

# Understandability of Process Models

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*Author: Raul Mäesalu*

The aim of this questionnaire is to gather data about the understandability of business process models. The results will be analyzed and used as part of my master's thesis on the topic of measuring and comparing understandability and complexity of unstructured and structured business process models.

This questionnaire contains two parts:

- Part 1 (4 questions) aims at testing your general knowledge of BPMN.
- Part 2 (40 questions) aims at testing your level of understanding of specific BPMN diagrams. In this part, you will be shown 8 business process models, and you will be asked 5 questions about each of these models.

You will have 20 minutes for answering all questions.

When answering the questions, please bear in mind the following:

- Completing this survey is voluntary. You will not be graded for it.
- This is an anonymous survey
- Please do not try to guess any answer. If you are not reasonably sure about the answer to a given question, please simply answer "I don't know". This way the results will be more accurate.
- Mind the clock – you have only about 30 seconds per question.

Thank you for participating!

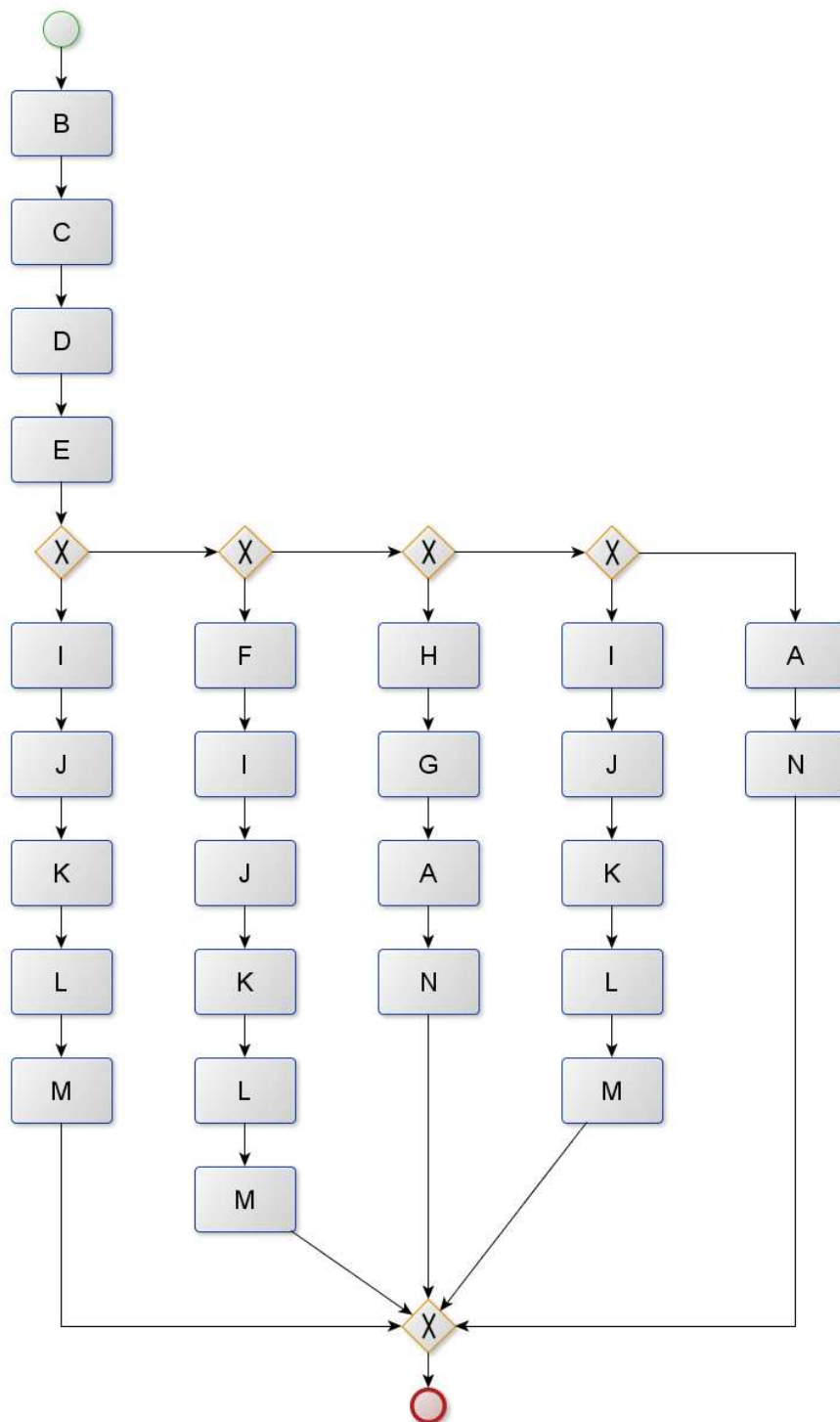
**Please underline or circle the correct answer.**

