

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.Chidambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

DEPARTMENT OF MECHCHANICAL ENGINEERING

Value Added Course

on

HEATING VENTILATION & AIR CONDITIONING

Conducted: Excel MEP, Bangalore

Year / Sem Batch: III / VI / 2019 – 23

Course duration :28.03.2022 to 30.03.2022

Course Duration: 24 Hrs

S.R.G.Chidambara Nadar - C. Nagammal Campus, G.C. Nagar, K. Vellakulam - 625 701, Near VIRUDHUNAGAR, Madural District. Accredited by NAAC with 'A' Grade Submitted to the SECRETARY for approval through the PRINCIPAL MECH Book No. SL No. 96 NALVE ADDED GURSE | I THEAR - SUDENTS | HVAC LOOTSE are planned to organize a value added Course ofthe we by One world Inc. - Aw conditioning & MED Company Ps. Persol ind g GST Nome of the Course . HVAC - Design. NO of Studant : 62 Nos Course from : 11.04.2022 to 13 04.2022 [ten hind] Thanky Lest 1, 20,000+ & GST with trainers accommobility in The kindly request you to bermit the programme & Sanction the arround of. Ps 1241, boot Signature of Faculty **OFFICE USE** 1) Budget allotted Value Added 2) Amount committed / Spent sofar Contain it perman 3) Balance available OM Treasurer a zi

From: Madhan.N.R Sent: 26 March 2022 13:23 To: MECH; SRI RAMA PRIYA.R.P Cc: PRITHIVIRAJ M; HODMECH Subject: Venue | Value Added Course | III year

Dear sir,

Department of Mechanical Engineering is organizing Value Added Course for III Year Mechanical Engineering (62 Nos) Students from **28.03.2022** to **30.03.2022**. Resource person from Excel MEP, Bangalore is going to handle this course.

Herewith I have shared you the venue details for this course.

Venue:

Data	Venue Details		
Date	FN	AN	
28.03.2022	CSE Conference Hall – I		
29.03.2022	Mechanical CAD Lab		
	Civil CAD Lab		
30.03.2022	HoP Lab	CSE Conference Hall – I	
	Centre for Prototype		

With Regards, Madhan N R, Assistant Professor, Mechanical Department, KAMARAJ

College of Engg and Tech, Virudhunagar. From: Zafar Khan
Sent: 23 March 2022 11:07
To: Madhan.N.R
Cc: akshayacreatech@gmail.com
Subject: Credit Courses for Engineering Students.

Dear Mr.Madhan, We thank you for getting in touch with us for our Courses.

We would like to introduce ourselves as Industry professionals working in the field of MEP (Mechanical Electrical & Plumbing) & have been associated in this Industry from the past 22 years and have been imparting training to Engineers & Diploma holders from the past 15 years. We have been associated with several professional Organizations in our field. We have successfully trained more than 3000 students from various Domains, Industry Verticals & Geographic locations in the field of MEP.

As discussed we would like to Offer three Credit Courses for your Students.

1) HVAC (Heating Ventilation & Air Conditioning) Design

with Introduction to other Building Services - 18 Hours Introduction to HVAC, Psychrometrics, Heat Load Calculations, Practical Classes to be conducted on Designing Software for Heat load, Duct Design & Piping Design - Practical Hands On Demonstration of Installation of Split AC, including Gas Charging, Copper Piping & Filter Cleaning.

The above courses would be conducted at your premises after which a test would be conducted and based on its completion, a Course Completion certificate would be issued to all the participants.

The Cost of each credit course would be 1,20,000 /- Plus Taxes. Please do get in touch for any Clarifications required.

Thanks & Regards,

Zafar Ulla Khan / Mr.Lakshmi Narasimhan

One World Inc. - Air Conditioning & MEP Company Excel MEP Academy Akshaya Createch - Electrical & Solar Design & Build Company

5, 1st Cross, Lal Bagh Road, Bangalore -560027 +91-9886001720 +91 80 22272102 www.excelmep.com Thanks & Regards,

Zafar Ulla Khan

One World Inc. - Air Conditioning & MEP Company



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.Chidambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

Department of Mechanical Engineering Three Member Committee - Minutes of Meeting for

Value Added Course Selection

Agenda		Value Added Course Selection Meeting	
Date	:	09/02/2022	
Time	:	01.00 PM	
Venue	:	HoD/Mech Cabin "E- Block"	
Members Present	÷	 Three Member Committee Members Dr. S.S. Saravana kumar, ASP & HoD/Mech Dr. S. Senthil, Prof. & Principal Er. N.R. Madhan, AP/Mech UG Coordinator Dr. S. Thanga Kasi Rajan, AP/Mech Chairperson Dr. M. Prithiviraj, AP/Mech Domain Experts Dr. B. Prabhu, AP/Mech Mr.B. Balavairavan, AP/Mech Class representative (2020 – 2024 Batch) Mr. RAHUL.V (19UMEC005), IIInd Year/ Student Mr. THOMAS LIVIN DANIYAL A (19UMEC033), IIInd Year/ Student 	
Minutes of the Meeting	:	 It is optional to complete a Value-Added Course for enhancing Industrial requirement. In this regard a three- member committee has been formed and a meeting is organized to select the course for registration. Meeting started by 01.00PM. Dr. S.S. Saravana Kumar, Associate Professor & Head of the Department, welcome the gathering. Dr. M. Prithiviraj, Assistant Professor & Chairperson of 2019-2023 batch has proposed various courses offered by Siemens Centre of Excellence in Manufacturing, National Institute of Technology, Tiruchirappalli and HVAC by Excel MEP, Bangalore. 	

