

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR
POST GRADUATE DIPLOMA IN MANAGEMENT (PGDM)-PART TIME
QUALITY MANAGEMENT
CREDIT: (2 CREDITS)
SESSION DURATION: 90 MINUTES

TERM: IV
YEAR: 2019-2020
Batch: 2018

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Course Introduction: Now days, quality becomes the benchmark of performance and it is quality that wins at the end of an evaluation process. It has always been the key to business success and long-term survivability. Quality management is a system that serves to control quality in the critical activities of an organization by bringing together resources, equipment, people, and procedures. It uses techniques and principles such as quality function deployment, the Taguchi method, service quality management, and Six Sigma to control quality in every sphere of activity in the organization. This course addresses the basic concepts and couple of tools which are implemented to improve the quality of product and services in the manufacturing / service industries. It would help the industry practitioners to use these concepts for improving the quality of product.

Learning Outcomes (LO):

LO-1: To enable the student to gain both qualitative and quantitative orientation.

LO-2: To facilitate hands-on practice of the fundamentals of statistics for quality and acceptance sampling and statistical tools of quality with different quality charts.

LO-3: To understand the process of benchmarking, quality standards, six sigma, quality function deployment, etc. concepts to industry's success.

LO-4: To understand different tools and techniques for quality from a business application perspective through case discussion.

Course Pedagogy: The sessions will be a blend of interactive lectures and discussions and will be supplemented by cases and exercises. **Students are expected to come prepared and participate in the discussions.**

Course Readings:

1. Kanishka Bedi (2006). *Quality Management (QM)*. Oxford University Press.
2. Besterfield, D. H.; Besterfield-Michna, C.; Besterfield-Sacre, M.; Besterfield, G.H.; Urdhwareshe, H.; Urdhwareshe, R. (2015). *Total Quality Management (TQM)*, 4th Edition. Pearson.

Course Evaluation criteria:

Evaluation Component(s)	Learning Outcomes	Weightage (%)
Class Participation (Including class exercise and case discussion)	LO-1, 2, 3, 4	20
Group Presentation	LO-1, 3, 4	20
Quiz	LO-1, 3, 4	20
End-Term	LO-2, 3, 4	40
Total		100

Session Plan:

Session	Topic	Learning Outcomes	Readings
1-2	Introduction to Quality Management <ul style="list-style-type: none"> ❖ What is quality? ❖ Dimensions of quality ❖ Dimensions of service quality ❖ Measuring service quality using SERVQUAL ❖ Quality ratings in the hotel industry Total Quality Management <ul style="list-style-type: none"> ❖ TQM basic concepts ❖ Quality Gurus (Deming's 14 point, PDCA cycle, Juran's trilogy, Kaizen) ❖ Comparison of quality Gurus ❖ Barriers of TQM 	LO – 1	<p>(QM: Ch- 1, Page No. 3-40; Ch-7, Page No. 431-452; Ch-10, Page No. 599-650)</p> <p>(TQM: Ch- 1, Page No. 1-12)</p> <p>Read: SERVQUAL Score with MS-Excel.</p> <p>Case: Discussion on Quality Ratings in the Hotel Industry, pp. 621</p>
3-5	Statistical Process Control <ul style="list-style-type: none"> ❖ Flow chart ❖ Pareto diagram ❖ Cause & Effect diagram ❖ Check sheet ❖ Histogram ❖ Scatter diagram ❖ Variable control charts ❖ Control charts for attributes ❖ Process capability ❖ Capability index 	LO – 1 LO – 2 LO – 4	<p>(QM: Ch- 4, Page No. 239-314)</p> <p>(TQM: Ch- 18, Page No. 417-473)</p> <p>Read: Control Chart, Pareto Chart with MS-Excel</p>
6-8	Management Tools <ul style="list-style-type: none"> ❖ Why, why; Forced field analysis ❖ Nominal group technique; Affinity diagram ❖ Interrelationship diagram; Tree diagram ❖ Matrix diagram; Prioritization matrices ❖ Process decision program chart; Activity network diagram The Fundamentals of Statistics for Quality	LO – 1 LO – 2 LO – 3 LO – 4	<p>(TQM: Ch- 17, Page No. 399-412)</p> <p>(QM: Ch- 3, Page No. 97-126)</p> <p>Read: OC Curve with MS-Excel</p> <p>(QM: Ch-8, Page No. 489-506, 531)</p>

	and Acceptance Sampling Six Sigma <ul style="list-style-type: none"> ❖ Meaning of six sigma ❖ Steps in implementing six sigma ❖ DPMO ❖ Six sigma training hierarchies ❖ Six sigma advantages ❖ Poka-Yoke 		Case: Mumbai Dabbawallahs, pp. 538
9-10	Benchmarking <ul style="list-style-type: none"> ❖ Type of benchmarking ❖ Approaches to benchmarking ❖ Reasons to benchmark ❖ Deciding what to benchmark Quality Function Deployment <ul style="list-style-type: none"> ❖ Benefits of QFD ❖ The voice of the customer ❖ House of quality ❖ Building a house of quality 	LO – 1 LO – 3	(TQM: Ch- 8, Page No. 177-188) (QM: Ch- 1, Page No. 40-46) (QM: Ch- 2, Page No. 57-82) (TQM: Ch- 12, Page No. 279-302) Case: QFD at Boing, pp. 90
11-12	Quality Management Systems <ul style="list-style-type: none"> ❖ What is ISO 9000? ❖ Benefits of ISO 9000 certification ❖ ISO 9000 : 2000 series of standards ❖ ISO 9001 requirements ❖ Implementation ❖ ISO 14000 ❖ Malcolm Baldrige criteria for business performance excellence ❖ Quality assurance Experimental Design and Taguchi Method <ul style="list-style-type: none"> ❖ Design of experiments ❖ Factorial experiments ❖ Taguchi's loss function 	LO – 1 LO – 2 LO – 4	(QM: Ch-5, Page No. 327-384) (TQM: Ch- 10, Page No. 221-253; Ch- 19, Page No. 479-510; Ch-20, Page No. 519-524) (TQM: Ch- 19, Page No. 479-510; Ch-20, Page No. 519-524) (QM: Ch-9, Page No. 545-568) Read: ANOVA and Design of Experiments (DoE) with MS-Excel.
13-14	Group Presentation		

Academic integrity

a) Plagiarism is the use of or presentation of ideas, works that are not one's own and which are not common knowledge, without granting credit to the originator. Plagiarism is unacceptable in IMI and will invite penalty. Type and extent of penalty will be at the discretion of the concerned faculty.

b) Cheating means using written, verbal or electronic sources of aid during an examination/ quiz/ assignment or providing such assistance to other students (except in cases where it is expressly permitted by the faculty). It also includes providing false data or references/list of sources which either do not exist or have not been used, having another individual write your paper or assignment or purchasing a paper for one's own submission. Cheating is strictly prohibited at IMI and will invite penalty as per policies of the Institute.