



Complete, fold and seal
(see note 2 below)

SURNAME: ~~Le Hoat~~ Romain

FORENAME(S): Le Hoat

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List the numbers of the questions you have attempted	Office Use
A 1 a	] 24
1 b	
1 c	
3 a	] 21
3 b	
3 c	
Total	45 90%

Mark agreed.
Ad
28/05/19.



1:

a) The 7 types of waste that Toyota has identified are:

- **Overproduction**: The fact (for the company) to don't take care of the customer demand during the production of goods
→ to produce more, less than the demand.
- **Transport**: Principally, this concern the transport of matters that the company has to transform to create the final product. It can be the transport between the company and the customers.
- **Inventory**: This represent the fact to check the goods in stocks (their numbers, their place ...) with the objectif to know when and how much to order.
- **Wasted motion**: This is the useless motions which doesn't help the final product to be create.
- **Waiting time**: The fact to wait, during the production between 2 stages of the supply chain (it can be the moment between the order of goods and the reception)
- **overbudding resources**: When there is a lot of differences resources for a product or when the company is "using" enough for the product, the company is losing matters and time

~~Beneficiaries~~

• Beneficiaries:

* We can present an other waste, it's the talent, indeed in a company, the employees aren't considerate at their valor. generally They only work by using a minimum of their capacities. So, there is a waste of talent for the lean management.

Interesting

All those things are considered as waste because they don't create final benefits for the customer. The final objective for a company is to reduce in a maximum the waste to be more competitive and attractive.

b) The Lean synchronisation is the fact to put in common all the improvements to finally reduce the waste (as discussed previously).

When a customer is buying a product, the way to create it isn't important for him. But is important for the company because with this waste reduction, she can be faster, the quality can be better, and the costs are reduced.

The total waste reduction isn't possible for a company who's using mainly ~~only~~ employees. For example the waiting time has to be reduced but not totally; ~~the~~ the employees can't work an entire day without some little break between the different steps of a company.

But the Lean synchronisation is a really good point for different types of company. Companies who's using a lot, the technology (robots, computer system). The liability, the durability and the safety of robots can be a really good point for the creation. The human workforce ~~can~~ can be used at other tasks (conception, administration, maintenance...)

So, to be the best, a company has to take in consideration her needs and her forces.

c) The continuous improvement concept is (for nowadays) an obligation for each company who want to be attractive and competitive. This consist in the fact to constantly search to improve the way to work: ~~for the~~ and this, for all sectors and offices in a company. The company has to follow the technological ~~in~~ innovation to being attractive. The customer has to be interesting by your

way to work ...

If a company never use this concept she will be a little one forever.

The improvement concept is like Idea to create new way to work.

^{continuous} The Swedish company was the first one to organize their shops to obligate their customers to visit all the shop. This was thanks to this concept. It can be market studies, brainstorming ...

This concept is now a common one in all sectors.

5

23

a) The Total Quality Management approach is the fact to offer the best service, product ~~to be~~ in all sectors, to our customers. The ~~company~~ company has to looking for the great things and decisions to take for the customers benefits.

The main objective is to totally satisfy the clients and this in the aspect, in the services, in the delivery ...

For example, the food "shop" Pret a Manger is looking for this approach and in the United Kingdom, he is considered as a leader because he propose the best ingredients (ordered the morning), very low prices and employees really happy all days.

As a customer (own experience) you ~~are~~ really like that because the quality is great in the main sectors that you looking for.

good example

10

✓

b) The different costs when we talk about quality are:

- Communication cost: ~~you~~ you have to be attractive to convince the clients to go to your shop, company, so the publicity (radio, TV, street) has to be perfect.

Sometimes we see on a TV a funny / beautiful publicity and we want to discover the product / ~~company~~ company behind that. A good quality of communication is a key factor.

- Innovation cost: As seen ~~if~~ before, to offer a good general quality to your clients, you have to constantly innovate. For Pret a Manger, they have to constantly change their food proposition to keep their old clients and to create the interest for the new ones.

- Service cost: It's a good point when a client is buying one of your product, but isn't finish. Indeed this only represent 30%. Indeed you should have to follow your clients after the purchase. For Ikea, the customer service is really important and this represent a lot of costs. If a client got a problem with a chair (for example) you have to ~~resp~~ respond as soon as possible to the problem.

c) To reduce the total cost of quality represent an important task for a company. Indeed if the company do that, it will be possible ~~to~~ ^{for} to allow that money in others sectors.

So, to reduce the total cost of quality, an important thing to do, is to try to put in common all these "sectors". ~~However~~ For example to put in common the innovation and the services could reduce the total cost from 1/4.

To outsource some cost could be a good thing because it's difficult for you to work in all activities.

The key quality costs are as follows

- prevention

- appraisal

→ Internal failure &

External failure

— a critical discussion is needed

Question No.

Examiner On

Arholwr yn unig

hif y Cwestiwn

Question No.

Examiner Only

Arholwr yn unig

Arholwr yn unig

Question No.

Examiner Only

Arholwr yn unig

Rhif y Cwestiwn

Question No.