 Subject expects are suggested to offer Air Conditioning (Thermal) related courses. Dr. S. Thanga Kasi Rajan, Assistant Professor has advised to maintain SOP for value added course. Based on the suggestion given by the Subject Expects & 2019-2023 Batch Chairperson, 3 committee members for Value added course "HVAC" course offered by Excel MEP, Bangalore, agree to take this VI semester for 2019-2023 Batch students
Justification for the Course selection: The justification for the course selection were as follows i. This Course will be useful for her project work ii. It is a 24-hour course iii. This Course is useful to beat Industrial Needs

57

Three Member Committee Members Dr. S.S. Saravana kamar, ASP & HoD/Mech Er. N.R. Madhan, AP Mech

Dachain Experts Er. B. Prabhu, AP Mech Mr.B. Balavanavan, AP Mech Jr. S. Thanga Kasi Rajan, AP Mech

1.54 UG Coordinator

Dr. S. Thanga Kasi Rajan, AP/Mech

Charperson Dr. M. Prithiviraj, AP/Mech

2.2 HoD/Mech

N.J - Sar 27171m

Dean Academics

COLLEGE OF ENGINEERING & TECHNOLOGY (An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

DEPARTMENT OF MECHCHANICAL ENGINEERING

Value Added Course on HVAC

Conducted : EXCEL MEP, Bangalore Course duration : 28.03.2022 to 30.03.2022 Duration of the Course : 24 Hrs Year / Sem : III / IV Batch : 2019 - 23

Approval of Programme Assessment Committee

Board of Study Meeting: IV

Mode: online (MS-Teams)

Date & Timing: 19.03.2022 & 3.00PM

Page No: 17 of 18

Dr. S. Thanga Kasi Rajan presented the list of value-added courses. The following discussions were made.

S.No.	Course Title	Total hours	Credits
1.	Programming on Computer Numerical Control		2
2.	Advanced Pro-E		2
3.	Machine Learning		2
4.	Block chain		2
5	Heating, Ventilation and Air Conditioning		2

The members of BoS recommend and proceed the same.

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VAC Coordinators

Page 17 of 18

2.2.2 **HoD/MECH**



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

Department of Mechanical Engineering

Value Added Course	: HVAC	Year	: III-Mech
Date	: from 28.03.2022 to 30.03.2022	Sem	: VI
Course conducted by	: Excel MEP Training Academy, Bangalore		

Summary Report

Day 1 | 28.03.2022

Course started by formal Inauguration function at 9.30am. Guest Er. Zafer Ulla Khan delivered his note on the topic of "Fundamental of Heating Ventilation and Air Conditioning (HVAC)". During the session, students interact with Speakers. At the end of the 3 sessions, students are received the course materials by the speakers.

Day 2 | 29.03.2022

Morning session, speaker delivered on the topics of "refrigeration cycle includes compressor, condenser, evaporator & expansion cycle".

Afternoon session, students derived "heat load calculation for different condition" using Ms-Excel and AutoCAD.

Day 3 | 30.03.2022

Forenoon session, students explored the heat load data book. They are calculated heat load for different condition. Student are explored various duck and its purpose.

Afternoon session, speakers practically demonstrated disassembly and assembly of Split AC. Students explored various part and its importance of Split AC.

At the end of the day, formal valedictory ceremony by Dr.S.Senthil , Principal & Dr.S.S.Saravanakumar, HoD cum ASP/Mechanical Department.

Photo Proof

Day 1 | 28.03.2022





Day 2 | 29.03.2022



Day 3 | 30.03.2022



N. R. modiliar

Faculty In-charges

D-D. Dury HoD/Mech-

or, Tamil Nadu, India MXC7+WVM, Chittoo

at 9.672411

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mil Nadu 625701.

Page 2 of 2









G. Ezg.

Date: 30th Mar 2022











Date: 30th Mar 2022





TRAINING | MEP SERVICES | JOBS

ISO 9001:2015 Certified

Certificate



This is to certify that Mr. BHUVANESH PANDIAN.P bearing Reg. No 920419114009 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28^{th} to Mar 30^{th} 2022



Date: 30th Mar 2022











Date: 30th Mar 2022









5, 1st Cross, Lal Bagh Road Bangalore - 560 027.















Bangalore - 560 027.



5, 1st Cross, Lal Bagh Road Bangalore - 560 027.



