



IIFE India's Lean Six Sigma Green Belt
(Course accredited by Council of Six Sigma Certification, USA)

Guidelines:

- The assignment shall be submitted by 11:59 PM, Saturday, 04 September 2021
- Submission beyond the stipulated timeline shall not be accepted
- The candidates need to mention the inference along with each answer
- The weightage of this assignment is mentioned in the course outline
- Submission of the relevant Minitab/excel file is mandatory

Course Assignment

1. A restaurant chain wants to enhance their customer feedback score and thus have collected their priorities through a survey. In the attached excel sheet (Sheet-1), their cause & effect matrix has been displayed. Evaluate it and answer the following questions:
 - a. Name the top areas where the management needs to focus. Why?
 - b. Which customer priority is least focussed by the restaurant?
 - c. Based on the given process inputs and the ratings, which customer priority is most focussed by the restaurant (as of now)
 - d. Apart from the given process input, can you identify any additional process step/inputs which is missing from the data
2. The given data (Sheet-2) is of a mobile manufacturing company. Answer the following questions, using the data set:
 - a. What is the defective PPM for the month
 - b. What is the DPMO for:
 - i. Crack on body
 - ii. Scratch on screen
 - c. Mention the RTY
 - d. Which Process steps are impacting the RTY
3. Four Banks (SPAXIS, HBL, IDBI and YUP Bank) have created some norms for the maximum and minimum disbursement of loans due to the loan defaulters in the past history. From the given set of data (Sheet-3), answer the following questions:
 - a. Performance of Loan disbursement process
 - i. For all 4 banks
 - ii. Which bank has better and the worst performance
 - b. Construct relevant control charts for all the 4 banks and study the variation. Identify out of control situation and explain your inference.
 - c. Compare the loan defaulters of these banks and make an inference
4. The leading countries of world are on a mission to eliminate terrorism. In the given data sheet (Sheet-4), number of successful covert operations on the militant groups by these countries have been mentioned. Analyse the data and answer the following:
 - a. Which countries should conduct military operations in routine and why
 - b. Which countries should conduct inter-joint operations



5. Cabon printers have developed a new type of printer. Following are their claims:
- New printer can print more than 700 sheets through a single cartridge.
 - New printer shall print more number of pages than the old printer in a single use of cartridge.

Test their claim and give your inference. Use the given data (Sheet-5) for analysis.

6. A dietician conducted an experiment for establishing weight loss preferable upto 70 Kgs or less. She asked her 8 clients of similar weights (around 90 Kgs) to eat the following diet for 3 months.
- Fruit – Apple and Banana
 - Snacks – Cheese and Salads
 - Drinks – Milk and Green Tea

She created a 2^k factorial design to study the impact of each type of diet of the body. She provided a specific diet chart to eight of her clients (sheet-6)

From the given data (Sheet-6), answer the following:

- Which type of diet impacts significantly on weight of the body
- What should be optimized combination of diet for achieving a minimum weight of around 65 Kgs
- Is there any significant interaction among diets?

End of Assignment