

Date: 17/08/2018

## NOTICE

All the students of Mechanical Engineering are hereby informed that Department of Mechanical Engineering has organizing five days Add on Program on “Advances in Refrigeration and Air Conditioning”, in association with MESA and IQAC from 25<sup>th</sup> to 29<sup>th</sup> August 2018, 10:00 am. to 5.00 pm.

Students who are interested, requested to register for workshop. Last day of Registration is 24<sup>th</sup> August 2018.

For Registration contact to Prof. D. B. Uphade.



Prof. D. B. Uphade  
Activity coordinator



Prof. T. Y. Badgujar  
HoD, Mechanical



Prof. Dr. S. B. Bagal

Principal  
Prof.(Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.



## Department of Mechanical Engineering

### Program Module and Outcome

#### 30 Hrs. Certificate Course/Add-on Course on "Advances in Refrigeration and Air Conditioning"

Sr. No.	Module	Syllabus
1	Module 1	Analysis of refrigeration cycle, principles of psychometric properties and processes
2	Module 2	Thermodynamic Properties of pure and mixed refrigerants. Eco-friendly Refrigerants, vapour absorption cycle and its components.
3	Module 3	Analysis and thermal design of Refrigeration compressor, condenser, evaporator and flow control devices

Sr. No.	Module	Outcome
1	Module 1	1. Students acquired an overview of various common refrigeration systems
2	Module 2	2. Students estimate the refrigeration load & design the system components.
3	Module 3	3. Students able to understand simple refrigeration system



Prof. D. B. Uphade  
Activity Coordinator



Prof. T. Y. Badgujar  
HoD, Mechanical



Prof. (Dr.) S. B. Bagal

Principal

**Prof.(Dr.) Sahebrao B. Bagal**  
Principal

Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.





Kalyani Charitable Trust's  
**Late G. N. Sapkal College of Engineering**

Kalyani Hills, Anjaneri, Trimbakeswar Road, Nashik-422 213 INDIA

Tel: +91 2594 220 168/71; Fax: +91 2594 220 174

Web: www.sapkalknowledgehub.org E-mail: gns\_engineering@sapkalknowledgehub.com



**DEPARTMENT OF MECHANICAL ENGINEERING**

Date: 25/09/2018

Title of the Workshop: Five Days Workshop on  
 'Advances In Refrigeration and Air-Conditioning'

Number of Day: 05 day Date of Conduction: 25<sup>th</sup> to 29<sup>th</sup> August 2018

Venue: Seminar Hall, Refrigeration and Air Conditioning Laboratory,  
 Class Room, Mech. Engg. Dept, LGNSCoE, Nashik  
 Narang Cold Storage, Plot B-51, Estate Satpur, Nashik

Number of Participants: 69 Students

**Description of the Program:**

Five day workshop on 'Advances in Refrigeration and Air-Conditioning' was conducted during 25-29<sup>th</sup> Aug 2018 in department of Mechanical Engineering in association with ISHRAE Nashik Chapter. This workshop covered the fundamentals of refrigeration and air-conditioning and recent trends in HVAC industry. This workshop enabled the participants to understand the significance of plotting cycle on p-h chart and psychrometric processes. This workshop majorly focused on recent techniques of refrigeration and air-conditioning. Field visit was organized to understand the application of refrigeration in cold storage.



*Prof. (Dr.) Sahebrao B. Bagal*  
 Prof.(Dr.) Sahebrao B. Bagal  
 Principal  
 Late G. N. Sapkal College of Engineering  
 Anjaneri, Nashik-422 213.

