

## Reading Strategies

### Before the Exam

- ✓ Take a pen and a piece of paper and for each lesson write a **list of unknown words**+ Persian equivalents or English synonyms
- ✓ Read the **grammar points**
- ✓ Use some **unseen texts** and practice your reading skills
- ✓ **Time** your reading

### While Taking the Exam

- ✓ Make sure you have access to **high-speed internet** and **electricity**
- ✓ Find a **quiet place** to take the exam
- ✓ **Stop** reading the text out loud
- ✓ Read the **question first** (find the key word of each item; why, when, what,...)
- ✓ Cover the words you've already read **OR** Use a pen to read the lines or place a card over the line you are reading
- ✓ Make **fewer eye movements** (8 words to the right of your eye position and 3-4 words to its left)
- ✓ Use a pen and paper; for each section write an important word or abbreviation (optional)
- ✓ Look at the **word groups**, not single words
- ✓ Look at the **content words** (nouns, verbs, adjectives and adverbs) only for comprehension items

## Types of Reading Items

### Skimming Items

#### ❖ Examples of Skimming Questions

1. The **main idea** of the passage **revolves around** ...
2. In paragraph x, the author **mainly** ...
3. Which of the following statements shows the author's **intention/purpose** in paragraph x?
4. Which of the following statements states the **main idea** of the text/paragraph x?
5. The **primary** focus of paragraph x is ...
6. Choose the **heading** that best matches paragraph x.

## What is Capitalism?

The word capitalism is now quite commonly used to describe the social system in which we now live. It is also often assumed that it has existed, if not forever, then for most of human history. In fact, capitalism is a relatively new social system. For a brief historical account of how capitalism came into existence a couple of hundred years ago, see Marx and Engels' Communist Manifesto. But what exactly does 'capitalism' mean?

### Class division

Capitalism is the social system which now exists in all countries of the world. Under this system, the means for producing and distributing goods (the land, factories, technology, transport system etc) are owned by a small minority of people. We refer to this group of people as the capitalist class. The majority of people must sell their ability to work in return for a wage or salary (who we refer to as the working class.)

The working class are paid to produce goods and services which are then sold for a profit. The profit is gained by the capitalist class because they can make more money selling what we have produced than we cost to buy on the labour market. In this sense, the working class are exploited by the capitalist class. The capitalists live off the profits they obtain from exploiting the working class whilst reinvesting some of their profits for the further accumulation of wealth.

### The profit motive

In capitalism, the motive for producing goods and services is to sell them for a profit, not to satisfy people's needs. The products of capitalist production have to find a buyer, of course, but this is only incidental to the main aim of making a profit, of ending up with more money than was originally invested. This is not a theory that we have thought up but a fact you can easily confirm for yourself by reading the financial press.

The capitalists calculate can be sold at a profit. Those goods may satisfy human needs but those needs will not be met if people do not have sufficient money.

Attentively  
read the first  
and the last  
paragraphs

Read only the  
first sentence.  
“Drop down”  
to the end,  
looking for  
key details

❖ **Skimming**: reading a text quickly in order to get the *general/main idea*

1. **Do not read everything**; move your eyes quickly over the text
2. Read the **title**
3. Read the **headings** and **subheadings**
4. Read the **first** and **last** sentences of each paragraph
5. Look at the **boldfaced**, underlined and *italic* words
6. Look at the keywords (the **repeated words**)
7. Look at the **tables**, **figures**, and **diagrams**

## 1. What is the aim of this text?

- a. Discussing the possibility of machines thinking
- b. Introducing cleverer mechanical manipulators
- c. Introducing methods of maintaining higher organisms
- d. Categorizing the most recent AI research studies

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One consequence of **speculation** about the possibility of computer thought was that we were forced to examine with new care the idea of thought in general. It soon became clear that we were not sure what we meant by such terms as *thought* and *thinking*. We tend to assume that human beings think, some more than others, though we often call people *thoughtless* or *unthinking*. Dreams cause a problem, partly because they usually happen outside our control. They are obviously some types of mental experience, but are they a type of thinking? And the question of nonhuman life forms adds further problems. Many of us would **maintain** that some of the **higher** animals—dogs, cats, apes, and so on—are capable of at least basic thought, but what about fish and insects? It is certainly true that the higher **mammals** show complex brain activity when tested with the appropriate equipment. If thinking is demonstrated by evident electrical activity in the brain, then many animal species are capable of thought. Once we have formulated clear ideas on what thought is in biological creatures, it will be easier to discuss the question of thought in **artifacts**. And what is true of thought is also true of the many other mental processes. One of the **immense** benefits of AI research is that we are being forced to **scrutinize**, with new **rigor**, the working of the human mind.

