

Exam Business Analysis January 2021

Business Process Management

15 MPC

1. Which BPMN process represents the petri net drawn (and split, and join and loop)
2. In BMP lifecycle in the first step “process identification”, which approaches did we look at:
 - a. **Designation and evaluation**
 - b. x
 - c. x
 - d. x
3. Which step is value-adding for the client in a complaint process?
 - a. **Talk over the proposed solution with the client**
 - b. Ask for approval from the manager (business value adding)
 - c. Send the claim to ... (non value adding)
 - d. Write down ... (non value adding)
4. Replay a trace and calculate token-based fitness → %
5. Cycle time calculation: bank A and bank B have the same process but with different average processing times for each activity. In process of bank B the probabilities on the XOR split are blank. Given that both processes have the same cycle time in total, calculate the missing probabilities (p and 1-p) → **30%**
6. Questions about a process given in the appendix: which statement is false
 - a. There is an event subprocess
 - b. **There is an interrupting boundary error event (it was an interrupting boundary message event)**
 - c. At least one of the starting events is wrongly used
 - d. There is a throwing error event
7. More questions about the process given in the appendix, indicate which statement is false
 - a. It is incorrect because there is lack of synchronization
 - b. **It is incorrect because there is deadlock**
 - c. When the termination event “deny request” is triggered it wipes off all the tokens
 - d. **It is incorrect because there is a deadlock and a lack of synchronization**
8. Process description and process model given, some statements given about the semantic quality. indicate the statement that is true
 - a. Process is *invalid* because..
 - b. Process is *unsound* because.. (soundness refers to syntax quality, not semantics)

- c. Process is *incomplete* because it does not model the situation where the fee is not paid
 - d. **Process is incomplete because the compliance check is not performed anymore after the request is updated**
- 9. Statements about elicitation techniques: indicate which one is false
 - a. **Process mining is good for process discovery because you can be *certain* that the input quality is high**
 - b. ?
 - c. ?
 - d. ?
- 10. Statements about process redesign: indicate which one is false
 - a. Transformational is clean slate and does not go along with the assumptions made in the modeling of as-is
 - b. **Transactional is universal and easy**
 - c. "Capture information once and at the source" is like providing a shared database that all users can access
 - d. ?
- 11. Statements about qualitative analysis, indicate which one is false
 - a. Value-added analysis is similar to total quality management and 6 sigma
 - b. **Pareto chart is best for multi-objective analysis** (false, only one dimension is looked at)
 - c. ?
 - d. ?
- 12. ?
- 13. ?
- 14. ?
- 15. ?

Enterprise Analysis

10 MPC

- 1. If you want to test for fraud (double my salary for example) in a code, which testing approach would be the best?
 - a. **Static testing (I think it could be this one x4)**
 - b. **Dynamic: black box testing**
 - c. Stress testing
 - d. Acceptance testing
- 2. 4 state machine diagrams given. Which of the state machines represents chain succession?
- 3. What does this state machine represent?
 - a. Chain succession
 - b. **Alternate succession**
 - c. Alternate precedence
 - d. None of the above

4. What diagrams are dynamic?
 - a. Use case and class diagrams
 - b. Collaboration and sequence**
 - c. Use case and state diagram
 - d. State diagram and employment diagram
5. Which statement is correct?
 - a. Kano is like a matrix with Now How Wow
 - b. MoSCoW is quantitative with 5 categories (must be, one dimensional, averse, indifferent, could have)
 - c. MoSCoW is qualitative with 4 categories (must, should, could, would)**
 - d. Kano is quantitative with weightings from 0...10
6. What does mutation testing mean?
 - a. Test every time the system mutates
 - b. Put errors in place on purpose**
 - c. End user tests the system
 - d. ?
7. (Table with assign 22 days, + 2, +3, + 5) indicate the hit policy
 - a. Unique
 - b. Any
 - c. Multiple**
 - d. First
8. (Table with US, Web, Phone, Retailer) indicate the hit policy, there was overlap in outcomes so unique and any hit policy are not possible
 - a. First**
 - b. Last
 - c. Unique
 - d. Any
9. Statements: which one is false
 - a. Success of interview elicitation technique & fixed format survey depends highly on the quality of the analyst (true?)
 - b. Ethnography is about observation, protocol analysis and apprenticing (true)
 - c. Card sorting enables you to discover expert vocabulary (true)
 - d. ?
10. Statements: which one is false
 - a. Security needs are functional requirements (they are non-functional)**
 - b. ?
 - c. ?
 - d. ?

2 Open Questions (2points)

1. $\text{Response}(A,B) + \text{Alternate Precedence}(B,C) + \text{Existence}(B,1) + \text{Existence}(C,1)$:
Which of the following traces are possible? Which of them are impossible and why?



1. Zero-to-many association, aggregation, composition, inheritance symbols given: name them and explain what kind of relation they represent.