Date: 30th Mar 2022







TRAINING | MEP SERVICES | JOBS

ISO 9001:2015 Certified



Certificate

This is to certify that Mr. <u>NAVANEETHA KRISHNAN.N</u> bearing Reg. No <u>920419114026</u> has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28^{th} to Mar 30^{th} 2022



Date: 30th Mar 2022
















Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.













Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 \$ 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.



6. 279:-

Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.





















5, 1st Cross, Lal Bagh Road Bangalore - 560 027













Bangalore - 560 027.

















Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.





HVAC Test

Value Added Course : HVAC Date : from 28.03.2022 to 30.03.2022 Course conducted by : Excel MEP Training Academy, Bangalore Year : III-Mech Sem : VI

- 1. Student Name
- 2. Student Roll No
- 3. 1. Heat transfer from one part of solid substance to another part within ^{1 point} itself or another solid substance placed in physical contact is known as

Mark only one oval.

- a) Conduction
- b) Retraction
-) Convection
-) d) Radiation
- 4. 2. Heat transfer within a fluid itself, maybe liquid/gases and is carried out 1 point by transfer of one fraction of fluid to another portion is known as

Mark only one oval.

- a) Conduction
- b) Retraction
- _____ c) Convection
- d) Radiation
| 5. | 3.To change Fahrenheit to Celsius, which formula is used? | 1 point |
|----|---|---------|
| | Mark only one oval. | |
| | (a) C =(F+32) ÷ 1.8 | |
| | b) C=(F-32) x 1.8 | |
| | () C=(F-32) ÷ 1.8 | |
| | \bigcirc d) C= (F-32) +1.8 | |
| | | |
| 6. | 4. Latent heat is measured in | 1 point |
| | Mark only one oval. | |
| |) Degrees Celsius, Fahrenheit and Kelvin | |
| | b) International System of Units | |
| | C) British Thermal Units | |
| | () Board of Trade Unit | |
| | | |
| 7. | 5. In Fahrenheit, the boiling point of water is | 1 point |
| | Mark only one oval. | |
| | a) 100 degrees | |
| | b) 112 degrees | |
| | C) 221 degrees | |
| | d) 212 degrees | |
| | | |
| 8. | 6. The temperature of the air when it is fully saturated and the moisture | 1 point |
| | condenses on a surface is known as | |
| | Mark only one oval. | |
| | a) Dew point temperature | |
| | b) Dry bulb temperature | |
| | C) Wet bulb temperature | |

) Supply air temperature

9. 7. The ratio of the actual moisture present in the air to the maximum 1 point moisture the air can hold is known as

Mark only one oval.

a) Relative humidity

🔵 b) Humidity ratio

-) Specific humidity
- _____ d) Absolute humidity
- 10. 8. Some of the air flowing through the coil impinges on the water tubes 1 point or the fins and is cooled to the ADP, the percentage of air that passes through the coil unchanged is called

Mark only one oval.

- 🔵 a) U-Factor
- b) Bypass Factor
- C) Thermal Resistance
- d) ESHF
- The conditioned air being supplied from the air conditioner outlet and 1 point is treated & contains all the desired qualities as provided by the air conditioning system is known as

Mark only one oval.

- a) Supply Air
- b) Return Air
- 🔵 c) Fresh Air
- 🔵 d) Exhaust Air

12. 10. The equipment which pumps the designed quantity of dehumidified 1 point air to respective areas by means of ducting is known as

Mark only one oval.

- a) High wall A/C
- b) Cassette A/C
- 🔵 c) Air Handling Unit
- 🔵 d) Chiller
- 13. 11. Which of these are not a part of Air-Cooled chiller system? 2 points

Mark only one oval.

- 🔵 a) Compressor
- b) Condenser
- 🔵 c) Evaporator
- d) Cooling tower
- 14. 12. The temperature and relative humidity of air to satisfy human ^{2 points} comfort conditions are

Mark only one oval.

- a) 30 Deg C and 60%
- **b)** 13 Deg C and 40%
- _____ c) 24 Deg C and 50%
- _____ d) 40 Deg C and 70%

 The equipment in which heat transfer takes place between the super- 2 points heated refrigerant and the cooling medium and the refrigerant is cooled is called

Mark only one oval.

-) Condenser
- b) Compressor
- 🔵 c) Evaporator
- 🔵 d) Expansion valve
- 16. 14. The Given image refers to

Mark only one oval.

- 🔵 a) High wall A/C
- b) Window A/C
- 🔵 c) Cassette A/C
- 🔵 d) Air Handling unit

image for question no 14



2 points

2 points

17. 15. A refrigeration ton is approximately equivalent to

Mark only one oval.

