

# Model Question

## Sub-IEQC (Inspection & QC)

### Set-1

Q1 Answer all the questions in brief. (2x10)

- Define Inspection.
- What is six sigma?
- What is Quality & Control?
- Define TQM.

Q2 Answer all the questions. (5 marks each)

- Briefly explain IS 14000.
- Explain why control is used.
- What is statistical quality control, explain?
- Give examples of TQM model?

Q3 Write in details the need for quality control. (10 marks)

Q4 ~~What~~ Write types of control chart, and also make a comparison between variable charts & Attribution charts. (10 marks)

Q5 Define C-chart. Explain in details about C-chart. (10 marks)

Q6 Describe the objectives of Inspection. (10 marks)

(2)

# Model Questions (IEQC)

## Inspection & QC

### Set-2

Q01 Answer all the questions in brief. (2 marks each)

- Define P-chart.
- Write the objectives of Inspection.
- What is JIT technique?
- Define TQM.
- What do you mean by incoming Inspection?

Q02 Answer all. (5 marks each)

- Briefly explain ISO 9000.
- Write briefly about factors that influence quality of manufacturing?
- What is centralised Inspection? Also write some advantages & disadvantages of this Inspection?
- Explain Six Sigma.

Q03 State types of control charts and give comments on purposes & advantages of control charts. state about P-chart.

(10 marks)

Q04 calculate UCL & LCL for  $\bar{X}$  & R chart of the following data:

Sample No-'1' to '6'

$\bar{X} \rightarrow 3292, 3350, 3645, 3470, 3080$   
& 4110

$R \rightarrow 410, 220, 300, 90, 1120, 520$

where,  $A_2 = 0.577, D_3 = 0$  &  $D_4 = 2.11$

(10 marks)

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Model Question  
Sub-IEQC  
Inspection & QC

Set-3

Answer all. (2 marks)

- Q1 a) What is statistical Quality Control?  
b) Define C-chart.  
c) Define JIT.  
d) Write objectives of Quality Control?  
e) Define Process Control.

Q2 Answer all the questions. (5 marks)

- i) What are the factors depend on Quality rating?  
ii) Write limitations of  $\bar{X}$  & R chart?  
iii) Write the purpose of P-chart?  
iv) Write the benefits of JIT?  
v) How to select Inspection station?

Q3 Describe the benefits of statistical Quality Control. (10 marks)

Q4 Write the requirements & advantages of TQM? (10 marks)

Q5 In a capability study of a lathe used in turning a shaft to a diameter of  $23.75 \pm 0.1$  mm a sample of 6 consecutive pieces was taken each day for 6 days. The diameters of these shafts are as given below:

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Date \_\_\_\_\_  
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1st day	2nd day	3rd day	4th day	5th day	6th day
23.77	23.80	23.77	23.79	23.75	23.78
23.80	23.78	23.78	23.76	23.78	23.76
23.78	23.76	23.77	23.79	23.78	23.73
23.73	23.70	23.77	23.74	23.77	23.76
23.76	23.81	23.80	23.82	23.76	23.74
23.75	23.77	23.74	23.76	23.79	23.78

Construct the  $\bar{X}$  chart & R-chart.

Take factors  $A_2 = 0.48$ ,  $D_3 = 0$  &

$D_4 = 2$  for subgroups as  $n=6$ .

(10 marks)