Examiner Only

Arholwr yn unig

Yn unig y Cwestiwn

Question No.

Examiner Only

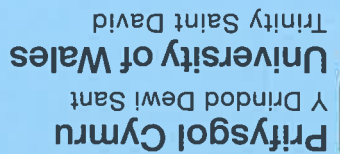


Question No.

Examiner Only

Arholwr yn unig

Arholwr yn unig



12 Tudalen

1. Rhwch yr holl wybodaeth y gofynnir amdani yn y blychau isod.
2. Rhwch eich enw yn y lle a ddarparwyd ar y dde, plynwch ei a'i selio i lawr (gan ddefnyddio'r label a ddarparwyd) i guddio'ch enw.

CYFENW:

Lienwch, plygwch a seliwch
(gweler nodyn 2 isod)

3. Rhaid i'r atebion fod mewn llawysgriften ddarllenadwy. Gall yr Arholwyr naill ai anwybyddu sgript annarllenadwy, neu drefnu iddi gael ei theipio a chael yr ymgeisydd i dalu.
4. Ysgriftennawch eich atebion mewn inc.
5. Dechreuwch bob ateb ar dudalen newydd. Gwnewch unrhyw fras nodiadau yn y llyfr atebion a thynnu llinell drwyddynt.
6. Ni ddylid rhwgo unrhyw ran o'r llyfr hwn; rhaid ei gyflwyno yn gyfan.
7. Os defnyddir mwy nag un llyfr, rhwymwch hwy gyda'i gilydd gan ddefnyddio'r tagiau sydd ar gael oddi wrth y gwyltiwr/gwylwyr.

8. Rhaid dychwelyd pob llyfr. Ni chaniateir mynd â llyfrau atebion, wedi eu defnyddio neu heb eu defnyddio, allan o'r lleoliad arholi o dan unrhyw amgylchiadau.

1	Rhif Myfyriwr	
2	Tell y Papur Arholiad	
3	Cod y Modwl	
4	Dyddiad ac Amser yr Archoliad	
5	Lleoliad yr Arholiad	
6	Rhif Sedd	
7	Nifer y Llyfrau Atebion a gyflwynwyd	

[illegible]

(See the other side for English version)



SURNAME:

DIPLOMA

12 Pages

FORENAME(S):

AARON LLOYD

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[illegible]

✓ Mark agreed
✓ Ad.
28/05/19.

Q1

- (a)
- 1 Transportation (the cost in time and money + no value added)
 - 2 Inventory (holding too much inventory adds costs)
 - 3 Movement (needed movement, or too much movement)
 - 4 over processing (over complicating a process)
 - 5 Too much variation (lack of a standardised process)
 - 6 ~~Defects~~ Defects (Poor Quality of products or services)
 - 7 Waiting times (waiting for change overs or stoppages)

(14)

(b) Lean Synchronisation benefits

The use of lean processes in operations such as Toyota's Manufacturing Strategy reduces Muda (waste) within its operations to deliver an effective and efficient method to the processes. The methods used organise the workflow of materials and processes in a minimal and standardised manner throughout the organisation.

The benefits would be a reduction in inventory levels, synchronisation of processes by means such as Kanban and the standardisation of the products and processes to help deliver products and services without defects.

(15)

Shortened or eliminated processes of movement activities, with the increased ability to predict and synchronise - goods in and goods out with timely deliveries minimising double handling and a greater ability to organise processes and activities to standards such as 5S.

Toyota uses Continuous Improvement Strategy to constantly attempt to reduce waste further and improve efficiencies using methods such as Value Stream Mapping.

The negative points of using Lean is the reduced ability to adapt to changes in demand suddenly and the reduced ability to add new products quickly. There is a risk of not being able to deliver if something goes wrong, or stock outs could occur if a disruption in the synchronisation -

Q1

(b) - Processes and/or activities.

(C) Continuous improvement is a strategy to constantly make adaptations in processes and the overall design to positively change the effectiveness and efficiency of processes.

5S is an example, as 5S is five improvement techniques all of them beginning with the letter (S), the five 5's are -:

- Sort
- Set in order
- Standardise
- Shine
- Sustain

The 5S technique is used in every department in every activity to improve the organisation, to improve the flow and movements of materials and tools and people, to create one simple way of doing things, to keep the cleanliness and organisation of things to a high standard to help the top three (S's) work, and to sustain the top four (S's) by means of audit to score and find improvements to be made.

Q3

(a) The Total Quality Management approach is the involvement of all staff in all departments in the quality of the organisations products or services.

From the designing of the product/service to the delivery.

This is done to maximise the potential of good quality products and services reaching the customer, and minimising and defects from reaching the customer by checking and keeping quality in -

Q3

(a) - Mind in every department.

(b) The costs of quality can range of -:

- Loss of customers
- Production / Labour Costs
- Tools and equipment
- Risk of Causing a bottleneck
- Reputation
- Third party inspection

(5)

(c) having regular inspections/audits throughout every activity such as Total Quality Management where employees are trained to maximise their efficiency in producing a good quality product or service, and to check at each stage, or even double check by the means of contracted 3rd party inspectors to ensure the checks are done. Provide customers with guarantees and refunds in the event of a problem creating an open means of communication at all times.