It is already clear that machines have superior mental abilities to many life forms. No **fern** or **oak** tree can play chess as well as even the simplest digital computer; nor can **frogs** weld car bodies as well as robots. The three-fingered mechanical **manipulator** is cleverer in some ways than the three-toed **sloth**. It seems that, viewed in terms of intellect, the computer should be set well above plants and most animals. Only the higher animals can, it seems, compete with computers with regard to intellect—and even then, with diminishing success. (Examples of this are in the games of **backgammon** and chess. Some of the world's best players are now computers.)

## Finding the Main Idea and Topic

- **Main idea:** a complete sentence that summarizes the whole paragraph or text; it includes the topic and what the author wants to say about it
  - **Topic:** the general subject of a paragraph or text which is described with just a word or a phrase
  - **Key words:** Mainly- primarily- the main focus- general idea- revolves around- concludes- discusses- primary- the best topic- the best title...
- 
- ✓ Read the beginning and concluding sentences
  - ✓ Ask questions (who; what; when; where; ...)
  - ✓ Read the titles and subtitles
  - ✓ Look at the tables and diagrams
  - ✓ Look at the underlined, boldfaced and italic words
  - ✓ Highlight or underline important information
  - ✓ Write a summary or rewrite the text in your own words

## 2. What is the best title for the above text?

- a. Are computers alive?
- b. Do animals think?
- c. How to improve our creativity?
- d. How computers affect our creativity?

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## Scanning Items

- ❑ Examples of Scanning Questions
- ❑ Questions that ask about details (number, name, date, what, when, where, ...)
- ✓ How many uses of laser were mentioned in the text? (keyword: number)
- ✓ Who invented the convertor furnace? (who)
- ✓ What percentage of electric power is generated by coal? (percentage)
- ✓ What devices are designed by electrical and electronics engineers? (what)

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You look  
for specific  
keywords

**Scanning:** reading a text quickly to find specific information (key words; specific words; names; or details)

1. If the text is completely unknown to you, skim the whole text first to get the general idea
2. Read each question carefully
3. Find the keywords in the question (why, what, ...)
4. Read the text quickly to find the answers to the questions



3. **The first electronic computers were:**

- a. slow and reliable
- b. creative and accurate
- c. large and fast
- d. dumb and creative

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4. **The author believes that such words as *thought* and *thinking*:**
  - a. are terms that are not clear and will never be exactly defined
  - b. might come to be better understood because of research into artificial intelligence and computers
  - c. have precise biological meanings that refer only to human mental processes

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5. **In the author's view, mental activities are characteristic of:**

- a. all plants and animals
- b. some animals
- c. human beings alone

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## Making Inferences

- ❑ **Making inferences:** to draw a logical conclusion based on what is not explicitly stated
- ❑ I failed the course. (my grade was below 10)
- ❑ I ate another sandwich. (I have eaten at least one sandwich before).
- ❑ **Sample Inferencing Questions**
  - **Key words:** suggest, indicate, conclude, infer, imply, ...
  - ✓ The passage suggests which of the following about laser?
  - ✓ We can conclude from paragraph x that ...
  - ✓ Paragraph x suggests that ...
  - ✓ We can infer from paragraph x that ...
  - ✓ This sentence implies that ...

6. **The author feels that by calling these early computers "highspeed idiots," people were really implying that computers:**

- a would never be capable of thought
- b. were already somewhat intelligent
- c. can never work as rapidly as people

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7. **The author's opinion regarding the possibility of computers thinking seems to be that:**
- a. there are already machines that think
  - b. this is somewhat possible
  - c. this is totally improbable

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## Finding Pronoun References

1. Number (singular/plural)
2. Gender (male/female/neutral)
3. Meaning
4. Distance (usually the nearest word)



**8. What does the underlined pronoun ‘they’ in the second paragraph refer to?**

- a. Dreams
- b. Types
- c. Forms
- d. Problems

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## Guessing Meaning from The Context

- ❖ **Context** (surrounding words and ideas) helps us to guess the meaning of unknown words
- **Contrast:**
  - ✓ **Rude** behavior is not accepted. You should be polite instead.
- **Examples:**
  - ✓ For example, someone who is not **rude** says 'please' before asking anybody to do something for them.
- **Synonyms:**
  - ✓ While giving a speech, **poise** and confidence matter the most.
- **Explanations:**
  - ✓ We can **verify** something by using different evidence and facts that prove it.

