EVALUATION CRITERIA

An examination will be conducted on the last day for a duration of 3 hrs. Candidates scoring more than 60% marks will be awarded with the following grades. Marks-80% & above: 'O' Grade (Outstanding), Marks-70% to 79%: 'A+' Grade (Very Good), Marks-60% to 69%: 'A' Grade (Good).

METHODOLOGY

Lectures, highly interactive sessions and case studies on various topics on Reliability Engineering.

NOTE

Participants are requested to bring Scientific Calculator for the training programme.
Working lunch, Tea and Snacks will be provided.
Participants have to make their own arrangements for accommodation.

SCHEDULE

Training program duration - 5 days (10.00 AM to 05.30 PM)
Registration (1st day) - 09.45 to 10.00 A.M.

VENUE: CENTRE FOR RELIABILITY, CHENNAI

COURSE FEE

Rs.15000/- plus 12.36% Service Tax of Rs.1854/- the total of **Rs.16,854/- per participant** which can be paid by way of DD/Local Cheque in favour of **"PAY AND ACCOUNTS OFFICER, DEITY"**, payable at Chennai. 10% concession will be offered, if 3 or more participants are nominated from the same organizations. Centre For Reliability (CFR) being a Govt. of India organisation, **NO INCOME TAX shall be deducted at source** for any payment made to it, in terms of SECTION 196 OF INCOME TAX ACT, 1961. Our Service Tax No.TIC/CHENNAI-IV/053/STC and TAN NO.D0412-G (S).

ORGANIZATIONS PARTICIPATED

BHEL, HPCL, MRPL-ONGC, IGCAR, C-DAC CRL, IOC, HAL, BEL, MECON, RDSO, DRDO, National Institute of Ocean Technology (NIOT), National Physical Oceanographic Lab (NPOL), NTG, DGQA, NPCIL, Konkan Railway, Pricol, NLCL, LMW, SAC, NRSA, VSSC, CTS, TCS, WIPRO, DRDL, DLRL, TCS, ECIL, IIPM, NTPC, L&T, ISPAT, HCL Technologies, Emerson Power, ECDS-Venture Lighting, HBLNIFE, Kemex Microsystems, Merlinhawk Aerospace Industries, Mahindra & Mahindra, Whirlpool, Sonakoyo, Mahindra Sathyam, Crompton Greaves, Cummins, TAFE, TVS Electronics, TATA Motors etc. Individual Professionals, Quality and Reliability Consultants from India and Abroad have also participated in this program.

FIVE-DAY TRAINING PROGRAMME

On

CERTIFIED RELIABILITY PROFESSIONAL (CRP)

Conducted by

CENTRE FOR RELIABILITY

STQC Directorate

Ministry of Communications & Information Technology
Government of India
VSI Estate, Near Lattice Bridge, Thiruvanmiyur
Chennai – 600041
Phone: 24543691, 24543710 Fax: 24543713
Email: cfr@stqc.nic.in
Web site: http://www.stqc.nic.in

INTRODUCTION

Quality and Reliability of a product or a service is essential for very survival of the Organisation. Every organization is striving hard to continuously improve the quality and reliability of their products and in-turn their customer base. There is a strong need for a work force proficient in the principles and practices of reliability engineering in every organization in order to create a brand image for the product through designing for reliability.

Proficiency in application of Reliability Tools and Techniques is a key to the progress of any organization. A Certified Reliability Professional will be able to achieve the Reliability goals set by the Organisation for various projects by implementing the tools and techniques learnt in this training programme. Certification is a mark of excellence. Certification is an investment in the career of the employees and in the future of that organization.

Centre For Reliability (CFR) has designed a five-day exhaustive training program on Reliability Engineering Tools and Techniques for professionals from industry and user organizations. The program focuses on all the essential topics in the area of Reliability Engineering, such as Reliability Prediction, Design Reliability Assessment & Improvement, Reliability Testing & Screening and Maintainability & Availability of the product. The body of knowledge is based on the Certified Reliability Engineer (CRE) program conducted by American Society for Quality (ASQ), USA. An examination will be conducted at the end of the program and successful candidates will be issued Certified Reliability Professional (CRP) Certificate.

OBJECTIVE

- To provide sufficient knowledge to the participants to evaluate and improve Product Reliability, Availability, Maintainability and Safety.
- To prepare participants and in turn their organizations to the level of International Standards in Reliability Engineering.
- To certify the expertise of professionals in the area of Reliability Engineering.
- To provide training in Reliability Engineering as per the curriculum of American Society for Quality (ASQ), USA, a renowned global institution for Quality and Reliability.

TOPICS

1. **Reliability Management**
   - Introduction to Reliability Engineering
   - Basic Concepts & Overview
   - Terms and Definitions
2. **Probability and Statistics for Reliability**
   - Basic Concepts
   - Statistical Inference
   - Probabilistic Analysis of Data and characteristic determination
   - Life Data Reliability Analysis
3. **Reliability in Design and Development**
   - Failure Modes, Effects and Criticality Analysis (FMEA/FMECA)
   - Fault Tree Analysis (FTA)
   - Worst Case Analysis
4. **Reliability Modeling and Prediction**
   - Data source
   - Reliability Prediction
   - Reliability Modeling
5. **Reliability Testing**
   - Reliability Determination/Demonstration Testing
   - Highly Accelerated Life Testing / Stress Screening (HALT/HASS)
   - Accelerated Reliability / Life Testing and Analysis (ALTA)
   - Life / Age Certification of Products
6. **Maintainability and Availability**
   - Maintainability Analysis
   - Availability Studies
   - Reliability Centered Maintenance (RCM)
7. **Data Collection, Analysis and Corrective Action**
   - Data Collection Methodology
   - Failure Reporting and Corrective / Preventive Action

BENEFITS TO THE PARTICIPANTS AND ORGANISATION

- A CRP is an asset to the organization
- Certification is a mark of Excellence
- Product reliability improves
- Widens customer base
- Higher reputation and market value

FACULTY

ASQ, USA Certified Reliability Engineers (CRE) of CFR, who have rich experience in Reliability consultancy and training program and have put in more than 20 years of experience in Reliability Engineering.

WHO SHOULD ATTEND

System & Design Engineers, Quality & Reliability Professionals, Production & Maintenance Managers can participate in this program.