(6)

Have contingency plans such as an extra line or machinery if there is a technical issue, or having buffer stock and back up suppliers and distributors.

Standardisation to maximise efficiencies and making mistakes harder to make in the first place.

The use of temporary staff to help with demand fluctuations or bottlenecks as a last resort.

This discussion is not critical

is required.

Question No.

Examiner O

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Question No.

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Question No.

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Question No.

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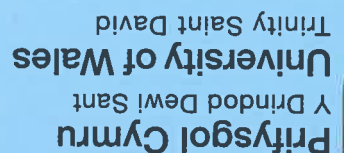
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Question No.

Examiner O

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ity Cwestiwn



12 Tüdalen

Llenwch, plygwrch a seliwrch
(gweler nodyn 2 isod)

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[illegible]

(See the other side for English version)



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FORENAME(S): Elliot

12 Pages

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1	Student Number	pl48966
2	Title of Examination Paper	Operations Analysis
3	Module Code	MGX 01290
4	Date and Time of Examination	14 th May 2014 12:00
5	Examination Venue	1QB10
6	Seat Number	6030
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
1	21
2	20
Total	44 98%

Mark agreed.
= X of 28/05/19.

1 a) 7 Wastes

Transportation: This waste is concerned with processes of transporting the goods which do not add any value and are sometimes viewed as unnecessary. ✓

Inventory: This waste is associated with stock buffers or ^{any} stock being held in the inventory that does not add any value to the business as it is not being used and takes up costly space and requires maintenance. ✓

Movement: This waste is associated with employees who move unnecessarily whilst not adding any value to the overall production process. Such as moving to another floor to collect a printed invoice & then proceeding back to the previous floor. This does not add value to the business or customer. ✓

Wait time: This generates waste because production is being held up for unknown reasons & this time could be better spent productively. ✓

Over-production: This generates waste because there is a saturation in production & not enough demand to actually distribute the products & so will sit on shelves and up in buffer stock holding areas. ✓

Over-processing: This process generates waste by adding too much value to a product which the customer doesn't require or deems valuable & so creates extra unnecessary cost and waste for the business. ✓

Defects: These generate waste as defective items have to be re-analysed to be repaired, scrapped or discarded and this takes time & resources which could be better spent.

B) Lean Synchronization Benefits:

Reduces Waste
Creates a mindset for the business & its employees to adhere to.

It can be standardized & sustained in order to ensure it is simplistic to follow and all employees know it off by heart.

It allows production to be a pull system which eliminates unnecessary waste as production only occurs when there is customer demand.

Also the products are designed & produced to the customer's specification which maintains quality & reduces cost as there will be no defects or errors.

Lean synchronization also involves using the 5S technique which will ensure a tidy and neat workplace and this will be maintained by all staff and will essentially contribute to continuous improvement (Kaizen).

However due to it being like a Kanban System, the pull system will only have products when there is demand and so this will minimize costs, save space as well as heating / lighting for that space and also save operating costs of the machine as well as less wear and tear.

The Lean Synchronization will make production much more simple and increase quality whilst minimizing costs and time that it takes to produce.

C) Continuous Improvement (Kaizen)

This concept looks to (obviously) improve the ~~the process~~ in the workplace by establishing a workplace-wide mindset of increasing quality whilst reducing costs and wait times.

This can be done by adopting lean production and ~~off on~~ 5S Methods which both seek to eliminate unnecessary waste and maintain cleanliness standards. This is because a cleaner work space will be more productive, have increased moral and generally be safer.

The continuous improvement concept was created by Edward Deming and further adopted by the Japanese firm Toyota who mastered the discipline within their workplace and ensured every employee understood it.

(5)

Jan answers presented the explanations but ~~is~~ more structured answers are required at this level —

2a) Project Management Roles and Techn: Stages.

First of all the project needs to be identified and what the consumer aims to achieve from the project whilst considering 3 key elements which are quality, cost and time.

This is because dependent on how much they value these 3 elements depicts how costly, how long or the level of quality that will be drawn from the finished project.

Project Management Starts with a kick off meeting which enlists what the consumer's aim to achieve and what one of the 3 elements is crucial or all of specified. It also allows the project Manager to identify whether they can carry out the project successfully and this will need to be determined right away. As there are also of risks which could affect the successfulness.

Next ~~task~~ Milestones will need to be identified, these are incremental steps of succession and will overall contribute to the final project once completed & also allows progress to be monitored.

~~Then~~ constraints with Time allocation will need to be specified for each ~~task~~ or milestone and a ~~maybe~~ a little justification as to why a particular ~~task~~ may take so long.

Then constraints will need to be identified as to what risks may be faced internally & externally. Then contingency time can be allocated with justification.

Gantt charts can be used to monitor the progress of the overall project as well as each milestone.

Lastly comments can be added to the project to evidence as to why particular tasks took longer than estimated.

