



MANIPAL UNIVERSITY
JAIPUR

MANIPAL UNIVERSITY JAIPUR TEACHER
EMPOWERMENT CENTRE (MUJ-TEC)

A report on

2 Days Workshop
on

“OUTCOME BASED EDUCATION”

22nd to 23rd December 2022 (online mode)

B. Sharma

Introduction of the Event

"Outcome-Based Education" (OBE) is the heart of the accreditation process, and over time, across the globe, OBE has started to play a crucial role in the accreditation. OBE is not only used for Accreditation but also can be used as a tool for measuring the "Quality of Education". The major components of OBE are Course Outcome (CO) and Program Outcome (PO). Depending upon how well these two parts are defined and evaluated, OBE attainment is measured.

Objective of the Event

The aim of the workshop is to facilitate and train teachers to understand the fundamentals of outcome-based education and its implementation in higher education. Manipal Teacher Empowerment Centre at Manipal University Jaipur (MUJ TEC) was established with the intent to invest in teacher training to help them grow professionally and personally. Teachers who are made to feel efficacious can participate and contribute fully to the process of achieving the institutional goals and objectives. One of the objectives is to train and equip teachers to learn and practice Outcome based education and help them to do objective assessment and evaluation of the learners. The need of outcome-based education is also very important with respect to the quality and for accreditation process like NAAC, NBA etc.

Beneficiaries of the Event

The workshop will be beneficial for all the faculty members, especially freshers and newly joined faculties of MUJ. HoD's are requested to encourage the participation of newly joined faculty members of their respective departments.

Details of the Guests:



Dr. Shankaranarayana Bhat
Associate Director (Faculty Development & Welfare), Faculty Member,
Dept. of E&C Engineering, M.I.T, Manipal.

B. Shalini



Mr. Gaurav Prasad, Assistant Professor, Department of Information Technology, Manipal Institute of Technology Bengaluru (MIT).

Flyer of Event:

Resource Persons



Dr. Shankaranarayana Bhat
Associate Director (Faculty Development & Welfare)
Dept. of E&C Engineering,
M.I.T Manipal



Mr. Gaurav Prasad
Assistant Professor
Dept. of Information Technology
M.I.T Bengaluru

Expected Outcomes

The need of "Outcome-Based Education" (OBE) is important to do objective assessment and evaluation of the learners. OBE is the heart of the accreditation process, and over time, across the globe, OBE has started to play a crucial role in the accreditation. It has also been used to measure the "Quality of Education". The major components of OBE are Course Outcome (CO) and Program Outcome (PO). Depending on how well these two parts are defined and evaluated, OBE attainment is measured. Manipal Teacher Empowerment Centre at Manipal University Jaipur (MUJ-TEC) was established to invest in teacher training to help them grow professionally and personally.

Therefore, the workshop aims to facilitate and train teachers to understand the fundamentals of OBE and its implementation in higher education.

Target Audience


All faculty members of MUJ, OBE coordinators, and especially newly joined faculty members.

About MUJ

Manipal University Jaipur (MUJ), India is a co-educational, residential, private research university located in the city of Jaipur in Rajasthan, India. It is the fifth university established by Manipal Global Education Services. Courses and programs offered by the university are in the fields of Engineering, Architecture, Interior Design, Fashion Design, Fine Arts, Hospitality, Humanities, Journalism and Mass Communication, Basic Sciences, Law, Commerce, Computer Applications, and Management. The campus of the institute has a total land area of 122 acres, with the constructed area of 2.47 million sq ft.; it was the first university in Rajasthan to be accredited as A+ (3.28) grade by NAAC. M.U.J. boasts of best-in-class infrastructure, including state-of-the-art research facilities and a modern, digital library. In line with Manipal University's legacy of providing quality education to its students, the campus uses the latest in technology to impart education.

Two Days Workshop on OUTCOME BASED EDUCATION (OBE)

Dec 22-23, 2022 [Online mode]
11:00 AM - 1:00 PM
Jointly Organized by:
MUJ-TEC, and School of Civil and Chemical Engineering



Day 1: Link
<https://teams.microsoft.com/join/19%3aypUv-DDhiudISC96tQvvp3hSRFfRD4Fa0-EhbOLdo1%40thread.tacv2/1671616674449?context=%7b%22Tid%22%3a%22a1608847-8390-44b1-90af-89ae3ab30761%22%2c%22Oid%22%3a%22fa5234e1-a334-4b40-a1f1-a15fc3798f92%22%7d>

Day 2: Link
<https://teams.microsoft.com/join/19%3aypUv-DDhiudISC96tQvvp3hSRFfRD4Fa0-EhbOLdo1%40thread.tacv2/1671616674449?context=%7b%22Tid%22%3a%22a1608847-8390-44b1-90af-89ae3ab30761%22%2c%22Oid%22%3a%22fa5234e1-a334-4b40-a1f1-a15fc3798f92%22%7d>

B. Prasad

Programme Schedule

Date/Time	Topic	Resource Person
22 nd Dec 2022 11:00AM-01:00PM	Fundamentals of OBE	Dr. Shankaranarayana Bhat
23 rd Dec 2022 11:00AM-01:00PM	Analytics of OBE	Mr. Gaurav Prasad



