

Report

Six Day Online Workshop on

“Mix-Design Methodology for Concrete and Bitumen”

A six day online workshop on “**Mix-Design Methodology for Concrete and Bitumen**” was organized by the Department of Civil Engineering. The program was organized from 23rd September 2019 to 28th September 2019 (6 Days). The workshop was designed for the Academicians/Engineers and Engineering students to give an exposure to the new innovative ideas and current sustainable construction practices in Civil Engineering in order to make them familiar to mix design method for flexible and rigid pavement.

The program was successfully completed under the auspices of

- Prof. Vinod Kumar – Vice Chancellor of JUIT Waknaghat and Patron of the organized CEP by the Department of Civil Engineering
- Prof. Samir Dev Gupta – Director and Dean of Academics of JUIT Waknaghat
- Major General Rakesh Bassi (Retd.) - Registrar and Dean of Students of JUIT Waknaghat
- Prof. Ashok Kumar Gupta – HOD, Department of Civil Engineering, JUIT Waknaghat and Program Chair of the organized CEP by the Department of Civil Engineering
- Dr. Amardeep – Assistant Professor, Department of Civil Engineering, JUIT Waknaghat and Program Convener.
- Dr. Pankaj – Assistant Professor, Department of Civil Engineering, JUIT Waknaghat and Program Convener.
- Dr. Tanmay Gupta – Assistant Professor, Department of Civil Engineering, JUIT Waknaghat and Program Convener.

Workshop Schedule

First Day		
10:30-11:10 AM	Prof. Ashok Kumar Gupta	Inaugural Lecture
High Tea		
11:30-1:30 PM	Mr. Abhilash Shukla	Concrete Mix Design: Overview
Lunch		
02:30-05:00PM	Mr. Tanmay Gupta Mr. Jaswinder	Casting of Concrete Mix-Design Samples of Various Strengths (Concrete Lab) <ul style="list-style-type: none"> • Mix-Design Cubes of Standard Sizes • Split Tensile Testing Cylinder of Standard Sizes
Second Day		
09:00-10:20 AM	Mr. Abhilash Shukla	Introduction to Cement and its Testing Methodologies
High Tea		
10:40-12:30 PM	Mr. Tanmay Gupta Mr. Jaswinder	Cement Lab Testing: <ul style="list-style-type: none"> • Normal Consistency • Initial and Final Setting Time
Lunch		
02:00-05:00 PM	Dr. Pankaj Kumar Mr. Jaswinder	Cement Lab Testing Continued: <ul style="list-style-type: none"> • Specific Gravity of Cement • Compressive strength of Cement • Tensile strength of Cement • Soundness of Cement
Third Day		
09:00-10:20AM	Dr. Pankaj Kumar	Concrete Matrix and its Constituents
High Tea		
10:40-12:30 PM	Dr. Pankaj Kumar Mr. Jaswinder	Concrete Matrix Lab Testing: <ul style="list-style-type: none"> • Characterization of Fine Aggregate • Bulking of Sand • Specific Gravity of Fine Aggregate
Lunch		
02:00-05:00 PM	Dr. Pankaj Kumar Mr. Jaswinder	Concrete Matrix Lab Testing Continued: <ul style="list-style-type: none"> • Specific Gravity of Coarse Aggregate • Flakiness Index and Elongation Index of Coarse Aggregate • Impact Abrasion Test • Workability Tests on Concrete
Fourth Day		
09:00-10:20 AM	Dr. Amardeep	Bitumen Grading, Properties and Mix Design in Pavement Construction: Methodological Different Specifications for Bitumen Mix Design Discussion

High Tea		
10:40-12:30 PM	Dr. Amardeep Mr. Jaswinder	Bitumen Lab Tests: <ul style="list-style-type: none"> • Introduction to Different Graded Bitumen • Penetration Test • Softening Point Test
Lunch		
02:00-05:00 PM	Dr. Amardeep Mr. Jaswinder	Bitumen Lab Tests: <ul style="list-style-type: none"> • Specific Gravity Test • Ductility Test • Flash and Fire Test
Fifth Day		
09:00-10:20 AM	Dr. Saurabh Rawat	Specification for Proctor and CBR Method as Per BIS
High Tea		
10:40-12:30 PM	Dr. Saurabh Rawat Mr. Itesh Kumar Singh	<ul style="list-style-type: none"> • Optimum Moisture Content • Dry Density • Proctor Test
Lunch		
02:00-05:00 PM	Dr. Amardeep Mr. Jaswinder	<ul style="list-style-type: none"> • CBR Test • Bitumen Mix Design
Sixth Day		
09: 00- 11:30 AM	Mr. Aakash Gupta	Specification of IRC 37 for Pavement Design <ul style="list-style-type: none"> • Benkelman Beam Deflection Test
High Tea		
11:30-12:30PM	Dr. Pankaj Kumar Mr. Tanmay Gupta Mr. Jaswinder	Concrete Sample Testing (Strength Assessment) Cement Sample Testing (Strength Assessment)
12:30-01:00 PM	Dr. Amardeep Dr. Pankaj Kumar Dr Tanmay Gupta	Feedback Session
01:00-01:30PM	Prof. Ashok Kumar Gupta	Closing Ceremony

Other Salient Features

- Video Recording of all lectures by the speakers for the Workshop available with the organizing committee.
- Presentation slides of all lectures by the speakers for the Workshop available with the organizing committee and has been distributed to participants.

- Certificates of participation issued to all registered participants.
- Certificates of resource persons issued to all the listed speakers.
- Feedback collected from participants for further improvement in conducting such future online Workshops

Summary of the Participants

Types of Participants	Total No. of Registered Participants
HPPWD Assistant and Junior Engineers	25
Other Participants	50

Feedback of the Participants

Types of Participants	Total No. of Registered Participants
HPPWD Assistant and Junior Engineers (20)	Excellent (80%) Very Good (7%) Good (13%)
Other Participants (50)	Excellent (85%) Very Good (12%) Good (3%)

With Regards

Dr. Amardeep,

Program Coordinator

Department of Civil Engineering

Jaypee University of Information Technology Waknaghat