



Proofs of Criteria 2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process.

1) Expert Lecture on Earthquake Resistant Building:

Department of Civil Engineering.

CHHATRAPATI SHIVAJI MAHARAJ INSTITUTE OF TECHNOLOGY

ONLINE WEBINAR

EARTHQUAKE

RESISTANT BUILDING

TIME 02:00 PM **SATURDAY** 15 OCT 2022

ORGANISED BY
CIVIL ENGINEERING DEPARTMENT

Er. Sayeda Nikhat Fathima
B.Tech / M.Tech / Ph.D (Pursuing)
Assistant Professor
HMS Institute of Technology,
Tumakuru, Karnataka

RESOURCE PERSON: Er. Sayeda Nikhat Fatima. Qualification :B.Tech /M. Tech/Ph.D(Pursuing). Working as an assistant Professor in HMS Institute of Technology, Tumakuru, Karnataka.



ABSTRACT OF THE SESSION:

Online Expert lecture on 'EARTHQUAKE RESISTANT BUILDING' was conducted at Department of Technology, Mumbai University, on 15th October, 2022. The eminent speaker Prof. Sayeda Nikhat Fatima, Civil Engineering Department, HMS Institute of Technology, Tumakuru, Karnataka was available as Chief Guest and resource person to guide the students third Year and final year student of Civil Engineering.

The Program was started by the welcome of chief guest and all participates. By Ms. Swati More, Assistant Professor, introduced Chief Guest and elaborated the work done by in this field of Earthquake engineering and requested the expert to enlighten the students. Initially she stated that to achieve safety against earthquake, either Increase the CAPACITY or Decrease the DEMAND. It is Best to do BOTH. To attain this behavior of structure under earthquake should be studied. Earthquake shaking reverses tension and compression in the members. Hence reinforcement is required on both faces of columns. During earthquakes buildings are subjected to horizontal forces and overturning moments. Hence it should be taken into account while designing the building against earthquake. India is divided into four seismic zones. Zone I is merged in Zone II in

IS:1893-2002. Hence no part of country is safe during earthquake. Hence it is necessary to design earthquake resistant structures which should have sufficient ductility. Weak beam and strong column strategy should be adopted. To increase the capacity beam, column, frame and shear wall, bracings systems are adopted. Two adjacent shear walls must be connected by coupling beam to avoid diagonal cracks during earthquake shocks.

The fundamental principle of seismic modification / isolation is to modify the response of the building to permit dissipation of vibration energy or the ground can move below the building without transmitting these motions into the building.

The isolation system should essentially be able to support a structure, provide horizontal flexibility. and able to dissipate energy. Different types of isolators are Elastomeric bearings, High damping rubber bearings, Lead rubber bearings, Sliding bearings, Curved slider (friction pendulum) bearings, Ball and roller bearings. Base Isolation should be used when Structures less than 15 stories for stiff framing systems (e.g. shear walls or braced frames), Structures less than 10 stories for flexible framing systems (moment frames), Sub-soil is stiff or moderately stiff, Height-to-width ratio prevents gross overturning, Local column uplift is small. After 2001 Bhuj earthquake, four storied hospital building is build with seismic isolators. Base Isolation should not be used when building rests on Soft soil, Building period > 1.5 sec., Wind load > 10 % building weight, Inadequate space around the structure ("seismic gap") Damping (Energy Dissipation) is the characteristic of a structural system that opposes motion by absorbing energy and tends to returns the system to rest when it is disturbed. The damping is generally categorized as viscous (velocity dependent) or hysteretic (displacement dependent). Different types of dampers are viscous fluid dampers, friction dampers and yielding dampres. Viscous dampers absorbs the energy during earthquake. It works similar to piston-cylinder mechanism provided in vehical to absorb shocks while travelling on rough road. In India, eighteen storied building at Gurgaon is build with seismic dampers. She shown videos of behaviour of isolated buildings and installation of dampers in the building. She delivered an informative and thought provoking lecture. It was



really splendid presentation which exposed students to the field practices. All the students appreciated and got benefited from your views on the subject.



No of Participants: 52.

2) “ Human Machine Interaction:

Department of Computer Engineering.

Online Webinar on
Lets play with the Concepts
of Human Machine
Interaction

Wednesday, 02 February 2022
Live start at 11.00am - 12:30 Noon

Organized by Dept. of Computer Engineering, CSMIT, Panvel

Dr. Ravi Prakash
Associate Professor
Head, Training and Placement Cell
K C College of Engineering & Management Studies and Research
Thane (Maharashtra)
Member, IIC-CSE Mumbai Chapter

Prof. Pratap Nair
Asst Prof.
K C College of Engineering & Management Studies and Research
Thane (Maharashtra)

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RESOURCE PERSON: Dr. Ravi Prakash & Prof. Pratap Nair, Corporate Trainer..

ABSTRACT OF THE SESSION: Department of Computer Engineering, CSMIT organized an add on Webinar on topic “HUMAN MACHIN INTERACTION” on 2 FEB 2022, for all Computer Engineering students. It was delivered by : Dr. Ravi Prakash & Prof. Pratap Nair, Corporate Trainer..

Mr. Ankush Pawar, Head, Department of Computer Engineering, Chhatrapati Shivaji MaharajInstitute of Technology, Panvel welcomed the Computer Engineering students in session.

No of Participants: 50.

3) Metrology in daily use.

Department of Mechanical Engineering.

St. Wilfred's Education Society
CHHATRAPATI SHIVAJI MAHARAJ INSTITUTE OF TECHNOLOGY, PANVEL
(Affiliated to The Mumbai University, Approved by AICTE - New Delhi.) www.csmiit.in

Webinar Topic : Metrology in Daily Use

On the occasion of Engineer's Day

Convener • Er. Manoj Dongare (HOD, Mechanical Engg. Dept.)	 Dr. KESHAV BADAYA HONOURABLE SECRETARY, ST. WILFRED'S EDUCATION SOCIETY
Co-Convener • Er. Akshay Vartak (Assistant Professor)	 Dr. Harish Kumar Department of Mechanical Engineering ,NIT, New Delhi
Faculty Co-ordinator • Er. Neeta Gawade (Assistant Professor)	 Dr. Dharmendra Dubey Principal, CSMIT, Panvel
Faculty Members • Er. Pratibha Nargolkar (Assistant Professor) • Er. Nutankumar Kale (Assistant Professor)	

Join Us : <https://meet.google.com/smu-cjuj-tjf>

15 September 2021 **11.00 am onwards**

E-Certificate will be provide to the registered candidate.

No Registration Fee

Resource Person: Dr. Harish Kumar, Department of Mechanical Engineering, N.I.T., New Delhi.

Abstract of the Session: DR. HARISH KUMAR. enlightened on the topic of Metrology. Metrology is basic to the economic and social development of a country. It is concerned with providing accurate measurements which impact our economy, health, safety and general well-being.