Organizing Committee

Chief Patron

Mr. S. Vaitheeswaran
Chairperson, Manipal University Jaipur

Patron

Prof. (Dr.) G. K. Prabhu
President, Manipal University Jaipur

Co-Patrons

Prof. (Dr.) N. N. Sharma
Pro-President, Manipal University Jaipur

Mr. (Dr.) Jawahar M Jangir
Provost, Manipal University Jaipur

Workshop Advisors

Prof. (Dr.) D P Sharma
Director, MUJ-TEC, Manipal University Jaipur

Prof. (Dr.) Bhavna Tripathi
Director, SCCE, Manipal University Jaipur

Workshop Conveners

Dr. Suyesha Singh
Dept. of Psychology, SHSS

Dr. Anjalee Narayan
Dept. of Arts (Liberal Arts), SHSS

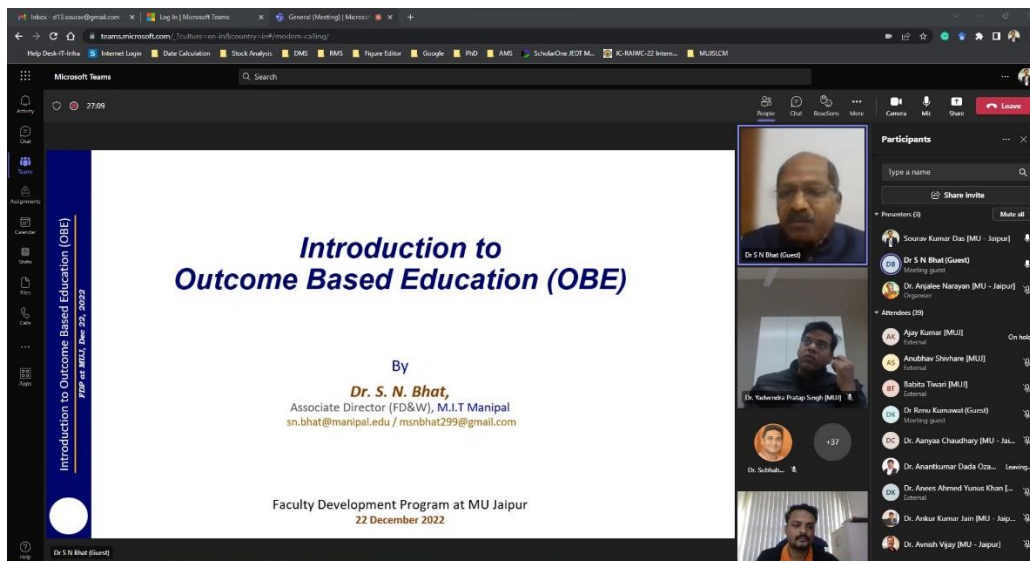
Mr. Sourav Kumar Das
Dept. of Civil Engineering, FOE

D. Sharma

Day wise Report:

Day-1: 22nd December 2022

Dr S N Bhat in his session demonstrated the background of OBE from its inception to its importance in the present education system. He discussed what are the different education reforms have taken place in the last two decades and how the focus of the students has been shifted to outcome-based education system rather than the conventional input based education system. He also discussed in detail the roadmap on an effective implementation of OBE through the change in the teaching pedagogy. He emphasized that the teaching pedagogy for an effective OBE must have a “Design down – Deliver up” approach where the teacher must identify the expected outcome from the students after the course is completed. Once identified the entire course module must be designed to get the maximum outcome through various in between methodologies like periodic assessment, formal and informal questionnaire survey, discussion on the opportunity of the course, etc. He mentioned that by following these methodologies both the teacher and the student will get the desired outcome and feel proud for an effective implementation of OBE. Finally, while designing the course outcome (CO) he illustrated the audience how a CO must be framed after considering the mission and vision of the university, Programme Specific Outcome (PSO) and Programme Outcome (PO). At last, the session concluded with Q&A session and vote of thanks.

