

Level: 2nd year Bachelor's degree in Computer Science (2024/2025)

Module: Information Systems

Exercise Series No. 8: OPM

Exercise 1:

A driving school prepares candidates to take a driving license exam of a specific type. Candidates are presented for the exam following the procedure below:

- To be eligible, candidates must have completed at least 20 hours of driving lessons.
- Once the above condition is met, candidates must either have the instructor's approval or submit a personal request.

With the list of eligible candidates, the driving school consults the exam schedule provided by the administration every Friday starting at 2 p.m. Based on this information, the school organizes the candidate appointments: a list of candidates is sent to the administration, and summon letters are sent to the candidates.

1. Create the **Conceptual Process Model (CPM)** and the **Operational Process Model (OPM)**.

Exercise 2: (Extension of Exercise 1 from the 6th series)

When a citizen submits a bank loan application, the customer service department reviews the file. The application is considered valid if:

- The file is complete.
- The citizen's age is under 55 years.
- The citizen's monthly salary exceeds 50,000 DA.

If the application is valid, the customer service department calculates the loan repayment schedule. The client then decides whether to confirm their request and proceed with the loan process or not.

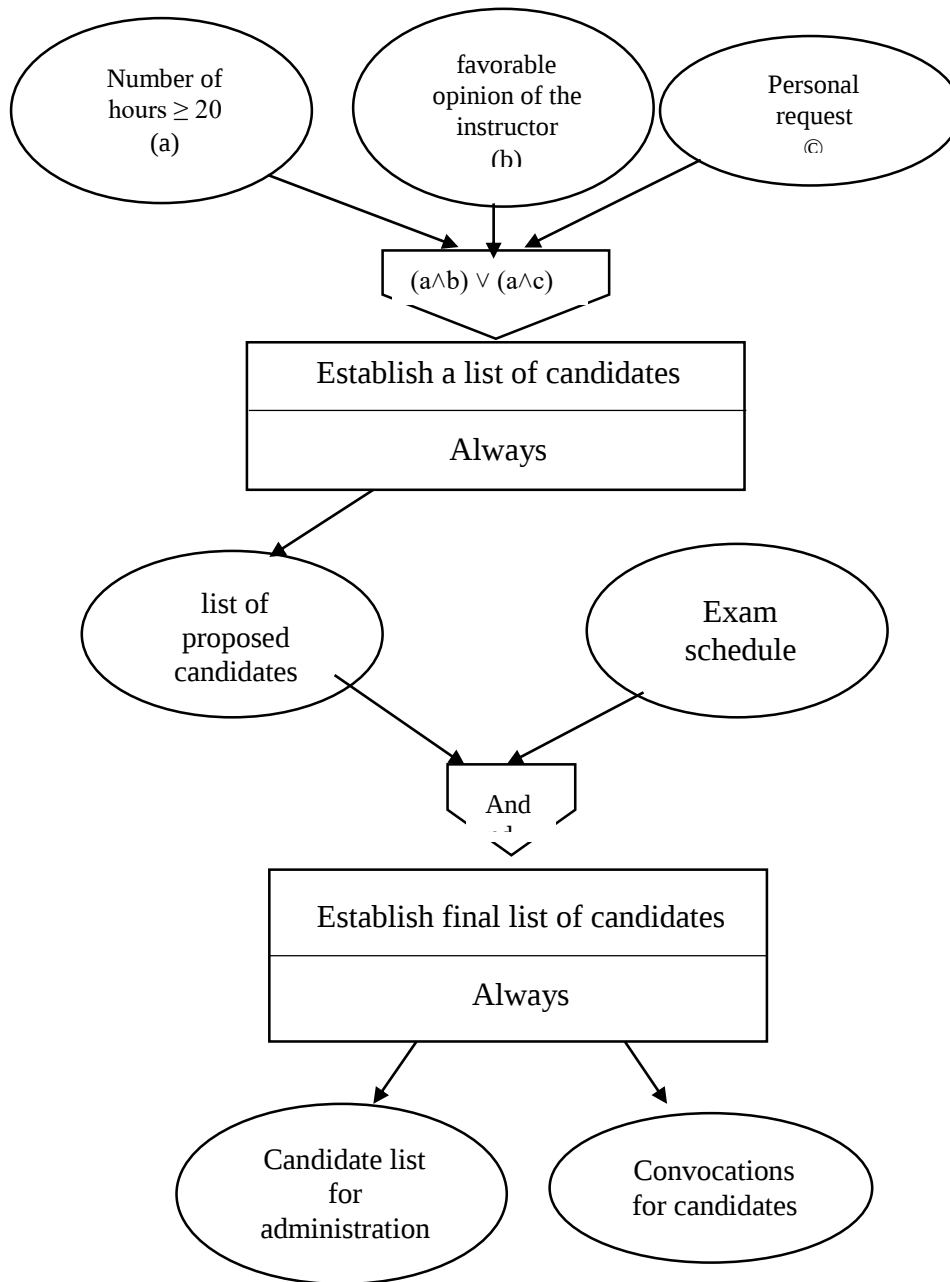
A committee chaired by the bank director meets on the 15th of each month to review the confirmed applications. A vote determines whether the application is approved or rejected.

