



Indra Ganesan

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'B+' Grade, 2(f) & 12B Status Institution by UGC

IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION – 1

CURRICULAR ASPECTS

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

INDRA GANESAN COLLEGE OF ENGINEERING





DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2022-23 EVEN / ODD SEMESTER

1.2 Academic Flexibility (30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs,SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	Heat Ventilation Air Conditioning				
Resource Person:	Mr.K.Deepak &Mr.Dhineshwaran Executive UNIQ MEP Trichy				
Date of conduct from:	22.05.2023	To:	27.05.2023	Duration:	30 Hours
Organized Department:	MECHANICAL ENGINEERING				
Participant Year:	Mech IV,III,II Year	Semester:	EVEN	No. of Students Registered:	48
Venue:	Mechanical Seminar Hall				

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Department of Mechanical Engineering

Academic Year 2022-2023 –Even Semester

Date: 18.05.2023

DEPARTMENT CIRCULAR

Department of Mechanical Engineering and IQAC of IGCE in Association with UNIQ-MEP, Trichy is going to organize Value added course for all III, IV Year students on “Heat ventilation Air conditioning Technology” from 22.05.2023 to 27.05.2023; certificates will be issued to be eligible participants at the end of the course. This training is to be provided in our campus.

Resource Person Details	1. Mr.K.Deepak Executive UNIQ-MEP Trichy 2. Mr.Dhineshwaran G Executive UNIQ-MEP Trichy
Venue	Mechanical Seminar Hall-IGCE


HOD/MECH


PRINCIPAL

Cc:

- Principal Office
- IQAC Co-Ordinator
- Class In charges –II, III & IV-Year
- II,III & IV-Year MECH Students
- Office File
- Notice Board


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



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Value Added Course

"Heat Ventilation Air conditioning Technology"

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Introduction of HVAC	3	22.05.2023
2	Air conditioning equipments and categories of air conditioning.	3	22.05.2023
3	psychometric	3	23.05.2023
4	Heat load calculation	3	23.05.2023
5	Fresh Air system	3	24.05.2023
6	HVAC software skills	3	24.05.2023
7	Electrical basis and electrical accessories	3	25.05.2023
8	Lighting circuit system design	3	25.05.2023
9	Load calculation and distribution ,cables section & Installation	3	26.05.2023
10	Application of HVAC	3	26.05.2023
11	Exam	1	27.05.2023
Total Hours(Excluding Exam)		30	


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VAC Coordinator


HOD MECH



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VALUE ADDED COURSE

“Heat ventilation Air conditioning Technology”

STUDENTS PARTICIPATION LIST

S.No	Reg.No	Students Name	Year/Branch
1	811219114001	Aathilingam V	IV/MECH
2	811219114002	Abimanyu C	IV/MECH
3	811219114003	Ajay S	IV/MECH
4	811219114004	Christy Lourthu Samy A	IV/MECH
5	811219114006	Periyasamy P	IV/MECH
6	811219114008	Saravana Kumar V	IV/MECH
7	811219114010	Siriyac Selva A	IV/MECH
8	811219114011	Suriyaganesh M	IV/MECH
9	811219114012	Vaithiyalingam M	IV/MECH
10	811219114013	Vikash R	IV/MECH
11	811219114301	Hariharan R	IV/MECH
12	811219114302	Mohanraj G	IV/MECH
13	811219114303	Sivash K	IV/MECH
14	811219114701	Gokul R	IV/MECH
15	811219114702	Madhan Murugan S	IV/MECH
16	811219114703	Muthukaruppan M	IV/MECH
17	811219114704	Inigo Rithish P	IV/MECH
18	811220114001	Abinesh As	III/MECH
19	811220114003	Anbarasan M	III/MECH
20	811220114005	Arunkumar M	III/MECH
21	811220114008	Balamurugan R	III/MECH
22	811220114013	Dhanushraja P	III/MECH
23	811220114015	Durai Pandi A	III/MECH
24	811220114017	Hariharan M	III/MECH
25	811220114020	Kanishkavardhini S	III/MECH
26	811220114026	Loganathan C	III/MECH
27	811220114032	Mohamed Ashif A	III/MECH
28	811220114039	Sanjay Kumar M	III/MECH
29	811220114040	Santhosh Kumar R	III/MECH
30	811220114042	Saranya Sree Tr	III/MECH
31	811220114043	Saravanan M	III/MECH
32	811220114044	Sathishkumar V	III/MECH
33	811220114047	Sheik Ameer M	III/MECH
34	811220114052	Thamaraiselvan K	III/MECH