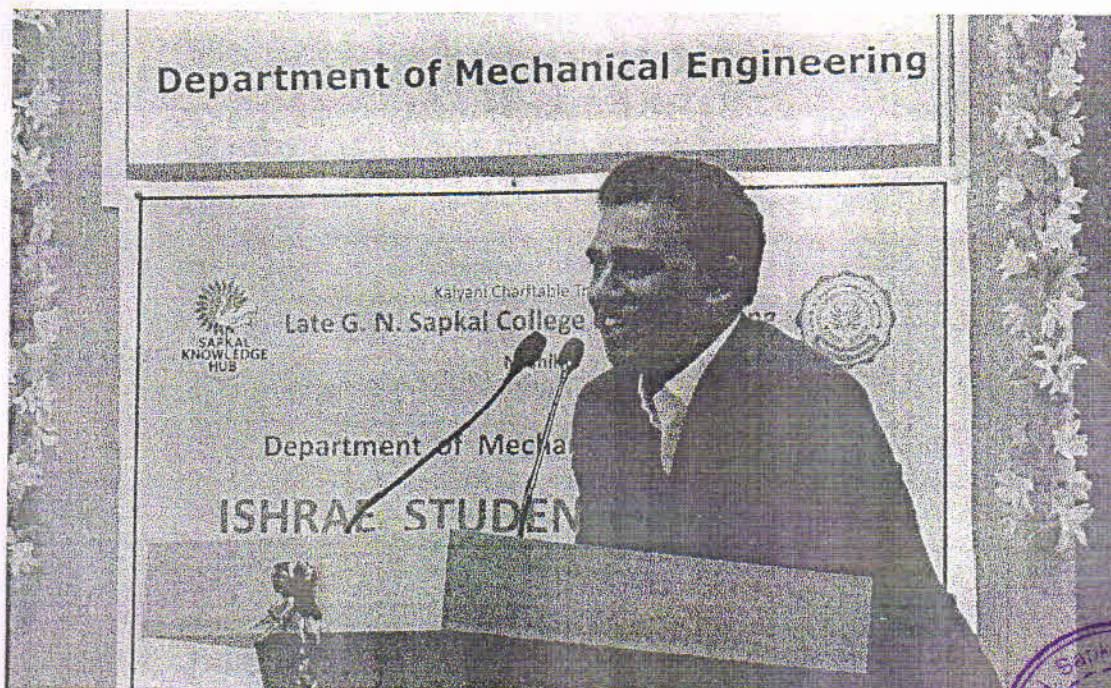
*Prof. (Dr.) Sahebrao B. Bagal*  
 Prof.(Dr.) Sahebrao B. Bagal  
 Principal

Photos:



**Inauguration of Five Days Workshop on 'Advances in Refrigeration and Air-Conditioning'**

Prof D B Uphade, Prof T Y Badgujar, Dr S B Bagal, Prof P D Jadhav and Prof P S Talmale (L-R)



