more rational – at least potentially so.

F. Translation

Translate the following passage into Persian

Uncontrolled economic growth and urbanization can lead to adverse environmental impacts in peri-urban areas due to the rapid increase in urban land use. Understanding the changing patterns and driving forces of urban sprawl becomes crucial given that urbanization will
continue to be one of the major causes of global environmental change in the foreseeable future (Seto and Fragkias, 2005). Kearney and Macleod (2006) also assert that peri-urbanization is of particular concern, possibly causing greater impacts than the land uses that it supplants. Since peri-urban areas have their own unique set of socioeconomic, political, and ecological characteristics, the effects of conversion of rural areas to urban land is likely.

F.1. Persian Equivalents
Find the Persian equivalents of the following words and phrases used in the passage of part 2.

<table>
<thead>
<tr>
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<tr>
<td>masterpieces</td>
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### Planning before the Industrial Revolution

<table>
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<td>feeder services</td>
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<td>metaphor</td>
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<td>adjusted</td>
<td>white-collar employees</td>
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<td>spacious</td>
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<td>cramped terraces</td>
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<td>excellently</td>
<td>decelerated</td>
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<td>decentralization</td>
<td>slum-dwellers</td>
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<td>facilities</td>
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<td>speculative building</td>
<td>generous</td>
</tr>
<tr>
<td>elaborate</td>
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</tbody>
</table>
UNIT 7

The Reaction against Sprawl

General Aims
This unit has been designed to help you learn a number of key words of application to urban and regional planning and some of the general words in meaningful contexts to expand your reading comprehension skills, and to make you familiar with typical passages of regional planning.

Behavioral Objectives
After carefully reading this unit, you are expected to:
1. Define the concern of town planners and rural conversations, recognize the bad effects of town developments without control of any effective planning, know the reason of ribbon development in London, explain the bad effect of uncontrolled town development on town's people, and describe the effect of vocal movement on the limiting of urban growth
2. Define the meaning of the key words and general words, and do the vocabulary exercises B-1 and B-2
3. Do comprehension exercises C-1, C-2, C-3 and C-4
4. Do word formation Chart exercise D
5. Do Structure Review Exercise E-1
6. Be able to perform the parts F and F.1
UNIT 7. Part 1: pre-Reading
Vocabulary List

General Words
arterial, authority, coalition, conservation, conservationist, gravel, incorporate, instrumental, lock, persuasive, relieve, remain, represent, vocal, scheme,

Key Words
congestion, inhabitant, retrace, preservation, ribbon, development, span, sprawl

A. Word Study
Study the following definitions, synonyms, and examples.

A.1. General Words

arterial adj
related to main road, railroad line or river
New arterial roads were built to relieve traffic congestion on the old radial arteries out of the city.

authority n
the power someone has because of his/her official position; power to command
She has the authority to sign checks.

coalition n
a union of separate political parties or people for a special purpose; alliance; confederacy
The two parties have decided to form a coalition.
The reaction against sprawl

conservation  n  
protection of natural things such as animals, plants, forests, etc.
The conservation of wildlife is a typical issue today’s.

conservationist  n  
person who is interested in conservation

She is a conservationist.

gravel  n  
small stones used in order to make a surface for paths or roads

incorporate  v  
include something as part of a group, system, etc. or in sth larger

Several safety features have been incorporated into the car's design.

instrumental  adj  
important in making something happen; helpful

Helen has been instrumental in organizing the festival.

lock  v  
fastened with a lock; become fixed or blocked

Most inhabitants were locked into a cycle of poverty and unemployment

persuasive  adj  
able to influence other people to believe or do something; influencing

It was not a very persuasive argument.
relieve

v
make a pain or bad feeling less severe; educe; ease; lessen

The county is building a new school to relieve overcrowding.

remain

v
stay in the same place or condition; stay; last

Many questions remained to be answered.

represent

v
act or speak officially for someone else; denote; stand for

The talks represent a significant step toward peace.

scheme

n
plan, plot, design

He created an elaborate scheme to steal from his employer.

vocal

adj
expressing one's opinion strongly or loudly

They all supported the vocal critic of the president.

A.2. Key words

congestion

n
density; the quality of being too full or blocked

New arterial roads were built to relieve traffic congestion on the old radial arteries out of the city.

inhabitant

n
person or animal living in a particular place; dweller

The village has fewer than 1000 inhabitants.
The reaction against sprawl

**preservation**  
the act of keeping something unharmed or unchanged; protection  
The painting was in a good state of **preservation**.

**retrace**  
go back over  
The ships **retraced** Columbus's route.

**ribbon development**  
(of building) houses along main out of city  
**Ribbon development** was partially controlled by an Act of 1935.

**span**  
to include all of a particular area  
The Internet **spans** the globe.

**sprawl**  
lie, sit, fall, or spread out ungracefully  
As the suburbs **sprawled** farther and farther, it was argued that the large cities imposed an increasingly insufferable burden on their inhabitants.
Unit 7. Part 2: Reading

The Reaction against Sprawl

A minority of thinking people, however, were alarmed at the result. They included both town planners, who by then existed as a profession – the Town Planning Institute had been incorporated in 1914 – and rural conservationists. They were concerned at the fact that the development was uncontrolled by any sort of effective planning. Though Acts of Parliament had provided for local authorities to make town planning schemes for their areas – in 1909, in 1925 and then, most decisively, in 1932 – basically these Acts gave them no power to stop development altogether where such development was not in the public interest; developers could build almost wherever they liked, provided they followed the general lines of the local town planning scheme. And this, the planners and conservationists argued, had two bad effects.