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S.No	Reg.No	Students Name	Year/Branch
35	811220114056	Vigneswaran K	III/MECH
36	811220114057	Vijayakumar G	III/MECH
37	811220114060	Yuvaraja A	III/MECH
38	811220114302	Chellapandian R	III/MECH
39	811220114305	Mohamed Nafil A	III/MECH
40	811220114306	Ruban A	III/MECH
41	811221114006	Dhanasejaram D	II/MECH
42	811221114008	Dhiwakar R	II/MECH
43	811221114014	Kannan P	II/MECH
44	811221114022	Naveen M	II/MECH
45	811221114030	Santhosh R	II/MECH
46	811220114302	Chellapandian R	III/MECH
47	811220114305	Mohamed Nafil A	III/MECH
48	811220114306	Ruban A	III/MECH

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Department of Mechanical Engineering

Academic Year 2022-2023 – Even Semester

STUDENTS ATTENDANCE LIST

VALUE ADDED COURSE

“Heat ventilation Air conditioning Technology”

Dr. G. Balakrishnan, M.E., Ph.D.,
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S.N o	Reg No	Students Name	Year/Branch	Date 22.05.23		Date 23.05.23		Date 24.05.23		Date 25.05.23		Date 26.05.23		SIGNATURE OF THE STUDENT	NO OF SESSIONS ATTENDED
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
				1	811219114001	Aathilingam V	IV/MECH	✓	✓	✓	✓	✓	✓		
2	811219114002	Abimanyu C	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	V. Anand	6	
3	811219114003	Ajay S	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓		9	
4	811219114004	Christy Lourthu Samy A	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	S. Hias	10	
5	811219114006	Periyasamy P	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓		10	
6	811219114008	Saravana Kumar V	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓		8	
7	811219114010	Siriyac Selva A	IV/MECH	ab	ab	ab	ab	ab	ab	ab	ab	ab		10	
				ab	ab	ab	ab	ab	ab	ab	ab	ab	A. SITIYO	1	



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				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
				8	811219114011	Suriyaganesh M	IV/MECH	✓	✓	✓	✓	✓	✓		
9	811219114012	Vaithiyalingam M	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	10
10	811219114013	Vikash R	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Vikash	9
11	811219114301	Hariharan R	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Vikash	9
12	811219114302	Mohanraj G	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	10
13	811219114303	Sivash K	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	MA	10
14	811219114701	Gokul R	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	9
15	811219114702	Madhan Murugan S	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	8
16	811219114703	Muthukaruppan M	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	man	9
17	811219114704	Inigo Rithish P	IV/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	10
18	811220114001	Abinash As	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	9
19	811220114003	Anbarasan M	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Abinash	8
20	811220114005	Arunkumar M	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	8
21	811220114008	Balamurugan R	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	8
22	811220114013	Dhanushraja P	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	8
23	811220114015	Durai Pandi A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	8
24	811220114017	Hariharan M	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Durai	6
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	gms	10



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				25	811220114020	Kanishkavardhini S	III/MECH	✓	✓	✓	✓	✓	✓		
26	811220114026	Loganathan C	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>C.P.</i>	10
27	811220114032	Mohamed Ashif A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>A.A.</i>	10
28	811220114039	Sanjay Kumar M	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>M.K.</i>	10
29	811220114040	Santhosh Kumar R	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>S.K.R.</i>	10
30	811220114042	Saranya Sree Tr	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>S.S.</i>	10
31	811220114043	Saravanan M	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>S.M.</i>	10
32	811220114044	Sathishkumar V	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>S.V.</i>	10
33	811220114047	Sheik Ameer M	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>S.A.M.</i>	10
34	811220114052	Thamaraiselvan K	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>T.K.</i>	10
35	811220114056	Vigneswaran K	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>V.K.</i>	10
36	811220114057	Vijayakumar G	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>V.G.</i>	10
37	811220114060	Yuvaraja A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Y.A.</i>	10
38	811220114302	Chellapandian R	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>C.R.</i>	10
39	811220114305	Mohamed Nafil A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>M.N.A.</i>	10