## **Part 1. General BPMN knowledge questions**

- **Q1.** An OR gateway triggers the execution of either one or all of its outgoing paths.
  - True
  - False
  - I don't know
- **Q2.** Every activity between a parallel gateway and a parallel join is always executed.
  - True
  - False
  - I don't know
- **Q3.** Repetition can only be achieved by using cycles.
  - True
  - False
  - I don't know
- **Q4.** An exclusive gateway triggers the execution of exactly one of its outgoing paths.
  - True
  - False
  - I don't know

## Part 2. Specific Questions

### Model 1



**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** If F is not executed, is I always executed after E in that case?

- Yes / No / I don't know

**Q2.** Can F and G be executed for the same case?

- Yes / No / I don't know

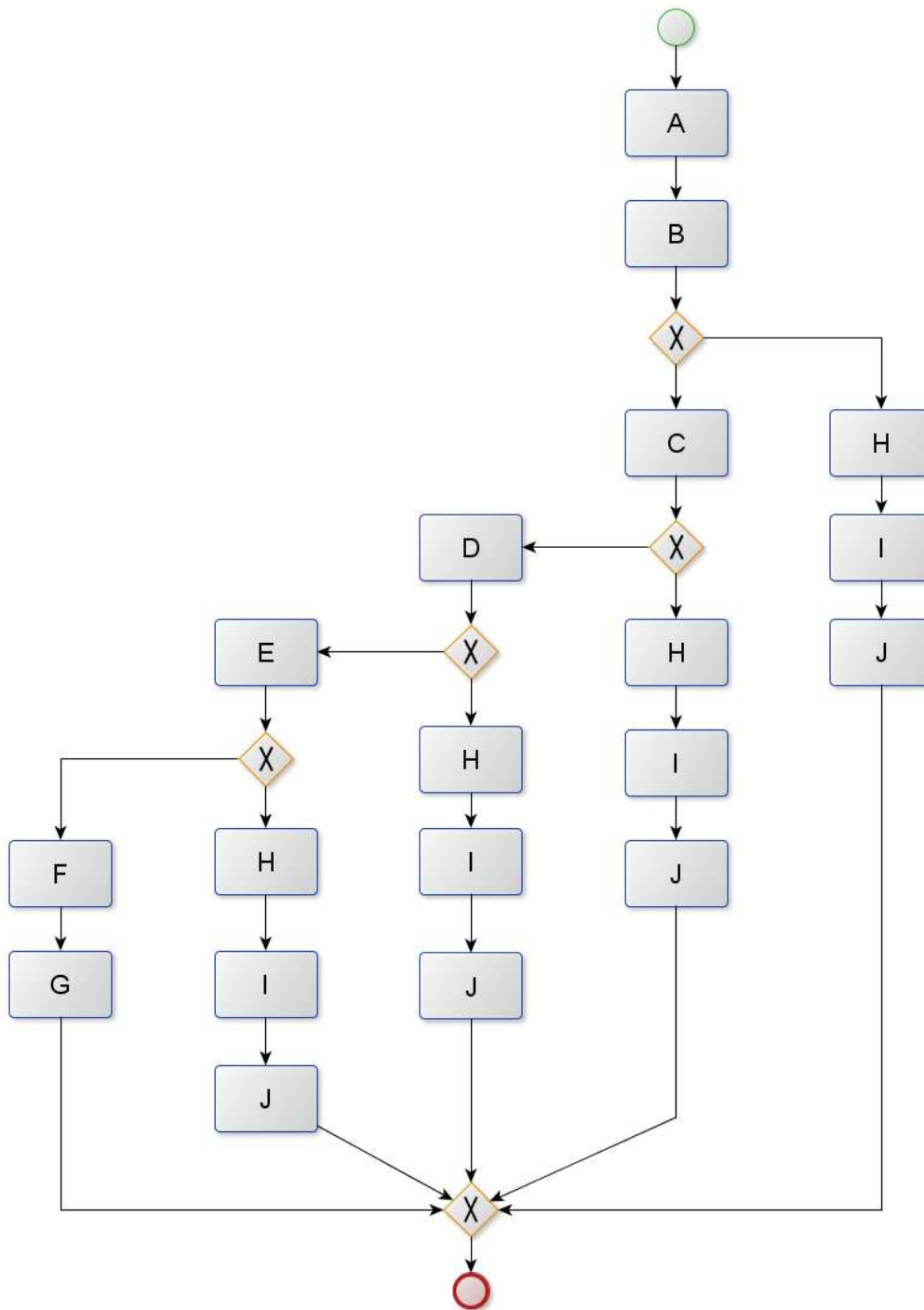
**Q3.** Are E and G always executed in the same case?