First, development was using up rural land – the great majority of it agricultural land – at an unprecedented rate. By the mid-1930s, as subsequent research showed, some 60,000 acres (24,000 hectares) each year (out of 37 million acres (15 million hectares) in all) were being taken from agriculture in England and Wales for all forms of urban development. Because the development was completely uncontrolled, it was no respecter of the quality of agricultural land: the suburban spread of London, for instance, took much of the finest market gardening land in all England, on the gravel terrace-lands west of the capital (ironically, later on, Heathrow Airport took much of the rest) (Plate 1.7). The result, critics argued, was a major loss of home food production – a loss Britain could ill afford in times of war. And in the late 1930s, with war threatening, this seemed an important argument.
Second, the critics argued that the effect on townspeople was equally bad. Homes were being decentralized at greater and greater distances from the city centre, but jobs were not being decentralized nearly as rapidly. In London and in some of the bigger provincial cities, between the two world wars some factory industry was moving outwards to the suburbs in search of space: new factory estates were developed, like Park Royal and the Lea Valley in London, Slough just outside it, Witton Park in Birmingham, or Trafford Park in Manchester. But much industry remained in inner urban locations, and the growing volume of so-called tertiary industry – service occupations like work in offices and shops – seemed to be firmly locked in city centers.

(Figure 1.7) A house-agent’s advertisement of the early 1930s. At this time house prices, aided by cheap labor and materials, were probably cheaper in relation to white-collar salaries than ever before or since. Commuting on the new electric lines round London was easy. There was a striking contrast with the poverty in the depressed industrial areas of the north. (Plate 1.7) The Great West Road, London, in 1951: ribbon development of the 1920s and 1930s alongside an interwar arterial road. This consumed some of the best agricultural land in southern
England, and aided the movement in the 1930s for more effective controls on urban growth. It also compromised the original purpose of the road as a through route, so that by the mid-1960s a replacement motorway was needed.

As a result, traffic congestion in the cities appeared to be growing; and journeys to work, it was assumed, must be becoming longer all the time. As cities grew larger and larger, as their suburbs sprawled farther and farther, it was argued that they imposed an increasingly insufferable burden on their inhabitants. And as new arterial roads were built to relieve traffic congestion on the old radial arteries out of the city, so these in turn were lined by ribbon development of new housing, compromising their function and reducing their efficiency. Ribbon development was partially controlled by an Act of 1935, but the real answer to the problem – motorways for through traffic, with limited access, of the kind already being opened in Italy and Germany – was not introduced to Britain until the Special Roads Act of 1949. Thus a small, but powerful and vocal, movement built up to limit urban growth through positive planning. Essentially, it represented a working coalition between people interested in town planning – some, but not all of them, professional planners – and rural preservationists, who had been instrumental in organizing the Council for the Protection of Rural England (CPRE) in 1925. One strong figure spanned both camps and united them: Patrick Abercrombie, Professor of Planning in the University of London and founder of the CPRE. Though they were persuasive, they might not have been so effective if they had not been joined by a third group: the representatives of the depressed industrial areas of northern England, south Wales and central Scotland. Meanwhile, we need to retrace our steps in time, to look at some of the most important ideas circulating among urban planners, and others interested in the subject, at this time.
Unit 7. Part 3: Exercises
B. Vocabulary Exercises

B.1. Fill in the Blanks
Use the correct form of the words given to complete the sentences that follow. There are more words than needed.

coalition, incorporate, instrumental, relieve, remain, scheme, sprawl, inhabitants, persuasive

1. ……….. urban areas means the growth in the size of a town or city.
2. The three countries have decided to form a ……….. in The Second World War.
3. Aspirin is effective at ……….. headaches.
4. The others left the village while my family ……….. and continued planting.
5. Authorities have been ……….. in organizing the international conference.
6. The large migration during two last year's led to increasing of ……….. in large cities.
7. Several safety features have been ……….. into the car's design.
8. We had to adjust the ……….. for construction.

B.2. Matching
Match each word or phrase in the left column with one of the words or phrases in the right column which has almost the same meaning.

| ……….. | 1 | coalition | a. lessen |
| ……….. | 2 | relieve | b. alliance |
| ……….. | 3 | retrace | c. stay |
| ……….. | 4 | incorporate | d. include something |
C. Comprehension Exercises
C.1. True/False Statements
Read each of the following statements and decide whether it is true or false. Write "T" before true statement and "F" before false ones. Justify your answers.

............... 1. The development of towns was uncontrolled by any sort of effective planning.


............... 3. Rural conservationists concerned that agricultural land were being changed to the forms of urban development.

............... 4. The good effect of suburban development was that homes were decentralized at greater distances from the city center.

............... 5. The Act of 1935 was run to control traffic congestion...
C.2. Multiple Choice Items
Choose the best choices (a, b, c or d) for each statement.

