



ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

A+, Accredited by NAAC & NBA (ECE & CSE)

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka

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DEPARTMENT OF MECHANICAL ENGINEERING

TALK ON BRIEF OVERVIEW OF NON DESTRUCTIVE TESTING



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Department of Mechanical Engineering

To

Date 01/12/22

IQAC Chairman

AIET, Mijar

Respected Sir

**Sub: Seeking Permission to conduct a technical talk on
05/12/2022**

We are happy to inform you that Department of Mechanical Engineering technical forum is conducting a technical talk on 05/12/22.

Title of the talk : **Brief Over view of Non destructive testing**

The details are mentioned below, kindly request you do the needful.

Resource person details

Name: **Sri. B S Venkata Subramaniyan**

Designation: **NDT coordinator (training & certification)**

Organization/Company/details: **V&G testing laboratories**


Venue: **CAMD lab**

Date/month/year: 05/12/2022



PRINCIPAL

Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K



HOD
H. O. D.
Dept. Of Mechanical Engineering
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225



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DEPARTMENT OF MECHANICAL ENGINEERING

aiet/Mech/AY2022-23/002

Date: 05/12/2022

CIRCULAR


It is hereby informed to all that Department of Mechanical Engineering, is organising a Technical talk on "Brief Over view of Non destructive testing" is arranged on 05/12/22.

Venue: CAMD Lab

Talk By: Sri. B S Venkata Subramanian,

NDT coordinator (training & certification), V&G testing laboratories

It is mandatory for all Students to attend the technical talk


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“A TECHNICAL TALK ON “BRIEF OVERVIEW OF NON DESTRUCTIVE TESTING”



An inaugural ceremony of the workshop was conducted on 5/12/2022 by the department of Mechanical engineering at 10:30 am the invited guest was Sri. B.S Venkata Subramaniyan, NDT Coordinator, Training and certification superintendent and Sri. Ganesh Thahashildar, Quality manager, V & G testing Laboratories, Pvt. Ltd. The program was started by lighting a lamp and followed by the small talk by the chief guest Sri. B.S Venkata Subramaniyan mainly

focused on the opportunities for the upcoming mechanical engineering graduate. He gave proper direction to build the career. HOD addressed the gathering and told about all the upcoming talks/training/plans for the academic year 2023/24. The inaugural ceremony was concluded by giving a vote of thanks.

Soon after an inaugural ceremony a technical talk on "Brief overview of NDT" was conducted the speaker Sri. B.S Venkata Subramaniyan gave a brief introduction about the NDT, he explained all the basic concepts which is related to the NDT. He told about the various branches of the Non destructive testing those methods are visual Inspection, Film evaluation of Radio, Ultrasonic inspection, Dye penetrant Inspection and magnetic particle inspection. He also clearly explained about the difference between Non destructive testing and Destructive testing. He told about what V & G industry does V&G Provides qualified and experienced inspection for piping, welding, coating, civil and structure for industrial Inspections in India as well as abroad.

He focused on different types of NDT methods individually, the first method he explained was Liquid penetrant testing, it locates surface breaking defects in all Non-porous materials. It detects casting, forging, welding, surface defects. The various steps in this process are pre clean, apply penetrant, penetrant dwell, remove penetrant, apply developer. Evaluate indications, post cleaning parts. The next topic he focused was Ultrasonic testing in which it uses high frequency sound energy to conduct examinations and make the measurements here the size of the reflector plays a very important role if there is presence of the defect. In ultrasonic testing there are various types such as pulse echo where it sends out a pulse of energy and the same or a second transducer listens for the reflected energy. The next type is Normal and Angled beam where the sound beam is introduced into the test sample at 90 degree to the surface while in angled beam it was introduced to around 45 degree to the surface. The next type is Immersion technique when the test surface is placed in the water bath clearly the defects are identified. The next test he explained was Radiographic testing in this method the part is placed between radiation source and a piece of film the main part of this technique is x ray generators where we can detect the defects which is present on the surface. The next method the speaker explained was Gamma ray generators where it generates the gamma rays to detect the defect on the surface. He also explained about the

Imaging Modalities and about the Image quality. Before the conclusion of the talk he told us about the radiation safety and how the radiation will affect us and how serious the side effects are. Later he concluded the talk by saying that there is a huge opportunity for the mechanical graduates in the filed of testing.