- Yes / No / I don't know

**Q4.** Is a case possible where neither of H, G or F is executed?

- Yes / No / I don't know

## Model 2



**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** If C is executed for a case, can J be executed for the same case?

- Yes / No / I don't know

**Q2.** Is a case possible where F is executed after B?

- Yes / No / I don't know

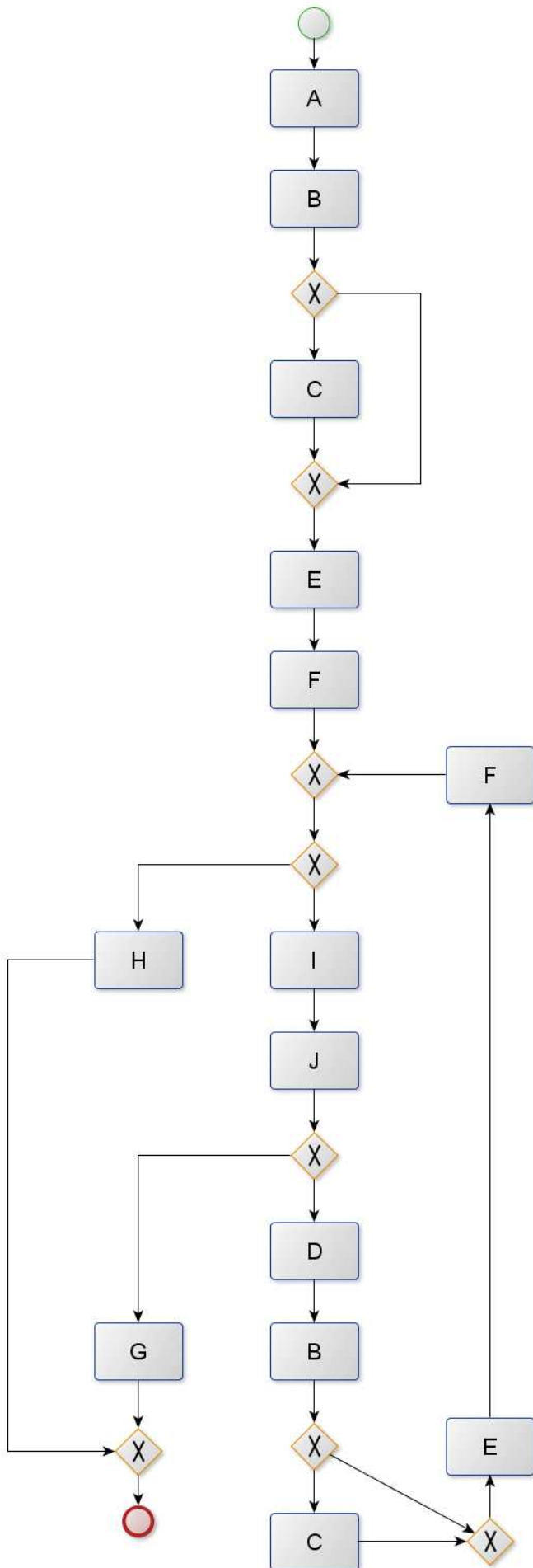
**Q3.** Can F and J be executed for the same case?

