

LEAN SIX SIGMA GREEN BELT

CHAPTER 3 – PROJECT MANAGEMENT, TEAMS & CHANGE

(Exam-Focused Notes)

1 Project Charter (VERY IMPORTANT)

Definition:

A Project Charter is a document that **formally authorizes a Six Sigma project**.

Contains:

- Project objectives
- Project scope
- Project boundaries (in-scope / out-of-scope)
- Resources
- Project closure & transition activities

Does NOT include:

- Detailed project schedule
- Change management plan

Exam Tip:

Authority to start a project → **Project Charter**

2 Team Formation – Tuckman Model (HIGH EXAM WEIGHT)

Stage	Key Behaviour
Forming	Polite, avoid conflict
Storming	Maximum conflict
Norming	Cooperation
Performing	High performance
Adjourning	Disbanding, boredom

Exam Traps:

- Avoid conflict → **Forming**
- Highest conflict → **Storming**
- Team breaks → **Adjourning**

3 Motivation Theories

Maslow's Hierarchy of Needs

- **Esteem needs** = Recognition, self-confidence
- **Self-actualization** = Personal growth

Herzberg's Two-Factor Theory (VERY IMPORTANT)

Factor Type	Effect
Hygiene factors	Short-term satisfaction
Motivators	Long-term motivation

Examples:

- Salary → Hygiene
- Recognition → Motivator



Exam Tip:

Long-term motivation → **Motivators**

4 Conflict in Six Sigma Projects

Most common cause of conflict:



Schedules

Conflict Handling Methods:

- Withdrawal → Avoid conflict
- **Compromising** → Give and take
- Confrontation → Win-win



“Give and take” → **Compromising**

5 Leadership Styles

Style	Meaning
Autocratic	Manager controls
Democratic	Participative
Laissez-faire	No interference



Manager does not interfere → **Laissez-faire**

6 Force Field Analysis

Used to identify:

- **Driving forces** (support change)
- **Restraining forces** (resist change)

Goal:

- Increase driving forces
- Reduce restraining forces



CHAPTER 3 – QUICK MEMORY KEY

- Project authority → Charter
- Max conflict → Storming

- Long-term motivation → Motivators
- “Give & take” → Compromising

LEAN SIX SIGMA GREEN BELT

CHAPTER 4 – MEASURE PHASE

(Exam-Focused Notes)


1 Purpose of Measure Phase

Main objective:

 **Measure current process performance**

Used to:

- Establish baseline
- Collect reliable data

 **Not used for:**

- Finding root causes
- Implementing solutions

2 Data Types (VERY IMPORTANT)

Discrete Data (COUNT)

- Number of defects
- Number of customers

Continuous Data (MEASURE)

- Time
- Weight
- Speed

 **Exam Tip:**

Count → Discrete

Measure → Continuous

3 Data Collection Methods

- Surveys
- Focus groups
- Interviews
- Observation

Focus Groups:

- 6–10 people

- Open discussion
- Deep insights

4 Surveys (HIGH EXAM WEIGHT)

Steps:

1. Create & validate questionnaire
2. Send to respondents
3. Collect & analyze data

Question Types:

- Open-ended
- Rating
- Ranking
- Yes / No
- **Likert scale** → measures attitude strength

5 Process Performance Metrics (VERY IMPORTANT)

DPU (Defects per Unit)

Defects / Units

RTY (Rolled Throughput Yield)

Multiply success rates of all steps

📌 Exam Trap:

RTY = **Multiplication**, not average

DPMO

$(\text{Defects} \times 1,000,000) / \text{Opportunities}$

6 Data Sources

Source	Example
External	Market share
Financial	Sales, profit
Process	Defect rate
Customer	Satisfaction

7 Importance of Correct Data

Incorrect data leads to:

- Wrong analysis

- Wrong decisions
- Project failure



Exam Line:

Wrong data → **Wrong conclusions**



CHAPTER 4 – QUICK MEMORY KEY

- Measure phase → Baseline
- Likert scale → Attitude
- RTY → Multiply
- Discrete → Count



FINAL CONFIDENCE BOOST

If you:

✓ Revise **Chapter 1–4 notes**

✓ Practice MCQs

✓ Avoid overthinking



You WILL pass the Green Belt exam in first attempt



CHAPTER 3 – Project Management, Teams & Change



15 EXAM MCQs

Q1. A Project Charter is mainly used to:

- A. Close a project
- B. Authorize a project
- C. Train team members
- D. Manage risks

Q2. Which of the following is negotiated in a Project Charter?

