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Reg. No. : .....

Name : .....

Eighth Semester B.Tech. Degree Examination, May 2013
(2008 Scheme)
08.806.3 : INDUSTRIAL QUALITY CONTROL (MPU)

Time : 3 Hours Max. Marks : 100

PART – A

Answer **all** questions. **Each** question carries **four** marks.

1. What is Juran's definition for quality ?
2. Briefly explain Quality value.
3. How process variability is measured ? Explain.
4. Discuss about quality policy.
5. Explain about sequential sampling.
6. Discuss about ideal OC curves.
7. Explain economies of inspection.
8. Discuss about life testing.
9. Explain MTTR and MTTF.
10. Explain failure density with an example.

PART – B

Answer **one full** question from **each** Module. **Each** sub question carries **ten** marks.

Module – I

11. a) List out and discuss the different types of variable and attribute charts.

    b) Analyse the $\bar{X}$ and R chart of the following data if subgroup size is 10.

Mean	20.03	19.01	22.09	24.99	20.01	17.09	23.00	20.91
Range	4.09	5.78	2.89	3.98	6.45	7.45	2.45	3.99

OR

P.T.O.

12. a) Explain in detail about attribute control charts and their uses.

    b) Discuss about any three process capability measures.

Module – II

13. a) Explain the procedural steps for constructing AOQL plot.

    b) Construct an OC curve if N = 1000, n = 40 and c = 3.

OR

14. a) Explain about AOQL and LTPD plans.

    b) Discuss about rectification plans with their significance.

Module – III

15. a) Explain about reliability design with live examples.

    b) Discuss the functions of product design and development.

OR

16. a) Discuss about system reliability. How it can be evaluated ?

    b) Develop an AOQ curve when N = 1000, n = 20, c = 1.