

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA II – SEMESTER 3– • EXAMINATION – WINTER-2018****Subject Code: 3539275****Date: 13/12/2018****Subject Name: Total Quality Management and World Class Manufacturing Excellence (TQMWCME)****Time: 10:30am To 01:30pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q – 1 Briefly explain the following: 14
- a) Poka-Yoke
  - b) Quality assurance
  - c) Lean manufacturing
  - d) PDCA cycle
  - e) Taguchi Loss function
  - f) SMED
  - g) ISO 14001
- Q – 2 (A) Discuss various kinds of costs associated with the quality and quality management. 7
- Q – 2 (B) Depict your understanding for six-sigma concept. How is it helpful in managing quality in the organization? 7
- OR**
- Q – 2 (B) How statistics is useful in controlling the quality. What do you understand by tolerance limits? 7
- Q – 3 (A) Depict your understanding for quality audit. Also discuss the importance of checklist in quality audit. 7
- Q – 3 (B) How information technology is useful in developing the growth of a tyre manufacturing company like Apollo Tyres. 7
- OR**
- Q – 3 (A) What are various business challenges in world class manufacturing at global level? Discuss various challenges for a manufacturing company. 7
- Q – 3 (B) How Gunn's model of WCM is useful in managing quality worldwide? 7
- Q – 4 (A) Discuss various issues in strategic planning for WCM. 7
- Q – 4 (B) Team work and team management are very important aspects in WCM. Do you agree with this statement? Provide valid reasons for your answer. 7
- OR**
- Q – 4 (A) What are the various reasons people resist the change? Discuss approaches to deal with the resistance in the change management 7
- Q – 4 (B) Discuss the role of customers in defining quality. 7

3M Company with a reputation for excellence in quality have leveraged this reputation by organising separate strategic business units to market consulting and training services. The Management Services Division of 3M has clients ranging from airlines to educational institutions. Labelled as “masters of innovation”, the company has been noted over time as a quality manufacturer of over 50,000 products worldwide.

A central idea of 3M’s total quality system, called “Managing Total Quality” (MTQ) is the “vision for success”, the key may motivating force being the MTQ success. Following the examples of 3M a number of hospital clients of 3M have drafted new mission statements as the basis for a quality management system.

The president of L.G Health Care System is of the opinion that too many mission statements read alike and are general in nature. For example, a mission statement reads like “We are going to deliver a high quality care at the lowest possible price”. This type of mission statement does not spell out anything about the hospital’s mission in the market.

The Mission statement of L.G Health Care System reads as below:

“The purpose of L.G Health Care System is to provide quality health care and health-related services. We are committed to a comprehensive approach that effectively and efficiently meets the needs of the individuals, families and the community including those who are the most vulnerable.

Our mission which is an expression of our philosophy of Human Ecology, demands that our practices demonstrates concern for the whole person-body, mind, emotions, spirit and relationships-as fundamental to every human encounter. We encourage the adoption of this philosophy through services, research, charity, advocacy and example”.

In addition to L.G Health Care System, St. Luke’s Medical Centre and S.C. Baptist Hospitals are other health care centres that have adopted Total Quality Management based on the MTQ process of 3M. Each admits that TQM is necessary in light of ever-increasing health-care costs and steadily decreasing federal funding for Medicare and Medicaid.

Employee involvement is a primary characteristic of TQM and the 3M system. Because participation by all individuals-ranging from the nursing staff to administration to environmental services—is strongly encouraged, each employee is empowered to make decisions and initiate service goals without first having to pass ideas through several levels of authority. Because it is important to involve all constituents, steering committee members are composed of hospital volunteers and employees, patients and physicians. This broad mix of input providers ensures that all constituents have a voice in the quality process.

Summarize the case and answer the following questions:

- Describe how the mission statement of L.G Health Care System can be implemented and made operational?
- How can quality as defined in the mission statement be measured?

**OR**

- Would L.G Health Care System’s mission be appropriate for a for-profits hospital? Explain.
- Will mounting pressure for health care costs make it more difficult to implement TQM? Explain.

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