

**A Report on**  
**One Week STTP**  
**RECENT RESEARCH TRENDS IN TRANSPORTATION AND GEOTECHNICAL**  
**ENGINEERING**

(5<sup>TH</sup> DEC. 2016 – 10<sup>TH</sup> DEC. 2016)



The banner features the Marwadi University and Marwadi Education Foundation logos at the top left. It states the event is organized by the Civil Engineering Department. The main title is '1 WEEK SHORT TERM TRAINING PROGRAM (STTP) RECENT RESEARCH TRENDS IN TRANSPORTATION & GEOTECHNICAL ENGINEERING 'RRTTGE' -16'. The dates are '5<sup>th</sup>-10<sup>th</sup> DECEMBER '16'. The background shows silhouettes of construction equipment and buildings.

Supported by 	In Association With 	COORDINATORS <b>DR. SIDDHARTH G. SHAH</b> <b>PROF. MS. BHAVANA K. AJUDIYA</b>	VENUE <b>Room MC-501 &amp; MB-101, B-Wing,</b> <b>Engineering Main building</b>
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**Report Prepared By Coordinators of the STTP:**

Dr. Siddharth G. Shah, Professor & Head FOPG, MEFGI  
Prof. Bhavana K. Ajudiya, Assistant Professor, MEFGI

## **STTP - “RECENT RESEARCH TRENDS IN TRANSPORTATION AND GEOTECHNICAL ENGINEERING”**

### **ABOUT MEFGI & MARWADI UNIVERISTY**

The Technical Campus at Gauridad is the first of its kind Integrated Campus that is offering Professional technical education under the umbrella of MEFGI in the state of Gujarat at Rajkot. It is affiliated to Gujarat Technical University, approved by AICTE and is presently offering graduate and post-graduate courses in various disciples of Engineering, Computer Applications (MCA) and Management (MBA + PGDM). In the year 2015 Govt. of Gujarat approved Private University status to MEFGI and now few new courses like B Sc, M Sc, Architecture and Research programs are offered in Marwadi University.

Marwadi University is a State of Art campus with an excellent Infrastructure spreaded in 3 Acres of lush green land. Campus has more than 500 faculties and 7000 students intake in various disciplines.

### **ABOUT CIVIL ENGINEERING DEPARTMENT**

Civil Engineering Department is the one of the active departments of MEFGI and is imparting quality education since 2008. The department has well qualified and experienced faculties with excellent laboratories and offering research and consultancy services. The Department runs an under graduate programme and two post graduate programmes (M.E – Structures and Transportation). The Department has ACI-India student chapter and is a member of Hydrological Data Usage Group of Government of Gujarat.

### **ABOUT STTP**

The one week long STTP presents the recent researches in the field of transportation and geotechnical engineering. It also discusses the current issues related to the same.

### **OBJECTIVES OF THE PROGRAMME**

Transportation engineering applies scientific and technical knowledge to provide economical and efficient transportation service that meets societal needs while maintaining compatibility with environmental, energy and safety goals. Geotechnical engineering is concerned with

investigation of subsurface conditions and materials; assessing the risks posed by site conditions; designing of earthworks and structure foundations for the construction occurring on the surface or within the ground. The primary goal of this short term course is to provide the participants with an in-depth understanding on recent trends in the area of **Transportation and Geotechnical Engineering**.

### **ABOUT PARTICIPANTS**

There were total 37 participants who constituted of 27 in-house Civil Engineering MEFGI Faculties, PG students and 10 participants outside of MEFGI Faculties & PG students.

### **COURSE CONTENTS**

- ❖ Urban Transportation Planning
- ❖ Traffic Flow Analysis & Control
- ❖ Pavement Evaluation & Management
- ❖ Ground Improvement Techniques
- ❖ Geotechnical Investigation and Testing
- ❖ Soil Dynamics and Earthquake Engineering
- ❖ Reinforced Earth and Geosynthetics