1. The concern of town planners and rural conservationists was that ……….
   a) Acts of Parliament gave them no power to stop development
   b) They followed the general lines of the local town-planning scheme.
   c) the development of towns was not controlled by effective planning
   d) Such development was not in the public interest

2. The changing of agricultural lands to the forms of urban development had the bad effect on ……….
   a) uncontrolled development
   b) the suburban spread of London
   c) the major loss of home food production
   d) war threatening

3. According to the passage, the vocal movement was built up ……….
   a) to limit urban growth through positive planning
   b) to represent a working coalition between people
   c) to organize the Council for the protection of Rural England
   d) to develop urban growth more rapidly

C.3. Open-ended Questions
Answer the following questions in Persian on the basis of the passage.

1. What was the concern of town planners and rural conversations?
   …………………………………………………………………………………………………………
   …………………………………………………………………………………………………………
   …………………………………………………………………………………………………………
   …………………………………………………………………………………………………………
2. What was/were the bad effect/s of town developments without control of any effective planning?
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

3. What was the reason of ribbon development in London?
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

4. What was the bad effect of uncontrolled town development on town's people?
........................................................................................................................................
........................................................................................................................................

5. What was the effect of vocal movement on the limiting of urban growth?
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

6. Who was Patrick Abercrombie?
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

C.4. Relation of the Words
What do the following pronouns refer to?

1. they (line 1) ...........................................
2. who (line 2) ...........................................
3. them (line 7) ...........................................
4. this (line 10) .........................................
5. they (line 37) .......................................
D. Word Formation
D.1. Word Formation Chart

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<th>Verb</th>
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<th>Adjective</th>
<th>Adverb</th>
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<td>incorporate</td>
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<td>incorporated</td>
<td></td>
</tr>
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<td>organize</td>
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<tr>
<td>persuade</td>
<td>persuasion</td>
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<td>persuasively</td>
</tr>
</tbody>
</table>

D.2. Fill in the Blank Exercise
Use the correct form of the words in D.1 to complete the following sentences.

1. The captain spoke in calm and .......... voice.
2. Dr. Ballard is a leading .......... on tropical diseases.
3. .......... your ideas on paper before you write your essay.
4. Anne is responsible for the .......... of the reception.
5. With a little .........., Debbie agreed to come with us.
6. This town has a .......... you couldn't find in a big city.

E. Structure Review
Look at the following sentences:
Passive voice

- When we use an active verb, we say what the subject does:
  a. The critics argued that the effect on townspeople was equally bad.
  b. It’s a big company. It employs two hundred people.
- When we use a passive verb, we say what happens to the subject. In other words, when we use passive verbs, who or what causes the action is often unknown or unimportant or less important than the action:
a. A minority of thinking people, however, were alarmed at the result.

- In passive voice, If we want to say who does or what causes the action, we use by before the main subject after the passive verb:
a. Ribbon development was controlled by an Act of 1935.

The passive is formed in the following way according to the tense of the active voice:

be + past participle

**For example:**

Active: Careless driving *causes* many accidents *every year*.
Passive: Many accidents *are caused* by careless driving *every year*.

Active: Careless driving *caused* many accidents *last year*.
Passive: Many accidents *were caused* by careless driving *last year*.

**E.1. Structure Exercise**

Change the following active sentences to passive voice.

1. They cancelled all flights because of fog.

2. People don’t use this road much.
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3. Somebody has accused him of stealing money.

4. Development was using up rural land at an unprecedented rate.

5. It represented a working coalition between people in the town.

6. Somebody warned us not to go out alone.

F. Translation

Translate the following passage into Persian

Urbanization in developing countries is proceeding exceptionally fast (United Nations, 2002). Likely mega-cities, or urban areas with populations of more than 10 million, will sprout from several urban centers of the developing countries in Asia (Ngand Hills, 2003). This rapid urbanization has been described mainly from a socioeconomic point of view (McGee, 1991, 1995), whereas micro-scale spatial development patterns are not investigated sufficiently. In particular, shifting process and patterns from previous agricultural land uses to current urban land uses are not yet fully understood, and the consideration of the natural condition of lands as the base of cities is also neglected. Many Asian mega-cities are located on deltas (Yeung, 2001) that formed during global sea level changes in the late Quaternary period (Tanabe et al., 2003). The deltaic environment continues to change rapidly, not only because of the natural sediment supply process, but also as a result of human action (Ojalaand Louekari, 2002)
F.1. Persian Equivalents

Find the Persian equivalents of the following words and phrases used in the passage of part 2.

<table>
<thead>
<tr>
<th>English Words</th>
<th>Persian equivalent</th>
<th>English Words</th>
<th>Persian equivalent</th>
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<tbody>
<tr>
<td>acts of Parliament</td>
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<td></td>
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</tr>
<tr>
<td>conservationists</td>
<td>essentially</td>
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<tr>
<td>majority</td>
<td>preservationists</td>
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<tr>
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<td>meanwhile</td>
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<tr>
<td>unprecedented rate</td>
<td>circulating</td>
<td></td>
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</tr>
<tr>
<td>terrace-lands</td>
<td>minority</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>profession</td>
<td></td>
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<tr>
<td>radial arteries</td>
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<tr>
<td>townspeople</td>
<td>ironically</td>
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</tbody>
</table>
Appendix I

Answer Key

Answer Key: Unit 1

B.1. Fill in the Blanks
1. achievement 2. appealed 3. target 4. elaborate
5. extremely 6. boom 7. illustrates 8. disaster
9. arouse 10. deliberately