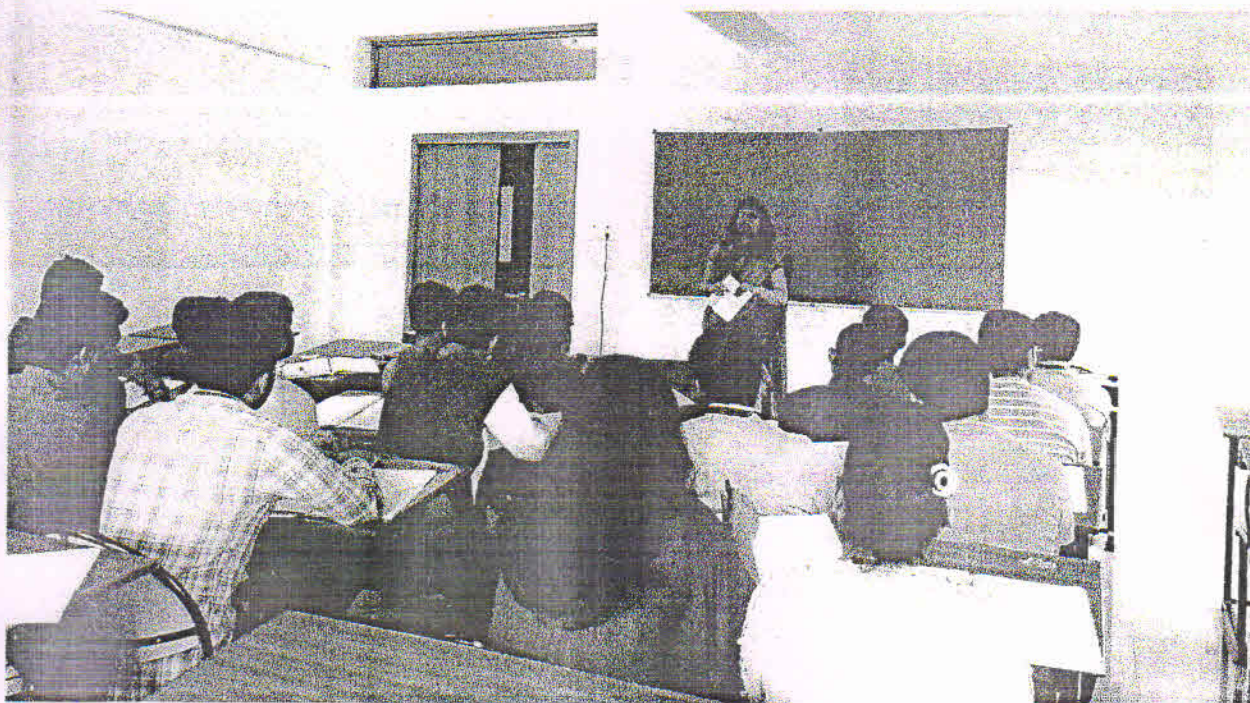
**Speech by Dr. S. B. Bagal, Principal, LGNSCOE, Nashik**



*[Handwritten signature]*

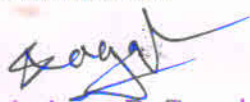


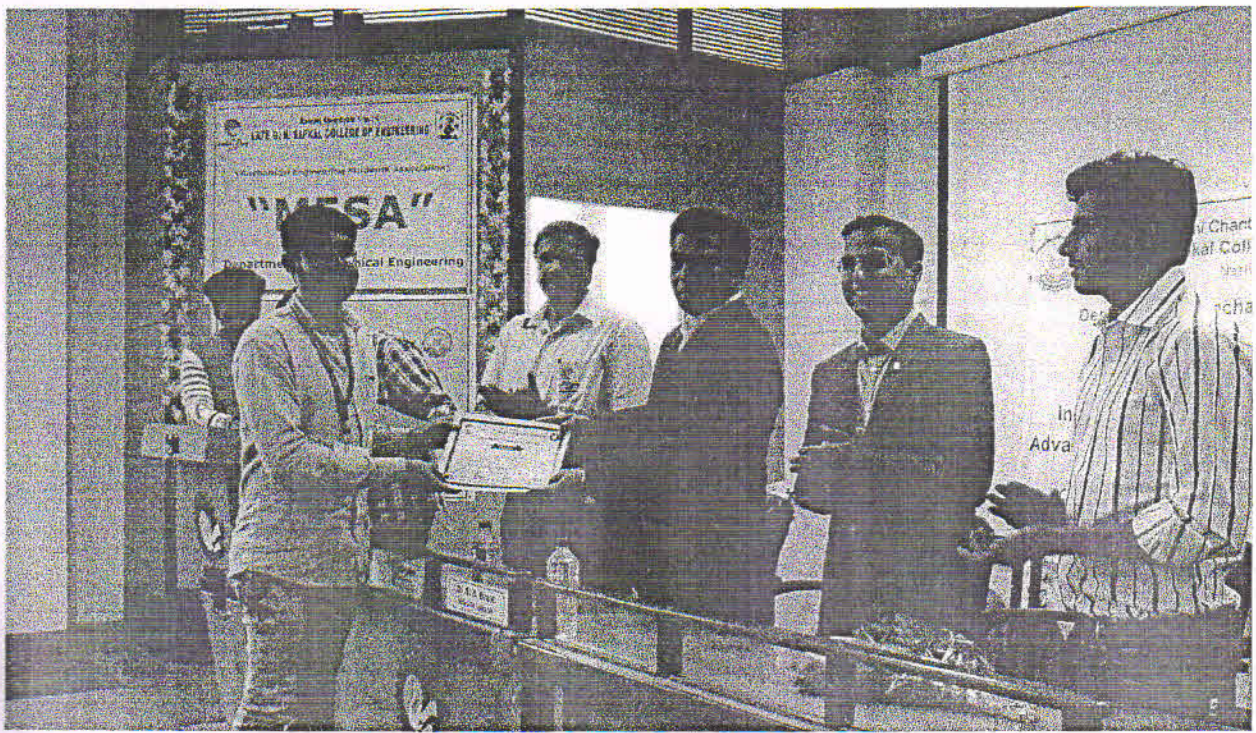
**Prof. Y. D. Tambe while Delivering Talk**