The overall role of project management allows users to plan, identify and produce a structured and detailed ~~table~~ of tasks to be completed incrementally & eventually finish the project.

d) Project Management Techniques:

Gantt Charts can be used to give a visual aid of the overall progress of the project for simpler viewing.

- correct

Six Sigma can be incorporated as a technique to specify whether the data lies between specified deviations to the mean and if not by how much. This would be rather useful for a project management technique as Six Sigma identifies irregularities in data. So can help to increase quality and sustain the elimination of these irregularities. It's also a rather valued tool to have.

5

Flow Systems / Diagrams.— Shows the process of materials are ~~put~~ through production in a particular project's Process Mapping.

→ 6 Sigma is not a project management technique.

Question No.

Examiner On

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e) Benefits of Computer systems for Project Management:

Computer systems are much more quicker & efficient ~~for~~ for carrying out project management tasks.

They can hold alot of data, where as paper is limited by its size and dependent upon it. There are likely to be no errors with computer systems unless ~~man~~ human made initially and then carried forward.

Computer systems allow for back ups to be made so if the computer crashes, there could be back up copies of the project on external hardware such as USB's, external harddrives or even on the cloud which is very convenient.

Computer Systems can take up and utilize less space than lots of projects management data sheets (on paper).

There are lots of software packages that enable project management tasks. So lots to choose from. A lot of variety in prices as well to suit different consumers.

Progress of the project can be quickly and easily sent via email or social media to stakeholders of the project rather than having to make duplicate paper versions and ~~to~~ distribute them to the stakeholders.

Computer Systems also have many other ^{useful} functions which can support the project management.

7

Question No.

Examiner Only

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hif y Cwestiwn

Question No.

Examiner Only

Arholwr yn unig

Rhif y Cwestiwn

Question No.

Examiner On

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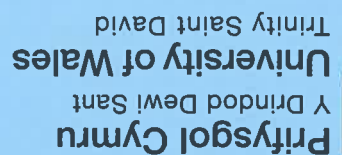


Examiner Onl

Question No.

hif y Cwestiwn

Arholwr yn unig



12 Tüdalen

[illegible]

(See the other side for English version)

Llenwch, plygwch a seliwch
(gweler nodyn 2 isod)

CYFENW:

ENW(AU) CYNTAF:



