EC07-PrevPlan - Control

Last name: _____

First name: _____

Subject A

Notation:

- **This test <u>represents 15 points of the global grade</u>, the 5 next points <u>come from the QCM</u> made during the lecture course.**
- **Each question has single or multiples answer(s), you need to define the number of good answers.**
- **Good response:** All points of the question
- **Case of multiple responses:** Points as prorate of the number of good responses (Ex. The number of good responses is 2 from 4 possible responses for a question with 1 point. Each good response permit to obtain 0.5 points per responses. In opposite, if 3 responses were chosen, the 2 good responses permit to obtain 0.33 points per good response.)
- **No response:** -50% of points of the question
- **Bad response:** -25% of points of the question

1. **Strategic plans allow forecasting, it is the highest term for a corporation (1 Pt)**

A	B
True	False

2. **In MRP2, what is the order of the different planning tools from the general one to the most detailed? (1 Pt)**

A	B	C	D
- Strategy Plan - Net Requirements Calculations - Sales and Operations Planning - Master Planning & Scheduling - Workshop Management	- Workshop Management - Net Requirements Calculations - Strategy Plan - Sales and Operations Planning - Master Planning & Scheduling	- Strategy Plan - Sales and Operations Planning - Master Planning & Scheduling - Net Requirements Calculations - Workshop Management	- Sales and Operations Planning - Master Planning & Scheduling - Strategy Plan - Net Requirements Calculations - Workshop Management

3. **What is an appropriate scale of time for a strategic plan ? (1 Pt)**

A	B	C	D
Few weeks	1 to 2 years	Few months	3 to 10 years

4. **Famous strategic plans are ? (1 Pt)**

A	B	C	D
“France Relance" lauched by Emmanuel MACRON in 2020	“Marshall Plan" lauched in 1948	“Paris 2024" for Olypics games lauched by Anne HIDALGO	APPLE strategy to choose FOXCONN as a main supplier.

5. **What is the purpose of a S&OP ? (1 Pt)**

A	B	C	D
Programming the supplier orders	Anticipate the company's capabilities	Programming the next company's investments	Programming the manufacturing orders

6. What is the unit used in the S&OP ? (1 Pt)

A	B	C	D
Quantity of finished products	Quantity of products per family of products	€ or k€	Quantity of components required for a certain production

7. How frequent this tool (S&OP) can be reviewed ? (1 Pt)

A	B	C	D
Every weeks	Every months	2 times a year	Every days

8. Few tables are composing the S&OP, how many ? And what do they correspond to? (1 Pt)

A	B	C	D
3 tables with Sales, forecast and Production.	3 tables with Stock, Sales and Production.	4 tables with the amount of Stock, Sales, Budget and Production	3 tables with Stock, Production and Budget.

9. If you are managing a bicycle production line, what would be a family of products for you ? (1 Pt)

A	B	C	D
Montain bikes	Road bikes	A pedal	A chain

10. What value is covered in black in position 2 ? (1 Pt)

PF120Go

Taille de lot = [redacted] Délai = [redacted] (5) Stock = 300 SS = 100
Niveau = 0 (4) Unité = [redacted] (3) Zone ferme = [redacted] (2)

	1	2	3	4	5	6	7	8	9	10
Prévisions restantes	100	200	550	800	800	800	700	400	400	300
Commandes fermes	1 400	1 100	550	100			(1)			
Stock disponible 200	300	200	300	200	200	200	[redacted]	300	300	0
PDP (fin)	1 600L	1 200F	1 200F	800F	800F	800	800	400	400	
PDP (déb)	1 200F	1 200F	800F	800F	800	800	400	400		
Disponible à vendre	500	100	650	700	800					

A	B	C	D
4	1	5	2

11. What value is covered in black in position 5 ? (1 Pt)

A	B	C	D
0,5	1	2	3

12. MPS is studying each ? (1 Pt)

A	B	C	D
ERP	Component	Family of products	Finished products

13. What value is covered in black in position 4 ? (1 Pt)

A	B	C	D
150	350	300	400

14. What value is covered in black in position 3 ? (1 Pt)

A	B	C	D
Number of finished products	Requierement calculations	Number of sub-assembies	Budget allocated

15. The MPS is used as input to calculate the Net Requirements Calculation ? (1 Pt)

A	B
Yes	No

16. The MPS is a tool that allows you to : (1 Pt)

A	B	C	D
Give to the the commercial department the available to sell without disturbing the production planning	Apply what you stated into the S&OP	Keep an eye on the evolution of the allocated budgets	Forecast the global resources (people, building) you will need in the future

17. What value is covered in black in position 1 ? (1 Pt)

A	B	C	D
120	320	100	300

18. What is a MPS ? (1 Pt)

A	B	C	D
The link between the S&OP and the Net Requirement Calculations	The link between the Strategic plan and the Net Requirement Calculations	The schedule of quantities to be produced for each finished product	A contract between the commercial and the production departement