- Yes / No / I don't know

**Q4.** If C is not executed for a case, can F be executed for the same case?

- Yes / No / I don't know

### Model 3



**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** Is it possible to execute both H and J in the same case?

- Yes / No / I don't know

**Q2.** Is it possible to execute both H and G in the same case?

- Yes / No / I don't know

**Q3.** Can you execute C after E is executed?

- Yes / No / I don't know

**Q4.** Is it necessary to execute both D and B in the same case?

- Yes / No / I don't know

## Model 4

**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** If L is executed in a case, is it possible that K has also been executed in the same case?

- Yes / No / I don't know

**Q2.** Can all L, K and M be executed in the same case?

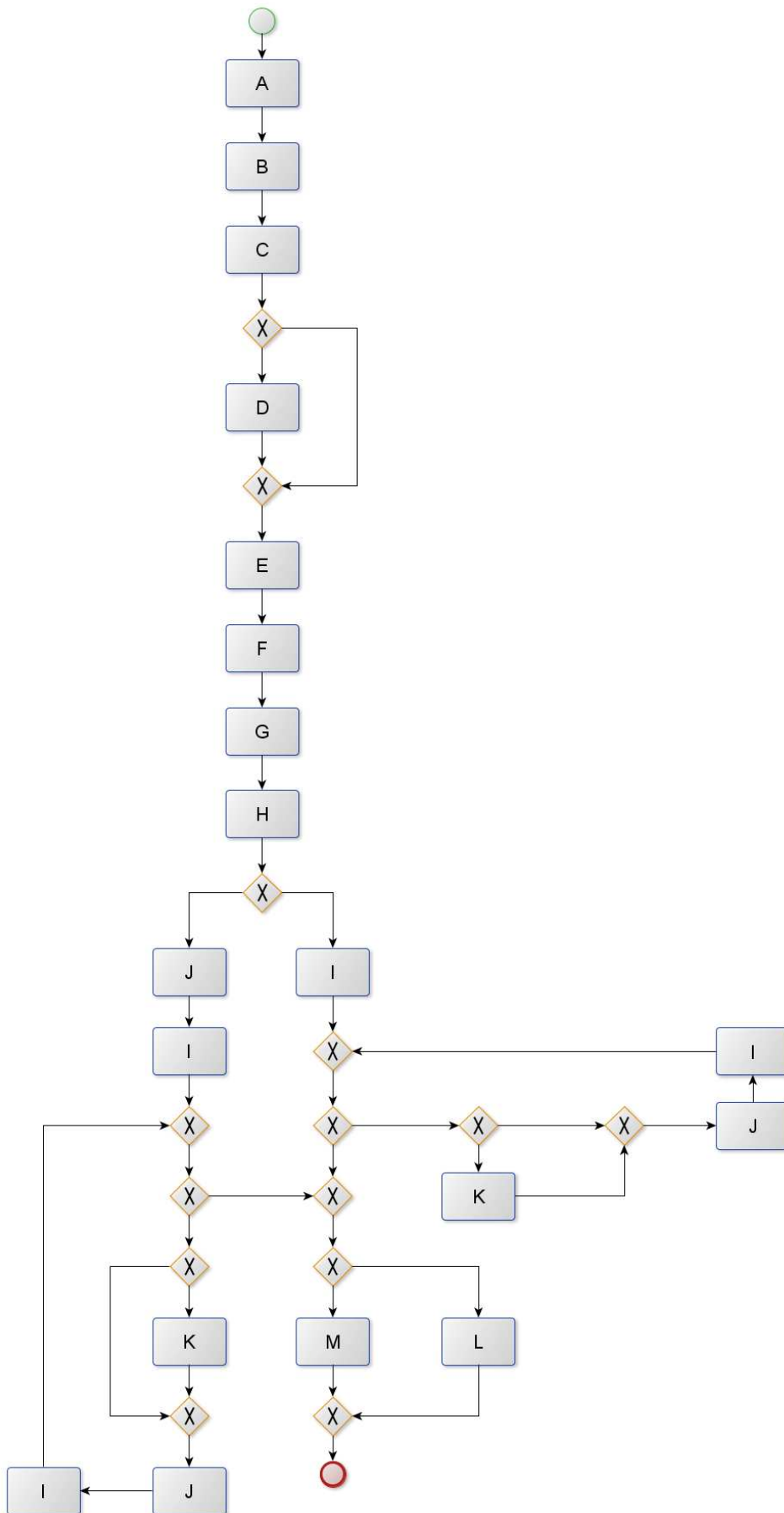