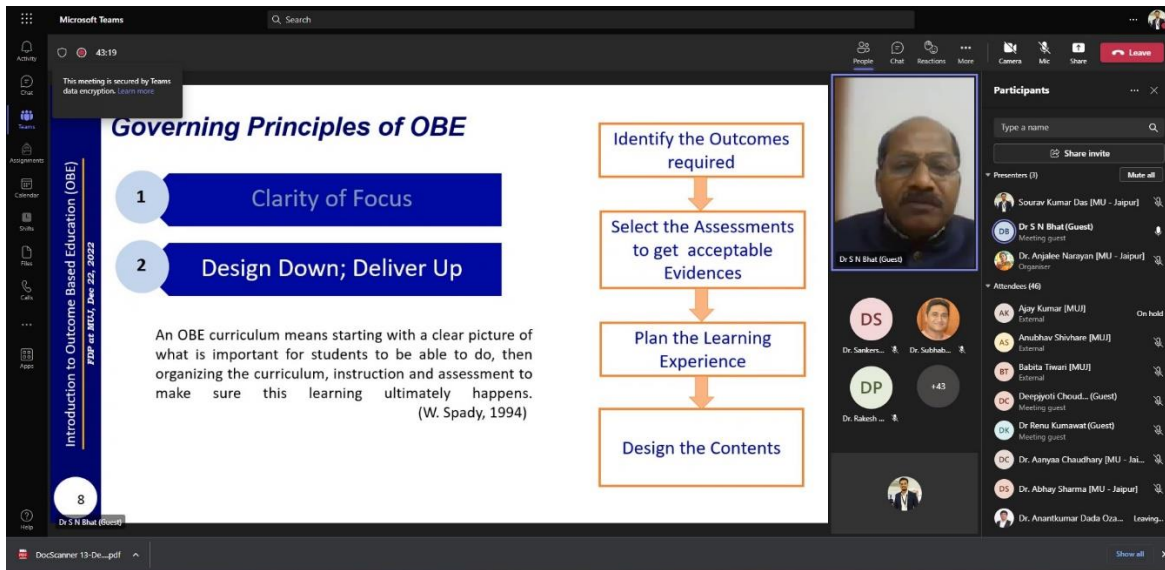


Picture 1: Dr. S.N. Bhat interacting with the participants

B. Shalini

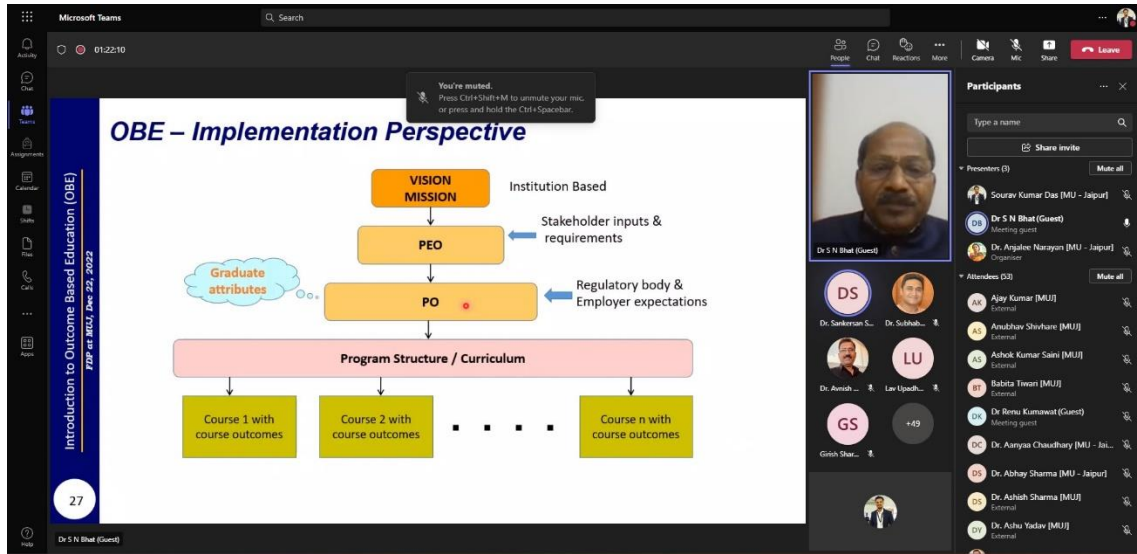


Picture 2: Dr. S.N. Bhat explaining the importance of OBE



Picture 3: Dr. S.N. Bhat explaining the principles OBE

Dr. S. N. Bhat

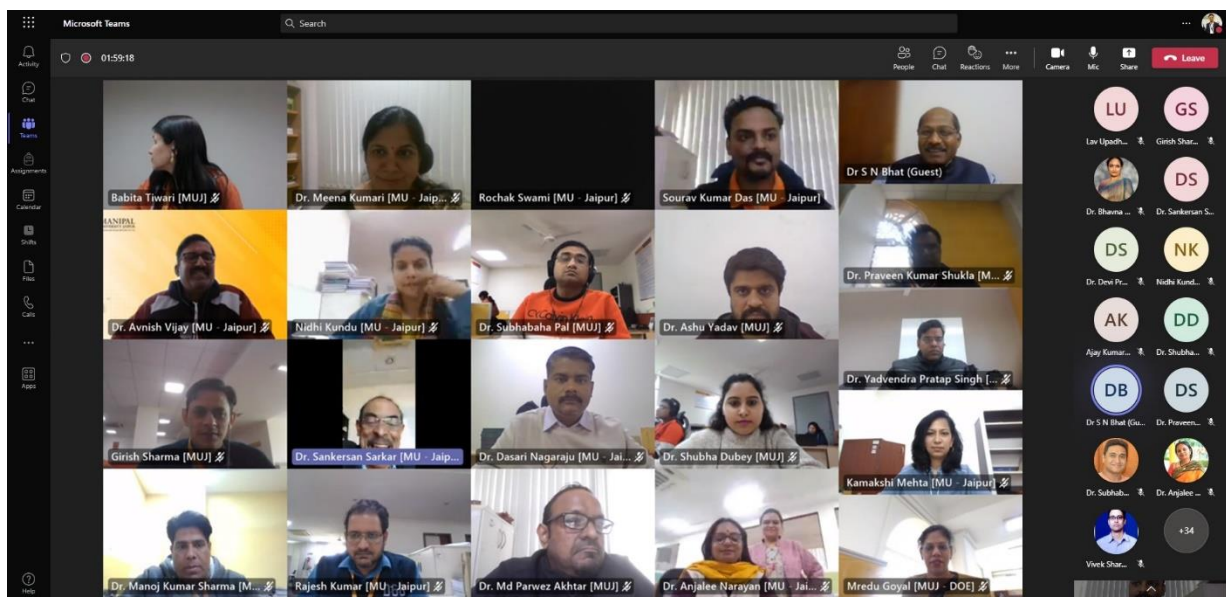


The screenshot shows a Microsoft Teams meeting interface. The main content is a presentation slide titled "OBE – Implementation Perspective". The slide features a flowchart illustrating the implementation process:

- VISION MISSION** (Institution Based) leads to **PEO**.
- PEO** (Program Educational Objectives) is influenced by **Stakeholder inputs & requirements**.
- PEO** leads to **PO** (Program Outcomes), which is influenced by **Regulatory body & Employer expectations**.
- PO** leads to **Program Structure / Curriculum**.
- Program Structure / Curriculum** leads to **Course 1 with course outcomes**, **Course 2 with course outcomes**, and **Course n with course outcomes**.
- Graduate attributes** are shown as a cloud connected to the PO level.

The slide also includes a sidebar on the left with the text "Introduction to Outcome Based Education (OBE)" and "27". The right side of the screenshot shows the "Participants" list with names like Sourav Kumar Das, Dr. S N Bhat, and others.

Picture 4: Dr. S.N. Bhat explaining about implementation of OBE



The screenshot shows a Microsoft Teams meeting grid with 20 participants. The participants are arranged in a 5x4 grid. The names of the participants are:

- Row 1: Babita Tiwari [MU], Dr. Meena Kumari [MU - Jaipur], Rochak Swami [MU - Jaipur], Sourav Kumar Das [MU - Jaipur], Dr. S N Bhat (Guest)
- Row 2: Dr. Avnish Vijay [MU - Jaipur], Nidhi Kundu [MU - Jaipur], Dr. Subhabaha Pal [MU], Dr. Ashu Yadav [MU], Dr. Praveen Kumar Shukla [M...]
- Row 3: Girish Sharma [MU], Dr. Sankersan Sarkar [MU - Jaipur], Dr. Desari Nagaraju [MU - Jai...], Dr. Shubha Dubey [MU], Dr. Yadendra Pratap Singh [...]
- Row 4: Dr. Manoj Kumar Sharma [M...], Rajesh Kumar [MU - Jaipur], Dr. Md Parwez Akhtar [MU], Dr. Anjalee Narayan [MU - Jai...], Kamakshi Mehta [MU - Jaipur]
- Row 5: Dr. Manoj Kumar Sharma [M...], Rajesh Kumar [MU - Jaipur], Dr. Md Parwez Akhtar [MU], Dr. Anjalee Narayan [MU - Jai...], Mredu Goyal [MU - DOE]

The right side of the screenshot shows the "Participants" list with names like LU, GS, DS, NK, DD, DB, and DS.