B.2. Matching Items
1. g 2. j 3. e 4. d 5. a 6. h 7. i 8. f
9. b 10. k 11. l

C.1. True/False Statements
1. f 2. f 3. t 4. f 5. t 6. f

C.2. Multiple Choice Items
1. a 2. c 3. d 4. c 5. a 6. d 7. d 8. b

C.4. Relation of the Words
1. planning
2. planners
3. oxford English dictionary and American Webster’s
4. one definition
5. the noun planning and planners
6. people
7. other types of planning
8. a new model of a car of a personal computer
9. a few well-understood rules
10. p plans
11. sequence of events
12. planning

D.2. Fill in the blank Exercise
1. distinct
2. differently
3. combination
4. representative
5. realized
6. emphatically
7. achievement
8. trouble
9. summary

E.1. Structure Exercise
1. simple
2. complex
3. simple
4. complex
5. simple
6. compound
7. compound
8. complex
9. summary

F. Translations
براساس تاکید اجتماع، رشته برنامه‌ریزی شهری و منطقه‌ای در مقایسه با برنامه‌ریزی جهانگریزی، هم از نظر موضوعی و هم نتایج حاصله جامع‌تر هستند. حداقل تا زمانی که
یعنی رشت دری در سطح آموزش عالی تدریس می‌شود. با این حال برنامه‌ریزی
جهانگریزی سهم بسیاری در روش‌های برنامه‌ریزی منطقه‌ای و شهری ایفا می‌کند. مخصوصاً
در زمینه‌هایی که به برنامه‌ریزی منطقی شناخته شده باشد. در واقع بخش محدودی از
برنامه‌ریزی جهانگریزی زیر ایجادی از رشته برنامه‌ریزی شهری و منطقه‌ای قلمداد می‌شود.
یکی از نقایص عمده برنامه‌ریزی جهانگریزی عدم توجه به موضوعات زیر باید است: 1.
چگونه برنامه‌ریزی بايد برنامه‌ریزی کنند و 2. برنامه‌ریزی در فعالیت برنامه‌ریزی، بر
موضوعی بايد تمرکز کنند. این پرسه‌ها به اطلاعات پیچیده و موضوعاتی که برنامه‌ریزی
آن سروکار دارند می‌پردازند. از قبیل پرسه‌های مانند: چه داده‌ها یا اطلاعاتی بايد جمع آوری
شوند و چگونه این اطلاعات سازماندهی شوند و چگونه در تصمیم‌گیری مورد استفاده قرار
گیرند.
### F.1 Persian Equivalent

<table>
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<th>English Word</th>
<th>Persian equivalent</th>
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Answer Key: Unit 2

B.1. Fill in the Blanks
1. output 2. assume 3. precise 4. phenomena
5. coordination 6. argument 7. culminated 8. divisions
9. concentration

B.2. Matching Items
1. h 2. e 3. c 4. i 5. k 6. f 7. b 8. g
9. d 10. a 11. j

C.1. True/False Statements
1. f 2. t 3. t 4. f 5. t 6. t 7. t

C.2. Multiple Choice Items
1. b 2. c 3. d 4. d 5. a

C.4. Relation of the Words
1. urban planning
2. a spatial or geographical component
3. to think of this type of planning
4. the Second World War
5. the system
6. planners
7. occupational mobility
8. a number of different faces
9. civil engineering is another; civic design is another
10. geography

D.2. Fill in the Blank Exercise
1. assumed 2. migrant 3. applied 4. distribution
5. location 6. statistically 7. constitutes 8. broaden
E.1. Structure Exercise
1. The police finally arrested the thieves who had participated in the great bank robbery.
2. The French pianist, whom they had heard praised very highly, turned out to be a great disappointment.
3. He picked up the toy with which his son was playing.
4. The street where our store is located on is a very busy one.
5. The president will see here on Saturday when he will have more time to spend with you.
6. It seems that urban planning is a special case of general planning which does include the plan-making, or representational, component.

F. Translation
اکنون رشد سریع شهرهای جهان عامل عمدی در تغییرات محیط زیست جهان پوشانه می‌آیند و بسیاری از کشورها حفاظت محیط زیست را یک خطمشی صریح قلمداد می‌کنند. برای کمک به جلوگیری از تابوی بیشتر محیط زیست نیاز افراد به رویکردهای راهبردی در برنامه‌ریزی حفاظتی در محیطهای شهری است که برای شناخت علمی الگوهای دورنما، نیازهای کونه‌ها و فشارهای توسعه باشد. در اتریش زیر حفاظت محیط زیست در کلیه سطوح برخده دولت است. دولت مركزی و دولتهای متعاقب ایلیت‌های اتریشی صاحب امضای راهکار می‌رای حفاظت محیط زیست اتریشی هستند (داروه محیط زیست، ورزشی و ناحیه، 1999). همچنین دولت فدرال برای محدود کردن فعالیت‌های همچون حفاظت محیط زیست، که با وجود قانون مصوب سال 1999 حفاظت محیط زیست، تأثیر مهمی در به خطر اندکی داشتن گونه‌ها و جامعه دارند نیز صاحب اختیار است. علی رغم این تهدیدات، تضاد بین حفاظت محیط زیست و توسعه زمین برای رشد جمعیت و اقتصاد جدی است.
### F.1 Persian Equivalent

