

## **Electrical Engineering Dept.**

1. Expert lecture By Mr. Sanjay M. Umate (Dy. Executive Engineer, MSETCL, Dhamangaon) on “Distribution Transformer”.

DATE:- 18/04/2017

A distribution transformer or service transformer is a transformer that provides the final voltage transformation in the electric power distribution system, stepping down the voltage used in the distribution lines to the level used by the customer.

### **Benefit and Outcomes–**

- Expert introduced practical electricity utilization through Distribution transformer, which is beneficial to students and faculty of Electrical Engineering.
  - Lecture focused on electrical power distribution and role of distribution transformer.
  - Expert delivered notes on various types of distribution transformer and its ratings.
2. Expert lecture “AC Machine & DC Machine”. By Mr. Bhalchandra V. Chikate (Executive, Electrical Department, Raymonds Luxury Cotton Ltd. Amravati)

DATE:- 07/04/2017

A.C. and D.C. motors serve the same function of converting electrical energy into mechanical energy, they are powered, constructed and controlled differently. The most basic difference is the power source. A.C. motors are powered from alternating current (A.C.) while D.C. motors are powered from direct current (D.C.), such as batteries.

### **Benefit and Outcomes–**

- Expert introduced different types of Electrical machines use in various sectors.
- Session focused on construction, maintenance and applications of AC & DC Machine.
- Expert interacted with students and explained role of electrical machine in textiles industries (Raymond Pvt. Ltd.)

3. Expert lecture “Internet Of Things (IoT)”. By Mr.ChandrashekharGampawar (Director)  
Let’s Win Glob, AurangabadDATE:- 23/03/2017



The Internet of Things (IOT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

**Benefit and Outcomes–**

- Expert introduced immerging technology, which is beneficial to students and faculty of Electrical Engineering.
- Lecture focused on electrical sector which has enormous opportunities through the design, installation and maintenance of IOT devices along with offering various consultative services.
  - Students cleared their doubt about IOT and smart electricity.

4. Expert lecture “Maintenance and safety precautions of distribution Transformer”. By Rajiv Bhoyar(Add. Executive Engineer MSETCL, Yavatmal. ) DATE:- 18/03/2017



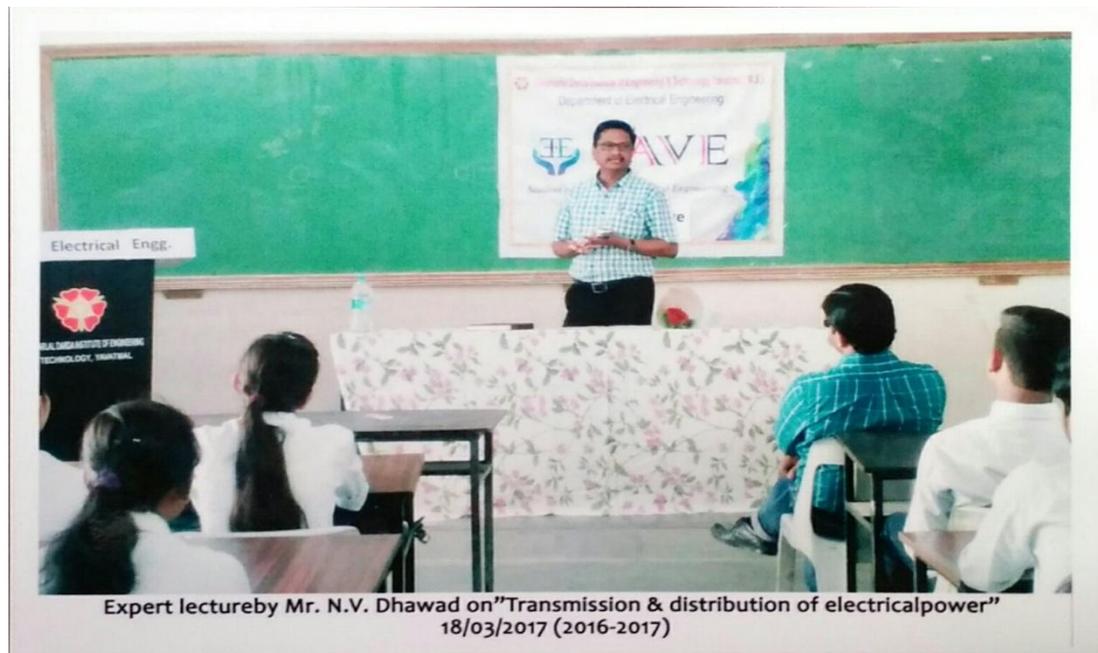
A power transformer is most costly and essential equipment of an electrical transformer. So for getting high performance and long functional life of the transformer, it is desired to perform various maintenance activities. Not only that, a power transformer also requires various maintenance actions including measurement and testing of different parameters of the transformer.

