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**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2012/2013**

**COURSE NAME : QUALITY MANAGEMENT**  
**COURSE CODE : BPB 44002**  
**PROGRAMME : 2 BPB**  
**EXAMINATION DATE : DECEMBER 2012/ JANUARY 2013**  
**DURATION : 2 HOURS**  
**INSTRUCTION : ANSWER ALL QUESTIONS**

**THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES**

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**Q1** Total quality tool is an integrative philosophy of management for continuously improving the quality of products and processes.

Discuss the purpose of the following quality tools.

(a) Pareto Chart

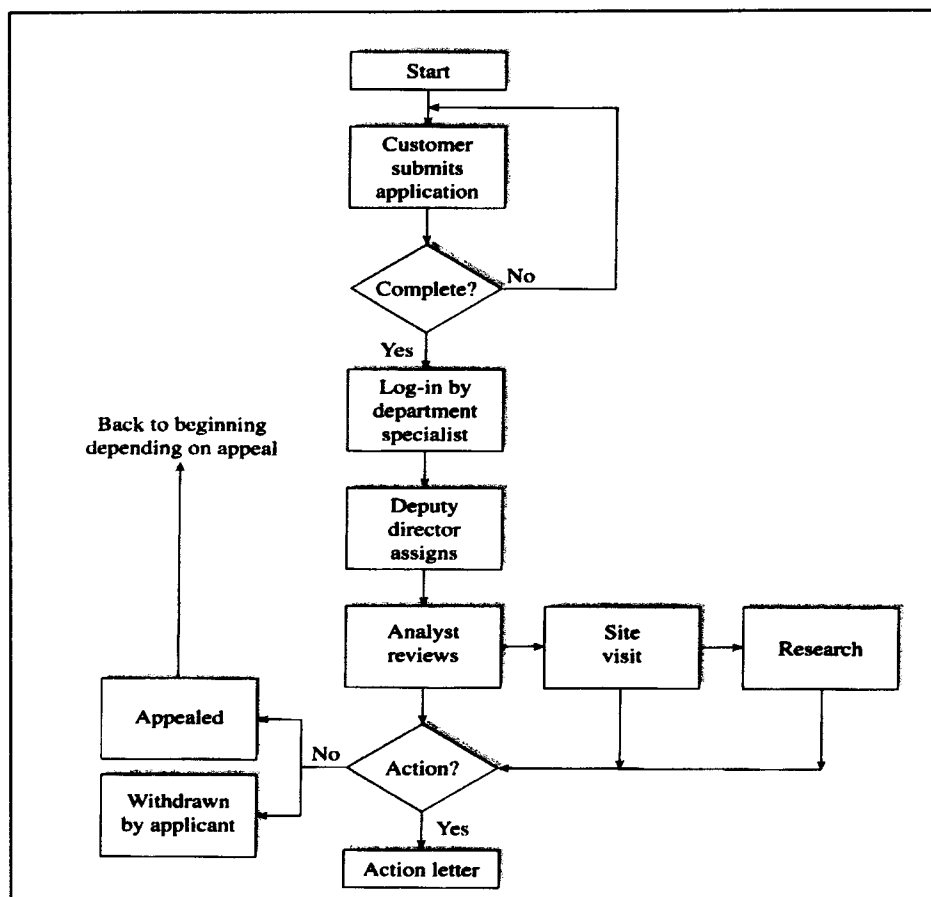
(10 marks)

(b) Cause and Effect Diagram

(10 marks)

**Q2** The process map in Table Q2 shows a current process used in a city planning department to issue permits allowing applicants to take possession of newly built homes.

Table Q2 : Process Mapping Home Occupation



(a) Prepare a new simplified process mapping to give the front desk more authority to process the form by eliminating the analyst review since it does not add value for the organization or customer.

(20 marks)

**Q3** Many firms fail to implement quality tool in a substantive way.

- (a) Explain **FOUR (4)** reasons for failure of statistical tools. (8 marks)
- (b) Discuss :
  - (i) The difference between random and non-random variation (6 marks)
  - (ii) The difference between a variable and an attribute (6 marks)

**Q4** Six Sigma is a very popular approach to improving quality. Part of a Six Sigma is to identify controllable and non controllable variables (X) and output the business objectives and measures (Y).

- (a) Discuss **FIVE (5)** Six Sigma processes. (10 marks)
- (b) The services process XY matrix is shown in Table Q4(b) :

Table Q4 (b): XY matrix data

XY Matrix						
	Output					
	A	B	C	D	Total	Rank
Ranks	4	6	7	9		
Input						
1	6					
2			5			
3		7				
4				8		
5		3	5			

- (i) Construct the XY matrix table. (8 marks)
- (ii) Determine the most important input based on answer in Q4 (b) (i). (2 marks)

- Q5**
- (a) Define the Taguchi method. (2 marks)
  - (b) Describe **THREE (3)** background of Taguchi method (6 marks)
  - (b) Explain **SIX (6)** the steps of Taguchi process (12 marks)

**- END OF QUESTION -**