🔵 a) 9,500 Btu/Hr

b) 12,000 Btu/Hr

_____ c) 11,000 Btu/Hr

🔵 d) 13,500 Btu/Hr

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Google Forms

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A M --. COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution - APPILIATED TO ANNA UNIVERSITY CHENNAN

S.P.G.Childambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Velakulam - 825 701 (Near VIRUDHUNAGAR). Value Added Course on "HVAC"

MECHANICAL ENGINEERING Year : 3 Semester : 6

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S.No	Rollno	Student Name	28.07.2022	29.07.2022	30.07.2022
1	19UMEC001	NARENDRAN K	KNND.	EDA.	ELD.
2	19UMEC002	JOYSON RALPH JEBADURAL	V. Ferry	VITVOI	VIEZ .
3	19UMEC003	VIMALA	All	The	VAL
4	19UMEC004	BALASUBRAMANIYAN.R	RiBan	R.R.A.	Ripin
5	19UMEC005	RAHULV	DN	PL	R
6	19UMEC006	RAJESH KANNAN.R	TANK	h	Ra
7	19UMEC007	LOKESH.S	S. Lakyth	Stoketh	SJokesh
8	19UMEC008	ASWIN.K	Adhuin	Achorn	Alhuin.
9	19UMEC009	BHUVANESH PANDIAN.P	PBRICE	REAL	PAR
10	19UMEC010	KARTHIKS	Sharthile	Skauphik	CRUNK- 2
11	19UMEC011	GOBINATH.M	ast.	as.	·OD
12	19UMEC012	MUTHUVEERASALAPANDIAN.M	M.M.V.S Pros	M. M. M. SPA.	M.Muskick.
13	19UMEC013	NAVANEETHA KRISHNAN.N	nn	angi	no
14	19UMEC014	SUBHASH RAAJ.K	1se	the	AA
15	19UMEC015	MANOJ.D L	Dinn	Rom	Dris
16	19UMEC016	JEEVABALANJ	J. Jopen Polan	J.Joova Palan	T.Joon Palar
17	19UMEC017	YUVARAJ.K	WUNRES.E	yours is	Y WHAJ. IC
18	19UMEC019	MADHAVAN.G	G. Madhavar	CMadharon	G Madlaan
19	19UMEC020	RATHINA SIVA MALAYAPPAN.G	and	RA .	ep
20	19UMEC021	MADHAVAN.P	P. Madhane	B Hadhava	PHOLINAN
21	19UMEC022	JAGANATHAN.S	time	tur	I.
22	19UMEC023	ABISHEK KUMAR.S	- Clas	al to	detto
23	19UMEC024	SATHEESH KUMAR.K	Killithen 4	K Stillent	K. Jottparte
24	19UMEC025	AAKASH KANNAN.U	Alathor.	Hotelas.	Hatters .
25	19UMEC026	AJAY KUMAR.R	au	Am	a
26	19UMEC027	GOVARTHANAN.T	Charthan	- Contann.	al mathie
27	19UMEC028	DEEPAN KAARTHIK.T	T Deyn Kawth	7. Degn har ho	T. Degen Kunths
28	19UMEC029	NAVEEN.D	Toto D	NA-2	A D
29	19UMEC030	ARUNKUMAR.V	Vetholen	V Avotes	V-Alton
30	19UMEC031	KUMARESH.R	R. K.K	Ribet	Riht
31	19UMEC032	PRAVEEN RAJ.R	Paro	Ripe	FUE
32	19UMEC033	THOMAS LIVIN DANIYAL.A	Adi	Adi	A.L.
33	19UMEC034	VIGNESH.NA	hor.	Jag.	And
34	19UMEC035	SIVA ANANTH.E	an	An	len
35	19UMEC036	KALIDASAN.M	M.	-phi	an.
36	19UMEC037	ARAVINDAN.C	Andon	Aganden	Aravidar.
37	19UMEC038	GNANAPRAKASAM.G	Councer Legen	in whyan	anden
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44	19UMEC045	GANESH KARTHIK.S	//1	14	the
45	19UMEC046	PARTHIBAN.P	Day	0	Um.
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47	19UMEC048	VINISH KUMARJ	L'all. T	Unest. Z	T. Vinial
48	19UMEC049	SIVAPACKIA.R	P. Shankin	RSiyaPackla	R. Sinnackia
49	19UMEC050	RAGULS	6 horas	b. Jack	6 Left
50	19UMEC051	VUAYAKUMARS	S. Junhot.	S. Mulett.	S. Voulout
51	19UMEC052	SENTHIL KUMAR.M	Matelle	Wothin	itide
52	19UMEC053	ARUNKUMAR.P	80-	The	Aug-
53	19UMEC054	PANDI KAMAL KRISHNA.A	APERMISHI	APERISAL	XPKEVISH
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56	19UMEC057	PRABAKARAN	ARUS !!	ARIS	Alla
57	19UMEC058	DHARUN,N	Dr	70m	Dur
58	19UMEC059	BALA SUDHARSAN.N	- ERENA	000	Rola
59	19UMEC060	MOHAMEDIRSHATH	A. Tahadl	A. rahd	Atabil
60	19UMEC061	HARIHARAN.R	R- Knog	IZ Angli	R. (4-4
61	19UMEC062	MANIKANDA PRABHU.K	K mailie	K main	K. marie
62	19UMEC063	SIVA SUBRAMANIAN.S	18t	81	8-1