Dr. S. N. Bhat



Picture 5: Group picture of participants with Dr. S.N. Bhat

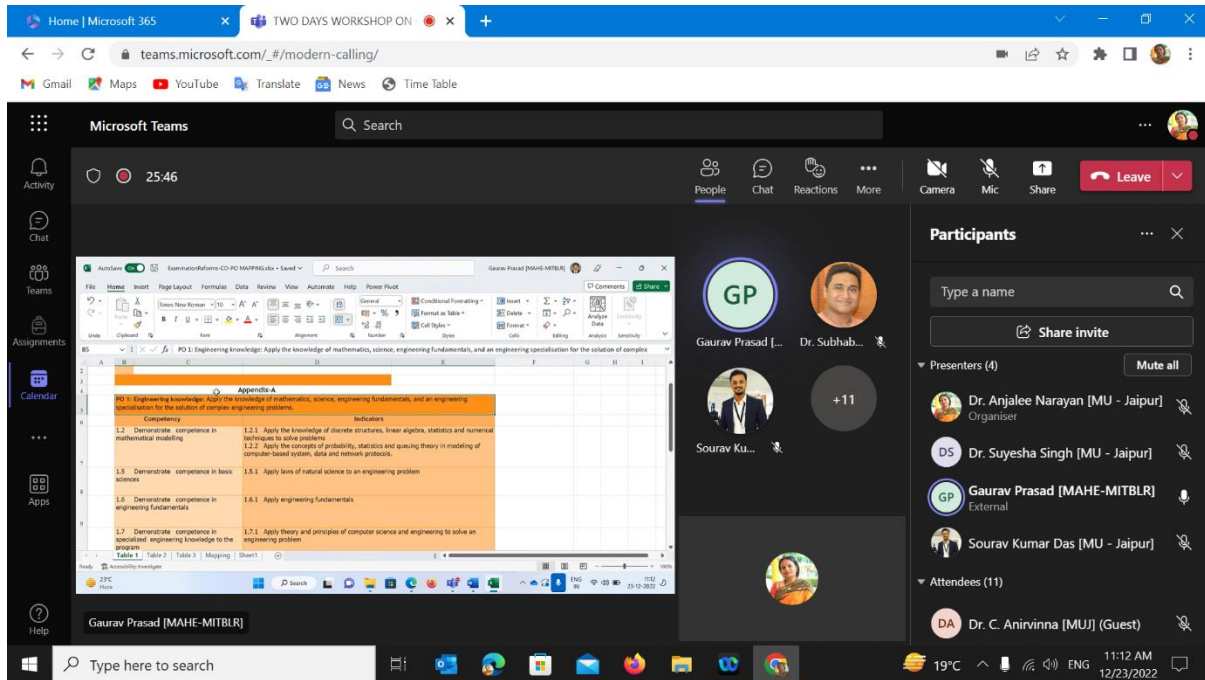
Day-2: 23rd December 2022

On the day-2 of FDP Mr. Gaurav Prasad commenced program with discussion on PO and PSOs. The OBE framework constituting vision, mission, CO, PO and PSO was discussed. Development of framework how in top-down approach right from vision to Questions was briefed. The evaluation process starting from framing of questions till mapping them to CO and their connection with PO and PSO was explained. Further, relevance of vision and mission was outlined. Difference between traditional approach and OBE based approach was highlighted by Mr. Gaurav Prasad.

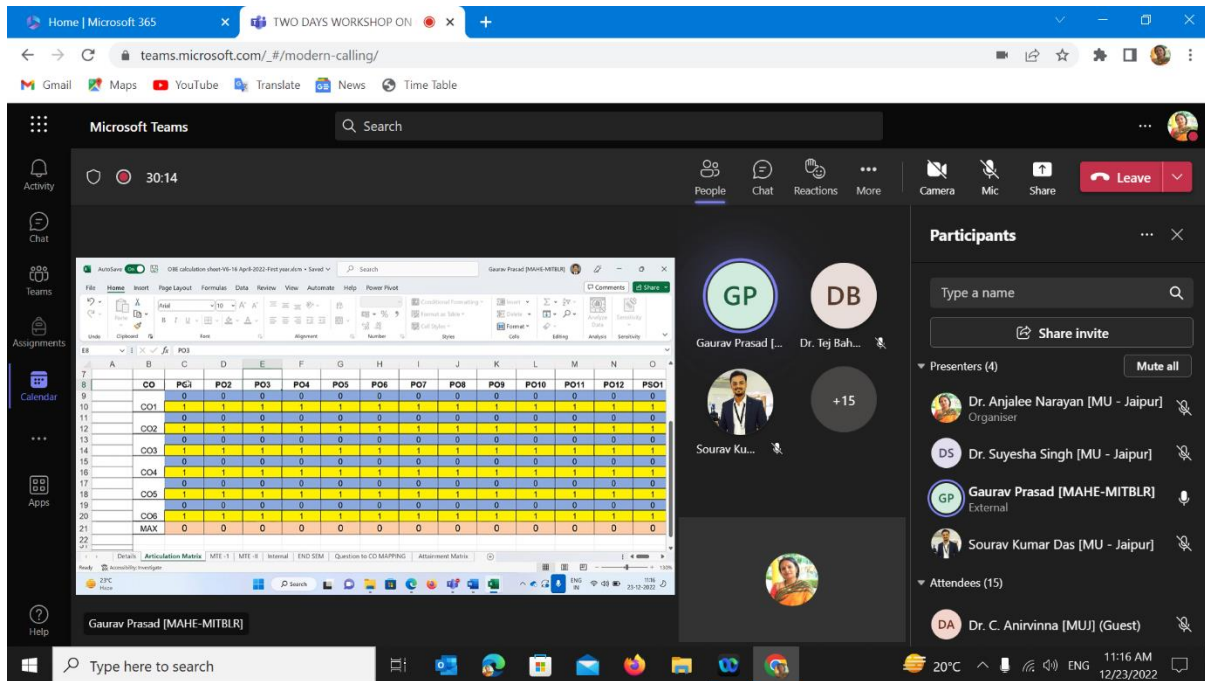
Mr. Prasad emphasized on the need and relevance of proper lecture plan. He also explained the advantages of fields like mode of delivery. This was followed by discussion on framing questions and mapping of questions to CO. He also explained the advantages of fields like mode of delivery. This was followed by discussion on framing questions and mapping of questions to CO. The relevance and identification of cognitive levels of the questions and mapping it into the CO's cognitive level was discussed. Examples for same were discussed later. Need for updating the course content or addition of course for program and its CO-PO mapping was discussed with the justification. Basics and relevance of CO-PO mapping, articulation matrix was discussed followed by the degree of correlation between the CO-PO and some examples were shared to understand them in a better way. Mr. Prasad explained in detail the tool used for calculation of course outcome and then participants were requested to work on the same. Next, different sheets of the workbook to calculate the CO attainment were discussed. The relevance of colouring scheme used in the sheet was highlighted. Mr. Prasad emphasized on the points to kept in mind while providing inputs in the sheet. The discussion was not only restricted to the working of sheets, but it also included detail explanation of formulas in the sheet. The relevance of threshold, number of students and number of questions and their impact on the attainment was also discussed. The technique to calculate overall CO attainment was also explained. The method for directly calculating PO and PSO attainment was also discussed. Brief discussion was conducted on indirect calculation of PO and PSO, which includes taking the feedback from stockholders.

This was followed by number of queries from the participants in the Q&A session. The session ended with a formal vote of thanks to the speaker and the participants. The feedback was taken thereafter.