### **EMINENT SPEAKERS**

- ✚ Dr. L. B. Zala, BVM, VV Nagar
- ✚ Dr. G. J. Joshi, SVNIT, Surat
- ✚ Dr. Amit J. Solanki, SVNIT, Surat
- ✚ Dr. Yogesh U. Shah, IITRAM, Ahmedabad
- ✚ Dr. H. R. Varia, TEC, Modasa
- ✚ Dr. P. J. Gundaliya, LDCE, Ahmedabad
- ✚ Dr. D. L. Shah, MSU, Vadodara
- ✚ Dr. A. K. Verma, BVM, VV Nagar
- ✚ Dr. Siddharth G. Shah, MEFGI, Rajkot

<b>SCHEDULE OF THE STTP RRTTGE-16</b>						
<b>Date Time</b>	<b>5/12/16 (Monday)</b>	<b>6/12/16 (Tuesday)</b>	<b>7/12/16 (Wednesday)</b>	<b>8/12/16 (Thursday)</b>	<b>9/12/16 (Friday)</b>	<b>10/12/16 (Saturday)</b>
9:00 – 9:30	Inauguration & High-tea	Tea/Breakfast				
9:30 - 11:00	<b>Dr. A. K. Verma</b> Professor & Head BVM- Vallabh Vidhyanagar	<b>Dr. D. L. Shah-</b> Professor & Head MS University- Vadodara	<b>Dr. P. J. Gundaliya -</b> Associate Professor, LDEC-Ahmadabad	<b>Dr. Siddharth G. Shah</b> Professor & Head MEFGI-FOPG, Rajkot	<b>Prof. Amit Solanki</b> Associate Professor SVNIT- Surat	<b>Dr. Yogesh U. Shah-</b> Assistant Professor IITRAM- Ahmadabad
11:00 – 11:15	Tea break					
11:15 - 12:30	<b>Dr. A. K. Verma –</b> Professor & Head BVM- Vallabh Vidhyanagar	<b>Dr. D. L. Shah-</b> Professor & Head MS University- Vadodara	<b>Dr. P. J. Gundaliya –</b> Associate Professor, LDEC- Ahmadabad	<b>Dr. Siddharth G. Shah</b> Professor & Head MEFGI-FOPG, Rajkot	<b>Dr. Lalit S. Thakur</b> Associate Professor & Head BIT-Vadodara	<b>Dr. Yogesh U. Shah</b> Assistant Professor IITRAM- Ahmadabad
12:30 – 1:30	Lunch break					
1:30 - 2:45	<b>Dr. L. B. Zala</b> Professor & Head BVM-Vallabh Vidhyanagar	<b>Dr. H. R. Varia</b> – Principal and Professor ,TITSC-Modasa	<b>Dr. G.J.Joshi</b> Associate Professor SVNIT-Surat	<b>Dr. Kalpana Maheshwari</b> Professor & Head HJDITE&R-Kera	<b>Dr. Lalit S. Thakur</b> Associate Professor & Head BIT-Vadodara	<b>Exam Assessment Result declaration</b>
2:45 – 3:00	Tea Break					<b>Valedictory &amp; High Tea</b>
3:00 - 4:30	<b>Dr. L. B. Zala</b> Professor & Head BVM- Vallabh Vidhyanagar	<b>Dr. H. R. Varia</b> Principal and Professor ,TITSC-Modasa	<b>Dr. G.J.Joshi</b> Associate Professor SVNIT-Surat	<b>Dr. Kalpana Maheshwari</b> Professor & Head HJDITE&R-Kera	<b>Prof. Amit Solanki</b> Associate Professor SVNIT- Surat	

## INAUGURAL SESSION

The STTP was chaired by Chief Guest & Keynote Speaker Dr. A.K. Verma (Professor & Head of AMD -BVM college, VV Nagar), Dr. L.B.Zala (Guest of honor, Professor & Head of CED-BVM College, VV Nagar), Dr. Siddharth G. Shah (Head FoPG and STTP Coordinator) Prof. Ankur Bhogayata (Head FOE, Civil Engineering Department), Dr. Chirag Patel, Prof Tarak Vora. Prof. Bhavana Ajudiya (Assi. Prof., CED and STTP Co-ordinator) had played the role of Master of ceremony. All the faculty and student participants were also present during the inauguration of STTP. As per the Indian tradition, the STTP was inaugurated with prayer and Lighting of the lamp. Prof. Bhavana Ajudiya, STTP Coordinator had welcomed all. She had given introduction of all Dignitaries on the dais and invited guests. Prof. Ankur Bhogayata, Head, FOE, CED, introduced all about the department and its activities. Dr. Siddharth Shah, Head FoPG, CED, had briefed all about the STTP and its importance. He explained various outcome of the program. He had given brief outline of program and requested to all participants to enrich their knowledge from this STTP by effective participation.