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				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
40	811220114057	Vijayakumar G	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>G Vijay</i>	10
41	811220114060	Yuvaraja A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Yuvaraja A</i>	10
42	811220114302	Chellapandian R	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Chellapandian R</i>	10
43	811220114305	Mohamed Nafil A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Mohamed Nafil A</i>	10
44	811220114306	Ruban A	III/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Ruban A</i>	10
45	811221114006	Dhanasejaram D	II/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Dhanasejaram D</i>	10
46	811221114008	Dhiwakar R	II/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Dhiwakar R</i>	10
47	811221114014	Kannan P	II/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Kannan P</i>	10
48	811221114022	Naveen M	II/MECH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<i>Naveen M</i>	10

[Signature]
VAC Coordinator

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Dr. G. Balakrishnan, M.E., Ph.D.,
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[Signature]
HoD/MECHANICAL



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Name of the Student :

Year/Sem:

AU Register Number:

Value Added Course

“Heat ventilation Air conditioning Technology”

MCO QUESTIONS (25X4 = 100 Marks)

1. Types of air conditioning are

- | | |
|-----------------------------|--------------------------------|
| a. Comfort air conditioning | b. Industrial air conditioning |
| c. Both (a) & (b) | d. None |

2. Summer air conditioning means

- | | |
|-----------------------------|-------------------------------|
| a. Cooling & humidification | b. Cooling & dehumidification |
| c. Both (a) & (b) | d. None |

3. Winter air conditioning means

- | | |
|-------------------------------|-------------------------------|
| a. Cooling and humidification | b. Heating & dehumidification |
| c. Heating and humidification | d. None |

4. In comfort air conditioning

- | | |
|--|-------------------------------|
| a. Total room air recirculates | b. Total fresh air circulates |
| c. 50-50 room and fresh air circulates | d. None |

5. In comfort air conditioning, room air and ventilation air are in the ratio

- | | |
|------------|------------|
| a. 80 : 20 | b. 60 : 40 |
| c. 40:60 | d. None |

5. In comfort air conditioning, room air

- | | |
|--|--|
| a. Alone is cooled & then mixed with ventilation air & then cooled | b. Is mixed with ventilation air & then cooled |
| c. Both (a) & (b) | d. None |

7. In operation theatres of comfort air conditioning, the ratio of room air and ventilation air is

- | | |
|------------|----------|
| a. 100 : 0 | b. 0:100 |
| c. 50 : 50 | d. NONE |

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8. Inside design conditions for comfort air conditioning are

- a. 20°C & 80 % RH
- b. 24°C & 100 % RH
- c. 20-24°C & 90 % RH
- d. None

9. Inside design conditions for comfort air conditioning are

- a. 20-24°C & 80 % RH
- b. 24-28°C & 100 % RH
- c. 22-27°C & 40-60 % RH
- d. None

10. In air conditioning, types of loads added are

- a. Sensible heat loads
- b. Latent heat loads
- c. Both (a) & (b)
- d. None

11. In comfort air conditioning, which load is more comes from the occupants

- a. Sensible heat load
- b. Latent heat load
- c. Both (a) & (b)
- d. None

12. Outside design conditions in comfort air conditioning are

- a. Constant
- b. Variable
- c. Can't say
- d. None

13. In order to achieve dehumidification, it is essential to decrease the temperature of air

- a. Below wet bulb temperature
- b. Dew point temperature
- c. Below dry bulb temperature
- d. None

14. For heating & humidification of air, it is passed through

- a. Water spray & then heated
- b. Hot water spray
- c. Over the heated surface
- d. None

15. The air conditioning used for winter air conditioning is


- a. Refrigerator
- b. Heat engine
- c. Heat pump
- d. None

16. The refrigerant used in car air conditioning is

- a. Ammonia
- b. R-134a
- c. R-22
- d. None

17. Fan coil unit is used in air conditioning of a

- a. Room
- b. Auditorium
- c. Both (a) & (b)
- d. None


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18. Air handling unit is used in the air conditioning of a
- a. Room
 - b. Auditorium
 - c. Both (a) and (b)
 - d. None
19. Fan coil unit is used in a
- a. Window air conditioner
 - b. Split air conditioner
 - c. Both (a) & (b)
 - d. None
20. Ducts are used with
- a. Window air conditioner
 - b. Split air conditioner
 - c. Both (a) & (b)
 - d. None
21. Ducts used in air conditioning are made of
- a. Copper
 - b. GI steel
 - c. Wood
 - d. None
22. The best shape of ducts in air conditioning is
- a. Round
 - b. Rectangular
 - c. Square
 - d. None
23. Condensers in central air conditioning plants are
- a. Air cooled
 - b. Water cooled
 - c. Evaporative cooled
 - d. None
24. Condensers in window air conditioner are
- a. Air cooled
 - b. Water cooled
 - c. Evaporative cooled
 - d. None
25. Condensers in air conditioning of auditoriums are
- a. Air cooled
 - b. Water cooled
 - c. Evaporative cooled
 - d. None


