# Hands-on-Training on "Green, Energy and Environment Audits" and Handling of Audit Instruments to Educational Institutions and Industries

### Organized by

# NATURE SCIENCE FOUNDATION

[ISO QMS (9001:2015), EMS (14001:2015), OHSMS (45001:2018) & EnMS (50001:2018) Certified and Ministry of MSME Registered Organization]

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# **About Nature Science Foundation (NSF)**

NSF is functioning energetically to conduct different awareness programmes and implement various schemes to Schools, Colleges and Universities across India towards the noble cause of environmental protection and nature conservation. The main motto of the NSF is "Save the Nature to save the Future" and "Go Green to save the Planet". NSF is a Non-Governmental, ISO 9001:2015, 14001:2015, 45001:2018 & 50001:2018 certified and Ministry of MSME registered Organization.

# **About the Hands-on-training Programme**

The Environment Management System is the quantitative and qualitative data to track air, water and waste, and to gain actionable insights to improve the operational performance. It is used to maintain the clean and green environment that leads to the stakeholders. It provides a solution at 360° view of a surrounding campus and makes it easy for Owner / Managers/ Environmentalists to collaborate, measure, control, and reduce environmental impacts. Finally it leads to enhancing the quality of life to human beings, animals and plants. Green Campus



Initiatives is needed at present across the world due to change in environmental conditions, global warming and increasing in human population. It aims to make a sustainable and environmentally friendly campus to stakeholders.

### **About the First to Fifth Series of Lead Auditor Course**

A total of five Lead Auditor courses were conducted so far by the NSF in which a total of 1500 participants such as students, research scholars, faculties, teachers, IQAC/NBA/NAAC Coordinators and scientists from research and development Centres, engineers and staff members from Railway as well as PWD Departments of state and central Governments, owners, managers, management representatives from industrial sectors, freelancers, entrepreneurs, environmentalists, environmental engineers, agriculture staff members, etc. were participated.



# **Types of Audit courses**

1. Environmental audit is a process of extracting information about an Institution and Organization that provides a realistic assessment of how the campus surroundings affect the environment and make sure that their activities should not harm the environment. To ensure that the environmental is neat and clean, environmental pollution impact,



carbon dioxide emission level, solid state management, disposal of sewage and waste materials and plastic use in the campus will be assessed.

- 2. Green campus audit is a type of assessment to ensure that the Institution and Organization campus is greenish in terms of planting a large number of trees and lawns in the campus. To ensure that the list of plants and animals / birds available in the campus, biodiversity conservation, water irrigation system, recycling of water, rain harvesting system, site preservation, soil erosion control and landscape management will be evaluated.
- 3. Energy audit ensures that the campus of Institutions and Organizations is involving energy savings and consumption towards the roadmap of the State development economy by assessing the electric current usage. To ensure that the air ventilation and day-lighting facilities, sodium vapor lights and LED bulbs, power generators, UPS, solar systems and renewable energy utilization, air-conditioned and non-air-conditioned buildings will be assessed.





### **Audit Instruments**

### 1. Carbon Dioxide Detector

- a) Carbon Dioxide Detector is used to measure the exhaled concentration of carbon dioxide. So, it to detect the Co2 level at the Academic Audits at the Institutions.
- **b)** The Dimensions may be taken from the various places like Students Classrooms, Studying area, staff rooms, Canteen etc.,
- c) The normal range is 400 to 800 ppm.



- a) Sound level meter is applicable for measurement of noise engineering, quality control, health prevention and various environmental noise, including noise measurements in such various places like College classrooms, Study area, College Corridors etc.,
- **b)** The calibration temperature is  $25 \pm 3$ °C.
- c) It ranges between 30 130 db and its accuracy is  $\pm 1.5$  db.

### 3. Oxygen Meter

- a) O<sub>2</sub> Meter is applicable for the O<sub>2</sub> monitor / detectors, food industrial : refrigerator, vegetable factory; Bio- technology : Oxygen incubator, Anaerobic cultivator; Security System: Air conditioner and Oxygen shortage alarm system, Fire alarm system and Fuel cell system.
- **b)** The calibration temperature is 0 to 50°C.
- c) It ranges between 0 to 30.0  $\% \times 0.1 \%$ .

# 4. Light Meter

- a) Light Meter is used to measure the light at an Optimum Position.
- **b)** The Measurements may be taken from the Various places like Students Classrooms, Studing area, staff rooms etc.,
- c) It has 5 ranges which are 40.00 / 400.0 / 4,000 / 40,000 / 400,000 Lux, wide measuring range.









#### 5. **TDS Meter**

- a) It is used to indicate the Total Dissolved Solids in a solution, usually water and to check the performance of the water filter, Hardness and pureness of the Water.
- b) The Measurements may be taken from different types of Water Storage
- c) It has the Range between  $0 \sim 9999$  ppm.

#### pH/ Temp Hydrotester 6.

- a) The first use of PH meter is that we determine acidity or alkalinity with the help of this meter and this is the easiest and most common way of finding PH and it is also used for the cleaning of a probe.
- **b**) It has the range between 0 14.

#### 7. **GPS** meter

- a) It is used to preparing accurate surveys and maps, taking precise time measurements, tracking position or location, and for navigation.
- b) GPS works at all times and in almost all weather conditions.







### **Learning Objectives**

- 1. Understand the principles and importance of various audits in the context of the organization and risk assessment to Educational Institutions and Industries.
- 2. Study the concept on how to conduct 'Environmental audit', 'Green campus audit' and 'Energy audit' at Educational Institutions, Industries and Public at 360° view?
- 3. Provide the hands-on-trainings on Audits groundwork, checklist preparation, practical auditing and auditing techniques, handling of Audit Instruments, Audit/Non-conformity report preparation and submission.
- 4. Analyze how to help the Educational Institutions and Industries to maintain the ecofriendly environment and personal hygiene to various stakeholders.
- 5. Teach the auditing exercises and supply of training course materials (PPTs slides, Lecture Notes, etc.), Audit Manuals, Checklists of audits and application forms of audits.



- 1. Any UG degree in B.A. / B.Sc. / B.Com. / BBA / B.E. / B.Tech./ B.Arch.
- 2. Any PG degree in M.A. / M.Sc. / M.Com / M.E. / M.Tech. / M.Arch.
- 3. Any M.S. / Ph.D., Post-Doc. in Arts, Science, Engineering and Technology.

# **Registration Fee and Process**

- Rs.500/- for Students and Scholars
- Rs.1000/- for Staff and Faculty members including any academic people
- Rs.2000/- for Industrial persons, Social workers, Experts, Environmentalists and Auditors
- Registration may be done through online (https://forms.gle/q2RoLWJM5a39twDi8)
- Registration fee may be paid through online on or before 15<sup>th</sup> February, 2023.





### **Account Details**

Name of Account : Nature Science Foundation

Account No. : 37459341560
Account Type : Current Account
Name of Bank : State Bank of India
IFS Code : SBIN0005740

Bank Branch : Vadavalli Branch, Coimbatore, Tamil Nadu.



Regd. No. 114 / 2017

# **Google Pay / Phone Pay**

Account Number : 95667 77255

# **CONTACT US**

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