Dr. A.K. Verma, Chief Guest of inaugural function had shared his views for the program. He gave motivational & inspirational talk to our participants to deeply involve in research field of Geotechnical Engineering. He congratulated the Department for organizing such a program which indirectly benefits to society.

Dr. L.B.Zala, Guest of Honour and Expert, gave the inaugural address and gave best wishes to the Department for successful completion of the STTP. All the technical sessions were delivered then after as per the schedule by experts from relevant fields.

**FEW GLIMPSES OF INAUGURAL FUNCTION OF STTP ON 5<sup>TH</sup> DEC-2016 ARE GIVEN BELOW:**



Prayer: Saraswati Goddess



Inauguration of the STTP: Deep Pragatya



Master of Ceremony: Ms. Bhavana Ajudiy



Felicitaition of Dr. L.B.Zala by Prof Ankur.



Dr. A.K.Veram's Speech on Inauguration



Dr. L.B.Zala's Speech on Inauguration



## ABOUT THE EMINENT SPEAKERS AND THEIR EXPERT TALKS

**Dr. A. K. Verma** – Professor & Head, Structural Engineering Department, BVM, Vallabh Vidyanagar.

**Topic:** Application of Geosynthetic for stabilization of soil and Ground improvement by stone column



**Dr. L. B. Zala** - Professor & Head Civil Engineering Department. BVM, Vallabh Vidyanagar

**Topic:** Transportation System Challenges, Opportunities , Demand Forecasting, And Software Demonstration by TransCAD

**Dr. D. L. Shah** - Professor, Applied Mechanics Department, Faculty of Technology & Engineering. MSU, Vadodara

**Topic:** Expansive Soils- Identification, Detection and Remediation and Grouting Technology



**Dr. H. R. Varia** – Principal, TITS, Modasa

**Topic:** Shopping trip and commodity carrier vehicle trip generation analysis for the urban residential area and Trip matrix estimation from link volume count for the congested urban road network: A heuristic approach



**Dr. P. J. Gundaliya**, Associate Professor  
L. D. College of Engineering, Ahmadabad

**Topic:** Urban Mass Transit System Planning

**Dr. G. J. Joshi** – Associate Professor, Civil Engineering Department. & Dean Academic SVNIT, Surat.

**Topic:** (i) **Transit Oriented Development and its impact on road traffic and metro: case study of Mumbai MetroLine-1(VAG) Corridor**

(ii) **Efforts towards development of Indian Highway Capacity 7/11/2016 Manual.**







**Dr. Kalpana Maheswari**, Professor & Head  
HJD Institute of Tech.-Kera , Kutch  
**Topic:** Geotechnical Investigation & Fiber  
Reinforced Clayey soil.