**Complete, fold and seal
(see note 2 below)**

FORENAME(S): Christopher

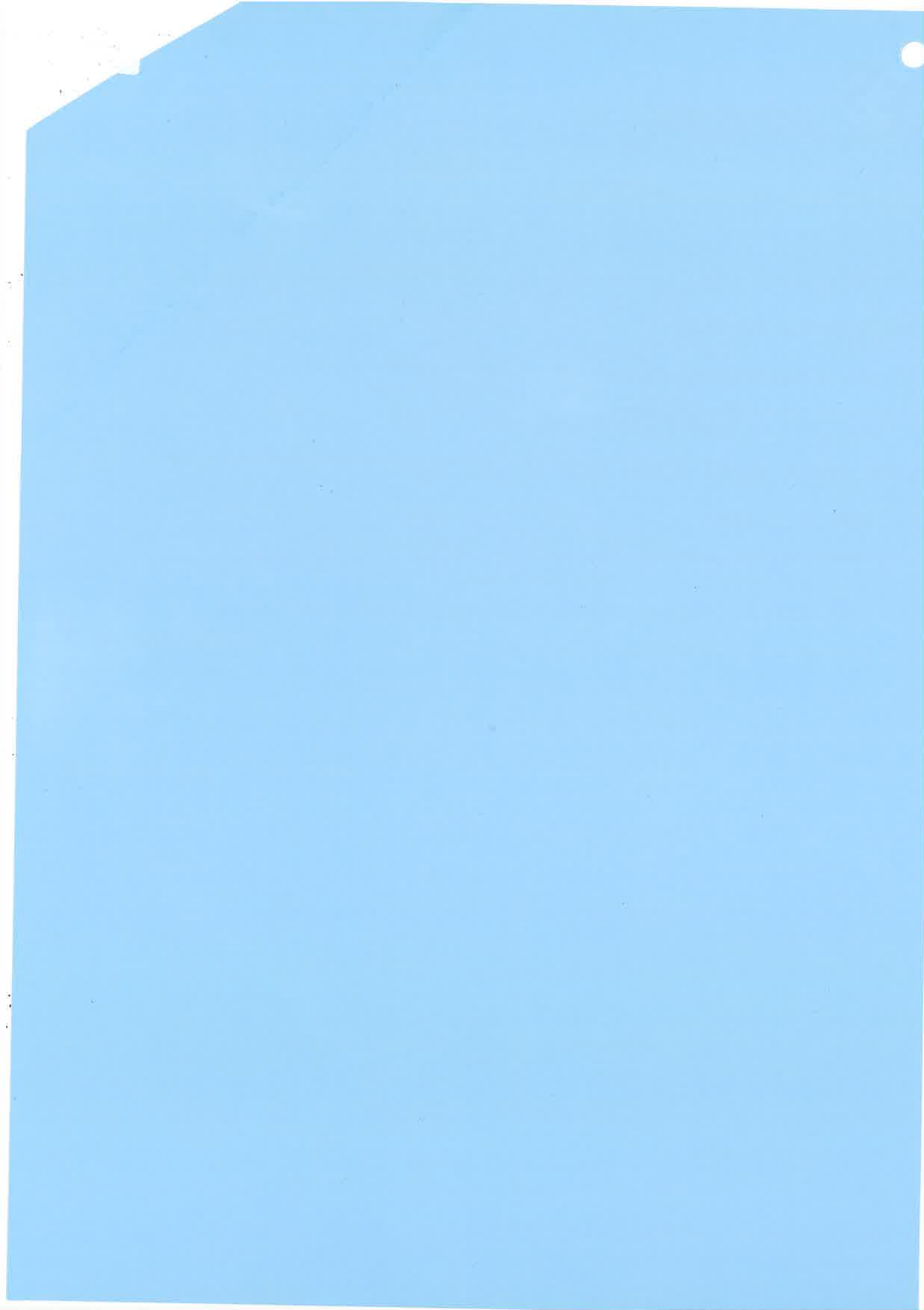
Instructions to Candidates

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1	Student Number	P151891
2	Title of Examination Paper	Operations Analysis
3	Module Code	M6X01290
4	Date and Time of Examination	10.05.19 12.00 PM
5	Examination Venue	104
6	Seat Number	GP37
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
1	19
2	19
Total	38 76%

✓ Mark agreed.
✓ M.
28/05/19.



1A The seven types of wastes as identified by Toyota are as follows: ~~TIME~~

~~TIME~~ IS

transport; Toyota set out to reduce any unnecessary logistical cost related to production.



Inventory, by using systems such as Just in Time, which is a tool used for Lean production helped reduce associated cost with holding raw materials of finished product.

Movement, the company discovered that by observing their employees that there are unnecessary movements taking place, that could be idling employees of the total movements of production materials.

over production is the process of a company that is going beyond what the product is intended for, and by doing so it is costing more in production time and materials, which is then passed onto the consumer.

~~over product~~

over production as Line inventory the over production has a great impact on cost. produce too much and space could be limited in the warehouse for incoming deliveries

defects, the longer a defect goes undetected the more expensive the cost is to ~~fix~~ change, that why it is important to eliminate defects as ~~early~~ early as possible.

- Motion

A focus definition of lean synchronisation
 it is needed - Meeting the demand with
 lean.

1b

The benefits of lean synchronisation to an organisation is very important as seen with Toyota. It is a philosophy of the company from the decision makers down to the production team. It is a team effort to ensure all processes are being followed; and not to fall back into old habits.

When a company ensures a lean strategy this can only benefit the consumer, because the organisation is ensuring the quality of the product; which will arrive to the customer within time, in the correct quantity, and undamaged.

Some key aspects
 for
 success

1c

The continuous improvement concept of kaizen is the process of ensuring that the company is looking forward, and aiding their employees through training so that they have a greater understanding of the company. This concept can be seen with McDonald's a company which is always looking to improve, and is doing so at the moment by looking at methods of reducing their plastic waste by ~~introducing~~ introducing paper sleeves.

2A

Many people believe that for a company to achieve the highest possible reduction in the cost associated with waste the two methods can be combined, after all both methods are designed to reduce waste. Total Quality Management is more focused on reducing time in the process, by ensuring that the production time is reduced to produce more products, on the other hand Six Sigma looks to data to discover how many defects are being produced and how to reduce them. The system mentioned will be very expensive to purchase for a small to medium company.

2A The project manager's role is to ensure the project is completed within the time specified, for the price agreed upon, and to the desired quality.

There are many stages to consider as a project manager. Firstly, what is the proposed project, after the project is agreed it is good practice for the manager to understand any risk associated with the project, another step is to ensure the wishes of the stakeholders are understood after all they are paying for a service and they want it done to their design. An example of a company who did not understand the associated risks of a project is the former Public Sector carillion who in 2018 went into liquidation. It could be said that happened because they either failed to see the risks or chose to ignore them completely.

a more structured answer is needed.

2 B A project management techniques used such as. having the ability to communicate with. other element in the process is very important for the completion of the project, so that all deadlines are met, within the price, but as a manager certain problems may arise such as. encountering a language barrier, if this happen it is important that the issue is ~~be~~ resolved as quickly as possible to ensure the project is not affected.

2 C The importance of Microsoft Project can not be overvalued when faced with a big project. In the software the user has the ability to produce a gantt chart which help illustrate the flow of the process. The chart also show the amount of time needed and the number of employees.

When looking at the chart it shows what process needs to be started first; and when to start the next, some process can be done at the same time, others can only start when the proceeding task is completed. For example if one was to make a breakfast the bread would ~~not~~ get buttered before it went ~~into~~ into the toaster, that would be shown on the chart so that there can be no confusion between workers. It is also important that the proposed plan is left some slack for any unforeseen events.

the techniques are

- Gantt Chart
 - Critical path analysis
 - PERT
- Project Evaluation technique

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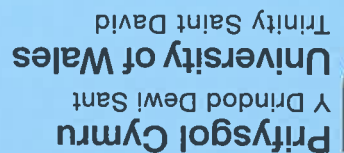
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ff y Cwestiwn



12 Tjudalen

1. Rhwch yr holl wybodaeth y gofynnir amdani yn y blychau isod.
2. Rhwch eich enw yn y lle a ddarparwyd ar y dde, pigwch ef a'i selio i lawr (gan ddefnyddio'r label a ddarparwyd) i guddio'ch enw.