HoD/Mech

Course Incharge

Η	V۸	C	Fest

Value Added Course : HVAC Date : from 28.03.2022 to 30.03.2022 Course conducted by : Excel MEP Training Academy, Bangalore Year : III-Mech Sem : VI

Student Name

M.SENTHIL KUMAR

Student Roll No

19umec052

1. Heat transfer from one part of solid substance to another part within itself or another solid substance placed in physical contact is known as

- (a) Conduction
- b) Retraction
- C) Convection
- 🔵 d) Radiation

1 point



5. In Fahrenheit, the boiling point of water is	1 point
a) 100 degrees	
O b) 112 degrees	
O c) 221 degrees	
O d) 212 degrees	
6. The temperature of the air when it is fully saturated and the moisture condenses of a surface is known as	1 1 point
 a) Dew point temperature 	
O b) Dry bulb temperature	
O c) Wet bulb temperature	
 d) Supply air temperature 	
7. The ratio of the actual moisture present in the air to the maximum moisture the air can hold is known as	1 point
 a) Relative humidity 	
O b) Humidity ratio	
O c) Specific humidity	
O d) Absolute humidity	

8. Some of the air flowing through the coil impinges on the water tubes or the fins and is cooled to the ADP, the percentage of air that passes through the coil unchanged is called	1 point
) U-Factor	
) Bypass Factor	
c) Thermal Resistance	
O d) ESHF	
9. The conditioned air being supplied from the air conditioner outlet and is treated & contains all the desired qualities as provided by the air conditioning system is known as	1 point
) a) Supply Air	
) Return Air	
🔘 c) Fresh Air	
 d) Exhaust Air 	
10. The equipment which pumps the designed quantity of dehumidified air to respective areas by means of ducting is known as	1 point
a) High wall A/C	
b) Cassette A/C	
O c) Air Handling Unit	
O d) Chiller	

11. Which c	of these are not a part of Air-Cooled chiller system?	2 points
) a) Comp	pressor	
) Condo	enser	
🔘 c) Evapo	prator	
🔘 d) Coolin	ng tower	
12. The ter are	mperature and relative humidity of air to satisfy human comfort conditions	2 points
🔵 a) 30 De	g C and 60%	
🔵 b) 13 De	eg C and 40%	
o c) 24 De	g C and 50%	
O d) 40 De	g C and 70%	
13. The equ refrigerant a	ipment in which heat transfer takes place between the super-heated nd the cooling medium and the refrigerant is cooled is called	2 points
) Conde	enser	
🔘 b) Comp	pressor	
🔘 c) Evapo	prator	
🔘 d) Expar	nsion valve	



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2 points

2 points

Value Added Course : HVAC Date : from 28.03.2022 to 30.03.2022 Course conducted by : Excel MEP Training Academy, Bangalore Year : III-Mech Sem : VI

Student Name

Rathish

Student Roll No

19umec055

1. Heat transfer from one part of solid substance to another part within itself or 1 point another solid substance placed in physical contact is known as

(a) Conduction

b) Retraction

) c) Convection

🔵 d) Radiation



5. In Fahrenheit, the boiling point of water is	1 point
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11. Which of these are not a part of Air-Cooled chiller system?	2 points
) Compressor	
) Condenser	
O c) Evaporator	
 d) Cooling tower 	
12 The temperature and relative humidity of air to satisfy human comfort conditions	2 points
are	2 points
a) 30 Deg C and 60%	
) 13 Deg C and 40%	
● c) 24 Deg C and 50%	
O d) 40 Deg C and 70%	
13. The equipment in which heat transfer takes place between the super-heated refrigerant and the cooling medium and the refrigerant is cooled is called	2 points
) Condenser	
b) Compressor	
O c) Evaporator	
d) Expansion valve	



image for question no 14



15. A refrigeration ton is approximately equivalent to 2 points
a) 9,500 Btu/Hr
b) 12,000 Btu/Hr
c) 11,000 Btu/Hr
d) 13,500 Btu/Hr

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08-07-2022

TO WHOM SO EVER IT MAY CONCERN

Please find below Mark of students who had taken the test for the value added course "HVAC Design Concepts" .