D. Prasad

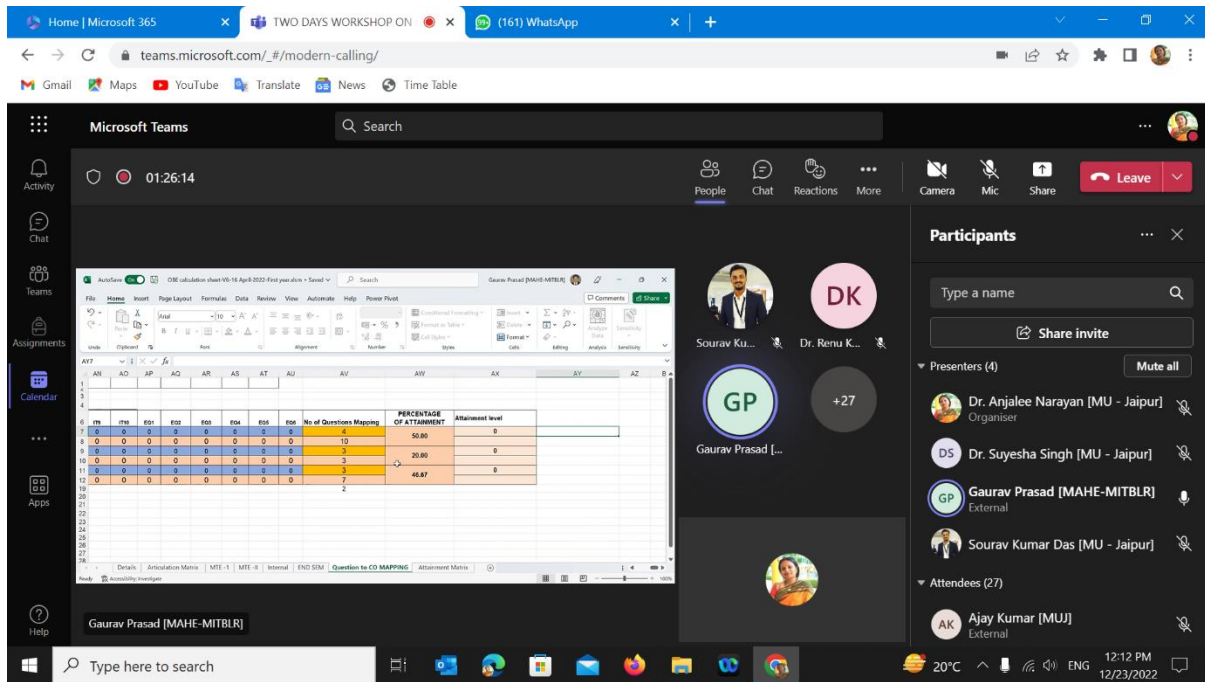


Picture 1: Mr. Gaurav Prasad explaining about competency and indicators in framing course objectives and outcomes