19. With a MPS, we are working on periods such as : (1 Pt)

A	B	C	D
The week	The month	The year	The day

20. What is the most evolved methodology of forecasting ? (1 Pt)

A	B	C	D
Demand planning	Advanced modelling	Statistical abstraction	Machine learning

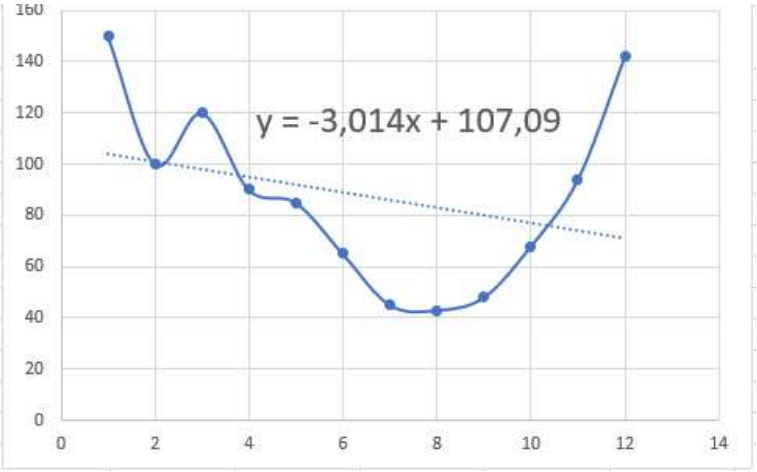
21. Considering the picture below, what type of profile the forecast seems to be? (1 Pt)

A	B	C	D
Trendy and Seasonal	None	Seasonal	Trendy

22. Considering seasonality and elements on the picture, what are the forecasts calculated with method by linear regression and seasonality for next year? (2 Pt)

The seasonality is considered on 1 month

Mois	n	Ventes faites	Coeff de saisonalité
Janvier	1	150	171%
Février	2	100	114%
Mars	3	120	137%
Avril	4	90	103%
Mai	5	85	97%
Juin	6	65	74%
Juillet	7	45	51%
Août	8	43	49%
Septembre	9	48	55%
Octobre	10	68	78%
Novembre	11	94	107%
Décembre	12	142	162%



A	B	C	D
Janvier 116 Février 74 Mars 85 Avril 61 Mai 54 Juin 39 Juillet 25 Août 23 Septembre 24 Octobre 32 Novembre 40 Décembre 56	Janvier 117 Février 75 Mars 85 Avril 61 Mai 15 Juin 39 Juillet 14 Août 23 Septembre 24 Octobre 32 Novembre 41 Décembre 59	Janvier 118 Février 58 Mars 85 Avril 54 Mai 54 Juin 45 Juillet 26 Août 23 Septembre 24 Octobre 32 Novembre 41 Décembre 57	Janvier 144 Février 74 Mars 111 Avril 61 Mai 54 Juin 45 Juillet 26 Août 29 Septembre 24 Octobre 25 Novembre 41 Décembre 58

23. What would be the profile of sales of a product like a calendar ? (1 Pt)

A	B	C	D
Erratic	Seasonal	Trendy	Consistent

24. Profile of sales, described as erratic, are calculated with : (1 Pt)

A	B	C	D
None approaches	Qualitatative approaches	Both, qualitative and quantitatives approaches	Quantitative approaches

25. Profile of sales, described as seasonal, are calculated with : (1 Pt)

A	B	C	D
None approaches	Qualitatative approicahes	Quantitative approaches	Both, qualitative and quantitatives approaches

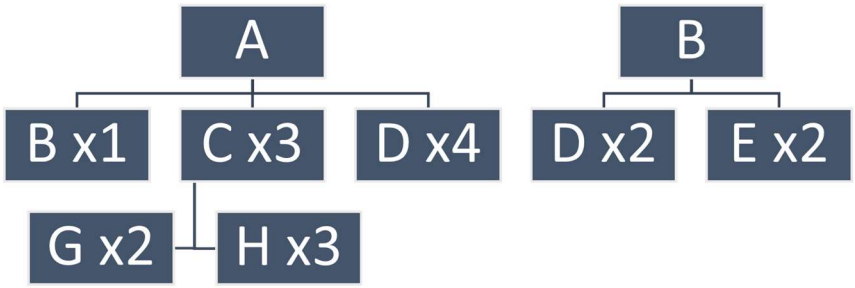
26. What is a BOP ? (1 Pt)

A	B	C	D
A key performance indicator	A list of components composing a finished products	A Bill Of Material	A description of the process, step by step

27. What is an indenpendant need for a car manufacturer ? (1 Pt)

A	B	C	D
Motor	Peugeot 207+	A group of technicians	Windshield

28. On which part would you run your first net requirement calculation? (1 Pt)



A	B	C	D
A	B	C	D

29. On which part would you run your second net requirement calculation? (1 Pt)

A	B	C	D
A	B	C	D

30. What is true about the Net Requirement Calculations ? (1 Pt)

A	B	C	D
It can be done with an ERP (like Divalto)	It forecast independant needs	It calculates how many components you'll need	It calculates the planification of the production order