3. Rhaid i'r atebion fod mewn llawysgrifen ddarllenadwy. Gall yr Arholwyr naill ai anwybyddu sgrïp't annarllenadwy, neu drefnu iddi gael ei theipio a chael yr ymgeisydd i dalu.
4. Ysgrifennwch eich atebion mewn inc.
5. Dechreuwch bob ateb ar dudalen newydd. Gwnewch unrhyw fras nodiadau yn y llyfr atebion a thynnu llinell drwyddynt.
6. Ni ddylid rhwgo unrhyw ran o'r llyfr hwn; rhaid ei gyflwyno yn gyfan.
7. Os defnyddir mwy nag un llyfr, rhwymwch hwy gyda'i gilydd gan ddefnyddio'r tagiau sydd ar gael oddi wrth y gwyllwyr/gwyliwyr.
8. Rhaid dychwelyd pob llyfr. Ni chaniateir mynd â llyfrau atebion, wedi eu defnyddio neu heb eu defnyddio, allan o'r lleoliad.

arholi o dan unthynw amgylchidau.

1	Rhif Myfyriwr	
2	Teitl y Papur Arholiad	
3	Cod y Modwl	
4	Dyddiad ac Amser yr Archoliad	
5	Lleoliad yr Arholiad	
6	Rhif Sedd	
7	Nifer y Llyfrau Atebion a gyflwynwyd	

Rhestrwch nifau'r cwestiynau a ymgelŵyd genych	
At Ddibenion y Swyddfa	

Llenwch, plygwch a seliwch
(gweler nodyn 2 isod)

CYFENW:

ENW(AU) CYNTAF:

ENW(AU) CYNTAF:



**Complete, fold and seal
(see note 2 below)**

FORENAME(S): Alessio

Instructions to Candidates

1. Please give the information requested in the boxes below.
2. Enter your name in the space provided to the right, fold over and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiners can either ignore illegible script or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

1	Student Number	1805682
2	Title of Examination Paper	Operations analysis
3	Module Code	M6X01290
4	Date and Time of Examination	10/05/2019
5	Examination Venue	310 \
6	Seat Number	G032
7	Number of Answer Books handed in	

[illegible]

Mark agreed.



28/05/19.



- a. Toyota has identified seven types of wastes that processes generate. These seven types of wastes are:
- Inventory wastes
 - Time / waiting wastes
 - Overproduction wastes
 - Processing wastes
 - Transportation wastes
 - motion wastes of motion
 - waiting times

4

Inventory wastes are the wastes that the operations that are required to stock the products of a company generate. These wastes can be pallets on which the products are put on that wear over time. It can also be for example various conditioning materials such as film. Indirectly, the action of stocking products generate paper wastes as the company regularly has to make inventories of their stocks.

Waiting wastes are a type of waste that is generated the more a product has to wait before arriving to the final customer. This can be due to conditioning that can perish, or the product itself if it is perishable, and has to wait too much for example.

Overproduction wastes are a type of wastes that is generated when ~~the~~ a company produces more products than what is needed. An example of overproduction wastes can be computers or laptops from big companies. At the moment of launch of the product, a lot of them are created. But if the sales were below expectations and there is spare products or components, they could be thrown away.

Processing wastes are a type of waste that is generated during the creation of a product. These wastes can be generated, for example, during the process of removing

material from a metal component to put it in a desired shape. These wastes are then not (immediately) usable and will be thrown away, and recycled in certain cases.

Transportation wastes are a type of waste that is generated by the transportation of a product from a place to another. These wastes, for example, can be rubber from truck tyres that wore off.

Motion wastes are a type of waste that is generated by the handling of materials, components or products. It can be, for example, tyres from forklift trucks.

1. b

Lean synchronisation is a method that consists in ~~reducing~~ ~~try~~ trying to ~~have the most accurate~~ ~~the closest~~ reduce as much as possible any excess wastes, products etc... The aim is to have the right ^{products} amount, with the best quality, at the right time and at the right place delivered to the customer. This method allows the company to have the best results in costs, customer satisfaction etc...

This method allows a company to reduce their costs because if they manage to deliver at the right time, not too soon nor too late, there is no waiting from them which saves money. Having a good quality also reduces the costs as it reduces the number of failures (internal and external).

This method also makes the company more attractive to customers because if it does the right things, it will be more trustworthy to the eye of the customer.

However, to have the right product, at the right quantity, best quality, at the right place and at the right time, it requires an efficient organisation which can be hard to make in place and costly as the company will require good tools.

12

c.

The continuous improvement concept is a way of planning, ~~and~~ organizing, and reviewing what a company puts in place to improve.