<table>
<thead>
<tr>
<th>English Words</th>
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<th>English Words</th>
<th>Persian equivalent</th>
</tr>
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<tr>
<td>description</td>
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<td>در عوض</td>
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<td>اشتغال</td>
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<td>combination of the factors</td>
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<td>low-income family</td>
<td>خانواده کم درآمد</td>
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<td>to some degree</td>
<td>ناحیددی</td>
<td>migrating</td>
<td>مهاجرت</td>
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<td>make sense</td>
<td>به مفهوم</td>
<td>distinction</td>
<td>تمايز</td>
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<td>ارائه فضایی</td>
<td>particular</td>
<td>خاص، ویژه</td>
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<td>فعالیت‌های سیاسی</td>
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<td>blueprint</td>
<td>طرح، نقشه</td>
<td>political geography</td>
<td>جغرافیای سیاسی</td>
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<td>مشاجره</td>
<td>disposition</td>
<td>میل، گرایش</td>
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<td>مهم، نامعلوم</td>
<td>concentrate</td>
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<tr>
<td>consist of</td>
<td>شامل</td>
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</tbody>
</table>

### Answer Key: Unit 3

#### B.1. Fill in the Blanks

1. comprises  
2. corporate  
3. analogy  
4. reveal  
5. obtained  
6. intense  
7. debating  
8. trend  
9. remarkable  
10. replicate

#### B.2. Matching Items

1. j  
2. l  
3. h  
4. g  
5. i  
6. f  
7. c  
8. b  
9. k  
10. d  
11. e
Appendix I

C.1. True/False Statements
1. f 2. t 3. t 4. f 5. t 6. t

C.2. Multiple Choice Items
1. d 2. d 3. d 4. b

C.4. Relation of the Words
1. What then would this core of planning education – the study of planning process – comprise?
2. in the American business schools
3. management education
4. this new tradition in corporate planning
5. the development of sophisticated control systems
6. the rapid development of more complex computers during the 1950s
7. science of cybernetics
8. a new science
9. human arrangements
10. planners
11. a survey
12. the planner
13. the new planning sequence

D.2. Fill in the blank Exercise
1. manifestation 2. modifications 3. formulating 4. applied
5. simulated 6. refinements

E.1. Structure Exercise
1- because living there is easier than living in the city.
2- when we try to apply the description to the particular sort of planning.
3- Before the Second World War

4- Although people realize that planning has this more general meaning

5- because he showed the spirit of enterprise

6- if students seek a certain sort of education.

F. Translation

سیستم‌های اطلاعاتی وابسته‌های جهت برنامه‌ریزی شهری به شکل ایران پشتیبانی تصمیم‌گیری ارائه شده‌اند. فاقده کامل چنین ابزاری هنوز ناشناخته است. این مقامه ابزاری برای افزایش تأثیر سیستم‌های اطلاعات شهری پیش‌بینی می‌گردد. این امر با تغییر تأکید بر ابزار کامپیوتری توسعه یافته جهت پشتیبانی برنامه‌ریزی شهری به سیستم‌های اطلاعات واقعی شهری تحقق می‌یابد. چنین سیستم‌هایی در درون دفتر مدیریت اطلاعات طراحی می‌شوند. در اینجا جنگهای فنی و رایانه‌ای سیستم‌ها شامل یک ویژگی میان عوامل درهم آمیخته بسیاری جهت تأمین پشتیبانی برنامه‌ریزی شهری است.

F.1 Persian Equivalent

<table>
<thead>
<tr>
<th>English words</th>
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<th>English Words</th>
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<tr>
<td>decision-taking</td>
<td>تصمیم‌گیری</td>
<td>survey–analysis–</td>
<td>برنامه تحلیل</td>
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<td>plan</td>
<td>بررسی</td>
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<td>پیش‌بینی شده</td>
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<td>بیان خود</td>
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<td>اموردونی</td>
<td>laid down</td>
<td>اطلاعات مرتبط</td>
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<td>تأثیر عمیق</td>
<td>update</td>
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<td>exposition</td>
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Appendix I

<table>
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<tr>
<th>insight</th>
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<th>yardsticks</th>
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<td>redefine</td>
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<td>فوق العاده، خاص</td>
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<td>برنامه ریزی، برنامه شناسی</td>
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<td>spatial planning</td>
<td>برنامه ریزی، برنامه شناسی فضایی</td>
<td>physical planning</td>
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</table>

**Answer Key: Unit 4**

**B.1. Fill in the Blanks**
1. encompass
2. reliable
3. constituted
4. diminished
5. precise
6. feasible
7. distinguishes
8. adequate
9. pitfalls

**B.2. Matching Items**
1. f 2. d 3. c 4. a 5. b 6. k 7. i 8. e 9. j 10. h 11. g

**C.1. True/False Statements**
1. f 2. f 3. t 4. f 5. t

**C.2. Multiple Choice Items**
1. b 2. c 3. d 4. b 5. c

**C.4. Relation of the words**

**D.2. Fill in the blank exercise**
1. development 2. flexibility 3. reduced 4. stable 5. achievable 6. developed 7. explicit

**E.1. Structure Exercise**
1. that they know what planning means.
2. what planning does to how planning does it.
3. that they want the security and dignity that planning can bring.
4. that urban planning (or regional planning) is a special case of general planning.
5. who she was referring to.
6. that they do all sorts of different things.
7. that the noun ‘plan’ and the verb ‘to plan’ have several distinct meanings.
8. that planning must include the preparation of such a design.