5	Department : MECHANICAL ENGINEERING Year : 3 Semester : 6				
SL .No	Regno	Student Name	Mark		
1	920419114001	AAKASH KANNAN.U	91		
2	920419114002	ABISHEK KUMAR.S	93		
3	920419114003	AJAY KUMAR.R	93		
4	920419114004	ARAVINDAN.C	95		
5	920419114005	ARUNKUMAR.V	92		
6	920419114006	ASWIN.K	92		
7	920419114007	ASWIN SUNDAR.R	91		
8	920419114008	BALASUBRAMANIYAN.R	94		
9	920419114009	BHUVANESH PANDIAN.P	95		
10	920419114010	DEEPAN KAARTHIK.T	93		
11	920419114011	GNANAPRAKASAM.G	93		
12	920419114012	GOBINATH.M	95		
13	920419114013	GOVARTHANAN.T	92		
14	920419114014	JAGANATHAN.S	92		
15	920419114015	JEEVABALAN.J	92		
16	920419114016	JOYSON RALPH JEBADURAI.V	92		
17	920419114017	KALIDASAN.M	93		
18	920419114018	KARTHIK.S	94		
19	920419114019	KUMARESH.R	91		
20	920419114020	LOKESH.S	93		
21	920419114021	MADHAVAN.G	93		
22	920419114022	MADHAVAN.P	94		
23	920419114023	MANOJ.D L	93		
24	920419114024	MUTHUVEERASALAPANDIAN.M	93		
25	920419114025	NARENDRAN.K	95		
26	920419114026	NAVANEETHA KRISHNAN.N	94		
27	920419114027	NAVEEN.D	94		

Regd. Office: #5, 1st Cross, Lalbagh Road, Near Subbaiah Circle, Bangalore-560027 Phone: +91-9886001720 Tel: +91 80 22272102 Email: oneworldinc@gmail.com Website: www.oneworldmep.com



28	920419114028	PRAVEEN RAJ.R	94
29	920419114029	RAHUL.V	95
30	920419114030	RAJESH KANNAN.R	91
31	920419114031	RAMPRASATH.C	93
32	920419114032	RATHINA SIVA MALAYAPPAN.G	90
33	920419114033	SATHEESH KUMAR.K	96
34	920419114034	SIVA ANANTH.E	96
35	920419114035	SIVABARATH.K	91
36	920419114036	SUBHASH RAAJ.K	91
37	920419114038	THOMAS LIVIN DANIYAL.A	96
38	920419114039	VENKATESHWARA.R	92
39	920419114040	VIGNESH.G	94
40	920419114041	VIGNESH.K B	94
41	920419114042	VIGNESH.NA	92
42	920419114043	VIMAL.A	91
43	920419114044	YUVARAJ.K	95
44	920419114301	ARUNKUMAR.P	91
45	920419114302	BALA SUDHARSAN.N	93
46	920419114303	DHARUN.N	92
47	920419114304	GANESH KARTHIK.S	94
48	920419114305	HARIHARAN.R	94
49	920419114306	MANIKANDA PRABHU.K	92
50	920419114307	MICKAEL RAJ.P	91
51	920419114308	MOHAMEDIRSHATH.A	96
52	920419114309	NAGARAJ.S	93
53	920419114310	PANDI KAMAL KRISHNA.A	94
54	920419114311	PARTHIBAN.P	92
55	920419114312	PRABAKARAN.A	94
56	920419114313	RAGUL.S	93
57	920419114314	RATHISH.S	94
58	920419114315	SENTHIL KUMAR.M	93
59	920419114316	SIVAPACKIA.R	97
60	920419114317	SIVA SUBRAMANIAN.S	93
61	920419114318	VIJAYAKUMAR.S	92
62	920419114319	VINISH KUMAR.J	93

N.R. modifier D.D. Jun

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(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.Chidambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

DEPARTMENT OF MECHANICAL ENGINEERING

Value Added Course on HEATING VENTILATION & AIR CONDITIONING

Year / Sem Batch: III / VI / 2019 – 23

Conducted: Excel MEP, Bangalore

28.03.2022 to 30.03.2022

S.No	Rollno Regno		Student Name				
1	19UMEC025	920419114001	AAKASH KANNAN.U	91			
2	19UMEC023	920419114002	ABISHEK KUMAR.S	93			
3	19UMEC026	920419114003	AJAY KUMAR.R	93			
4	19UMEC037	920419114004	ARAVINDAN.C	95			
5	19UMEC030	920419114005	ARUNKUMAR.V	92			
6	19UMEC008	920419114006	ASWIN.K	92			
7	19UMEC039	920419114007	ASWIN SUNDAR.R	91			
8	19UMEC004	920419114008	BALASUBRAMANIYAN.R	94			
9	19UMEC009	920419114009	BHUVANESH PANDIAN.P	95			
10	19UMEC028	920419114010	DEEPAN KAARTHIK.T	93			
11	19UMEC038	920419114011	GNANAPRAKASAM.G	93			
12	19UMEC011	920419114012	GOBINATH.M	95			
13	19UMEC027	920419114013	GOVARTHANAN.T	92			
14	19UMEC022	920419114014	JAGANATHAN.S	92			
15	19UMEC016	920419114015	JEEVABALAN.J	92			
16	19UMEC002	920419114016	JOYSON RALPH JEBADURAI.V	92			
17	19UMEC036	920419114017	KALIDASAN.M	93			
18	19UMEC010	920419114018	KARTHIK.S	94			
19	19UMEC031	920419114019	KUMARESH.R	91			
20	19UMEC007	920419114020	LOKESH.S	93			
21	19UMEC019	920419114021	MADHAVAN.G	93			
22	19UMEC021	920419114022	MADHAVAN.P	94			
23	19UMEC015	920419114023	MANOJ.D L	93			
24	19UMEC012	920419114024	MUTHUVEERASALAPANDIAN.M	93			
25	19UMEC001	920419114025	NARENDRAN.K	95			
26	19UMEC013	920419114026	NAVANEETHA KRISHNAN.N	94			
27	19UMEC029	920419114027	NAVEEN.D	94			
28	19UMEC032	920419114028	PRAVEEN RAJ.R	94			
29	19UMEC005	920419114029	RAHUL.V	95			
30	19UMEC006	920419114030	RAJESH KANNAN.R	91			
31	19UMEC044	920419114031	RAMPRASATH.C	93			
32	19UMEC020	920419114032	RATHINA SIVA MALAYAPPAN.G	90			
33	19UMEC024	920419114033	SATHEESH KUMAR.K	96			
34	19UMEC035	920419114034	SIVA ANANTH.E	96			
35	19UMEC043	920419114035	SIVABARATH.K	91			
36	19UMEC014	920419114036	SUBHASH RAAJ.K	91			
37	19UMEC033	920419114038	THOMAS LIVIN DANIYAL.A	96			
38	19UMEC042	920419114039	VENKATESHWARA.R	92			
39	19UMEC041	920419114040	VIGNESH.G	94			
40	19UMEC040	920419114041	VIGNESH.K B	94			
41	19UMEC034	920419114042	VIGNESH.NA	92			