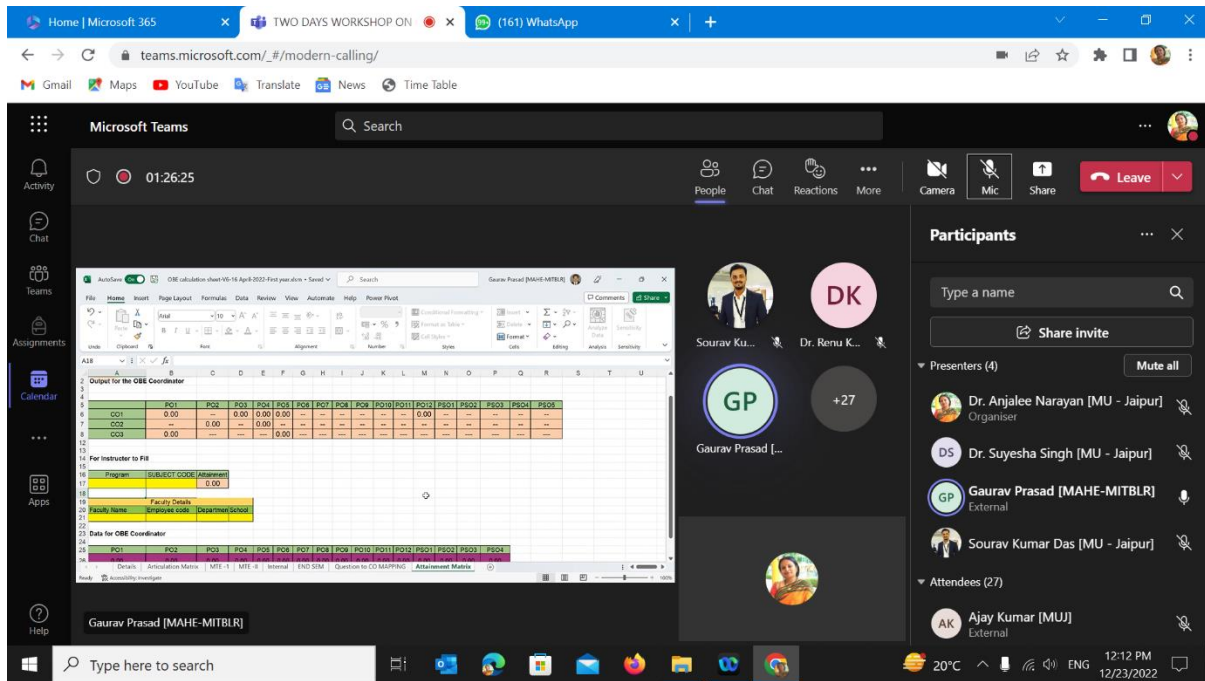


Picture 2: Mr. Gaurav Prasad demonstrating CO-PO Mapping in the OBE matrix

Dr. Anjalee Narayan

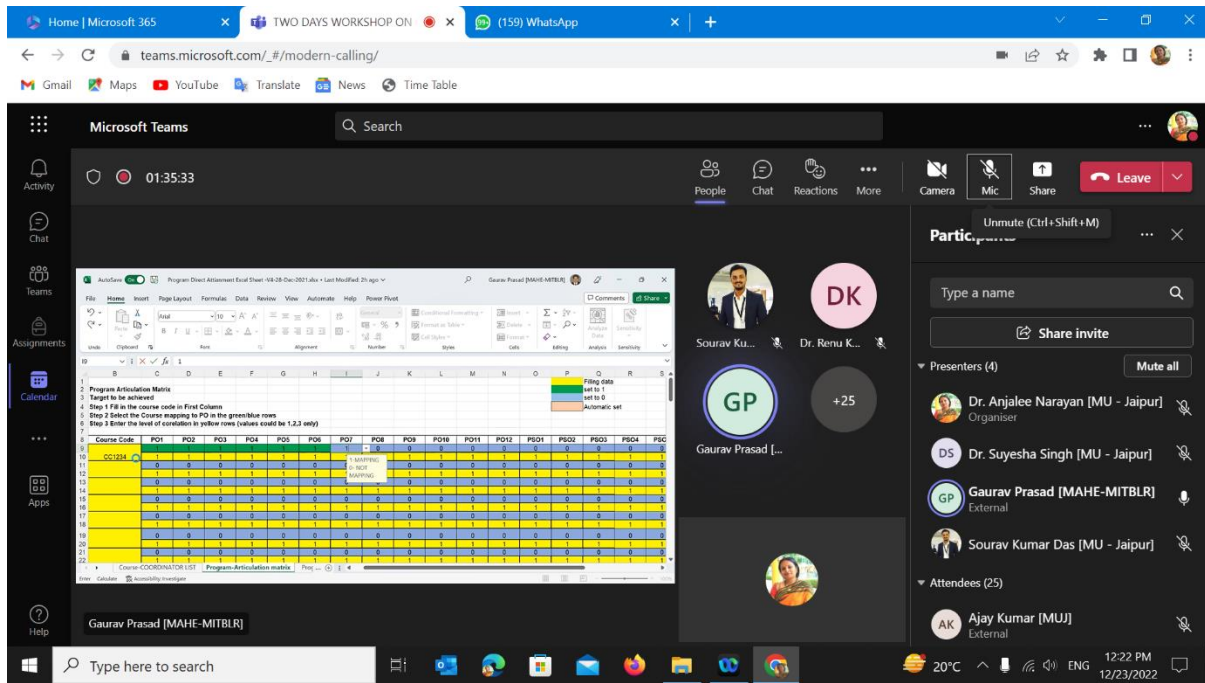


Picture 3: Mr. Gaurav Prasad demonstrating deriving the attainment levels



Dr. Anjalee Narayan

Picture 4: Mr. Gaurav Prasad demonstrating deriving the attainment levels



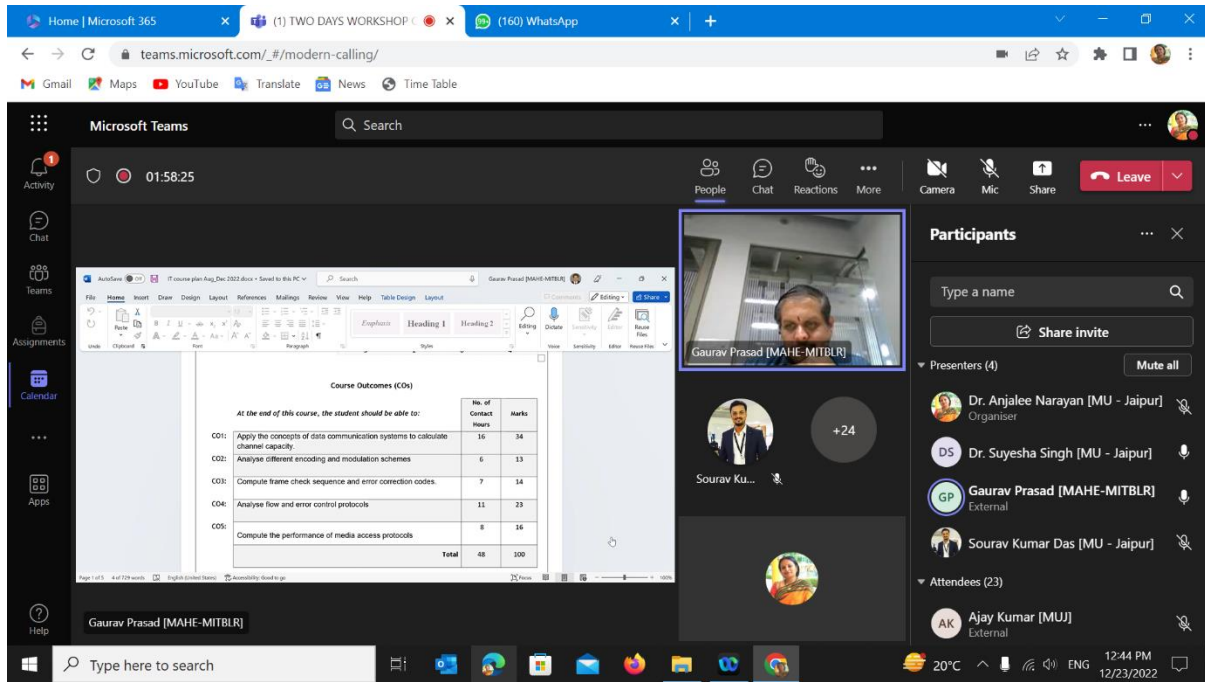
The screenshot shows a Microsoft Teams meeting interface. The main window displays a PowerPoint slide titled "Program Direct Attainment Evaluation". The slide content includes:

- 1. Program Articulation Matrix
- 2. Target to be achieved
- 3. Step 1 Fill in the course code in First Column
- 4. Step 2 Select the Course mapping to PO in the green/blue rows
- 5. Step 3 Enter the level of correlation in yellow rows (values could be 1,2,3 only)