F. Translation

از نظرفضا، نمونه‌های روشن کمتر شهرونه که بتوانند توسعه شهرونه را درگذشته دنبال و برنامه‌های توسعه آنها را پیشنهاد کنند برای ارزیابی سیستم‌های برنامه‌ریزی شهری از زمین هستند. توسعه شهرونه یک فرآیند پیچیده است که با تبادل عوامل زیست فیزیکی و انسانی در فضا و زمان و در مقیاس‌های مختلف تغییر می‌شود. گذشته‌دار یک روش ارزیابی برای شناختن یک فرآیند است. این وجودیگوشهای واضح توسعه شهرونه که بتوانند بطور مؤثر گسترند شهرونه را در گذشته پیگیری کنند و پیش‌بینی نمایند که سیستم‌های برنامه‌ریزی شهری مرتب ارزیابی شوند بسیار نادر هستند. از آنجا که نمونه‌های کاربرد زمین از پردازش‌های پیچیده و فرآیند یک برنامه و این گونه برنامه‌ها و سیستم‌ها را پیش‌بینی می‌کند، توسعه بیشتر الگوی زمین شهری برای توصیف مؤثر فرآیند پیچیده گسترند شهرونه نیز اجتناب ناپذیر است.

F.1 Persian Equivalent

<table>
<thead>
<tr>
<th>English words</th>
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<td>projections</td>
<td>طرح‌ها نقسدها</td>
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<td>slum district</td>
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<td>commercial aviation</td>
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<td>transportation</td>
<td>حمل و نقل</td>
<td>practitioner</td>
<td>پزشک</td>
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<td>in some sense</td>
<td>به مفهومی</td>
<td>resolution</td>
<td>حل مشکل، قطع‌نهایه</td>
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<td>distinctively</td>
<td>به طور متداوم</td>
<td>explicit framework</td>
<td>چارچوب واضح</td>
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<td>professionals</td>
<td>متخصصان</td>
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<td>conventionally</td>
<td>سنتی، ثاردادی</td>
<td>segregating factory</td>
<td>کارخانه تفکیک‌کننده</td>
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<td>multi-objective planning</td>
<td>برنامه‌ریزی</td>
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<td>حفاظت</td>
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<td>همکاران</td>
<td>conservationists</td>
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<td>public purse</td>
<td>پاداش عمومی</td>
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</tbody>
</table>

**Answer Key: Unit 5**

**B.1. Fill in the Blanks**
1. banned   2. trigger off   3. inherited   4. immense   5. bypassed   6. uppermost

**B.2. Matching Items**
1. b  2. g  3. a  4. e  5. h  6. i  7. f  8. c

**C.1. True/False Statements**
1. f  2. t  3. f  4. t  5. f

**C.2. Multiple Choice Items**
1. d   2. a   3. b   4. d   5. c

**C.4. Relation of the Words**
1. specific social and economic problems
2. problems
3. questions
4. problems
5. immense problems of traffic congestion
6. London
7. cities
8. the name
9. specific social and economic problems
10. problems

D.2. Fill in the blank exercise
1. solve
2. measurement
3. specific
4. means
5. distinguishable

E.1. Structure Exercise
1. them: the same interests and concerns they: Social planners
2. which: plans
3. It: that they imposed an increasingly insufferable burden on their inhabitants.
4. that: the nouns ‘planning’ and ‘planner’ It: The verb ‘to plan’ they: the nouns ‘planning’ and ‘planner’

F. Translation
هدف از انتخاب ‘محدوده طراحی شده غیر شهری’ حفاظت از مناطق حساس زیست محیطی
و زمینهای روستایی است. تغییر کاربری زمین در ‘محدوده‌های برنامه‌ریزی شده غیر شهری’ با
یک مجوز تحت لایحه برنامه‌ریزی منطقه‌ای اجرا می‌شود. در ‘مناطق برنامه‌ریزی شهری’
حکومت شهری (شهرداری) کنترل کاربری زمین را از طریق احکام منطقه‌نامه‌سخت و
خشک کنترل کرده. در ‘مناطق برنامه‌ریزی غیر شهری’ هر تکه زمین برای کاربری منطقه‌ای
با فشرده‌گی کنترل از مناطق برنامه‌ریزی شهری انتخاب می‌شود. صاحبان زمین‌ها در این مناطق
می‌توانند از میان فهرست زمین‌های دارای مجوز یک قطعه زمین را انتخاب کنند. اگرچه مناطق
برنامه‌پری شده غیرشهری ممکن است در برنامه‌پری شهری منطقه‌بندی‌سنجی شوند
اما تفاوت در مجوز‌های انتخاب‌های دیگر و سخت برای توجه به دیگر مناطق زمین در مناطق برنامه‌پری شده شهری و غیرشهری منجر به تفاوت‌های تجاری قابل‌بندی فضایی الگویی کاربری زمین‌شنده است.
تحقیقات بسیاری تغییرات اجتماعی – اقتصادی را در مناطق شهری بررسی کرده‌اند. با این حال مطالعات درباره فرایندهای فیزیکی مرتبط با تغییرات کاربری زمین شهری و عوامل اجتماعی، اقتصادی و سیاسی که بتواند منجر به قابل‌بندی‌های فضایی خاص و تغییر کاربری زمین بشوند، در سابقه تحقیقات کمتر مورد توجه واقع شده‌اند.