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HoD Mech

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Value Added Course

“Heat ventilation Air conditioning Technology”

ANSWER KEY

1	c	6	c	11	b	16	b	21	b
2	b	7	b	12	b	17	a	22	a
3	c	8	d	13	b	18	b	23	c
4	d	9	c	14	b	19	c	24	a
5	a	10	c	15	c	20	d	25	b

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Name of the Student: Arunkumar m

Year/Sem: III / mech

AU Register Number: 81122014005

Value Added Course

“Heat ventilation Air conditioning Technology”

MCQ QUESTIONS (25X4 = 100 Marks)

1. Types of air conditioning are

- a. Comfort air conditioning
 c. Both (a) & (b)

- b. Industrial air conditioning
d. None

2. Summer air conditioning means

- a. Cooling & humidification
c. Both (a) & (b)

- b. Cooling & dehumidification
 d. None

3. Winter air conditioning means

- a. Cooling and humidification
c. Heating and humidification

- b. Heating & dehumidification
d. None

4. In comfort air conditioning

- a. Total room air recirculates
c. 50-50 room and fresh air circulates

- b. Total fresh air circulates
d. None

5. In comfort air conditioning, room air and ventilation air are in the ratio

- a. 80 : 20
c. 40:60

- b. 60 : 40
d. None

5. In comfort air conditioning, room air

- a. Alone is cooled & then mixed with ventilation air
b. Is mixed with ventilation air & then cooled
c. Both (a) & (b)

- d. None

7. In operation theatres of comfort air conditioning, the ratio of room air and ventilation air is

- a. 100 : 0
c. 50 : 50

- b. 0:100
d. NONE

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8. Inside design conditions for comfort air conditioning are

- a. 20°C & 80 % RH
b. 24°C & 100 % RH
c. $20-24^{\circ}\text{C}$ & 90 % RH
d. None

9. Inside design conditions for comfort air conditioning are

- a. $20-24^{\circ}\text{C}$ & 80 % RH
b. $24-28^{\circ}\text{C}$ & 100 % RH
c. $22-27^{\circ}\text{C}$ & 40-60 % RH
d. None

10. In air conditioning, types of loads added are

- a. Sensible heat loads
b. Latent heat loads
c. Both (a) & (b)
d. None

11. In comfort air conditioning, which load is more comes from the occupants

- a. Sensible heat load
b. Latent heat load
c. Both (a) & (b)
d. None

12. Outside design conditions in comfort air conditioning are

- a. Constant
b. Variable
c. Can't say
d. None

13. In order to achieve dehumidification, it is essential to decrease the temperature of air

- a. Below wet bulb temperature
b. Dew point temperature
c. Below dry bulb temperature
d. None

14. For heating & humidification of air, it is passed through

- a. Water spray & then heated
b. Hot water spray
c. Over the heated surface
d. None

15. The air conditioning used for winter air conditioning is

- a. Refrigerator
b. Heat engine
c. Heat pump
d. None

16. The refrigerant used in car air conditioning is

- a. Ammonia
b. R-134a
c. R-22
d. None

17. Fan coil unit is used in air conditioning of a

- a. Room
b. Auditorium
c. Both (a) & (b)
d. None


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18. Air handling unit is used in the air conditioning of a
- a. Room
 - b. Auditorium
 - c. Both (a) and (b)
 - d. None
19. Fan coil unit is used in a
- a. Window air conditioner
 - c. Both (a) & (b)
 - b. Split air conditioner
 - d. None
20. Ducts are used with
- a. Window air conditioner
 - c. Both (a) & (b)
 - b. Split air conditioner
 - d. None
21. Ducts used in air conditioning are made of
- a. Copper
 - c. Wood
 - b. GI steel
 - d. None
22. The best shape of ducts in air conditioning is
- a. Round
 - b. Rectangular
 - c. Square
 - d. None
23. Condensers in central air conditioning plants are
- a. Air cooled
 - c. Evaporative cooled
 - b. Water cooled
 - d. None
24. Condensers in window air conditioner are
- a. Air cooled
 - b. Water cooled
 - c. Evaporative cooled
 - d. None
25. Condensers in air conditioning of auditoriums are
- a. Air cooled
 - c. Evaporative cooled
 - b. Water cooled
 - d. None