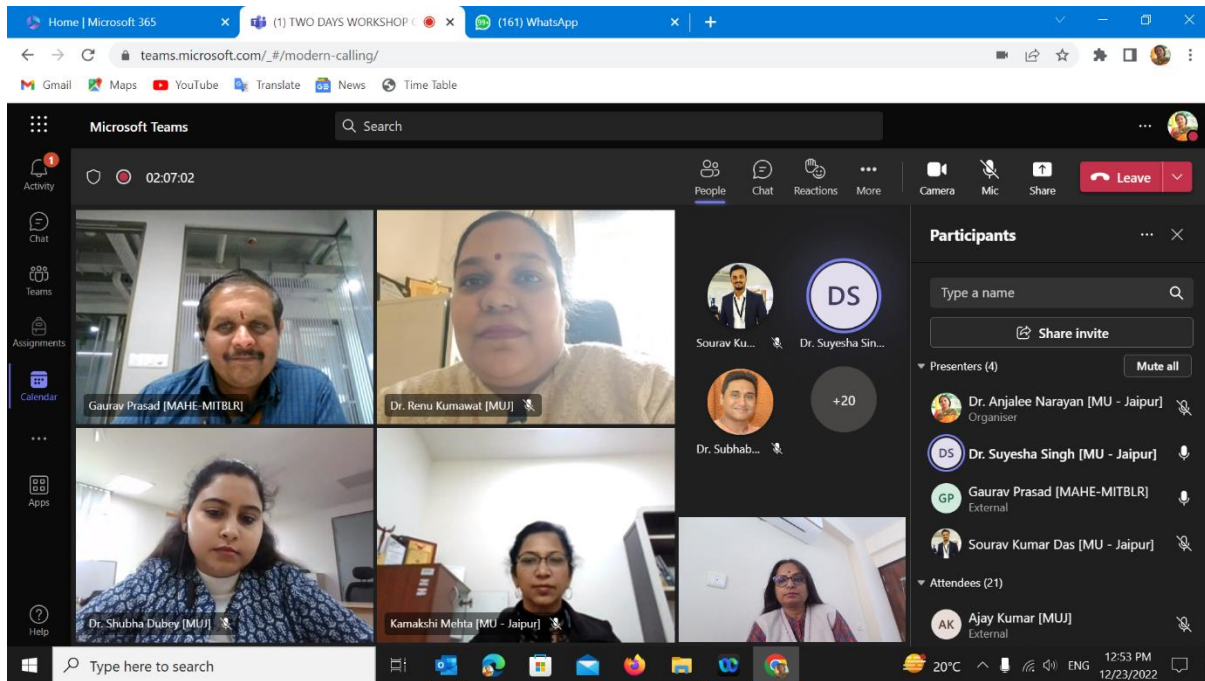
The slide shows a table with columns for Course Code, PO1 through PO14, and PO15 through PO18. The table is partially filled with data, and a yellow highlight is visible on the PO15-PO18 columns. The meeting interface shows participants: Sourav Kumar Das, Dr. Renu K..., Gaurav Prasad, and Ajay Kumar [MUJ].

Picture 5: Mr. Gaurav Prasad demonstrating CO-PO Mapping in the OBE matrix

Dr. Anjalee Narayan

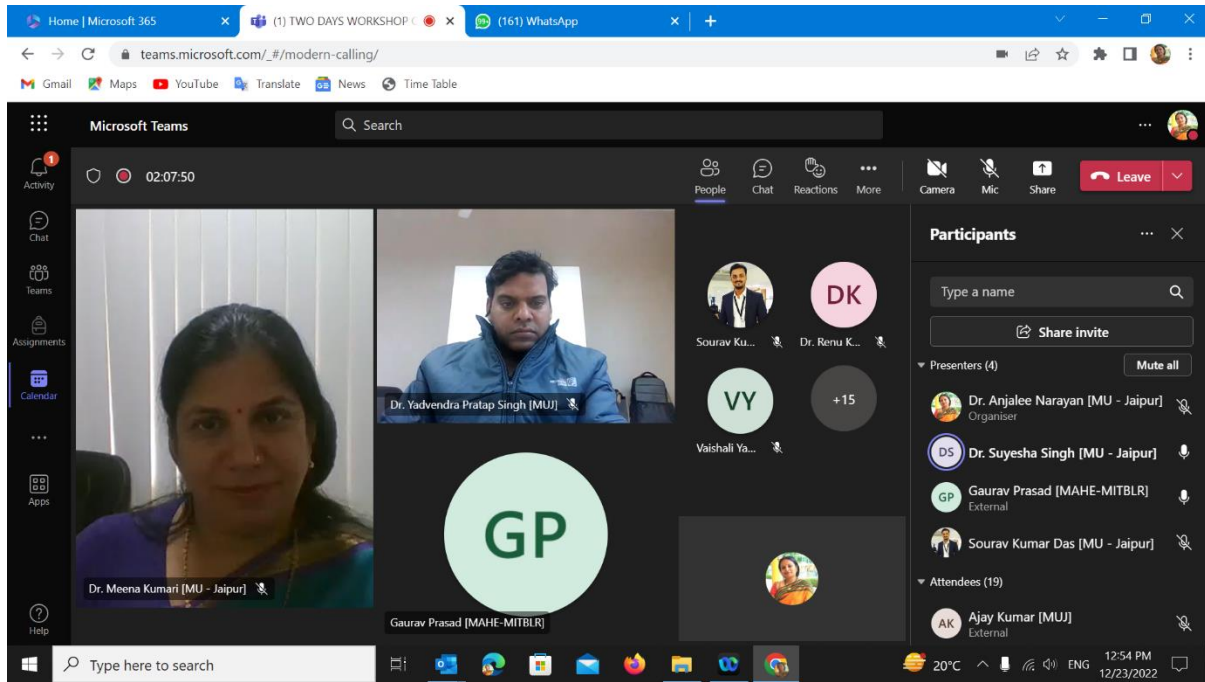


Picture 6: Mr. Gaurav Prasad explaining how to frame course outcomes



Picture 7: Group picture of Mr. Gaurav Prasad with participants

Dr. Shubha Dubey



Picture 8: Mr. Gaurav Prasad answering the queries of the participants

List of attendees:

Employee Name	Employee code
Rochak Swami	MUJ1392
Dr. Bhavna Tripathi	MUJ0796
Girish Sharma	MUJ1394
Dr. Anantkumar Dada Ozarkar	MUJ0160
Dr. Umesh Solanki	MUJ0686
Nidhi Kundu	MUJ1393
Dr. Yadvendra Pratap Singh	MUJ1417
Babita Tiwari	MUJ1447
Dr. Purvi Pareek	MUJ1093
Dr Renu Kumawat	MUJ0384
Dr. Avnish Vijay	MUJ1359
Dr. Anees Ahmed Yunus Khan	MUJ0860
Vivek Sharma [MU - Jaipur]	MUJ1090
Prashant Hemrajani [MU - Jaipur]	MUJ1039