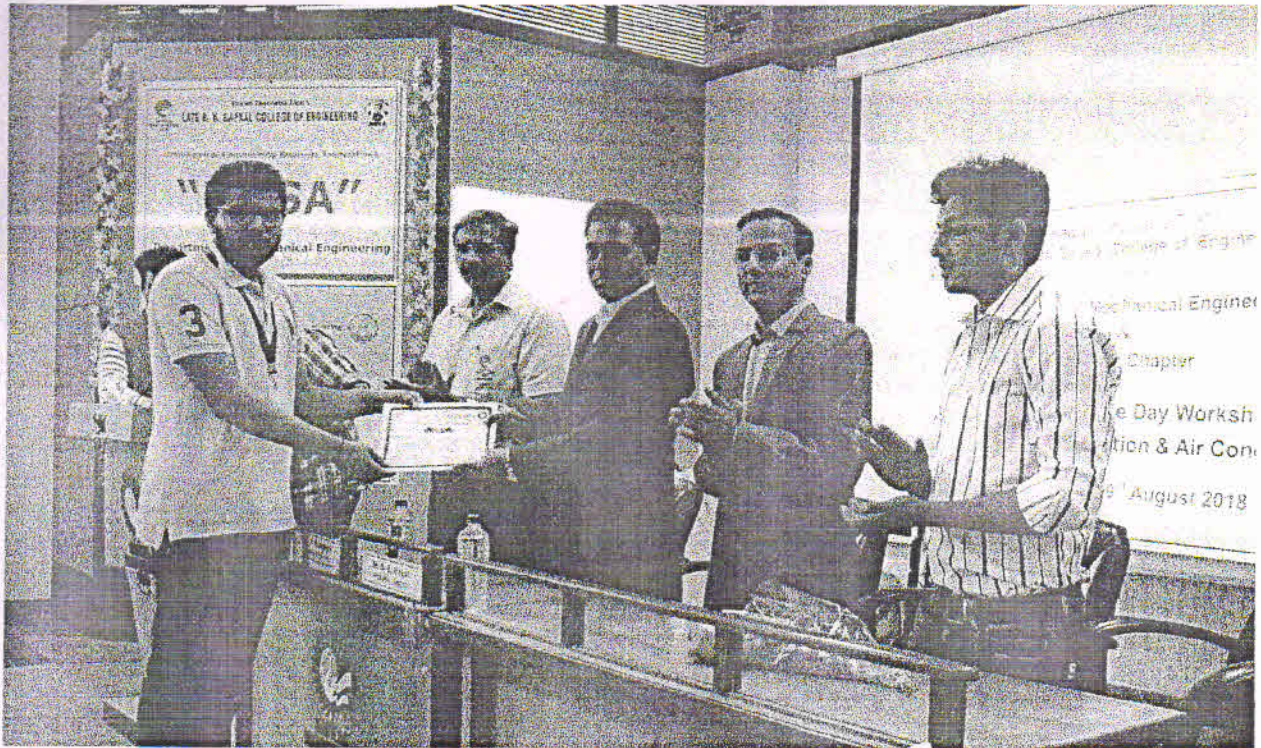
**Prof. P. S. Talmale while Delivering Talk**