- Yes / No / I don't know

**Q3.** If J is executed in a case, does K also need to be executed?

- Yes / No / I don't know

**Q4.** Can D be executed twice?

- Yes / No / I don't know



## Model 5

**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** Can H and I be executed in the same case?

- Yes / No / I don't know

**Q2.** If J is executed in a case, can F be executed in the same case?

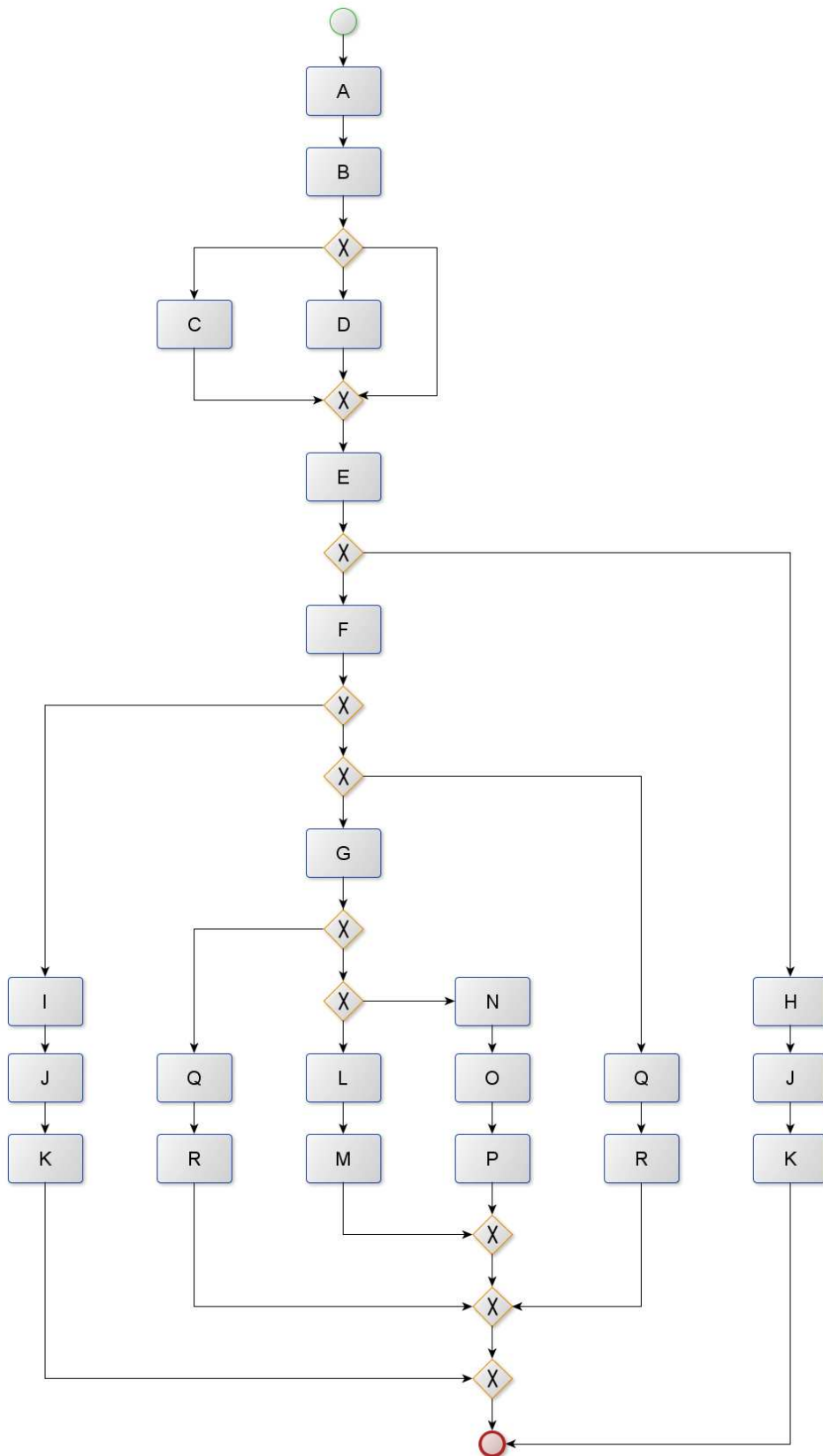
- Yes / No / I don't know

**Q3.** If Q is executed in a case, do both D and F have to be executed in the same case?

- Yes / No / I don't know

**Q4.** If G is executed in a case, can J be executed in the same case?

- Yes / No / I don't know



## Model 6

**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** If D and L are both executed for a case, can N be executed for the same case?