**Dr. Siddharth G. Shah**, Professor & Head FOPG  
MEFGI, Rajkot

**Topic:** Nano Technology applications in  
Geotechnical Engineering and Soil Structure  
Interaction analysis methods



**Dr. Yogesh U. Shah**, Assistant Professor,  
IITRAM- Ahmadabad

**Topic:** Application of structural Equation  
Modeling in Pavement Maintenance

**Dr. Amit J. Solanki**, Associate Professor,  
SVNIT-Surat

**Topic:** Flexible Pavement Design with IRC  
code provisional discussion and Material  
Characterization.



**GLIMPSE OF THE VARIOUS EXPERT LECTURES:**



Dr. A.K. Verma



Dr. L.B. Zala



Dr. H.R. Varia



Dr. D.L. Shah



Dr. G.J. Joshi



Dr. P.J. Gundaliya



Dr. Siddharth Shah



Dr. Kalpan Maheshwari



Prof. Amit Solanki

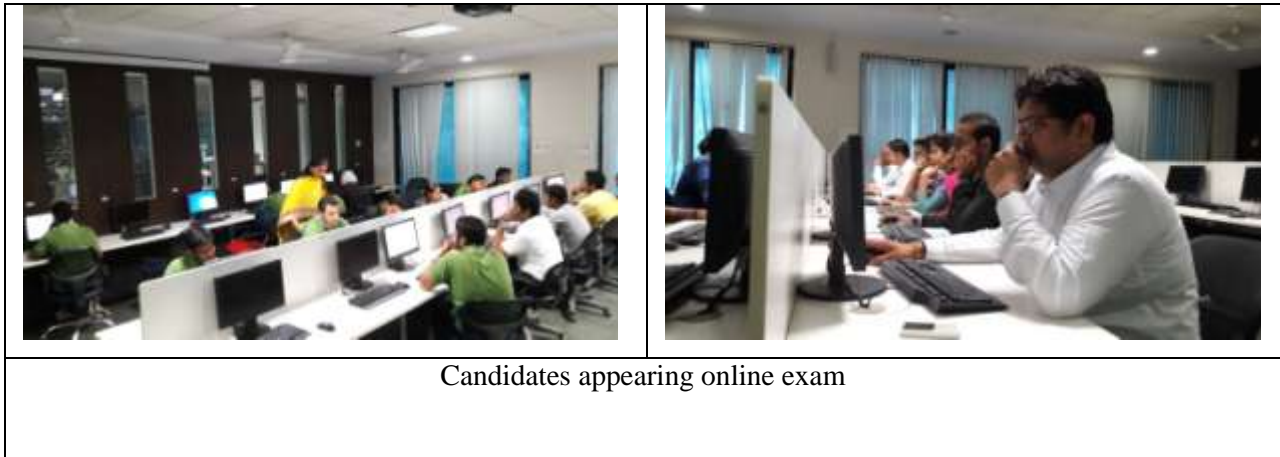


Dr. Yogesh .Shah

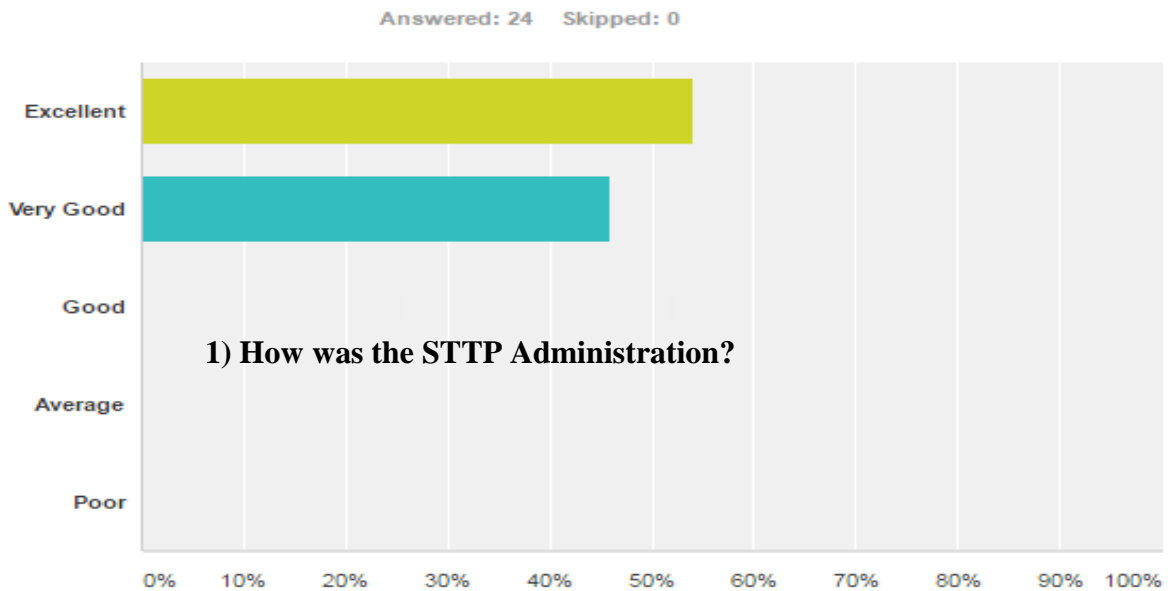
**SPECIALITY OF THIS STTP:**

At the end of session online assessment test were conducted based on one week STTP course. There were passed students awarded with certificates during valedictory function.

