

Chapter 9: Critical thinking, problem solving and description

Task I

Here are a number of questions taken from examination papers in various subjects.

- How many questions are there in each of the following assignments?
- Identify which sections of the assignment involve a descriptive answer and which an analytical one.

Example:

What is the Balance of Trade? What is a Balance of Trade deficit? Which part of the Balance of Payments includes the Balance of Trade? Is a positive Balance of Trade always desirable?

Answer: 4 questions. The first 3 are descriptive; question 4 is analytical.

- 1. How and why do governments intervene in markets? What are the effects?
- 2. What are the three types of unemployment? What types of unemployment exist when the economy is operating at potential? How would the changes in the economy in 2009 (the year of the global financial crisis) change each type of unemployment?
- 3. In the last 20 years, rates of divorce have risen significantly in Western countries. Critically analyse some of the different explanations given for this phenomenon. In your discussion you should consider what implications these explanations might have for social policy.
- **4.** Describe the factors that contributed to the increase of opium production in the Golden Triangle in the second half of the 20th century.
- **5.** The Chief Executive Officer of Benstow Corporation has noticed that poor work practices are increasing in the company. For example, employees are often late for work and are taking long lunch breaks. The CEO recognises that the culture of the company may be contributing to these poor work practices, so he engages a consultant (you) to prepare a report addressing the following topic:
 - What is an organisation's culture and how can it be managed?
- **6.** Explain how the tilt of the Earth's axis with regard to the ecliptic causes seasons on Earth. What would seasons be like on Earth if the Earth's axis was more tilted with regard to the ecliptic (.23.5°)? What would seasons be like on Earth if the Earth's axis had no tilt? Explain your reasoning in each case.
- 7. Describe the reproductive cycle of the sporophyte and the gametophyte in plants.



- **8.** What is the difference between a normal good and an inferior good? Describe what happens to the demand for an inferior good when (i) income falls, and (ii) price increases.
- **9.** Discuss the ways in which the late Roman Empire influenced the Byzantine Empire, the early medieval states of Europe and the Islamic caliphate. Consider culture (including religion, art and architecture), trade and language.
- 10. With specific reference to both income and expenses, explain the differences between the cash basis and accrual basis of accounting for profit.
- **II.** Most of the mistakes that second language learners make are due to interference from their first language. Evaluate the evidence for this statement.
- 12. Almost every day supervisors must help employees resolve conflicts with other employees.
 Select one conflict resolution strategy, describe it and explain why it is useful in resolving conflict.
- **13.** The primary causal factor influencing the severity of tourism's environmental impact is simply the number of tourists visiting a destination. Limiting the number of tourists is the most effective way of minimising environmental damage.
 - Discuss the validity of this statement in relation to tourism's impact on a range of different environments, and highlight any significant management or policy implications that emerge.
- **14.** Is the rise of a nationalist consciousness among colonised people a product of colonialism? Discuss in relation to the rise of anti-colonial movements in colonised countries. You may restrict your examples to one country or one period of time.

Task 2

Texts I and 2 are extracts from two essays on the following topic:

Does the use of mobile phones pose a risk to human health?

- Which extract uses an analytic approach and displays critical thinking?
- Which extract uses a descriptive approach?
- Give reasons for your answers

Text I

Identifying links between cancer and the use of mobile phones is difficult because cancer has many causes. Even before the introduction of mobile phones, people developed brain cancer, so before investigating the effects of mobile phones, the change in the number of cases of brain cancer since the introduction of mobile phones needs to be investigated. Then research is needed to discover whether these extra cases are related to the use of mobile phones or whether there are other



possible causes.

In order to investigate these questions, a large number of studies have been carried out on both animal and human subjects. In one study, Rothman (1996) reviewed the health records of more than 250 000 mobile phone users and found no evidence for an increase in the rate of cancers. He did, however, find that the longer a person talked on a mobile phone while driving a car, the more likely he or she was to have a car accident.

Smith (1998) assessed mobile phone use by brain tumour patients in comparison to healthy controls. The study found no correlation between use of mobile phones and increased rates of cancer. However, it did find that users of mobile phones who had developed certain types of brain tumours were more likely to report having used the phone on the side of the head with the tumour than on the other side. But the association was weak. It was not statistically significant and might easily have been a result of recall bias. Recall bias is the tendency of subjects to remember exposure to something more readily if they developed a disease. The brain cancer patients in the study knew their diagnosis before they were asked about their use of mobile phones.

Text 2

Rothman (1996) reviewed the health records of more than 250 000 mobile phone users and found no evidence for an increase in the rate of cancers. He did, however, find that the longer a person talked on a mobile phone while driving a car, the more likely he or she was to have a car accident. Smith (1998) assessed mobile phone use by brain tumour patients in comparison to healthy controls. The study found no correlation between use of mobile phones and increased rates of cancer. However, it did find that users of mobile phones who had developed certain types of brain tumours were more likely to report having used the phone on the side of the head with the tumour than on the other side.

Task 3

Texts 3 and 4 are two short answers written in response to the question:

Are children better than adults at learning a second language?

- Which text displays a descriptive approach and which a critical one? Underline the sections
 of the text that allowed you to decide.
- Which text do you think a university lecturer would prefer and why?



Text 3

The question of whether children are better than adults at learning a second language has attracted a good deal of attention in recent decades. Snow and Hoefnagel-Hohle (1978) found that adults were better than children at learning Dutch after a year of exposure to the language. Krashen, Long and Scarcella (1979) reviewed 23 studies of second language learning and concluded that while adults might learn more quickly in the short run, over a longer period of time children outperformed adults. Long (1990) stated that while adults learned more quickly than children in the first year of study, children were better learners overall. Aoyama et al. (2008) also indicated that children learn better than adults in the long term.



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Task 4

- What are the advantages of a descriptive approach to knowledge?
- What are the advantages of an analytical approach?
- Share your ideas with a partner.