## Affixes (suffixes, prefixes)

### Prefixes:

- To add the meaning '**not**' to the word:
- ☐ **Un:** unreal; unusual; unrelated; unpopular; unlikely; unsuitable; unexpected
- ☐ **In:** ineffective; incomplete; inexpensive; incapable
- ☐ **Dis:** dissimilar; dislike; disorganized; dishonest; disease
- ☐ **Im:** improbable; impolite; imperfect; impossible

- ❑ **Ir:** irregular; irrational; irresponsible
- ❑ **De:** deform; deactivate; degenerate
- To add the meaning 'again':
- ❑ **Re:** reconnect; restart; reform; regenerate

## Suffixes:

### ➤ Noun making suffixes:

- ❑ **-tion:** information; production; suggestion; connection
- ❑ **-ness:** happiness; sleepiness; drowsiness
- ❑ **-ence/-ance:** performance; difference
- ❑ **-ment:** development; management, equipment, government
- ❑ **-er:** programmer; computer; manager

### ➤ Adjective making suffixes:

- ❑ **-ous:** continuous,; dangerous; famous
- ❑ **-tive:** informative; productive; suggestive
- ❑ **-ive:** responsive; progressive
- ❑ **-al:** experimental; developmental; mechanical
- ❑ **-able/-ible:** suitable; comfortable; portable

### ➤ Verb making suffixes

- ❑ **-ize:** summarize; finalize; systematize; characterize
- ❑ **-fy:** classify; simplify; intensify

## Linking/Connecting Words

- ❑ Special words and phrases to **link different ideas**, clauses or sentences
- ✓ **Emphasis**: indeed; particularly; clearly; especially; absolutely; generally, ...
- ✓ **Addition**: also; too; in addition; moreover; not only ... but also; furthermore; additionally; and, ...
- ✓ **Contrast**: unlike; on the other hand; whereas; however; yet; but, although, ...
- ✓ **Result/ Conclusion**: therefore; in conclusion; to summarize; as a result; thus; hence, thereby, ...
- ✓ **Giving Examples**: for example; for instance; such as; like, ...
- ✓ **Explanation/ Reason**: because; since; due to; because of; the reason why, ...

9. The underlined word 'dubbed' in the text is closest in meaning to .....

- a. Call
- b. Dress
- c. Add
- d. Copy

The topic of *thought* is one area of psychology, and many observers have considered this aspect in connection with robots and computers: Some of the old worries about AI (artificial intelligence) were closely linked to the question of whether computers could think. The first massive electronic computers, capable of rapid (if often unreliable) computation and little or no creative activity, were soon **dubbed** "electronic brains." A reaction to this terminology quickly followed: To put them in their place, computers were called "high-speed idiots," an effort to protect human vanity, in such a climate the possibility of computers actually being alive was rarely considered: It was bad enough that computers might be capable of thought. But not everyone realized the implications of the *high-speed idiot* tag. It has not been pointed out often enough that even the human idiot is one of the most intelligent life forms on earth. If the early computers were even that intelligent, it was already a remarkable state of affairs.

One consequence of speculation about the possibility of computer thought was that we were forced to examine with new care the idea of thought in general. It soon became clear that we were not sure what we meant by such terms as *thought* and *thinking*. We tend to assume that human beings think, some more than others, though we often call people *thoughtless* or *unthinking*. Dreams cause a problem, partly because they usually happen outside our control. They are obviously some types of mental experience, but are they a type of thinking? And the question of nonhuman life forms adds further problems. Many of us would maintain that some of the higher animals—dogs, cats, apes, and so on—are capable of at least basic thought, but what about fish and insects? It is certainly true that the higher mammals show complex brain activity when tested with the appropriate equipment. If thinking is demonstrated by evident electrical activity in the brain, then many animal species are capable of thought. Once we have formulated clear ideas on what thought is in biological creatures, it will be easier to discuss the question of thought in artifacts. And what is true of thought is also true of the many other mental processes. One of the immense benefits of AI research is that we are being forced to scrutinize, with new rigor, the working of the human mind.

It is already clear that machines have superior mental abilities to many life forms. No fern or oak tree can play chess as well as even the simplest digital computer; nor can frogs weld car bodies as well as robots. The three-fingered mechanical manipulator is cleverer in some ways than the three-toed sloth. It seems that, viewed in terms of intellect, the computer should be set well above plants and most animals. Only the higher animals can, it seems, compete with computers with regard to intellect—and even then, with diminishing success. (Examples of this are in the games of backgammon and chess. Some of the world's best players are now computers.)

**Choose the best heading for each of the sections. There are two headings you will not need.**

- A The advantages of NGVs
- B The need for change
- C Reducing carbon-monoxide emissions
- D Who uses NGVs?
- E An expanding refueling infrastructure

Natural gas has long been considered an alternative fuel for the transportation sector. In fact, natural gas has been used to fuel vehicles since the 1930s! According to the Natural Gas Vehicle **Coalition**, there are currently 150,000 Natural Gas Vehicles (NGVs) on the road in the United States today, and more than 5 million NGVs worldwide. In fact, the transportation sector **accounts for** 3 percent of all the natural gas used in the United States. In recent years, technology has improved to allow for a **proliferation** of NGVs, particularly for fuel-**intensive** vehicle **fleets**, such as taxicabs and public buses. However, virtually all types of NGVs are either in production today for sale to the public or in development, from passenger cars, trucks, buses, vans, and even **heavy-duty** utility vehicles. Despite these advances, a number of disadvantages of NGVs prevent their mass production. Limited range, **trunk** space, higher initial cost, and lack of refueling infrastructure **pose impediments** to the future spread of NGVs. Most NGVs operate using compressed natural gas (CNG). This compressed gas is stored in similar fashion to a car's gasoline tank, attached to the rear, top, or undercarriage of the vehicle in a tube-**shaped** storage tank. A CNG tank can be filled in a similar manner, and in a similar amount of time, to a gasoline tank.