- A. Project initiation
- B. Project boundaries
- C. Change management plan
- D. Detailed schedule

Q3. The stage where team members avoid conflict is:

- A. Storming
- B. Norming
- C. Forming
- D. Performing

Q4. Maximum conflict in a team occurs during:

- A. Forming
- B. Storming
- C. Norming
- D. Performing

Q5. The stage where the team disbands is called:

- A. Performing
- B. Storming
- C. Adjourning
- D. Norming

Q6. Recognition and self-confidence belong to which Maslow need?

- A. Safety
- B. Social
- C. Esteem
- D. Physiological

Q7. Which factors cause long-term motivation according to Herzberg?

- A. Hygiene factors
- B. Salary
- C. Motivators
- D. Company policy

Q8. Salary and working conditions are classified as:

- A. Motivators
- B. Hygiene factors
- C. Esteem needs
- D. Self-actualization

Q9. The most common source of conflict in projects is:

- A. Personal issues
- B. Schedules
- C. Administration
- D. Office politics

Q10. "Give and take" conflict resolution refers to:

- A. Withdrawal
- B. Confrontation
- C. Compromising
- D. Bargaining

Q11. A leadership style where the manager does not interfere is:

- A. Autocratic
- B. Democratic
- C. Supportive
- D. Laissez-faire

Q12. Which role is considered constructive in a team?

- A. Aggressor

- B. Blocker
- C. Encourager
- D. Recognition seeker

Q13. Force Field Analysis is used to:

- A. Measure defects
- B. Identify root causes
- C. Analyze driving and restraining forces
- D. Improve processes

Q14. Increasing driving forces helps to:

- A. Resist change
- B. Support change
- C. Reduce productivity
- D. Increase conflict

Q15. Which is NOT part of a Project Charter?

- A. Objectives
- B. Boundaries
- C. Resources
- D. Detailed project schedule

Chapter 3 – Answer Key

- 1-B
- 2-B
- 3-C
- 4-B
- 5-C
- 6-C
- 7-C
- 8-B
- 9-B
- 10-C
- 11-D
- 12-C
- 13-C
- 14-B
- 15-D

CHAPTER 4 – MEASURE PHASE (Data & Metrics)

15 EXAM MCQs

Q1. The main objective of the Measure phase is to:

- A. Implement solutions
- B. Identify root causes
- C. Measure current performance
- D. Control the process

Q2. Data that can be counted is called:

- A. Continuous data
- B. Discrete data
- C. Variable data
- D. Attribute data

Q3. Which of the following is continuous data?

- A. Number of defects
- B. Customer count
- C. Cycle time
- D. Number of orders

Q4. Surveys are mainly used to:

- A. Fix defects
- B. Collect customer opinions
- C. Improve machines
- D. Reduce cost

Q5. A focus group usually consists of:

- A. 1–2 people
- B. 3–5 people
- C. 6–10 people
- D. More than 50 people

Q6. Which question type measures attitude strength?

- A. Yes/No
- B. Ranking
- C. Open-ended
- D. Likert scale

Q7. Which data source provides sales and profit information?

- A. Customers
- B. Company processes
- C. Financials
- D. Competitors

Q8. DPU stands for:

- A. Defects per unit
- B. Defects per user
- C. Defects per update
- D. Defects per usage

Q9. If 20 defects are found in 1,000 units, DPU is:

- A. 0.2

- B. 0.02
- C. 0.002
- D. 2

Q10. RTY is calculated by:

- A. Adding yields
- B. Averaging yields
- C. Multiplying yields
- D. Dividing yields

Q11. DPMO is used to measure:

- A. Cost
- B. Productivity
- C. Defects standardized to one million opportunities
- D. Customer satisfaction

Q12. Incorrect data collection can lead to:

- A. Better decisions
- B. Correct analysis
- C. Wrong conclusions
- D. Faster projects

Q13. Which is an external data source?

- A. Defect rate
- B. Cycle time
- C. Market share
- D. Inventory level

Q14. Observation is mainly used to:

- A. Train employees
- B. Analyze behavior
- C. Reduce cost
- D. Conduct audits

Q15. The Measure phase comes after:

- A. Analyze
- B. Improve
- C. Define
- D. Control



Chapter 4 – Answer Key

- 1-C
- 2-B
- 3-C
- 4-B
- 5-C
- 6-D

7-C

8-A

9-B

10-C

11-C

12-C

13-C

14-B

15-C