

Time : 2 Hrs 30 min

Marks : 75

Instructions :

1. Answer any two subquestions from each question. Q.5 is compulsory.
2. Each question carries 15 marks. Figures to the right indicate marks.
3. Only use of basic calculator is allowed.

- Q1
- A. Explain any 8 points from Deming's 14 points.
 - B. What is mean by Quality circle? Explain its principles.
 - C. Explain product dimensions with example.
- 2
- A. What is mean by suggestion scheme? Explain its benefits. How it can be made successful?
 - B. Explain different allowances considered while calculating standard time. Find normal time & standard time if
Observed time = 2 min Rating factor = 90% Allowances = 10% of normal time
 - C. Explain the concepts
i) Learning curve ii) Job evaluation iii) Split brain theory
- Q3
- A. What is mean by brainstorming? Explain stages of brainstorming in detail.
 - B. Explain SMED technique in detail.
 - C. Explain the concepts
i) TQM ii) Muri iii) PDCA
- Q4
- A. What is mean by Six Sigma? Explain six sigma organization structure.
 - B. Define Kaizen Gemba? What are its types?
 - C. Explain the concepts
i) Pokayoke ii) ISO 9000 iii) JIDOKA

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Q5 Read the case study & answer the following questions

Brite Plastics

Brite Plastics is an organization engaged in making plastic components, mostly used in electrical industries. It has been doing business for last ten years & had a market share of about 15% in this business. Mr. Sharma, the vice president is worried about the future of the organization as it was far behind its competitors who were doing much better. There was also a fear that they may not be able to increase their market share in spite of a booming market for plastic components in electrical business.

The company was riddled with many major & minor quality & process related problems. Mr. Sharma called his managers & told them that he wanted to see some results in next three months by adopting a new technique to solve problems successfully.

Mr. Ravi, production manager, called his workers & supervisors. He discussed the problems & asked them to form group of five workers & one supervisor, who want to solve problems voluntarily. Mr. Shankar, in charge packing department, also called his workers & supervisors & told them important problems in their department. Five workers & one supervisor showed interest to make group for problem solving.

After two weeks, the vice president Mr. Sharma called for a review. Mr. Shankar along with group leaders was present. The vice president came half an hour late. All during the presentation, he was busy attending too many business calls. Towards the end of the presentation, he had to leave in hurry, without hearing the last few presenters.

Mr. Shankar's team had several problems in the progress & needed some help in resources, to complete his project. He needed management help but now he has to wait till next meeting, which would delay the work. Mr. Ravi's team has some alternate decisions. But the final decision will be given by Mr. Ravi.

Questions:

1. What are the problems in the above case? (5M)
2. Which technique was used in Bright Plastics? Why did the technique fail? (5M)
3. What remedial actions you will suggest in this situation for improvement? (5M)