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There are many reasons why NGVs are increasing in abundance and popularity. New federal and state emissions laws require an improvement in vehicle emissions over the foreseeable future. For example, the state of California has some of the most **stringent** environmental standards, many of which are currently unattainable with conventionally fueled vehicles. Natural gas, being the cleanest burning alternative transportation fuel available today, offers an opportunity to meet these stringent environmental emissions standards. In addition, natural gas is very safe. Being lighter than air, in the event of an accident, natural gas simply **dissipates** into the air, instead of forming a dangerous, flammable **pool** on the ground like other liquid fuels. This also prevents the pollution of ground water in the event of a **spill**. Natural-gas fuel storage tanks on current NGVs are stronger and **sturdier** than gasoline tanks.

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Natural gas is also an economical alternative to gasoline and other transportation fuels. Traditionally, NGVs have been around 30 per cent cheaper than gasoline vehicles to refuel, and in many cases the maintenance costs for NGVs are lower than traditional gasoline vehicles. In addition to being economical, many **proponents** of NGVs argue that a transportation sector more **reliant** on domestically abundant natural gas will decrease the US dependence on foreign oil-allowing for a more secure, safer energy supply for the country.

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One of the primary reasons for **pursuing** alternative-fueled vehicle technology is to decrease environmentally harmful emissions. **It** is estimated that vehicles on the road account for 60 per cent of carbon **monoxide** pollution, 29 per cent of hydrocarbon emissions, and 31 per cent of nitrogen oxide (NOx) emissions in the United States. All of these emissions released into the atmosphere contribute to **smog** pollution, and increase the levels of dangerous ground-level ozone. Vehicles also account for the emission of over half of all dangerous air pollutants, and around 30 per cent of total carbon emissions in the US, contributing to the presence of "greenhouse gases" in the atmosphere. The environmental effects of NGVs are much less **detrimental** than traditionally fueled vehicles.



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NGVs are much cleaner burning than traditionally fueled vehicles due to the chemical composition of natural gas. While natural gas is primarily **methane**, gasoline and diesel fuels contain numerous other harmful compounds that are released into the environment through vehicle exhaust. While natural gas may emit small amounts of **ethane**, **propane**, and **butane** when used as a **vehicular** fuel, it does not emit many of the other, more harmful substances emitted by the combustion of gasoline or diesel. These compounds include **volatile** organic compounds, sulfur dioxide, and nitrogen oxides (which combine in the atmosphere to produce ground-level ozone), **benzene**, arsenic, nickel, and over 40 other substances classified as toxic by the EPA.

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**Dedicated** NGVs also produce, on average, 70 per cent less carbon monoxide, 87 per cent less non-methane organic gas, and 87 per cent less NOx than traditional gasoline-powered vehicles. NGVs as they exist today are best suited for large fleets of vehicles that drive many miles a day. Taxicabs, **transit** and school buses, airport **shuttles**, construction vehicles, **garbage** trucks, **delivery** vehicles, and policework's vehicles are all well suited to natural-gas fueling. Because these vehicles are centrally maintained and fueled, it is economical and beneficial to convert to natural gas.

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The primary impediments to the public proliferation of NGVs include the high initial cost, limited refueling infrastructure, and automobile performance characteristics. NGVs, despite being cheaper to refuel and maintain, are more expensive initially than their gasoline powered **counterparts**. However, as the technology becomes more advanced, the cost of manufacturing these vehicles should **drop**, which may then be passed along to the consumers.

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In terms of refueling infrastructure, there are currently around 1,500 natural-gas refueling stations in the US, over half of which are open to the public. Although this is a small fraction of the number of gasoline-fueling stations in the country, as environmental standards and government **incentives** for NGVs increase, supplying natural gas as a vehicular fuel will become increasingly common.

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While driving range, storage space, and initial cost are currently preventing the mass production of dedicated NGVs (which in turn is preventing the expansion of public natural-gas fueling stations), it is expected that with improved technology, research, and infrastructure, the use of NGVs in non-fleet **settings** will increase in the future. NGVs present an exciting opportunity to reduce the damage of one of our most polluting sectors.