It is a process that can repeat itself to achieve constant progression of the performance of a company.

This process ~~is~~ has 4 steps which are:

- Plan: Action of planning a project that would improve the company
- Do: Action of realizing, putting the project in place
- Check: Once the project was put in place, the next step will be to evaluate the ups and downs of the project to see if it really benefits the company.
- Improve: Once the ups and downs of the projects are highlighted, the last part will be to find a way to improve it to maximize the benefits of it.

After those 4 steps are realized, other projects will have to be planned to continue improving the performance of the company

3. a.

The Total Quality Management approach or TQM is one of the first big trends that happened among companies. It was adopted by a lot of companies in the years 1980s, 1990s

A definition of TQM is required & explanations about the integration of different quality dimensions of development, maintenance & improvement

3. b.

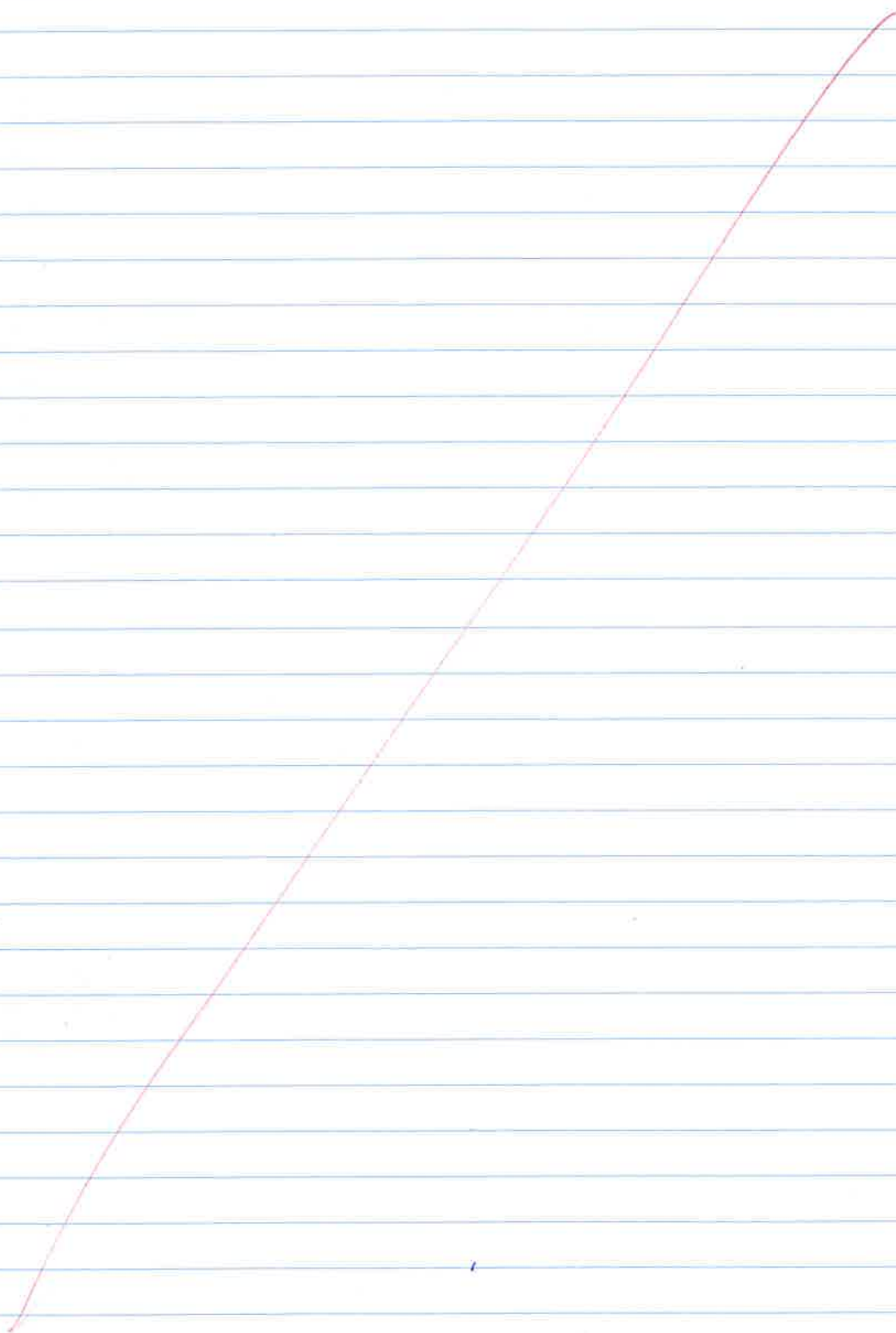
Quality is an essential part of businesses, it guarantees the customer to have the best product or service as possible. It allows companies to be more attractive to customers, but quality has a cost.