- Yes / No / I don't know

**Q2.** Can J be executed directly after C?

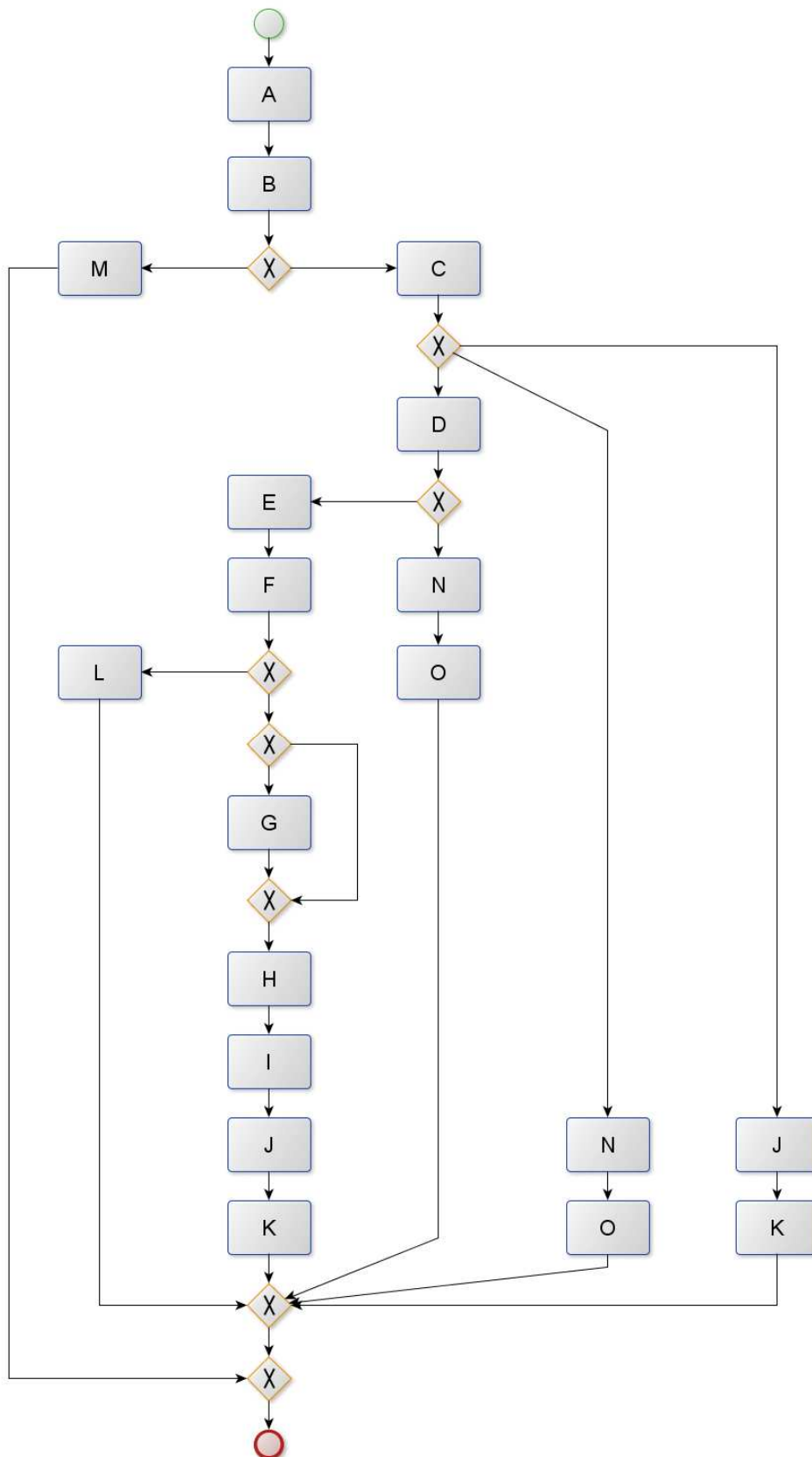
- Yes / No / I don't know

**Q3.** If C and E are executed