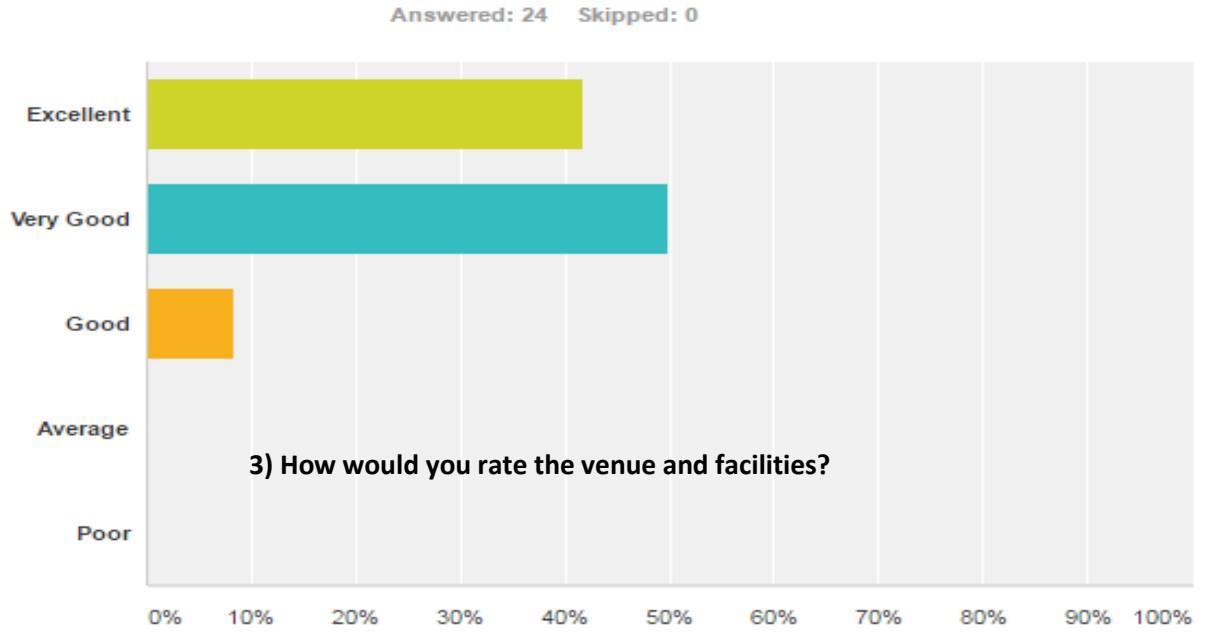
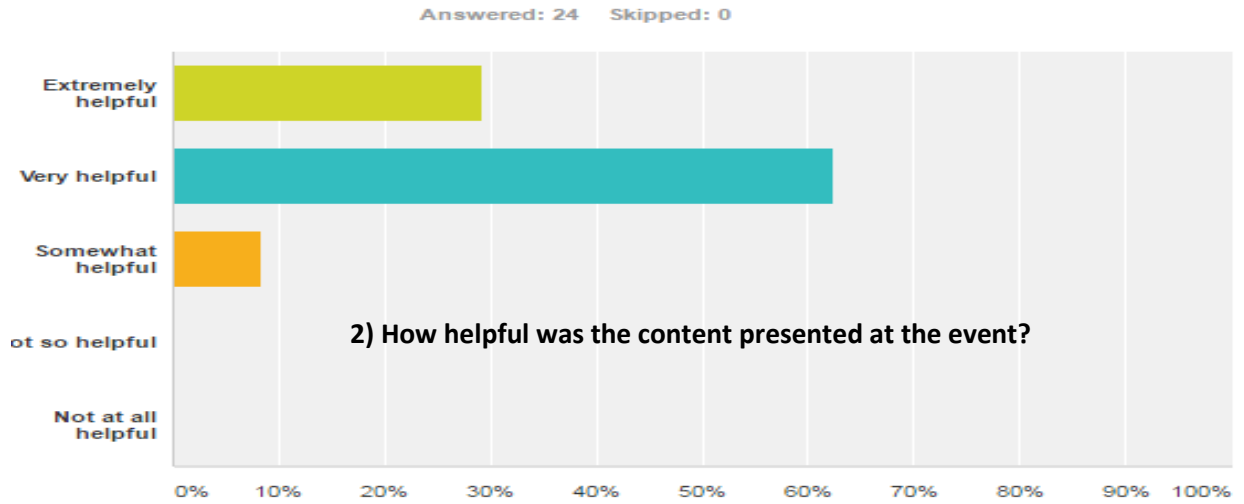
**GLIMPSE OF THE ONLINE ASSESMENT TEST:**