31. Independents needs come from inside the company? (1 Pt)

A	B
True	False

32. Independent needs can be estimated by forecasts and dependents needs must be calculated ? (1 Pt)

A	B
True	False

33. In case of overlad in production, what can you do ? (1 Pt)

A	B	C	D
Focussing the workforce on a specific reference.	Hiring salaries	Outsourcing activities	Promotional actions

34. What is a BOM? ? (1 Pt)

A	B	C	D
A list of components composing a finished products	A description of the process, step by step	A key performance indicator	A Bill Of Material

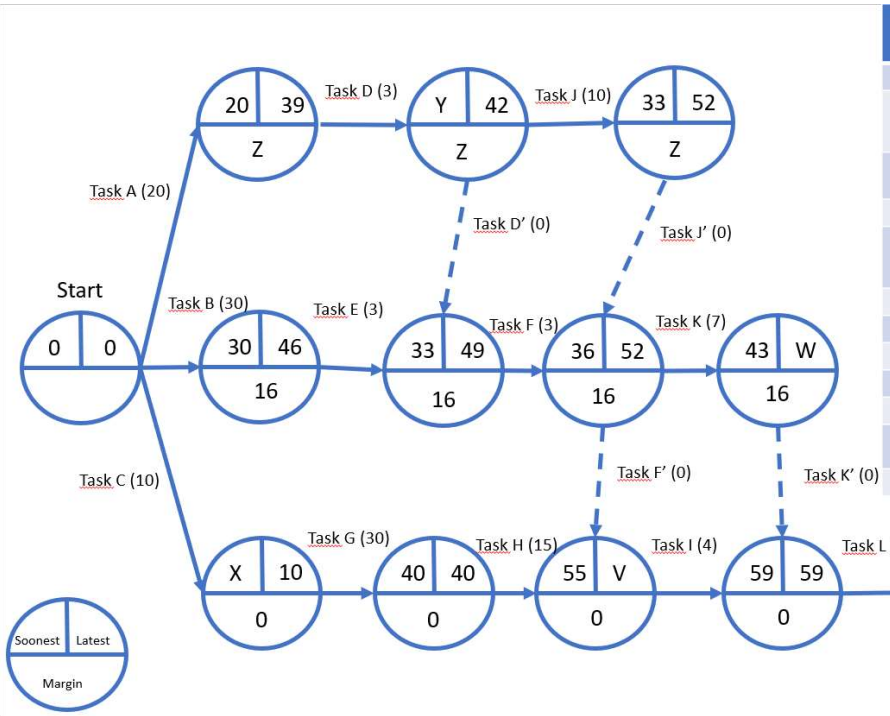
35. What is a dependent need for a car manufacturer ? (1 Pt)

A	B	C	D
A group of technicians	Peugeot 207+	Windshield	Motor

36. With a BOM composed of several levels, we must take care of the requirements coming from all levels ? (1 Pt)

A	B
True	False

37. What is the value of X in the PERT diagram ? (1 Pt)



Task	Name	Duration	Previous tasks completed required
A	Supplier orders	20	-
B	Recruitment of qualified engineers	30	-
C	Communication of the event	10	-
D	Design	3	A
E	Technical drawings validation	3	B
F	Training	3	D and E
G	Final orders	30	C
H	Installation	15	G
I	Programmation	4	F and H
J	Test and debug	10	D
K	Final presentation	7	F and J
L	Final installation	1	I and K

A	B	C	D
1,5	3	5	10

38. PERT (Program Evaluation and Review Technique) is a diagram allowing managing : (1 Pt)

A	B	C	D
Requirement	Projects	Suppliers	Chains of production

39. What is the value of W in the PERT diagram ? (1 Pt)

A	B	C	D
57	56	55	59

40. What is the value of V in the PERT diagram ? (1 Pt)

A	B	C	D
59	56	55	57

41. What is the value of Z in the PERT diagram ?(1 Pt)

A	B	C	D
19	26	28	23

42. What is the task D' ? (1 Pt)

A	B	C	D
A fictive task	A priority task	A delayed task	A main task

43. What is the value of Y in the PERT diagram ? (1 Pt)

A	B	C	D
23	28	26	19

44. On this PERT diagram, what is the critical path, the task sequence that allows no delay ? (1 Pt)

A	B	C	D
No critical path defined here	Task C, G, H, I, L	Task A, D, D', F, F', I, L	Task A, D, J, J', K, K', L

45. What does the KANBAN system bring ? (1 Pt)

A	B	C	D
In contrast to a big security stock, the KANBAN system will amplificate the problem, by revealing them. It will then be possible to work on the problems identified.	Once the good quantity of Kanban required and the good capacity of container defined, it brings a huge help.	Globally it gives you the amount of components needed for a specific finished product.	It will symplify the choice of the customers

46. What does KANBAN means ? (1 Pt)

A	B	C	D
Enough Stock	Stock	Component	Label