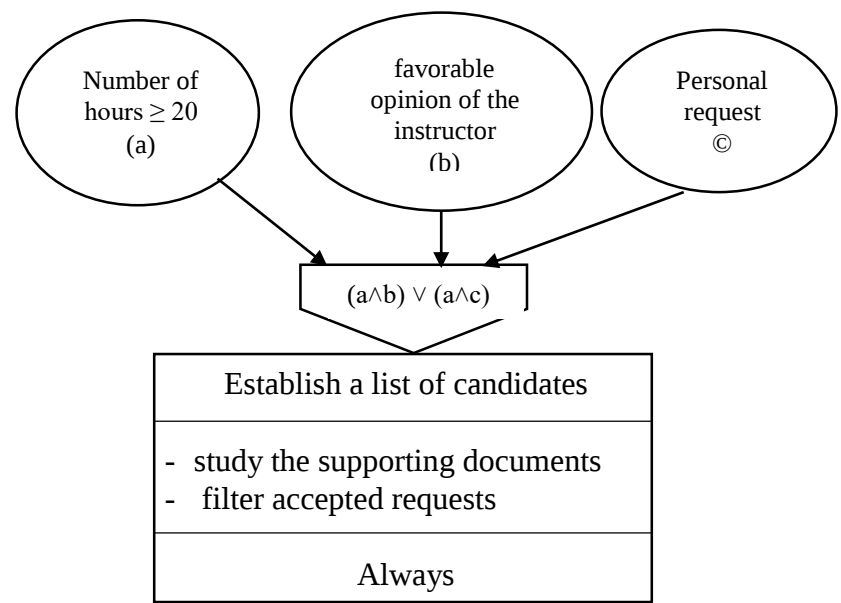
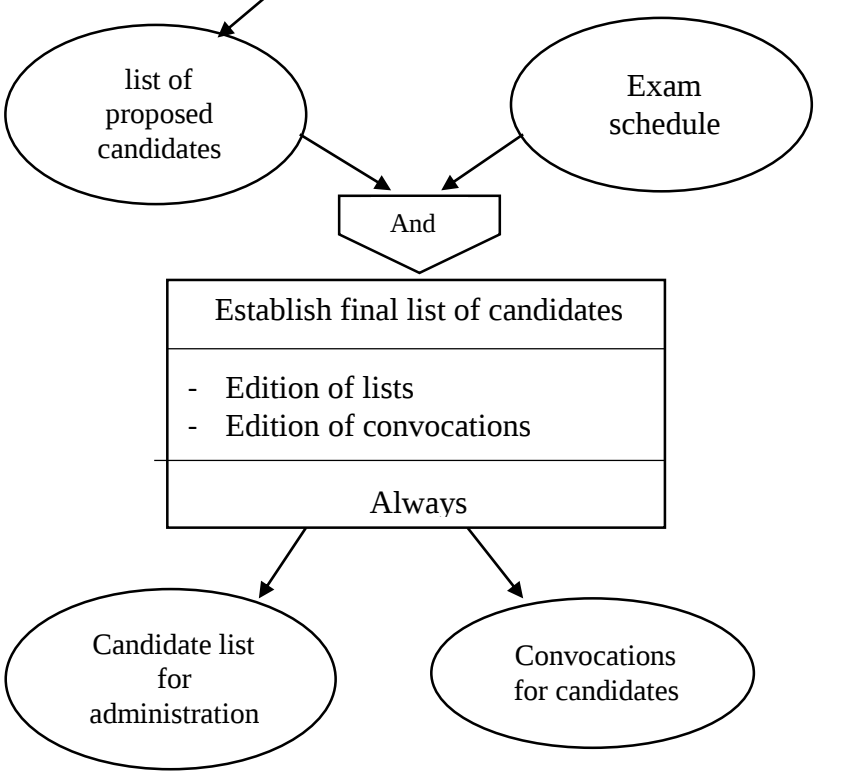
- If approved, the loan is granted.
- Otherwise, the loan is denied.

1. Create the **Organizational Process Model (OPM)** for this procedure.

Solutions

Exo1



sequence of functional procedures	nature of treatment	workstation	chronological sequence
 <pre> graph TD A1((Number of hours ≥ 20 (a))) --> D1 A2((favorable opinion of the instructor (b))) --> D1 A3((Personal request ©)) --> D1 D1{<math>(a \wedge b) \vee (a \wedge c)</math>} --> P1[Establish a list of candidates] subgraph P1 [] direction TB P1_1[study the supporting documents] P1_2[filter accepted requests] P1_3[Always] end </pre>	Manual	Driving school	Friday 2 p.m.
 <pre> graph TD B1((list of proposed candidates)) --> D2 B2((Exam schedule)) --> D2 D2{And} --> P2[Establish final list of candidates] subgraph P2 [] direction TB P2_1[Edition of lists] P2_2[Edition of convocations] P2_3[Always] end P2_3 --> B3((Candidate list for administration)) P2_3 --> B4((Convocations for candidates)) </pre>	Automatic	driving school	over time

Exo 2