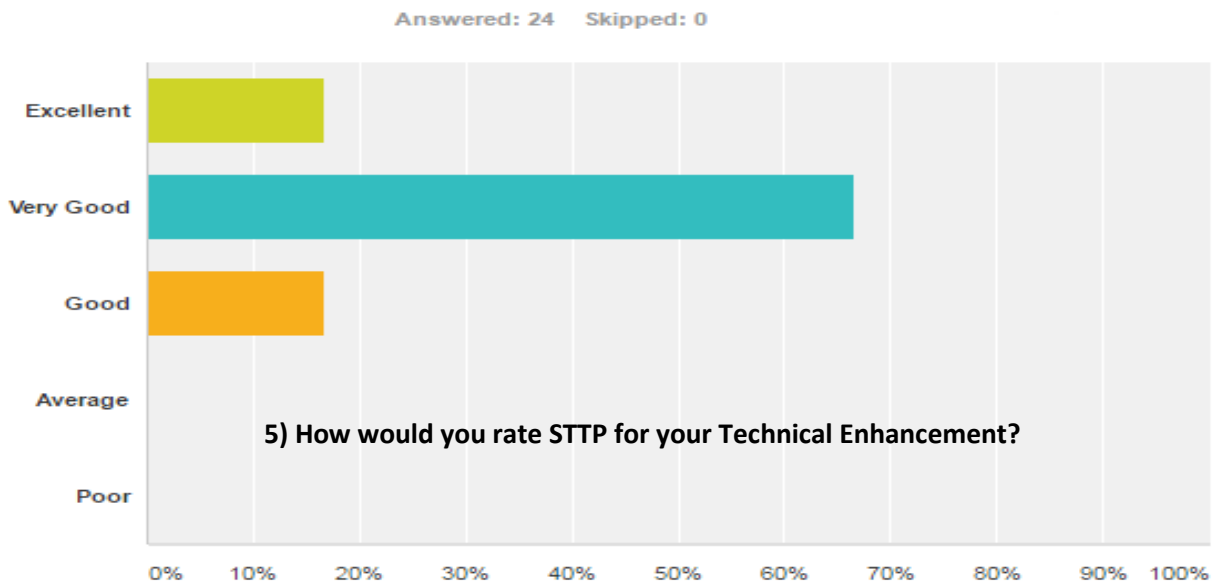
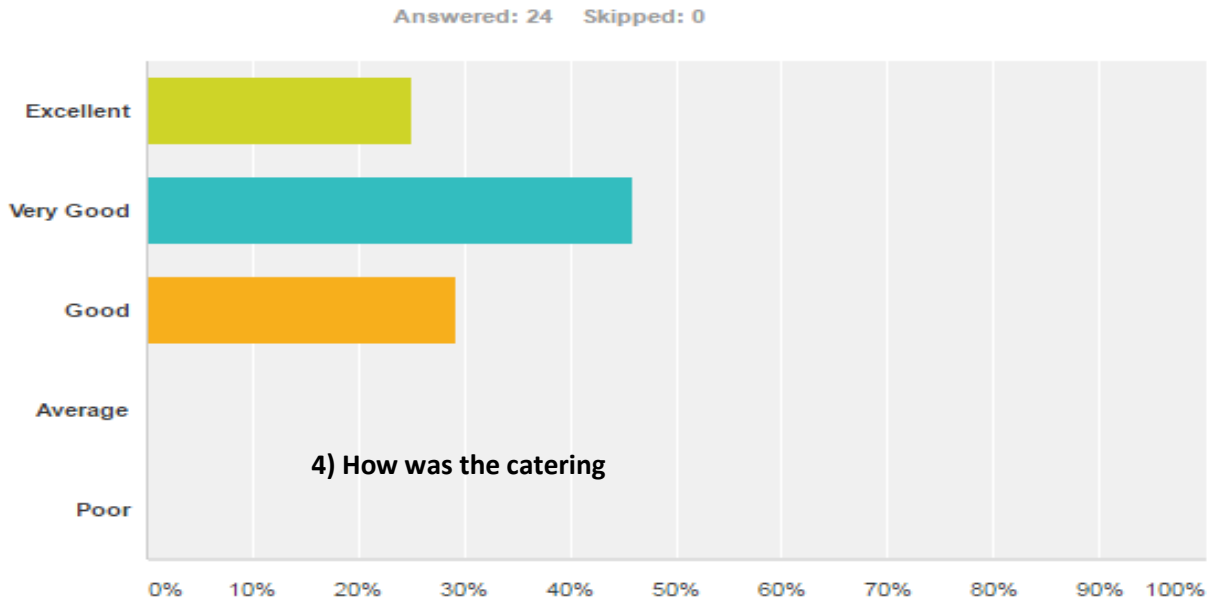