  
**Prof. (Dr.) Sahebrao B. Bagal**  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.



Certificate Distribution in Valedataory Session



Certificate Distribution in Valedataory Session

*[Signature]*  
**Prof. D. B. Uphade**  
 Coordinator

*[Signature]*  
**Prof. P. D. Jadhav**  
 Co-coordinator

*[Signature]*  
**Prof. T. Y. Badgujar**  
 Head, Mech. Engg

*[Signature]*  
**Prof. Dr. S. B. Bagal**  
 Principal

Compiled by Dr D B Uphade on 25/09/2018 at LGNSCOEN as a part of FDW\_ARAC Coordinator  
 Saved as G:\14 LGNSCOE\14 LGNSCOE\20180610\ISHRAE\5 day Workshop\_20180825-29+DBU-LGNSCOE, MESA&ISHRAE+5 day Workshop\_ARAC-Event Report docx 1.10.2018

*[Signature]*  
**Prof.(Dr.) Sahebrao B. Baga.**  
 Principal  
 Late G. N. Sapkal College of Engineering  
 Anjaneri, Nashik-422 213.





Kalyani Charitable Trust's

# Late G. N. Sapkal College of Engineering

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## DEPARTMENT OF MECHANICAL ENGINEERING

in association with ISHRAE Nashik Chapter

Date: 20/08/2018

### Schedule of Advances in Refrigeration and Air-Conditioning 25<sup>th</sup> to 29<sup>th</sup> August 2018.

DAY	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Time	Saturday 25/08/2018	Sunday 26/08/2018	Monday 27/08/2018	Tuesday 28/08/2018	Wednesday 29/08/2018
9:40 to 10:30	Inauguration	Session 1 [DBU]	Session 1 [DBU]	Session 1 [DBU]	Session 1 [PST]
10:30 to 11:20	Session 1 [PDJ]		Session 2 [MSD]		Session 2 [DBU]
11:20 to 12:10			Recess		
12:10 to 12:50			Recess		
12:50 to 1:40	Session 2 [YDT]	Session 2 [YDT]	Session 3 [DBU]	Field Visit 1 [PDJ+YDT]	Session 3 [GSN]
1:40 to 2:30			Recess		
2:30 to 2:45			Recess		
2:45 to 3:35	Practical session 1 & 2 [YDT]	Practical session 1 & 2 [YDT+DBU]	Practical session 1 [YDT]	Field Visit 2 [PDJ+YDT]	Valedatory
3:35 to 4:25					

*Dr. P. B. Uphade*  
Workshop Coordinator



*P. P. D. Jadhav*  
Prof. P. D. Jadhav  
Workshop Co-coordinator

*T. Y. Badgajar*  
Prof. T. Y. Badgajar  
Head, Mech. Engg. Dept.

*S. B. Bagal*  
Prof. (Dr.) Sahebrao B. Bagal  
Principal

*S. B. Bagal*  
Prof. (Dr.) S. B. Bagal  
Principal

Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.

# Late G N Sapkal College of Engineering, Anjaneri, Trambhoor Road, Nashik

Department of Mechanical Engineering

Five Day Workshop on "Advances in Refrigeration and Air-Conditioning"

Organized by Department of Mechanical Engineering and MESA in association with ISHRAE Nashik Chapter