for a case, is G always executed for the same case?

- Yes / No / I don't know

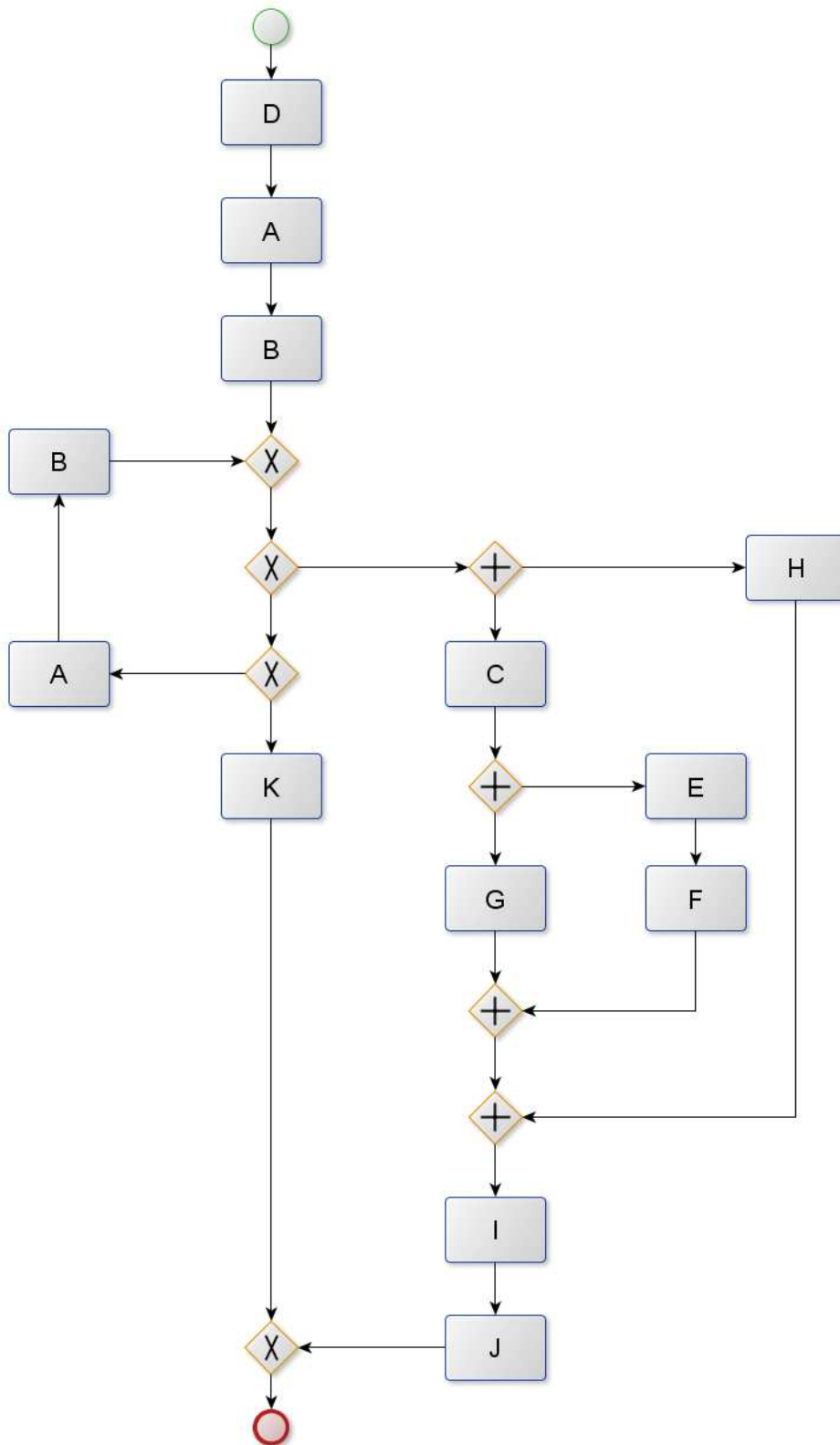
**Q4.** Can C and O be executed in the same case?