**FEED BACK BY PARTICIPANTS:** Total Five questions were asked to all the participants through online feedback tool survey monkey, the survey was carried out and the graphical presentation is as following:









Most of participant rated the STTP very good /excellent as a whole. As per their Feedback course contents, facilities and food were excellent. They also cited the need for arranging software related training programme and field visits in future.



### **VALEDICTORY SESSION:**

The STTP was concluded with valedictory function on 10<sup>th</sup> Dec.,2016. In the Valedictory function, two Experts of the day, Dr. Yogesh Shah from IITRAM – Ahmadabad and Prof. Amit Solanki from SVNIT, Surat ,Dr. Sarang Pande , Dean of FOPG-MEFGI and the three heads of the civil engineering department Dr. S. G. Shah, Prof. Tarak Vora and Prof. Ankur Bhogayata were remain present. The highlights of the STTP were given by Dr. Siddharth Shah and Prof. Bhavana Ajudiya, STTP Coordinators. The valedictory speech was given by Dr. Sarang Pande and he congratulated the coordinators and The Civil engg dept for conducting third consecutive STTP, he also appreciated the STTP theme, and its innovation of conducting the exam. He also made one suggestion to incorporate practical testing training pertaining to the subject area. All the participants were distributed with the certificates on successful passed online assessment test based on course of one-week STTP by dignitaries on the Dias.

The Vote of thanks was given by Dr. Siddharth shah, STTP Coordinator. He highlighted the immense contribution of the various sponsors and organizers and special thanks to the Chairman- Shri Ketanbhai Marwadi sir, Vice-Chairman- Shri Jitubhai Chandarana Sir, The Director- Dr. Y. P. Kosta and The Dean- Dr. R. B. Jadedja sir of MEFGI Campus for their constant support for the STTP. He also showed his gratitude towards Dr. R.L.Zala , Registrar Naresh Jadeja and Dr. Sarang Pande sir for mentoring the event.

He also thanked his Team RRTTGE-16, Ms. Jyoti Mandhani for registration , Prof. Mandeep sinh Walia for catering, Prof. Ravindra Solanki for accounts and transportation and Prof. Jay Pandya for photography.

He heartily thanked all the speakers who took pain to travel from their places to MEFGI campus and spared their valuable time for the institute. He also thanked all the participants who made this event a grand success by participating whole heartedly and appearing in the exam.

The valedictory session ended with the national anthem and Group Photo session of dignitaries and all participants.

## GLIMPSES OF VALEDICTORY FUNCTION



Short film of all photoes of the STTP



Valedictory function member on the dias



Dr. Sarang Pande sir's speech



Certificate Distribution, by Dr. S. S. Pande



Certificate Distribution, by Prof. Amit Solanki



Certificate Distribution, by Prof. Ankur Bhogayata



Certificate Distribution, by Dr. Yogesh Shah



Certificate Distribution, by Prof. Tarak Vora



Certificate Distribution, by Dr. Siddharth Shah



Ms. Bhavana , Dr. Siddharth & Dr. Yogesh

### GROUP PHOTO OF PARTICIPANTS AT RRTTGE-2016



**Thank you.**

**COORDINATORS:**

Dr. Siddharth G. Shah & Ms. Bhavana Ajudiya.