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42	19UMEC003	920419114043	VIMALA	91
43	19UMECO17	920419114044	YUVARAJ K	95
44	19UMECOS3	920419114301	ARUNKUMAR P	91
45	19UMEC059	920419114302	BALA SUDHARSAN N	93
45	19UMEC058	920419114303	DHARUNIN	92
47	19UMECO45	920419114304	GANESH KARTHIK.S	94
4.8	19UMEC061	920419114305	HARIHARAN.R	94
49	19UMEC062	920419114306	MANIKANDA PRABHU.K	92
50	19UMEC047	920419114307	MICKAEL RAJ.P	91
51	19UMEC060	920419114308	MOHAMEDIRSHATH A	96
52	19UMEC056	920419114309	NAGARAJ.S	93
53	19UMEC054	920419114310	PANDI KAMAL KRISHNA.A	94
54	19UMEC046	920419114311	PARTHIBAN.P	92
55	19UMEC057	920419114312	PRABAKARAN.A	94
56	19UMEC050	920419114313	RAGULS	93
57	19UMEC055	920419114314	RATHISH.S	94
58	19UMEC052	920419114315	SENTHIL KUMAR.M	93
59	19UMEC049	920419114316	SIVAPACKIA.R	97
60	19UMEC063	920419114317	SIVA SUBRAMANIAN.S	93
61	19UMEC051	920419114318	VUAYAKUMAR.S	92
62	19UMEC048	920419114319	VINISH KUMAR.J	93
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se HoD/Mech Dean Academics

Statt Incharge

Feedback Form | III Year | Value Added Course

Title of the Program : Value added course for "HVAC"

Participants: III-year studentsDate: 28.03.2022 to 30.03.2022Conducted by: Excel MEP, BangaloreSoftware used: RIVET & MS EXCELMode: OFF Line

Coordinators:

Mr. Madhan N R, AP/Mech, Dr. Prithiviraj M, AP/Mech, Department of Mechanical Engineering,

Instructions: Please indicate your level of agreement the statements listed below

4 Star - Strong Agree 3 Star - Agree 2 Star - Neutral 1 Star - Dis-Agree

* Required

* This form will record your name, please fill your name.

1. The objectives of the training were clearly defined by the Co-ordinator *

- 2. Participation and interaction were encouraged.
- 3. The topics covered were relevant to me.



- 4. The content was organized and easy to follow.
- 5. This training experience will be useful me. *
- 6. The trainer was knowledgeable about the training topics.

*

7. The trainer was well prepared.

- 8. The trainer was well prepared.
- 9. The training objectives were met.



- 10. The training objectives were met.

*

- 11. The time allotted for the training was sufficient
- 12. The CAD Lab and CNC Machine were adequate and comfortable. *

*

*

Your view about this programme

13. What did you like most about this training?

14. What aspects of the training could be improved?

15. How do you hope to change your practice as a result of this training?

16. Please share over all comments about this programme.

- 17. Do you suggest this programme to your juniors *
 - 🔵 No
 -) Yes

Certificate Details

- 18. Kindly upload your certificate here. (Please share as a PDF within 5MB) *
 - ↑ Upload file