- Yes / No / I don't know





## Model 7



**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** Can E, G and H all be executed in the same case?

- Yes / No / I don't know

**Q2.** Can I and K be executed in the same case?

- Yes / No / I don't know

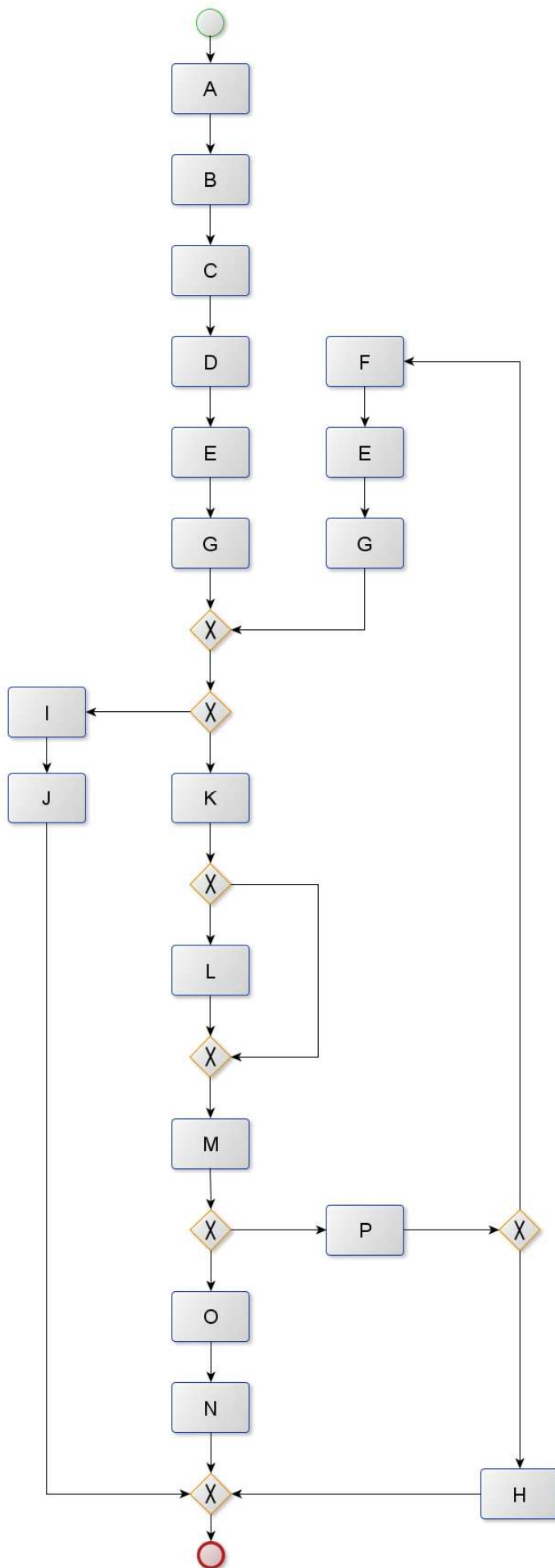
**Q3.** If B has been executed, can A be executed again?

- Yes / No / I don't know

**Q4.** Can H be executed twice?

- Yes / No / I don't know

## Model 8



**Q0.** Please rate the difficulty of the model on a 4-point scale:

- 1 – Very simple
- 2
- 3
- 4 - Very difficult

**Q1.** Can F and H be executed in the same case?

- Yes / No / I don't know

**Q2.** Can K be executed after L has already been executed?

- Yes / No / I don't know

**Q3.** If M is executed for a case, can J be executed for the same case?

- Yes / No / I don't know

**Q4.** Do M and N have to be executed in the same case?

- Yes / No / I don't know