

**Questions should be —
 WRITTEN IN LEGIBLE HANDWRITING IN BLACK INK.
 SIGNS, SKETCHES OR FIGURES IF ANY BE DRAWN IN NEAT BLACK INK,
 so as to avoid mistakes in the printed question papers.**

Duration2 1/2... Hours.

Total Marks assigned to the paper ...7.5..

Q. No.	N.B. :	Marks
	<u>Answer Keys</u>	
Q1 A)	State True or false	
1)	False	
2)	True	
3)	True	
4)	True	
5)	True	
6)	False	
7)	True	
8)	False	
9)	False	
10)	True	
Q1B)	Match the following	
1)	SMED	Shigeo Shingo
2)	Brainstorming	Group Creativity Technique
3)	Delphi Technique	Expert Judgement.
4)	Joseph Juran	Quality Trilogy
5)	ISO 14001	Environmental Management
6)	Intermittent Production	Highly skilled Workers
7)	Mass Production	Standard Products.

Q. No.

- | | | |
|-----|-------------------|----------------------------|
| 8) | Ergonomics | Human Factor Consideration |
| 9) | Backtracking | Process Layout |
| 10) | Cement Industries | Product/line layout |

- Q2 A) Explanation and meaning of Mass Production. Two or three points each for characteristics, advantages & limitations.
- B) Seven points of objectives of Production Management.

OR

- Q2 A) Concept, Meanings and characteristic of ~~Quality Circle~~ and ~~Quality Assurance~~.
- B) Types of layout.
All four layouts description should be given.
- D) Role of location decision & its importance has to be mentioned.

~~Q3 A) Meaning & characteristics of Quality and formula of both the types of productivity.~~

Q. No.

Q2 A) Explanation to any two approaches to Quality as per choice.

B) Any seven points relating to the service quality dimensions.

OR

Q3 A) Brief concept of Quality Circle and any five points for objectives.

B) Concept, meaning of Productivity. Explanation to different ways to calculate it with formulae.

Q4 A) ~~Any eight factors that affect TQM.~~
All four Absolutes of Crosby's Philosophy with explanations.

B) All the four pillars of TQM and their explanation.

OR

Q4 A) Eight different factors that affect TQM.

B) Full explanation with diagram to PDCA cycle of Deming.

Q. No.

Marks

- Q5A) Meaning of lean thinking and full explanation of all 3 M's of lean.
- B) Full forms and their explanation of DMADV.

OR

Q5. Short Notes. (Any three)

- 1) Batch Production
- 2) Six Sigma
- 3) Qc 9000
- 4) Delphi Techniques
- 5) Fixed Plant layout.