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Department of Mechanical Engineering

Academic Year 2022-2023 – Even Semester

VALUE ADDED COURSE ASSESEMENT SHEET

“Heat ventilation Air conditioning Technology”

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Manikandam, Trichy-620 012.

S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100)(B)	
1	811219114001	Aathilingam V	IV/MECH	30	100	18	72	86
2	811219114002	Abimanyu C	IV/MECH	28	93	16	64	79
3	811219114003	Ajay S	IV/MECH	30	100	18	72	86
4	811219114004	Christy Lourthu Samy A	IV/MECH	30	100	21	84	92
5	811219114006	Periyasamy P	IV/MECH	26	87	17	68	77
6	811219114008	Saravana Kumar V	IV/MECH	30	100	18	72	86
7	811219114010	Siriyac Selva A	IV/MECH	AB	AB	AB	AB	AB
8	811219114011	Suriyaganesh M	IV/MECH	30	100	21	84	92
9	811219114012	Vaithiyalingam M	IV/MECH	28	93	20	80	87
10	811219114013	Vikash R	IV/MECH	28	93	18	72	83



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				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100)(B)	(50% of A + 50% of B)
11	811219114301	Hariharan R	IV/MECH	29	97	17	68	82
12	811219114302	Mohanraj G	IV/MECH	29	97	18	72	84
13	811219114303	Sivash K	IV/MECH	28	93	19	76	85
14	811219114701	Gokul R	IV/MECH	29	97	21	84	90
15	811219114702	Madhan Murugan S	IV/MECH	29	97	20	80	88
16	811219114703	Muthukaruppan M	IV/MECH	29	97	22	88	92
17	811219114704	Inigo Rithish P	IV/MECH	28	93	20	80	87
18	811220114001	Abinesh As	III/MECH	28	93	21	84	89
19	811220114003	Anbarasan M	III/MECH	29	97	20	80	88
20	811220114005	Arunkumar M	III/MECH	29	97	22	88	92
21	811220114008	Balamurugan R	III/MECH	28	93	18	72	83
22	811220114013	Dhanushraja P	III/MECH	29	97	19	76	86
23	811220114015	Durai Pandi A	III/MECH	30	100	18	72	86
24	811220114017	Hariharan M	III/MECH	29	97	21	84	90
25	811220114020	Kanishkavardhini S	III/MECH	29	97	22	88	92
26	811220114026	Loganathan C	III/MECH	28	93	20	80	87
27	811220114032	Mohamed Ashif A	III/MECH	29	97	21	84	90

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S.No.	Reg.No	Student's Name	Year/ Branch	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100)
				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100)(B)	(50% of A + 50% of B)
28	811220114039	Sanjay Kumar M	II/MECH	28	93	20	80	87
29	811220114040	Santhosh Kumar R	II/MECH	29	97	22	88	92
30	811220114042	Saranya Sree Tr	III/MECH	29	97	20	80	88
31	811220114043	Saravanan M	II/MECH	29	97	22	88	92
32	811220114044	Sathishkumar V	III/MECH	30	100	20	80	90
33	811220114047	Sheik Ameer M	III/MECH	28	93	21	84	89
34	811220114052	Thamaraiselvan K	III/MECH	29	97	20	80	88
35	811220114056	Vigneswaran K	III/MECH	28	93	22	88	91
36	811220114057	Vijayakumar G	III/MECH	29	97	21	84	90
37	811220114060	Yuvaraja A	III/MECH	29	97	22	88	92
38	811220114302	Chellapandian R	III/MECH	30	100	20	80	90
39	811220114305	Mohamed Nafil A	III/MECH	29	97	21	84	90
40	811220114306	Ruban A	III/MECH	29	97	20	80	88
41	811221114006	Dhanasejaram D	II/MECH	27	98	22	88	92
42	811221114008	Dhiwakar R	II/MECH	28	99	20	80	90
43	811221114014	Kannan P	II/MECH	29	94	21	84	89
44	811221114022	Naveen M	II/MECH	30	97	20	80	88