#### **Benefit and Outcomes–**

- Discussion held on various technics of maintenance of transformer used at MSETCL.
- Expert delivered sound knowledge of their practical experience in field also sorted out practical and theoretical concept in field.
- Shared expert advice about maintenance of transformer at various voltage level.

5. Expert lecture “Transmission and Distribution of Electrical Power”. By Mr. NarendraDhawad(Add. Executive Engineer MSEDCL,Yavatmal Urban)

DATE:- 18/03/2017



Indian power sector have large amount of power exchange through the various section like Generation, Transmission & distribution. In this lesson a brief idea of a modern power system is outlined. Emphasis is given to create a clear mental picture of a power system to a beginner of the course Electrical Technology. As consumers, we use electricity.

#### **Benefit and Outcomes–**

- Students understand different methods of generating electrical power.
- This lesson covered a brief idea and Issues involved in transporting power to different types of consumers located generally at far off places from the generating stations.
- Expert explained Necessity of substations to cater power to consumers at various voltage levels.

6. Expert lecture "Electrical Safety & Precautions". By Nitin R. Pantawane. Electrical Safety officer Yavatmal.

DATE:- 04/03/2017



Expert lecture on “Electric safety and precautions” by Mr. N.B. Pantavane (2016-2017)

Avoiding electrical hazards associated with electrical protective measures in several different areas. A designer/installer must pay attention to circuit and equipment identification, analysis of hazards and exposure to those hazards, warnings, listing, and labelling. The designer/installer must also consider the mechanics of establishing an electrically safe work condition.

#### **Benefit and Outcomes–**

- Students understand the value of electrical safety & Precaution and Earthing also.
- In lecture, expert introduced with various safety norms in industry and field while touched with Electrical system.
- Aware about number of methods for grounding and discussed all concepts.

7. Expert lecture “Energy Audit ”. By AksayAdmane(Dy. Manager Raymond UCO Denim Pvt. Ltd. Yavatmal).  
DATE:- 26/09/2016



The strategy of adjusting and optimizing energy, using systems and procedures so as to reduce energy requirements per unit of output while holding constant or reducing total costs of producing the output from these systems.

#### **Benefit and Outcomes–**

- Introduced about the objective of Energy Management is to achieve and maintain optimum energy procurement and utilisation, throughout the organization.
  - Delivered sound knowledge about how to make report on Energy Audit.
- Students and faculty understood to minimise energy costs / waste without affecting production & quality to minimise environmental effects.

8. Expert lecture “Power generation by Gasturbine”. By DilipmandaveRtd. (Executive Engineer MSPGCL,Nagpur)

DATE:- 21/03/2016



Today, gas turbines are one of the most widely-used power generating technologies. Gas turbines are a type of internal combustion (IC) engine in which burning of an air-fuel mixture produces hot gases that spin a turbine to produce power.

#### **Benefit and Outcomes–**

- In Expert lecture student understood the importance of gas turbine used for electrical power generation.
  - Expert shown how gas turbine work and why it is more reliable.
- Delivered sound knowledge and practical experience of expert at gas power plant.

9. Expert lecture “Energy Scenario & Role of Engineer in Present Situation”. By Anil Onkar(Executive Engineer MSPGCL,Nagpur)  
DATE:- 02/03/2016



India has always been a pioneer in the generation and utilization of electricity since the 19th century. Major developments associated with harnessing the full potential of electricity, the electricity sector in India is growing leaps and bounds, exhibiting great dynamism and exponential growth. The utility electricity sector in India had an installed capacity of 271.722 GW as of end March 2015.

#### **Benefit and Outcomes–**

- Expert shown how big energy sector in India and opportunity is for Electrical Engineer in this sector.
  - Discussion on various power generation and demand at state.
  - Student understood the role of engineer and career objectives.