The cost of quality can be divided into three components:

- Prevention: This can often be the most important part of quality because, especially in logistics, the prevention of incidents, the prevention of attention ~~the~~ errors etc... play a big role.
- minimization of internal failures: This is also an important cost because it can depend a lot on the company's strategy (if high volume, low cost or low volume high cost). This cost consists for example in ~~investing~~ investing in more reliable machines for production, new communications systems to avoid errors etc...
- minimization of external failures: This cost is also dependant on the company's strategy because it is about the suppliers of the company. A more expensive supplier could be more reliable and ~~it's~~ its products ~~may~~ may be better, whereas a cheaper supplier could be less reliable and their ~~products~~ products could have a more mediocre quality.

3. c.

The strategies to reduce quality costs may vary from a company to another. In a logistics provider, costs could be more focused on prevention costs because it would have a bigger impact on their quality of service than internal failures for example because they don't have production lines with machines for example. An industrial company such as a car manufacturer could, on the other hand, ~~not~~ insist on the minimization of internal failures ~~it~~ as they have a lot of machinery. Reducing the number of external failures also could be very important to them as the quality of the metal they use is very important and these manufacturers would be in trouble if a delivery incident arrived and their production lines stopped.



Question No.

Examiner On

Arholwr yn unig

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Question No.

Examiner On

Question No.

Examiner Only

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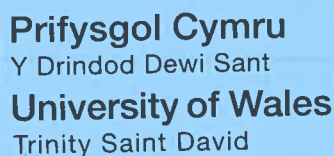
Question No.

Examiner Only

Arholwr yn unig

Arholwr yn unig





12 Pages

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SURNAME:

ANDRZEJEWSKA

FORENAME(S):

KAMILA

1	Student Number	P125093
2	Title of Examination Paper	Operation Analysis
3	Module Code	M6X01290
4	Date and Time of Examination	12:00 AM 10-05-2019
5	Examination Venue	
6	Seat Number	G034
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
1 3	21. ~~10~~
Total	33 ~~66~~ %

Mark agreed
SP
28/05/19.

① a) wastes identified by Toyota are 7:

1) Overproduction - producing more than is actually needed at the time.

2) Processes - Unnecessary processes are usually runned but they could add value elsewhere. (15)

3) Transport - Transporting goods ~~to~~ back and forth add to the cost and could cause defects.

4) Defect - Quality is a major cost of waste. It is less costly to address the root cause of defect than running the quality process.

5) Time - Only 5 per cent of time spent is adding value to the product or service, shockingly 95 per cent ~~do~~ add's cost ~~and~~ unnecessarily to the customer.

6) Motion - too much motion does not add value

7) Inventory - must be avoided at all times.

B)

Synchronisation is the flow of products or services to the customer at the right time (not too early not too late) at the right quality, at the right quantity (not too much not too less) at the right place. (12)

The lean synchronisation is all of that added ~~together~~ together at the least cost possible. The lean synchronisation will only be possible if all 7 Toyota identified wastes are avoided. The lean synchronisation will provide customer satisfaction & in the long term bring a lot of benefits to the organization.

C) Continuous improvement concept is when an error is being identified and addressed. A company is always straining for perfection making corrections of processes and avoiding wastes at all costs. Improvement of operations and customer service. (14)

1. a) The waste is basically any activity that does not add value. Waste can be easily spotted in a product, it is harder to actually notice it if it^{is} happens in the service.

③

a) Total Quality Management. - is a philosophy, an approach that focuses on the customer satisfaction. If the product or a service is brought to the customer in the best quality than this will bring long term benefits to the organisation.

More diagram



(10)

Total Quality Management (TQM) has 5 characteristics: Durability, Appearance, Flexibility,

The customer judges (by those 5 characteristics) the quality of the product or service.

TQM is basically bringing the best product or service to the customer at the lowest price. Making the customer happy is the main goal of TQM.

b) The Quality related costs are : labour, transport, 2
quality check,

c)

Question No.

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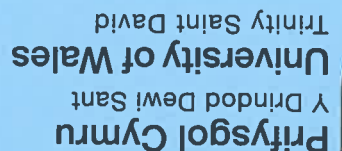
Rhif y Cwestiwn

Question No.

Examiner On

Arholwr yn unig

Arholwr yn unig



12 Tudalen

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2. Rhwch eich enw yn y lle a ddarparwyd ar y dde, plygwch ef a'i sello i lawr (gan ddefnyddio'r label a ddarparwyd i guddio'ch enw.

CYFENW:

Llenwch, plynghwch a seliwch
(gweler nodyn 2 isod)

3. Rhaid i'r atebion fod mewn llawysgriften ddarllenadwy. Gall yr Arholwyr naill ai anwybyddu sgrïpt annarllenadwy, neu drefnu iddi gael ei theipio a chael yr ymgeisydd i dalu.
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7. Os defnyddir mwy nag un llyfr, rhwymwch hwy gyda'i gilydd gan ddefnyddio'r tagiau sydd ar gael oddi wrth y gwyllwrr/gwylwyr.
8. Rhaid dychwelyd pob llyfr. Ni chaniateir mynd â llyfrau atebion, wedi eu defnyddio neu heb eu defnyddio, allan o'r lleoliad

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2	Teitl y Papur Arholiad	
1	Rhif Myfyrwr	

[illegible]

(See the other side for English version)