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				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100)(B)	(50% of A + 50% of B)
45	811220114043	Saravanan M	II/MECH	28	93	22	88	91
46	811220114044	Sathishkumar V	II/MECH	29	97	21	84	90
47	811220114047	Sheik Ameer M	II/MECH	29	97	22	88	92
48	811220114052	Thamaraiselvan K	II/MECH	30	100	20	80	90


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HoD/MECHANICAL



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Report on Value Added Course

Title:	Heat ventilation Air conditioning Technology		
Resource Person:	Mr. Deepak Executive UNI-Q-MEP Trichy.	Mr. Dhineshwaran G Executive UNI-Q-MEP Trichy.	
Date of conduct from :	22.05.2023	To: 27.05.2023	Duration: 30 Hours
Organized Department :	MECHANICAL ENGINEERING		
Participant Year:	2,3, 4	No. of Students Registered :	48
Venue:	Mechanical Seminar Hall Third Floor Mechanical Department IGCE		

Outcome of Value Added Course (VAC): At the end of the Course, Students can able to

- Knowledge about HVAC system
- Application of HVAC clearly students known
- Various gases usage in HVAC system Explained.
- Load circuits and pipeline circuits are explained clearly


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Assessment Process

- Students, who are securing more than 70% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted
- Total Score = (0.5 * Attendance in VAC out of 100 percentage + 0.5 * Test mark in VAC out of 100 marks)


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HOD/MECH


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Sample Photos of Value Added Course

Title: Heat ventilation Air conditioning Technology

Resource Person:	Mr. Deepak Executive UNIQ-MEP Trichy.	Mr. Dhineshwaran G Executive UNIQ-MEP Trichy.
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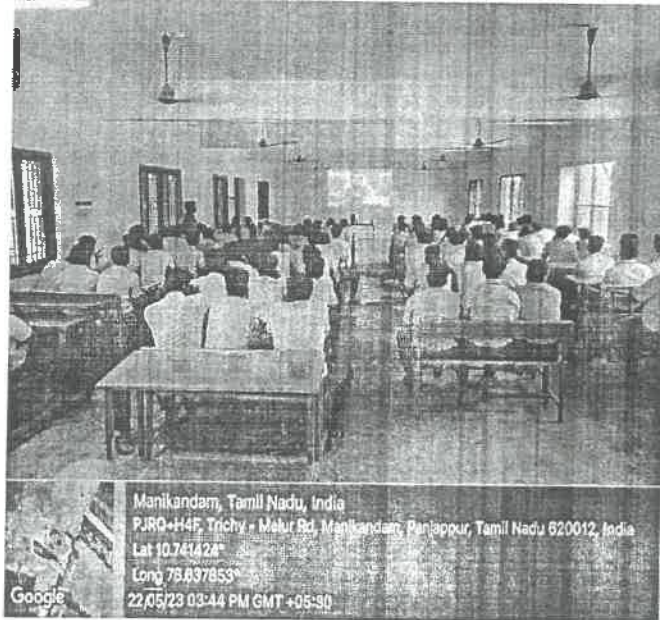
Date of conduct from :	22.05.2023	To:	27.05.2023	Duration:	30 Hours
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Organized Department : MECHANICAL ENGINEERING

Participant Year:	2,3, 4	No. of Students Registered :	48
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Venue: Seminar Hall
Third Floor- Mechanical Department
IGCE

Sample Photo




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UM UNIQUE
MEP

CERTIFICATE OF PARTICIPATION

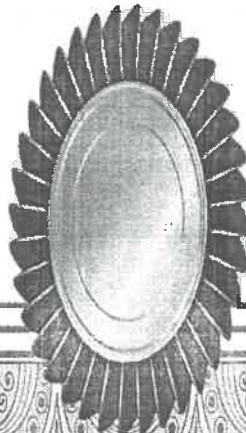
This is to certify that **Mr. Ruban A, IV Year, MECH** has successfully completed the value added course on **“Heat ventilation Air conditioning Technology”** organized by Department of Mechanical Engineering and IQAC of our institution in association with **UNIQUE MEP** from **22.05.2023** to **27.05.2023 (5days)** during the Academic Year **2022-2023**

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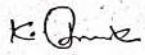
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Value Added course Heat ventilation Air conditioning Technology conducted
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