Date: 25/08/2018 to 29/08/2018

Attendance Sheet

S #	Name of Students	DAY-1 25/08/2018		DAY-2 26/08/2018		DAY-3 27/08/2018		DAY-4 28/08/2018		DAY-5 29/08/2018	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
1	Chaudhari kunal Gorakh	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
2	Kamble sumit panditrao	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
3	R V Sarvesh	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
4	Ajay Bhikan Jadhav	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
5	Avhad Nilesh Vitthal	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
6	Chandan Ketan Prabhakar	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
7	Honde Chetan Manik	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
8	Mahajan Sanket Vijay	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
9	Rahul ashok porje	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
10	Sant Viranjali Sumant	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
11	Mayur Mahipalsingh Pardeshi	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
12	Sonawane Suraj Eknath	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
13	Deshmukh Kishor Santosh	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
14	Jadhav Shubham Anil	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
15	Patil ketan vikram	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
16	Hemant ramesh gawari	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
17	Ugale Rohit S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
18	Lahamge Nikita B.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
19	Deore Rohan S.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
20	Walzade laxmikant shrikant	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
21	Bhadane Kaushal Ravindra	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
22	Patil Bhushan	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
23	Kulal Harshit Shankar	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present



Prof. (Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering

M.S.D.



# Late G N Sapkal College of Engineering, Anjaneri, Trambak Road, Nashik

Department of Mechanical Engineering

Five Day Workshop on "Advances in Refrigeration and Air-Conditioning"

Organized by Department of Mechanical Engineering and MESA in association with ISHRAE Nashik Chapter

Date: 25/08/2018 to 29/08/2018

Attendance Sheet

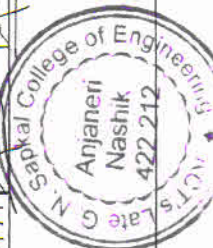
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		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
24	Kulkarni Mihir Milind	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
25	Patil bhashan sunil	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
26	Sagar Rajendra Sasale	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
27	Gupta Vijay K	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
28	Tapkire Roshan Kondaji	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
29	Daulkar Rohit suryakant	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
30	Lipne krishna manikrai	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
31	Patil Mrunal B	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
32	Shelke Abhijit K	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
33	Patil Sumit D.	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
34	Shinde Sankalp R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
35	Pravin Shelke P	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
36	Vetal yogesh pundlik	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
37	Dhondage Chetan Rajendra	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
38	Patil Harshal Satilal	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
39	Kuwar Sanket H	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
40	kuwar shubham sunil	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
41	Sasale Sagar Rajendra	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
42	Satish Sikandar Chandramore	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
43	Tadge Sayali	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
44	Ahire Sushil	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
45	Kumar Milind chandhari	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

Coordinator  
Dr. D B Uphade

Ce-coordinator  
Prof P D Jadhav

Principal  
Prof.(Dr.) Sahebrao B. Bagal

H.O.D, Mechanical Department  
Prof. T. V. Badajjar.



Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 212.

Late G N Sapkal College of Engineering, Anjaneri, Trimbak Road, Nashik

Department of Mechanical Engineering

Five Day Workshop on "Advances in Refrigeration and Air-conditioning"

Organized by Department of Mechanical Engineering and MESA in association with ISHRAE Nashik Chapter