F.1 Persian Equivalent

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<th>English Words</th>
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<th>English Words</th>
<th>Persian equivalent</th>
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<td>afterwards</td>
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<tr>
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<td>congestion</td>
<td>تراکم، ازدحام</td>
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<td>ancient Rome</td>
<td>روم باستان</td>
<td>spice</td>
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<td>regulations</td>
<td>مقررات</td>
<td>inertia</td>
<td>رخویت، جمود</td>
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<td>laid down</td>
<td>وضع کردن</td>
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<td>آگاهانه، عمدی</td>
<td>penalty</td>
<td>مجازات، کیفر</td>
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</tbody>
</table>

Answer Key: Unit 6

B.1. Fill in the Blanks
1. absolute
2. deploy
3. spread
4. colonized
5. erect
6. depression
7. warfare
8. imitation

B.2. Matching Items
1. c 2. d 3. e 4. i 5. f 6. g 7. h 8. a

C.1. True/False statements
1. f 2. t 3. f 4. f 5. t 6. f 7. t
C.2. Multiple Choice Items
1. c  2. d  3. a  4. d  5. b

C.4. Relation of the words
1. broad formal avenues
2. geometrical street plan
3. the time
4. workmen
5. London
6. regular salaries
7. employees
8. people
9. The underground railways
10. London
11. producing a roughly circular city with a radius about 12 to 15 miles (19 to 24 km) from the centre

D.2. Fill in the blank Exercise
1. contributions
2. elaborate
3. aspirations
4. deployed
5. erection
6. colonial

E.1. Structure Exercise
1. planning
2. swing, planning
3. modifying
4. evolving
5. having, planning
6. working, Planning

F. Translation
رشد بیروهی اقتصادی و توسعه شهری می‌تواند به خاطر افزایش سریع در کاربرد زمین‌های شهری، منجر به تأثیرات زیست محیطی نامطلوبی در مناطق پیرامون شهرها بشود. شناخت الگوهای تغییر و نیروهای محور در بین‌نظری شهرها تبدیل به این فرض اساسی شده است که توسعه شهری یکی از عوامل عمده تغییرات زیست محیطی جهانی در آینده تُردید است. کردن و مک لود همچنین ادعا می‌کند که توسعه شهری حومه یک دغدغه خاص است که احتمالاً
توجه تأثیرات عمده‌ای بیشتر از کاریب زمین که جایگزین آن است می‌شود. از آن‌جا که مناطق حومه شهری مجموعه‌ی منحصربه‌فردی از ویژگی‌های اجتماعی - اقتصادی، سیاسی و زیست محیطی است، تأثیرات تغییر مناطق روستایی به زمین‌های شهری احتمالاً دال‌تر بر نتیجه تغییر محیط زیست جهان دارد.

**F.1 Persian Equivalent**

<table>
<thead>
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decentralization | تمرکزداوی | elaborate | مشروح، پرشاخو
mortgage | رهن | facilities | تسهیلات، امکانات
speculative building | ساختمان ذهین | generous | فروان، بیش از حد

Answer Key: Unit 7

B.1. Fill in the Blanks
1. sprawling  2. coalition  3. relieving  4. remained
5. instrumental  6. inhabitants  7. scheme  8. incorporated

B.2. Matching Items
1. b  2. a  3. l  4. d  5. e  6. h  7. g  8. c
9. f

C.1. True/False statements
1. t  2. f  3. t  4. f  5. t

C.2. Multiple Choice Items
1. c  2. c  3. a

C.4. Relation of the words
1. thinking people
2. town planners
3. local authorities
4. developers could build almost wherever they liked
5. cities
6. people interested in town planning
7. people interested in town planning
8. rural preservationists
9. Patrick Abercrombie, Professor of Planning in the University of London and founder of the CPRE
D.2. Fill in the blank exercise
1. authoritative  2. authority  3. organize  4. organization  
5. charm  6. persuasion

E.1. Structure Exercise
1. All flights were cancelled by them because of fog.
2. This road isn’t used by people much.
3. He has been accused of stealing money by somebody.
4. Rural land was being used at an unprecedented rate by development.
5. A working coalition was represented between people in the town.
6. We were warned not to go out alone by somebody.

F. Translation
توسعه شهری در کشورهای در حال توسه بهطور فوقالعاده به سرعت در حوالی رشد است.
احتمالاً به زودی ایشان در حال توسعه به سرعت در حوالی رشد است. 
به‌طور مثال یک شهری با جمعیتی بیش از ده میلیون نفر از مراکز شهری کشورهای در حال توسه در آسیا به‌وجود خواهند آمد. این توسه سریع شهری عدم آن از نقطه نظر اقتصادی -اجتماعی تعیین شده است و در این حوالی است که اگرای توسعه فضایی با مقياس چرخک به‌طور مناسب بررسی نشده‌اند. به‌خصوص فرآیند در حال تغییر و اگرای کاربری زمانی‌های کشاورزی به‌کاربری زمانی‌های فعلی هنوز به‌طور کامل شناخته نشده‌اند. درحالی که در حوالی زمان‌های نادیده گرفته می‌شوند.
بیماری از ایشانی در طول تغییرات سطح دریایی جهان در دوره میان‌گذری می‌باشد و در حال تغییر است. به‌طور کلی، به‌طور کلی، این می‌باشد که در نتیجه این تغییرات سطح دریایی جهان در دوره میان‌گذری می‌باشد و در حال تغییر است. به‌طور کلی، به‌طور کلی، این می‌باشد که در نتیجه این تغییرات سطح دریایی جهان در دوره میان‌گذری می‌باشد و در حال تغییر است. به‌طور کلی، به‌طور کلی، این می‌باشد که در نتیجه این تغییرات سطح دریایی جهان در دوره میان‌گذری می‌باشد و در حال تغییر است.

