

STUDENT NAME

PROFESSOR	PHD. SAMIA GAMOURA		
LEVEL	PGE 2A - MANAGEMENT GÉNÉRAL AVANCÉ (MGA)		
TITLE	LOGISTICS MANAGEMENT PROJECT (EM054M8AA1)		
EXAM TYPE	MAKE-UP		
DATE	19/01/2019	DURATION	120 MINUTES

PART 1: THEORETICAL QUESTIONS

** Please answer in this sheet and make your name in the top. To be delivered separately*

In the following, check correct answers (one or more answers are possible):

1. A project is
 - A planning
 - An idea to resolve a problem
 - A Technical Flow Chart

2. In projects, the type 'Multi sub-projects'
 - Gathers several projects in parallel
 - Is performed only by enterprise's internal teams
 - May be public government project

3. Management is
 - Dealing with a problem
 - Controlling a situation and/or a context
 - Communicating about a situation

4. In classic management (history)
 - The Fayolism introduced the concept of 'Coordination of tasks'
 - The Taylorism made the concept of 'Costs optimization'
 - The Colbertism introduced the concept of 'Decomposition into tasks'

5. In the etymology of project management, a 'program' is :
 - a set of 'Products'
 - a set of related projects belonging to the same business line
 - a set of 'Business Cases'

6. In logistics, managing a project includes
 - Optimization transport
 - Tracking information flows between suppliers and customers
 - Controlling the operations between the suppliers and the consumers.

** This page is intentionally left blank.*

PART 2: PRACTICAL QUESTIONS

Exercise 1

In Figure 1.1, there are 2 mistakes in the organizational relationships between concepts:

- Find the 2 mistakes (with argumentations of your finding).
- Propose your schema to fix mistakes.

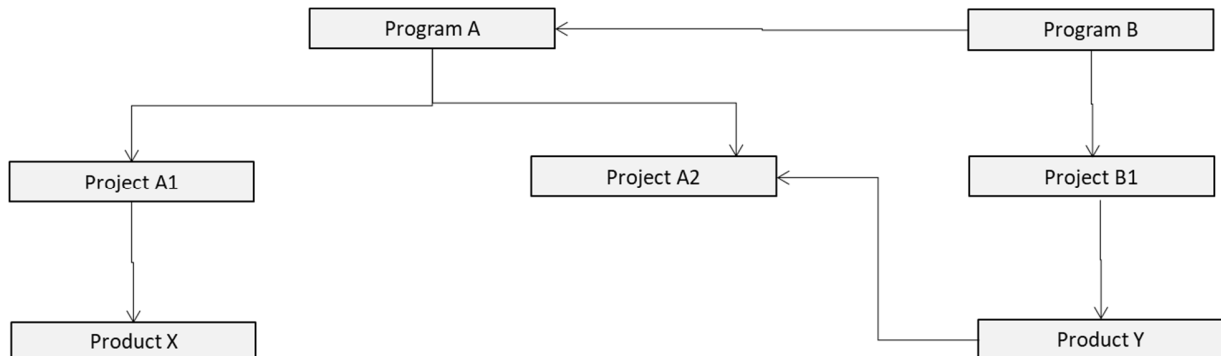


Figure 1.1. Relationships between concepts in project management

Exercise 2

DISTX is a French Company specialized in warehousing (located in Strasbourg). 3 sites (warehouses) exist in France.

To reduce the inventory costs, DISTX asked the Warehouse Project manager to perform the task of studying the situation to decide which sites should kept open (2 sites should be kept from the 3) and only 1 site will be closed.

In Table 2.1 is the summary of the historical data regarding the same product of the 3 main customers in each area of the 3 sites during 5 years.

Suppose, the manager bases his decision on this data only:

- The task of 'addressing the technical problem of broken machines and maintenance', is it involved in the role of the Warehouse Project Manager?
- Give the optimal sites to keep (location). Give argumentation for you choice.
- Suppose a strike of employees is announced in the region of Strasbourg (employees of the site of Strasbourg will stop working) for all the next year. What could be the impacts of the decision and study performed by the Warehouse Project Manager?

Location	Customer ID	Yearly orders (number of items)					Average*	Standard deviation*
		2013	2014	2015	2016	2017		
Strasbourg	Customer X	54 000	4 225	749	310	720 986	156 054	316 619
Nice	Customer Z	23 531	658 304	768	45 769	74 322	160 539	279 586
Lille	Customer Y	1 093	34 214	546 896	54 673	5 004	128 376	234 989

Table 2.1. Historical Data of the 3 main customers in the 3 sites of DISTX (5 years)

* Reminder:

Average: is a measure of the mean value of the data set.

Standard deviation: is a measure to quantify the amount of dispersion of a set of data from the mean.

Exercise 3

In the following: Figure 3.1 and Table 3.1:

- The planning (schedule) illustrated in Figure 3.1 is a PERT diagram. Is this assumption true?
- Based on Figure 3.1, try to complete Table 3.1
- Propose a CPM diagram based on Table 3.1 (after completion).

