### Multiple choice

1. An optimal search for alternatives should last:
2. As long as needed to find the best solution.
3. As long as needed to find the first good enough solution.
4. As long as the cost of the search does not outweigh the value of the added information.
5. As long as the cost of the search is within the appropriate limits set by the decision maker.

Ans: c

Response: p. 2-3

1. Rating alternatives on each of the decision criteria is considered the most difficult stage of the decision-making process, because:
2. It assumes we have precisely defined our priorities.
3. It requires us to forecast how each alternative solution will achieve each of our decision criteria.
4. It requires us to compare all of the alternatives simultaneously.
5. It is likely to fail if our problem is not defined correctly, and this failure will not be detected.

Ans: b

Response: p. 3

1. In the interplay between system 1 and system 2 thinking, the key goal for managers is:
2. To improve their use of system 1 thinking.
3. To attempt to use system 2 thinking as much as possible.
4. To apply both systems in making decisions in order to perform a more thorough and complex search for alternatives.
5. To identify when they should move from system 1 to system 2 thinking.

Ans: d

Response: p. 4

1. Which of the following is a typical characteristic of heuristics?
2. They provide us with a simple way of dealing with complex problems.
3. They have the best likelihood of reaching an optimal solution to a problem.
4. They are time and resource consuming.
5. They are used mainly by irrational decision makers.

Ans: a

Response: p. 6

Questions 5-8 describe examples of heuristics outlined in the chapter. For each question, indicate which heuristic it describes:

1. The representativeness heuristic.
2. The availability heuristic.
3. The confirmation heuristic.
4. The affect heuristic.
5. Inner city crime in the U.S. gets considerable media coverage, such that every homicide is reported in the news. In contrast, a story of a person who died from a heart attack rarely makes the news. This leads people to overestimate the frequency of deaths due to homicides relative to those due to heart failure.

Ans: b

Response: p. 7-8

1. John is over seven feet tall. When asked whether John is a professional basketball player or a software programmer, many people predict the former, even though there are many more software programmers, even very tall ones, than professional basketball players.

Ans: a

Response: p. 8-9

1. After reading about the positive effect chocolate has on student performance, a teacher gives each student in a class a chocolate bar before taking an exam. 15 out of 22 students in that class get an A on the exam. The teacher therefore concludes that chocolate enhances performance.

Ans: c

Response: p. 9-10

1. A common wisdom in politics is that the more an argument is repeated, the more it will be considered by the public as reliable and true.

Ans: b

Response: p. 7-8

1. The affect heuristic can explain why
   1. People who live in California are assumed to be happier than people who live in the Midwest.
   2. Students predict they will be sadder after getting a bad grade on a test than they actually are in these situations.
   3. People do not remember sad events from their early childhood.
   4. Stock prices go up on sunny days.

Ans: d

Response: p. 10

### True/False

1. Succumbing to heuristics is inevitable, and there is no way to make judgment less prone them. Rather, one can only be aware of the biasing effect heuristics have on one’s judgment.

Ans: False

Response: p. 11

1. A search for alternatives may be too short to find the best possible alternative, but still be considered rational and optimal.

Ans: True

Response: p. 2-3

1. The main disadvantage of system 2 thinking is its high resource consumption.

Ans: true

Response: p. 3

1. This book takes a descriptive, rather than a prescriptive approach, to studying decision making, meaning that it provides ways to understand actual human decision making, but does not provide tools for improving one’s decision processes.

Ans: false

Response: p. 5

### Short answer

1. Which of the two cognitive systems (System 1 and System 2) is most often used, and in what kinds of decision is it typically used?

Ans: System 1 thinking is used more often. It is used typically in routine, everyday choices.

Response: p. 3-4

13-15. Identify three constraints on rational thought that may lead to suboptimal outcomes:

1. Time and cost constraints that limit information search.
2. Memory constraints on the amount of information stored.
3. Intelligence limitations and perceptual errors that constrain the ability to choose the optimal alternative.

Response: p. 5-6

1. Describe the term “to satisfice”

Ans: to satisfice is to end the search for alternatives when we find a satisfactory solution that achieves a satisfactory level of performance, rather than examine all possible alternatives or look for the best solution.

Response: p. 5-6

### Essay

1. In what ways is our rationality bounded? Discuss the aspects that are bounded in our judgment and how they are bounded.

Our willpower is bounded, such that we tend to give greater weight to present concerns than to future concerns. Our self-interest is bounded, such that we care not only about our own outcomes, but also about the outcomes of others. Our awareness is bounded in a way that makes us overlook obvious, important, and readily available information that lies beyond our immediate attention. Our ethicality is also bounded, or is limited in ways of which we are unaware.

Response: p. 6

1. What affects whether system 1 thinking or system 2 thinking will occur? What are the conditions which make the use of one system more likely than the use of the other?

Ans: the chosen system depends in part on the level of constraint on people’s resources – mainly cognitive load, time, and money. When these resources are not limited, i.e. when people have enough time, money and peace of mind to conduct a thorough decision-making process, they will use system 2 thinking. In contrast, the busier and more rushed people are, the more they have on their minds, therefore they are more likely to rely on system 1 thinking. System 2 is also more likely to take over when people realize that system 1 is failing to produce satisfactory results.

Response: p. 3-4