Fayoum University Faculty of Engineering Industrial Engineering Dept.

Final Exam , Jan., 2016

4th Year Quality management Time Allowed: 3 hours

- Solve the following Questions
- Stick this paper with the answer sheet after solving the choose and True False questions Question One (20 marks)
- a) Define the following terms: Risk management, Customer property, Competence, Kanban
- b) State with an example the types of quality costs
 c) State three of the new requirements for the ISO 9001/2015 changes.
- d) How is the responsible on quality in the organization?

Question Two:

(20 marks)

- a) What is the difference between corrective and preventive actions with example?
- a) What is the difference between corrective and preventive actions with example :
 b) In a manufacturing company, a degradation and of its market share in Egypt is increase during the last 5 years, use the 5 why analysis to find causes of the problem and to propose a solution.
 c) What are the main requirement of ISO 9001 for the purchasing process?
- d) What is the difference between: DMAIC and DMADV.
- d) What is the meaning of the following abbreviations: IPO, TPM, FTY, VSM, RPN.

Question Three

(15 marks)

Chose the correct word or statement for each of the following:

Write the letter(s) here		
	1.	It focus on the product and detection driven
	2	Unnecessary movement of material that adds no value to product
	3	Types of waste, when searching for something
	4	Time spent idle not performing work results in increased lead time
	5	Activities that customer pay for '
-116	6	Creates waiting at next process, adds cost if rework is required, and increases the lead time
	7	Its objective is to define and elimination of wastes
	8	It focus on process and product
	9	Three of the traditional TPM model component (or TPM 8 Pillars)
	10	Producing more goods than what is needed
	11	Abbreviation for seven types of waste
	12	Displayed the logical path from effect to cause
	13	It is a brake through improvement for the company
	14	Small and continuous improvement in any area of the company
	15	The tool used to organize work place is

a) Overproduction	b) Quality assurance	c) Quality control
d) Defects	e) Transportation	f) over processing
g) Lean	h) motion	i) Value added activity
j) Waiting	k) TIMWOOD	L) Kaizen
m) Training & Education	n) Quality management	p) Six sigma
r) Fault tree analysis	s) Focused improvement	t) Planned maintenance
q) 5 S		

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Question Four

(20 marks)

- a) Draw a process model for each of the following as a process; Purchasing process, design
- process, production process

 b) Measurement analysis and improvement is a requirement for ISO 9001 qulity system, state four measures that have to be performed in this system.
- c) Draw a schematic diagram for the Kano model.

Question Five:

Det (True) or (false) for each of the following statements and correct the false sta (25 marks)

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1	Policy must be smart				
2	Policy is a framework for setting objectives				
3	Continual improvement of the organization's overall performance should be permanent objective of the organization.	ne a			
4	Effective decisions are based on manger view point.				
5	Leadership is a commitment participation and model				
6	Any exclusions in the quality management system must be from clause eight only and must be justified.				
7	The output to management review shall include information on: a) Results of audits, b) Customer feedback, c) Status of preventive and corrective actions,				
8	Improvements in quality can lead directly to increased productivity and other benefits .				
9	The mission statement is a declaration of what an organization should look like fiven years in the future.	ve to			
01	The vision statement answers the following questions: Who we are? Who are the customers? What we do? How we do it?				
11	Quality policy must be: a) communicated and understood within the organization, and b) reviewed for continuing suitability				
12	Lean is a structured approach that uses DMAIC methodology				
13	Company that works with three sigma is better that that which works with five sigma				
14	Quality assurance review product only				
15	The outcomes of continuous improvement are increase fluctuation and decreased efficiency				
16	Quality control is part of quality assurance				
17	Efficiency is archiving some level of effectiveness in less time or with less effort				
18	Kaizen means change to better				
19	Pash system is better than pull system				
20	Six sigma is a methodology that evaluates processes with focus on speed and efficiency				
21	Lean objectives is to reduce process variation and defect rates while six sigma is to reduce wastes.				
22	 Six sigma philosophy is to introduce small and continuous improvement while kaizen is to introduce brake though improvement. 				
23	Reliability is one of the eight dimensions of quality				
24	Lean is a structured approach that uses DMAIC methodology				
25	Company that works with three sigma is better that that which works with five sign	na.			

Good Luck:

Dr. Mohamed Fahmy