

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- IVth SEMESTER-EXAMINATION – MAY/JUNE- 2012****Subject code: 142502****Date: 31/05/2012****Subject Name: Fundamentals of Quality Management****Time: 10:30 am – 01:00 pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) What is Quality Management ? Discuss strategies of Quality Management. **07**
 (b) Describe contribution of Juran and Crosby for Quality briefly. **07**

- Q.2** (a) What is Total Quality Management ? State its objectives. **07**
 (b) Enlist seven Quality Improvement Tools and explain any one briefly. **07**

OR

- (b) Explain regarding ISO – 14000 in detail. **07**

- Q.3** (a) Define Quality Function Deployment (QFD) and explain its benefits. **07**
 (b) Explain the importance of Quality Management software in Business improvement. **07**

OR

- Q.3** (a) What is Attributes And Variables ? Discuss Single Sampling Plan briefly. **07**
 (b) Construct a control chart for Mean and Range for following data of measurement, 10 sample of sample size 5 is being taken for consideration. **07**
 Mention your conclusion for state of control.

Sample no.	1	2	3	4	5	6	7	8	9	10
Measurement	12	12	10	11	10	08	08	08	10	07
	10	08	08	15	08	12	07	07	11	09
	12	10	07	12	09	11	10	11	10	11
	11	10	12	10	06	11	09	10	12	08
	14	09	11	11	07	09	06	11	14	06

Take $A_2 = 0.58$, $D_3 = 0$, and $D_4 = 2.11$ for $n=5$

- Q.4** (a) Discuss about priorities and development of Quality in Indian Industries. **07**
 (b) Describe Operating Characteristics Curves (O-C) and explain about Consumer's and Producer's Risk. **07**

OR

- Q.4** (a) What is Quality Control ? Discuss its objectives and advantages. **07**
 (b) Following observations were taken while inspecting the product, 10 samples of size 100 each is taken, **07**

Sample No.	1	2	3	4	5	6	7	8	9	10
No. of Defects	12	15	20	14	09	20	15	10	09	08

Construct the p – chart and give your comments.

- Q.5** (a) What is Benchmarking ? Discuss about its types briefly. **07**
 (b) Describe Deming Award for Quality. **07**

OR

- Q.5** (a) What is Service Quality ? Discuss about its types briefly. **07**
 (b) Write short note on Quality Assurance and Quality Audit. **07**
