## University of Larbi Ben Mhidi Oum El Bouaghi Faculty of Exact Sciences and Life and Natural Sciences Department of Mathematics and Computer Science

Module: Information Systems, 2nd Year Bachelor's Degree in computer science

**Tutorial N 7**: CPM (Conceptual process Model)

## **Exercise O1:**

When an employee submits a promotion request, their file is first reviewed. If their seniority and service record justify it, their file is opened, and the superior's report is awaited to complete the file review. If seniority or service record are unfavorable, the file is rejected. After reading the report and a commission discussion, a vote determines whether the opinion is favorable or not. If it is favorable, the promotion is granted; otherwise, it is denied.

Question: Develop a conceptual process model (CPM) to represent this situation.

## Exercise 02:

When a customer tells a salesperson they want to purchase a specific item, the salesperson checks on the computer to confirm its availability. If the item is unavailable, the salesperson informs the customer. If the item is available, the salesperson fills out a form with the item's details and the price to be paid. The customer then takes this form to the cashier.

Once the customer pays, the cashier issues an invoice and a stock release note. A duplicate of the stock release note is sent to the warehouse. The customer then goes to the store and presents their stock release note. When the item arrives, an employee stamps the stock release note with "item delivered" and hands the item to the customer.

Question: Develop a conceptual process model (CPM) to represent this situation.

## **Exercise 3:**

For university enrollment modeling, the following information is considered:

Upon receiving the completed file, an administrative department agent conducts an initial visual check to ensure the required documents are included. The file is then reviewed by another experienced agent who examines its content:

- Verification of the candidate's civil status (age limit)
- Evaluation of their educational background (level of education).

Subsequently, a senior department official reviews the "motivation letter" written by the student, which is one of the required elements in the application file. If all these checks are favorable, a secretary enters the student's key information into the university's mini-computer terminal. This information is stored in a candidate database, and an invitation is issued to the student, specifying the date, time, and location of the selection tests.

Question: Develop a conceptual process model (CPM) to represent this situation.