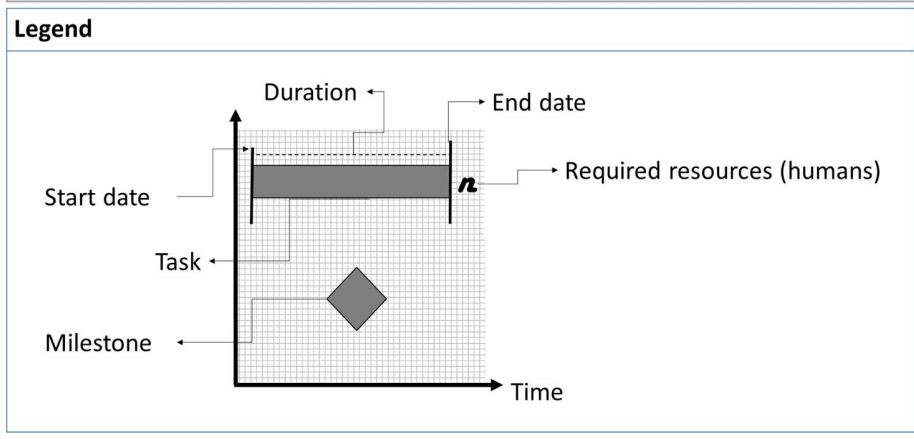
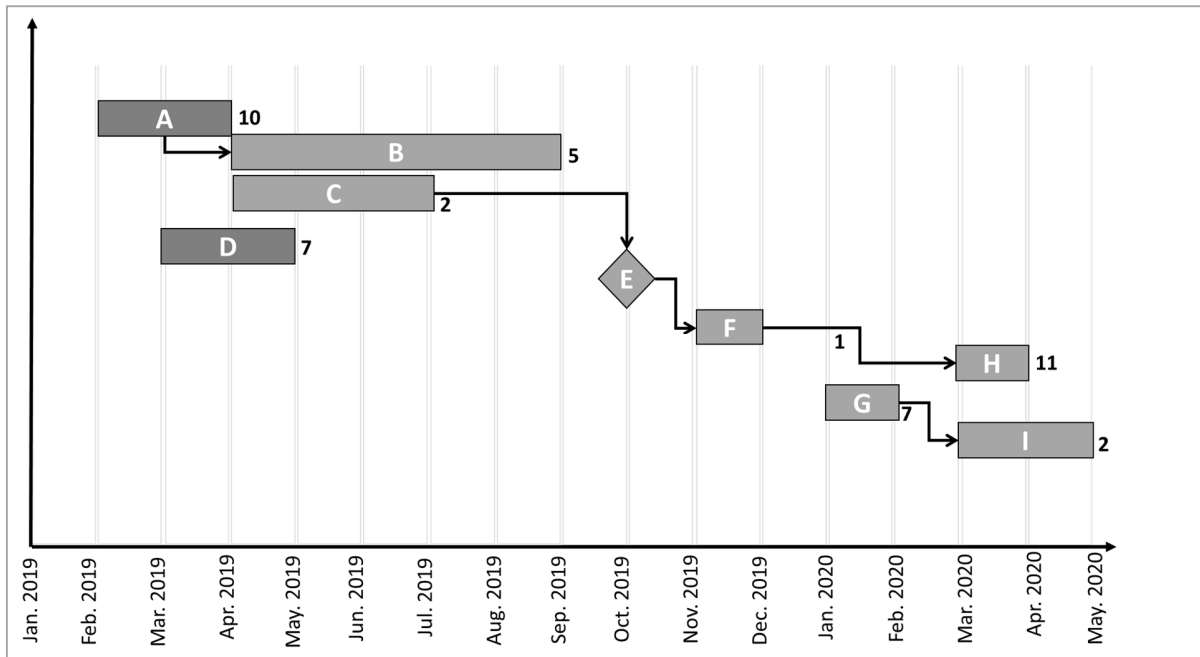


Figure 3.1. Chart with legend

Tasks	Previous task	Start date	End date	Duration	Resources (humans)
A					
B					
C					
D					
E					
F					
G					
H					
I					

Table 3.1.

Exercise 4

Suppose a project with 5 tasks: {T1, T2, T3, T4, T5}.

- Propose the CPM chart based on the Table 4.1.
- Suppose the T1 starts on 01/02/2019, and the unit of duration is based on $\frac{3}{2}$ month, propose your Gantt chart based on your CPM charts.
- What is the minimum number of resources required for this project?

Tasks	Previous task	Duration	Cost
T1	-	6	657
T2	T1	36	324
T3	T1	3	112
T4	T1	2	22
T5	T2,T3	2	87

Table 4.1.

Exercise 5

In a company of logistics DISTM, there are 2 services:

- Transportation service
- Inventory service

DISTM owns 3 trucks in his fleet {Truck 1, Truck 2, Truck 2}.

DISTM launched a new project named DELTA.

In Table 5.1, we illustrate the organizational structures of services in the company DISTM.

Services	Employee	Position
Transportation	Elena Trivaux	Manager
	Bertrand Anael	Truck driver
	Emilie Fac	Truck driver
	Derrick Dommart	Truck driver
	Omar Dinet	Handler in trucks
	Patrick Jannet	Scheduler supervisor
Inventory	Mathilda Ramoz	Manager
	Joan Keram	Supply supervisor
	Helene Sarra	Inventory Auditor

Table 5.1. DISTM organizational structure

In Table 5.2, we illustrate the DELTA structure (tasks):

EQUINOX tasks	Title	Duration (days)	Required Resources	Cost
Task 1	Auditing the inventory before supplying	1,5	1	350 €
Task 2	Supplying the trucks	3	1	577 €
Task 3	Auditing the inventory After supplying	4,5	1	240 €
Task 4	Producing the Inventory management report	2	1	580 €
Task 5	Scheduling the transportation operations	2	1	437 €
Task 6	Handling packages in trucks	1	1	300 €
Task 7	Driving trucks to the distribution center	6	3	1824 €
Task 8	Producing the Transportation management report	2	1	546 €

Table 5.2. DELTA structure

Suppose the task 1 starts on 01/02/2019, based on tables Table 5.1 and Table 5.2:

- Propose a WBS table
- Propose a OBS table
- Propose a WP table

End
Good luck