**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**FIFTH TRIMESTER (Batch 2019-21)**

**END TERM EXAMINATION, JAN-2021**

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| Course Name | **Total Quality Management**  | Course Code | **OP 503** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

Write very precisely and you can assume the important assumptions.

Draw all charts and tables clearly and in readable form.

**Questions.1 (8 Marks)**

Define the goal post and taguchi view of quality definition and develop the loss of quality function development for taguchi view? Also, discuss the any real-life observation (any industry) with application of taguchi view of quality management?

**Questions.2**  **(8 Marks)**

Elaborate the need of quality control charting. List out the application of p-chart, R-chart, X bar chart, u- chart, and np chart.

A sample of 100 cups from a particular dinnerware pattern was selected on each of 25 successive days, and each was examined for defects. The resulting numbers of unacceptable cups and
corresponding sample proportions are as follows:





Assuming that the process was in control during this period, let’s establish control limits and construct a suitable controlchart.

**Questions.3 (8 Marks)**

How 6-sigma quality control process is measured and how process capability indexes are applicable to decide the process capabilities under 6-sigma philosophy? Draw the USL and LSL of 6-sigma process and compute the Cpk and Cpm values for USL=10.4, LSL =6.45 mean 7.2, sigma= 0.6

**Questions.4 (8 Marks)**

Discuss the role of HOQ mapping in quality assessment and development process. Consider a case of e-commerce company which is working for better service and deliver quality. Draw the HOQ for that and highlight your recommendation for improving quality management.

**Questions.5 (8 Marks)**

A educational institute having multiple campuses for higher education. The institute is providing the value education to PG and doctoral students of business management. Develop a VSM for enhancing the educational quality and how an ideal quality path is achieved. Draw the multiple level of value addition components and their mapping with the other quality components.