F.1 Persian Equivalent

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majority  اکثریت  preservationists  محافظان محیط زیست
agricultural land  زمین کشاورزی  meanwhile  در غیب حال، در این میان
unprecedented rate  میرز بن سایه  circulating  کرده، جریان
terrace-lands  زمین های تراسی  پیکانی  minority  اقلیت
insufferable  غیرقابل تحمل  profession  شغل، حرفه
radial arteries  شاهرادهای باروی  decisively  قاطعانه

townspeople  شهرنشینان  ironically  طعنه، آمز، عجیب

Appendix II

Word List

Unit 1

achievement  موفقیت، دستیابی  define  تعیین کردن، تعیین
accompany  همراهی کردن  distinction  تمایز، تفاوت
advance  ارتقاء  پایین، افزایش  پایین  disaster  مصیبت، فاجعه
affluent  ثروتمند، غنی  deliberately  عمدتاً، اکثراً
ambiguous  مبهم  democratic  مردمی
appeal  خواهش، نمایه  dignity  احترام، احترام ناگهانی
appropriate  اختصاص دادن، تخصیص دادن  desire  آرزو، خواستن
arise  بیداده، آباد شدن  diplomat  دیپلمات
assemble  انتخابه شدن، گرد آوردن  earthquake  زمین لرزه، زلزله
arrangement  ترتیب کار، برنامه‌ریزی  elaborate  مفصل، مشترک
benefit  میت، فایده  emphasis  تأکید، اهمیت
blueprint  طرح، نقشه  enterprise  کار مهم، کارآفرینی
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**Unit 2**

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sequence
slump
strike
statement
to realize, concentrate, constitute, constitute
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rely on, be based on, rely on, rely on, constitute, rely on
concentrate, come together, come together
refer to, point to, constitute, come together, come together, constitute, come together
readily, be based on, rely on, rely on, constitute, come together, come together
to concentrate, come together, come together
to constitute, come together, come together
reputation
requirement
seeking
sequence
slump
strike
statement
to realize, concentrate, constitute, constitute
quickly
rely on, be based on, rely on, rely on, constitute, come together, come together
concentrate, come together, come together
refer to, point to, constitute, come together, come together
readily, be based on, rely on, rely on, constitute, come together, come together
to concentrate, come together, come together
to constitute, come together, come together
reputation
requirement
seeking
sequence
slump
strike
statement

to evolve, exchange, harness
hotly
household
impact
lead to
location
majority
mobility
neutral
obscured
output
pattern
peculiar
phenomena

to evolve, exchange, harness
affirm, redefine, redefine, redefine, redefine, reexamine, reexamine, reexamine
concentrate, come together, come together
refer to, point to, constitute, come together, come together
readily, be based on, rely on, rely on, constitute, come together, come together
to concentrate, come together, come together
to constitute, come together, come together
reputation
requirement
seeking
sequence
slump
strike
statement

to evolve, exchange, harness

Unit 3
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analogy
apparently
automation
comprise
core
corporate
curiously
debate
evolve
formerly
fundamental
intense
interpretation
harness

to evolve, exchange, harness
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readily, be based on, rely on, rely on, constitute, come together, come together
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reputation
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to evolve, exchange, harness
affirm, redefine, redefine, redefine, redefine, reexamine, reexamine, reexamine
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to evolve, exchange, harness

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stability
tedious

Unit 5
ban
bypass
chariot
corresponding
depression
deserve
dominate
equaled
erect
enthusiasm
extraordinary
imitation
mortgage
penetrate
radius
regal
scattered
speculative
spread
subsidy

accelerate
affluent
aristocracy
aspire
border
charming
clerical
colonize
commentator
commute
conscious
contribute
density
deploy
development
gravel
incorporate
inhabitant
instrumental
lock
persuasive
preservation
relieve
retrace
ribbon
span
sprawl
vocal

موقع
شبات داشتن به
بهداشت
شکاک، بدبین
پایداری، دوام
مالآور، خسته کننده
پایداری، دوام
مالآور، خسته کننده

شتاب گرفتن، نسرع شدن
تورمته، غنی
طبقه اشراف
اشتیاق داشتن، آزو داشتن
مهم مره، مجاور
زیبا، جداب
مربوط به روحالیت
مستعمرا کردن
مفسر، گزارشگر
تندد کردن
هشیار، آگاه
سهم شدن، مشارکت کردن
غلظت، فشردگی
به کار گرفتن
رشد و توسعه
سنجیده
ترکیب کردن، آمیختن
ساخت، گیم
میف، سومد
قفل، ضامن
مؤثر، متقاعد کننده
حفظ، نگهداری
تسکین دادن، راحت کردن
دولت کردن، برگشت
نوار، روبان
فاضل، معین
پراکنده شدن
آوایی
Unit 7

arterial  راه اصلی
authority  اختیار، قدرت
coalition  ائتلاف، اتحاد موقت
congestion  شلوغی، تراکم
conservation  محفوظت، نگهداری
conservationist  طرفدار محیط زیست