Dr. Anjalee Narayan



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Jitendra Singh Yadav [MU - Jaipur]	MUJ1089
Dr. Dinesh Kumar Saini [MU - Jaipur]	MUJ1103
Dr. Usha Choudhary [MUJ]	MUJ1386
Dr. Ankur Kumar Jain [MU - Jaipur]	MUJ1471
Dr. Geeta Rani [MU - Jaipur] (Guest)	MUJ0968
Neha Janu [MUJ]	MUJ1462
Dr. Sourabh Singh Verma [MUJ]	MUJ1065
Dr. Deepak Panwar [MUJ]	MUJ1158
Vijay Shankar Sharma [MUJ]	MUJ1169
Dr. Praveen Kumar Shukla [MUJ]	MUJ1405
Deepjyoti Choudhury (Guest)	MUJ1443
Dr. Abhay Sharma [MU - Jaipur]	MUJ1361
Dr. Dasari Nagaraju [MU - Jaipur]	MUJ0040
Dr. Rishav Dubey [MU - Jaipur]	MUJ1388
Lav Upadhyay [MU - Jaipur]	MUJ1431
Sunil Kumar Patel [MU - Jaipur]	MUJ1430
Dr. Pratistha Mathur [MU - Jaipur]	MUJ0706
Mr. Dharmesh Yadav [MUJ]	MUJ0498
Dr. Ghanshyam Raghuwanshi [MUJ]	MUJ0961
Lal Pratap Verma [MU - Jaipur]	MUJ1163
Dr. Ashu Yadav [MUJ]	MUJ0358
Monu Bhagat (Guest)	MUJ1427
Jay Prakash Singh [MU - Jaipur]	MUJ1452
Vivek Kumar [MUJ]	MUJ1433
Dr. Md Parwez Akhtar [MUJ]	MUJ0878
Mredu Goyal [MUJ - DOE]	MUJ1216
Himanshu Priyadarshi [MU - Jaipur]	MUJ0291
Dr. Priya Soni [MUJ]	MUJ1465
Dr. Umesh Solanki [MU - Jaipur]	MUJ0686
Anil Kumar [MU - Jaipur]	MUJ1183
Dr. Subhabaha Pal [MUJ]	MUJ1079
Kavita Jhaharia [MU - Jaipur]	MUJ0724
Dr. Jagriti Singh [MU - Jaipur]	MUJ1411
Dr. Harsh Pandey [MU - Jaipur]	MUJ0895
Dr. Gaurav Sancheti [MU - Jaipur]	MUJ0572
Dr. Manisha Sharma [MU - Jaipur]	MUJ0538
Dr. Sumit Taneja [MU - Jaipur]	MUJ0954
Deepak Panwar [MU - Jaipur]	MUJ1158
Dr. Amit Chaurasia [MU - Jaipur]	MUJ1156

B. Sharma



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Kuntal Gaur [MU - Jaipur]	MUJ0259
Dr. Subhabaha Pal [MU - Jaipur]	MUJ1079
Rajesh Kumar [MUJ]	MUJ1437
Dr. Rakesh Premi [MU - Jaipur]	MUJCON065
Dr. Shubha Dubey [MUJ]	MUJ1463
Kamakshi Mehta [MU - Jaipur]	MUJ1476
Dr. C. Anirvinna [MUJ] (Guest)	MUJ0195
Dr. Sankersan Sarkar [MU - Jaipur]	MUJ0749
Dr. Umesh Solanki [MU - Jaipur] (Guest)	MUJ0686
Sagar Gupta [MU - Jaipur]	MUJ0495
Dr. Tej Bahadur [MUJ]	MUJ0575
Dr. Meena Kumari [MU - Jaipur]	MUJ0446
Dr. Md. Parwez Akhtar [MU - Jaipur]	MUJ0878
Dr. Aanyaa Chaudhary [MU - Jaipur]	MUJ0590
Nandana Chakinala [MU - Jaipur]	MUJ0689
Deepjyoti Choudhury [MUJ]	MUJ1443
Dr. Usha Choudhary [MU - Jaipur]	MUJ1386
Dr. Renu Kumawat [MUJ]	MUJ0384
Nidhi Kundu [MUJ]	MUJ1393
Dr. Harshavardhana BG [MUJ]	MUJ0480
Anubhav Shivhare [MUJ]	MUJ1446
Ashok Kumar Saini [MUJ]	MUJ1451
Sanchit Anand [MU - Jaipur]	MUJ0506
Dr. Anand Gupta Chakinala [MU - Jaipur]	MUJ0568
Shishir Singh Chauhan [MUJ]	MUJ1421
Dr. Yadvendra Pratap Singh [MUJ]	MUJ1417

Link of the event on the MUJ website:

<https://jaipur.manipal.edu/muj/academics/teacher-empowerment-centre.html>

Feedback:

Dr. Shalini

Feedback Form for the FDP-OBE (22nd to 23rd Dec-2022)

10

Responses

01:00

Average time to complete

Closed

Status

1. Name

10

Responses

2. Emp ID

10
Responses

Latest Responses

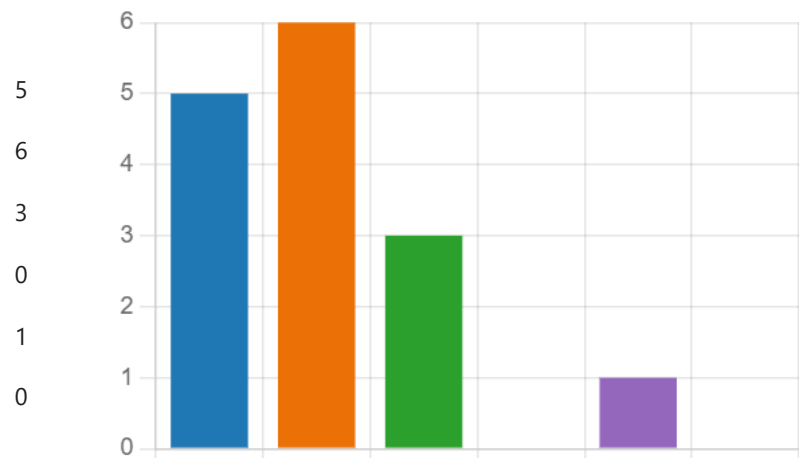
"MUJ0257"

"MUJ0512"

"MUJ0695"

3. Resource person's Teaching Methodology:

- Excellent
- Very Good
- Good
- Average
- Poor
- Very poor



4. Resource person's depth of understanding of Topic:

● Excellent	3
● Very Good	8
● Good	3
● Average	0
● Poor	1



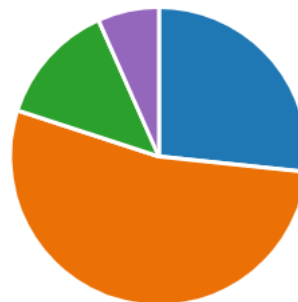
5. Topics were as per expectation:

● Excellent	3
● Very Good	5
● Good	6
● Average	0
● Poor	1



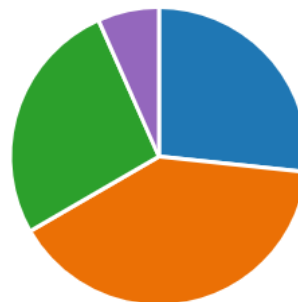
6. Program fulfilled the theme of the FDP:

● Excellent	4
● Very Good	8
● Good	2
● Average	0
● Poor	1



7. Overall Program Rating

● Excellent	4
● Very Good	6
● Good	4
● Average	0
● Poor	1



8. Overall Remarks

10
Responses

Latest Responses

"It was informative "

"Good and helpful"

B. Schaefer