Attendance sheet

Date: 25/08/2018 to 29/08/2018

S #	Name of Students	Day-1 25/08/2018		Day-1 25/08/2018		Day-1 25/08/2018		Day-1 25/08/2018	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
46	SONAWANE GAURAV UTTAM	Gaurav	Gaurav	Gaurav	Gaurav	Gaurav	Gaurav	Gaurav	Gaurav
47	YADAV SHUBHAM SANTOSH	YS	YS	YS	YS	YS	YS	YS	YS
48	KUWAR MADHURI BHATU	Md	Md	Md	Md	Md	Md	Md	Md
49	PATHAK GAURAV PADMAKAR	Pat	Pat	Pat	Pat	Pat	Pat	Pat	Pat
50	PATIL HARSHAL CHANDRAKANT	Har	Har	Har	Har	Har	Har	Har	Har
51	PAWAR SHASHIKANT VISHVANATH	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar
52	SANDHAN AMOL DATTATRAY	Amol	Amol	Amol	Amol	Amol	Amol	Amol	Amol
53	SONAWANE KETAN KISHOR	KS	KS	KS	KS	KS	KS	KS	KS
54	SONAWANE PRADNYA DAYANAND	PDS	PDS	PDS	PDS	PDS	PDS	PDS	PDS
55	CHAVHAN AMOL RAJENDRA	Amol	Amol	Amol	Amol	Amol	Amol	Amol	Amol
56	DEOSE SHAM CHINTAMAN	Sham	Sham	Sham	Sham	Sham	Sham	Sham	Sham
57	AHER TUSHAR DHANARAJ	Aher	Aher	Aher	Aher	Aher	Aher	Aher	Aher
58	DHANRAJ VASUDEO KISAN	VK	VK	VK	VK	VK	VK	VK	VK
59	GAMANE GOPAL SHIVAJI	Gopal	Gopal	Gopal	Gopal	Gopal	Gopal	Gopal	Gopal
60	GHARTE HARSHAL SURESH	HS	HS	HS	HS	HS	HS	HS	HS
61	GITE SHAKTI RAMBHAU	Shakti	Shakti	Shakti	Shakti	Shakti	Shakti	Shakti	Shakti
62	HASE ADINATH ANNASAHEB	Adi	Adi	Adi	Adi	Adi	Adi	Adi	Adi
63	HIRAY LOKESH VILAS	HL	HL	HL	HL	HL	HL	HL	HL
64	HIRE MAYUR SURESH	MH	MH	MH	MH	MH	MH	MH	MH
65	PATIL DURGESH CHAKRADHAR	Patil	Patil	Patil	Patil	Patil	Patil	Patil	Patil
66	RAI ANKIT RAJESH (RAKESH)	Rai	Rai	Rai	Rai	Rai	Rai	Rai	Rai
67	SURUDE SAURAV SHANTARAM	Surude	Surude	Surude	Surude	Surude	Surude	Surude	Surude
68	BHAVSAR PUSHKAR SHIRISH	Bhavsar	Bhavsar	Bhavsar	Bhavsar	Bhavsar	Bhavsar	Bhavsar	Bhavsar
69	CHAVAN ANKIT SANJAY	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan

  
**Dr. D B Uphade**  
 Coordinator



**Prof. (Dr.) Satebrao B. Bagal**  
 Principal  
 Late G N Sapkal College of Engineering  
 Anjaneri, Nashik-422 212

  
**Prof. T. Y. Sagar**  
 H.O.D. Mechanical Department



Kalyani Charitable Trust's

## LATE G. N. SAPKAL COLLEGE OF ENGINEERING

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E-mail : gns\_engineering@sapkalknowledgehub.org | www.sapkalknowledgehub.org



**Prof.(Dr.) Sahebrao B. Bagal**  
M.E. (Electronics), Ph.D. (E & TC)  
PRINCIPAL

**Affiliated to** : Savitribai Phule Pune University (ID. No. PU/NA/Engg./152/2009 Ref.No.-CA/6501 Dated-1/11/2009)  
**Approved By** : A.I.C.T.E., New Delhi (F.N: 06/07/MS-Engg/2008/O-17, Dated- 11<sup>th</sup> June 2009)  
Govt. of Maharashtra (No. GEC-2009/(67/09)/T.E.-4, Dated - 15<sup>th</sup> June 2009.  
D.T.E., M.S., Mumbai (No.2/NGC/Engg./Approval/2009/535, Dated - 23<sup>rd</sup> July 2009)

Ref. No.: KCT/LGNSCOE/Mech/2018-19/ **495(a)**

Date: 23/08/2018

To,

**Prof. M S Dukale.**

**K K Wagh Polytechnic.**

**Nashik.**

**Subject:** Invitation for the expert talk on "Fundamentals of Refrigeration and Air-Conditioning."

Dear Sir,

We would like to introduce our self as one of the emerging institute in Nashik District. We are affiliated to University of Pune and cater for five Bachelor's degrees in Engineering, viz. Bachelor in Civil Engineering, Computer Engineering, Electronics & Telecommunications, Electrical Engineering and Mechanical Engineering.