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N. R. modiliar

Approved by D-D. Durungener HoD/Mech



4. The content was organized and easy to follow. (0 point)

46 Responses

 $\star \star \star \star$

3.50 Average Rating

5. This training experience will be useful me. (0 point)

46

Responses

 $\star \star \star \star$

3.57 Average Rating

6. The trainer was knowledgeable about the training topics. (0 point)

46 Responses

 $\star \star \star \star$

3.52 Average Rating

7. The trainer was well prepared. (0 point)

46 Responses

 \star \star \star

3.50 Average Rating

8. The trainer was well prepared. (0 point)

46 Responses

 $\star \star \star \star$

3.50 Average Rating

9. The training objectives were met. (0 point)

46 Responses

 $\star \star \star \star$

3.48 Average Rating

10. The training objectives were met. (0 point)

46 Responses

 $\star\star\star\star\star$

3.37 Average Rating

11. The time allotted for the training was sufficient (0 point)

46 Responses

 $\star\star\star\star\star$

3.35 Average Rating

12. The CAD Lab and Demo Session were adequate and comfortable. (0 point)

46 Responses

 $\star\star\star\star\star$

3.50 Average Rating

13. What did you like most about this training? (0 point)

14. What aspects of the training could be improved? (0 point)

46

Responses

Latest Responses "Nothing" "Skills development" "Nothing "

6 respondents (13%) answered good for this question. thinking aspects demo software knowledge Needed to learn Creo good software Learnir Duration time period not Good students time and Materials 15. How do you hope to change your practice as a result of this training? (0 point)

8 respondents (17%) answered good for this question.

MODEL	LING Creo is	ea good	sily can understa	and Machine c touch v
Upgrade our le	vel	better	good	CREO quickly
co	onspect	No idea	training is usefu Designe	l creo software er Exceller

16. Please share over all comments about this programme. (0 point)

	Latest Responses
46	"Nice"
Responses	"Nill"
·	"Nice"

12 respondents (26%) answered Good for this question. Excellent programme useful thanks to CIPET knowledge of creo CNC machine 12 respondents (26%) answered Good for this question. idea about creo company machine creo i sir Creo basic knowledge

6/27/22, 10 34 AM	Feedback Form [III Year Value Added Course
17. Do you suggest this programm	ne to your juniors (0 point)
 Yes No 3 	
 Kindly upload your certificate F (Please share as a PDF within 5 	nere. (0 point) MB)
46 Responses	Latest Responses navaneetha krishnan_NAVANEETHAKRISHNAN.P.pdf New doc Feb 26, 2022 3.44 PM_SAIKISHORE.K(ME).pdf cipet_SIVAGURU.U(ME).pdf
Training made a impart in HVAC basics and many Students planue & proceed further in this and as to primary canar. Jul CHAIRPERSON.	Most of the students geve Positive foedback about the programme. J. J. J. J. J. M. Hoplmech.

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Nea	r Virudhunaga 1A	r , Madurai District.			Near Virudhunagar , Madurai District.				
	GSTIN				GSTIN				
	STATE	Tamil Nadu			STATE 1		Tamil Nadu		
9	STATE CODE	33			STATE C	ODE	33		
SL	HSN CODE	PARTICULARS/SERIAL NO	UOM	QTY	RATE	TAXABLE	IG	ST	TOTAL
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1	995463	"HVAC- Design"	Lot	1	105085	105084.75	18%	18915.25424	124000
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					Į				
		TOTAL AMOUNT				105084.75	18%	18915.25424	124000
	In Words	One Lakh Twenty Four Thousand Rupees Only/-							
Terr	ns and Conditi	ons:					TOTAL AMOUNT BEFORE TAX 105084.74		
1.Al	l Payment sho	uld sent to the above address with Invoice No &Date					ADD : IGST		18915.25424
							TOTALTAX AMOUNT		18915.25424
Ассо	unt Details:						ROUND OFF		
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Excel MEP Institute

#5, First Cross, Lalbagh Main Road, Near Subbaiah Circle, Bengaluru-560027

E-Mail: <u>oneworldinc@gmail.com</u> | Call:09886001720 / 09739933559

CENTRE FOR SKILLING AND TECHNICAL SUPPORT (CSTS)

About Our Institute

Having started in the year 1994 as Techademy, Excel MEP Institute has Trained & Successfully placed many Engineers & Diploma holders in the field of HVAC, Electrical, Plumbing (PHE) & Firefighting We train our students who are Graduate Engineers, Diploma Holders & ITI graduates in Design & Draughting of MEP Systems making them technically sound in the MEP domain by giving theoritical, Practical and Draughting skills.

Course Offered:

- HVAC
- ELECTRICAL
- PLUMBING
- FIRE FIGHTING
- REVIT MEP (Jan 2017)
- CLEAN ROOM DESIGNING

The main objectives of the courses at Excel MEP Academy are ;

- To enhance the employability of engineering students.
- To enhance the standard of fresh engineering graduates so that they become acceptable to the industry.
- To cater to the needs of the industry.

• To create a platform where the students can work towards accessing the skills required to get into industry.

- To bridge the gap between industry and educational institutions.
- To provide both technical and soft skill to people to facilitate their employability.

• To meet the needs of unemployed and non-employable engineering graduates and to improve their communication skills.

• To reinforce the students skills and acquire industry-specific knowledge from trained faculty and experts from industries.

- To offer suitable candidates to different industries.
- To help young graduates to find jobs through appropriate training.