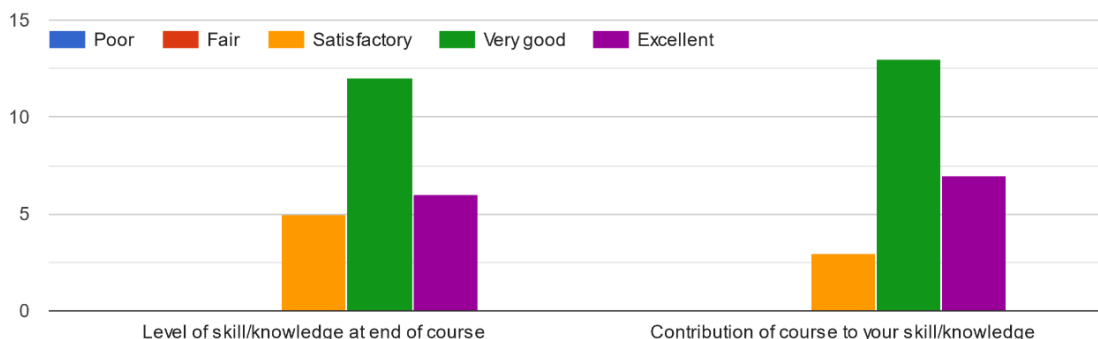
After the talk the interaction session was held where a lot of students cleared their doubts regarding the topics. The technical talk was ended by the vote of thanks given by the forum student president Nandana M hegde. The participants of this inaugural ceremony and technical talk were Mechanical students and faculties. Around 100 students and faculties were benefited by this technical talk.

FEED BACK ON

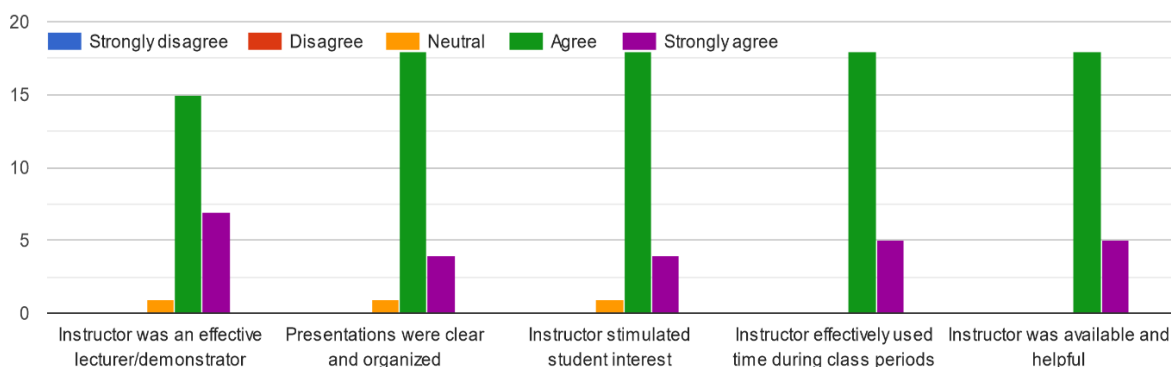
“BRIEF OVERVIEW OF NON DESTRUCTIVE TESTING”



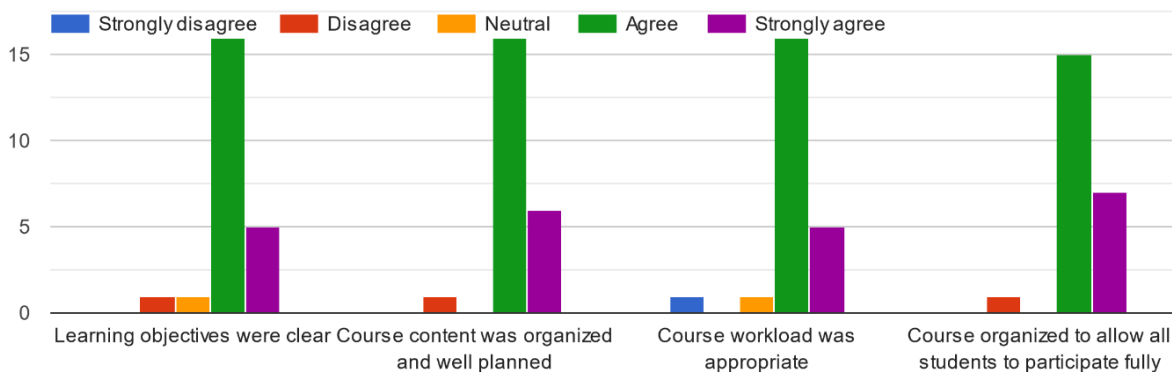
Contribution to learning



Skill and responsiveness of the instructor



Course content




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