As a part of five days Workshop, the students of **B. E. Mechanical Engineering** are required to aware about various facets of Thermal Engineering and the different opportunities in the field of Refrigeration and Air- Conditioning for the carrier option.

Your expertise and experience in the field of Thermal Engineering will be an excellent addition to student's knowledge. As many participants will be benefited by listening to your talk, it is honour for us to invite you as a Speaker for the talk on the topic "**Fundamentals of Refrigeration and Air-Conditioning.**"

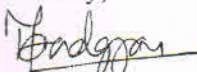
We have arranged your session on **26<sup>th</sup> August 2018 at 10:30am to 12:30 pm**. So, we request you to spare your valuable time and share your experience.

**Details of Coordinator** are as follows:


Name: Prof. R. R. Ahire (+919075090875) and Prof. P R Golekar (+919623984920)

Thanking you,

Yours truly,

  
**Prof. T. Y. Badgajar**  
HOD,  
Mechanical Engineering



  
**Prof. (Dr.) S. B. Bagal**  
Principal  
**Prof.(Dr.) Sahebrao B. Bagal**  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.

**CORPORATE OFFICE** : Sapkal Knowledge Hub, "Parag" 46, Ashwin Sector, Opp. Hotel Sai Palace, Mumbai - Agra Highway, Nashik - 422 009. Ph.: +91 - 253 - 2392450 / 51, Fax : +91 - 253 - 2375557. Website : www.sapkalknowledgehub.org

**MUMBAI OFFICE** : Sapkal knowledge Hub, Unit No. 22, 1st Floor, Shubhada Tower Shopping Center, Sir Pochkanwala Road, Near R.T.O. Office, Worli, Mumbai-400 030. Tel.: +91-22 - 24938914 / 24938915, Fax : +91 - 22 - 24938919.



**KALYANI CHARITABLE TRUST'S  
LATE G. N. SAPKAL COLLEGE OF ENGINEERING**

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Website: www.sapkalknowledgehub.org E-mail: gns\_engineering@sapkalknowledgehub.com



Ref: KCT's /LGNSCOE/2018-19/Mech/ 524(a)

Date: 26/08/2018

To,  
Prof. M.S. Dukale,  
K K Wagh Polytechnic.  
Nashik.

**Letter of Appreciation**

Dear Sir,


We express our sincere gratitude for accepting our invitation and delivering invited talk on 26 August, 2018 to our BE Mechanical Engineering students on "Fundamentals of Refrigeration and Air- Conditioning" organised by Mechanical Engineering Department at Late G. N. Sapkal College of Engineering.

We warmly acknowledge cooperation extended and service rendered for the noble cause of proliferation of quality technical education.

Thanking you.

Received  
At  
M. S. Dukale  
26/8/18



  
Prof. (Dr.) S. B. Bagal  
Principal  
Prof. (Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213





**FEEDBACK ANALYSIS – PARTICIPANTS**

We would appreciate if you could take a few minute to share your opinion with us.

Name of the Department: Mechanical Engineering

Topic: "Advances in Refrigeration and Air-Conditioning"

Name of the Speaker: \_\_\_\_\_

Date: 25 Aug. to 29 Aug 2018 . Time: \_\_\_\_\_

No.	Performance Attributes	Rating
1.	Was the objective of the expert talk specified properly to you?	10 10
2.	Was the Expert properly introduced to the audience?	10 9
3.	Was the Expert interactive in his delivery?	10 9
4.	Rate the language of the expert.	10 7
5.	Whether sufficient time was available for completion of the talk?	10 9
6.	Whether sufficient time was available for question & answer session?	10 8
7.	Did the talk improve your knowledge / awareness about the topic discussed?	10 10
8.	Rate the relevance of the program to your 'Personal / Professional interest'.	10 9
9.	Would you like to attend such program again in future?	10 9
10.	Would you recommend your friend to attend such program?	10 9

8.9/10

Over all Remark - \_\_\_\_\_

Signature of Program Coordinator



Signature of HoD

**Prof.(Dr.) Sahebrao B. Bagai**  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.