

VAC082	ORACLE
Contact Hours	30 Hours
Prerequisite	Nil

Course Description

This course on Oracle is designed to provide students with a comprehensive understanding of Oracle databases, their administration, and management. Students will explore the fundamental principles of Oracle database systems, including installation, configuration, security, and maintenance. The course aims to equip individuals with the knowledge and skills needed to become proficient Oracle database administrators.

Course Objectives

The course will enable the students to:

- Understand the core principles of Oracle database administration.
- Learn to install, configure, and manage Oracle databases.
- Explore database security and user management.
- Develop skills for backup and recovery of Oracle databases.

Course Outcomes

On the completion of the course students will be able to:

CO1: Explain the core principles of Oracle database administration.

CO2: Install, configure, and manage Oracle databases.

CO3: Implement database security and user management.

CO4: Perform backup and recovery of Oracle databases.

Course Content

Module 1: Introduction to Oracle Database Administration

5 hours

- The Significance of Oracle Databases
- Ethical Considerations in Database Management
- Challenges and Opportunities in Database Administration
- Real-world Oracle Database Success Stories

Module 2: Oracle Database Architecture

5 hours

- Oracle Database Architecture Overview
- Installation and Configuration of Oracle Database
- Database Instance and Memory Structures
- Managing Initialization Parameters

Module 3: Database Security and User Management

5 hours

- Database Authentication and Authorization
- User Roles and Privileges
- Auditing and Monitoring Database Activity
- Data Encryption and Security Best Practices

Module 4: Backup and Recovery

5 hours

- Understanding Backup and Recovery Concepts
- Performing Logical and Physical Backups
- Database Recovery Methods
- Using RMAN for Backup and Recovery

Module 5: Performance Tuning and Monitoring

5 hours

- Performance Tuning Fundamentals
- SQL Tuning and Optimization
- Database Monitoring and Diagnostic Tools
- Real-time Application Testing

Module 6: Data Migration and High Availability

5 hours

- Data Migration Techniques
- Data Pump and Transportable Tablespaces
- High Availability Solutions with Oracle
- Disaster Recovery Planning

Practicum

The course includes a practicum where students will install and configure Oracle databases, implement user management and security measures, conduct backup and recovery simulations, and perform performance tuning and monitoring of real databases.

Textbooks

Loney, K., & Ingle, B. (2016). Oracle Database 12c: The Complete Reference. McGraw-Hill Education.

Alapati, S., Kuhn, D. C., & Nanda, A. (2018). Expert Oracle Database Architecture: Oracle Database 9i, 10g, and 11g Programming Techniques and Solutions. Apress.

Reference Books

Arup Nanda, K. G., & Leung, M. (2019). Oracle Data Guard 11g Handbook. McGraw-Hill Education.

Kyte, T., & Kuhn, D. C. (2018). Expert Oracle Database Architecture: Oracle Database 9i, 10g, and 11g Programming Techniques and Solutions (2nd ed.). Apress.

Malcher, T., & Burleson, D. (2020). Oracle Database 19c New Features. Rampant TechPress.

Ruhl, M. (2017). Pro Oracle Database 12c Administration. Apress.

	Evaluation Component	Weightage (%)
1	Activities	20
2	Project/Presentation	20
3	Attendance	10
4	End Term Examination	50



K.R. MANGALAM UNIVERSITY
EDUCATION FOR LIFE
(Recognized by UGC and a member of AIU)

Ref.No.:KRMU/Admin./Notice/2021-2022/ 2433(A) Dated: 02nd August, 2021

NOTICE

This is to put for information that School of Engineering & Technology is offering Value-Added Course (VAC) for all interested students during Odd Semester as per the following specifications.

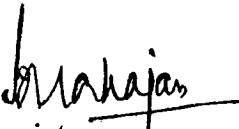
Course Code	Course Title	Coordinating Department / School	Duration
VAC069	Innovation through Design Thinking	SOET	30 Hrs.
VAC072	Applied Cryptography	SOET	30 Hrs.
VAC073	Data Analytics with R	SOET	30 Hrs.
VAC082	ORACLE	SOET	30 Hrs.
VAC083	Internet of Things (IoT)	SOET	30 Hrs.

Maximum 100 seats are available for the course.

Course Start Date: 08 September 2021

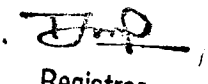
Course End Date: 29 September 2021

All interested students are required to confirm their registration with the Dean-School of Engineering & Technology latest by **24th August, 2021**.


Registrar
K.R. Mangalam University

Copy to: Sohna Road, Gurugram (Haryana)

- Vice Chancellor : For kind information
- Dean (Academics Affairs)
- Controller of Examinations
- All Deans/ School Coordinators
- All Faculty Members/ Mentors
- Notice Board
- Office Copy


Registrar
K.R. Mangalam University
Sohna Road, Gurugram (Haryana)



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2021-22
COURSE CODE: VAC082
COURSE TITLE: ORACLE

ROLL NO	NAME	PROGRAMME	SEMESTER	8-Sep-21	10-Sep-21	17-Sep-21	22-Sep-21	29-Sep-21
2101840007	SAKSHAM TANWAR	B.Sc. (H) DS	Semester I	P	P	P	P	P
2101840006	VINESH	B.Sc. (H) DS	Semester I	P	P	P	P	P
2101840006	VINESH SANGWAN	B.Sc. (H) DS	Semester I	P	P	P	P	A
2101840005	ATRI RISHI	B.Sc. (H) DS	Semester I	A	P	P	A	P
2101840004	MAYANK CHAUDHARY	B.Sc. (H) DS	Semester I	P	P	P	P	P
2101840003	HETANSH MALIK	B.Sc. (H) DS	Semester I	A	P	A	P	P
2101840002	MAYANK	B.Sc. (H) DS	Semester I	P	P	P	P	P
2101840001	RASHIKA RANJAN	B.Sc. (H) DS	Semester I	P	P	A	P	P
2102080096	TASLEEM	BBA	Semester I	P	P	P	P	P
2102080085	AARAV GUPTA	BBA	Semester I	P	A	P	A	P
2102080052	ANGELA SHARMA	BBA	Semester I	P	P	P	P	P
2102080039	KARAN NACHAAL	BBA	Semester I	A	P	P	P	P
2101030001	HIMANSHU YADAV	B.Tech EEE	Semester I	P	P	P	P	P
2101020002	MADHAV GUPTA	B.Tech ME	Semester I	P	P	P	P	P
2101020001	TANIA BANERJEE	B.Tech ME	Semester I	A	P	P	P	P
2101020005	LAKSHAY KUMAR SUHAG	B.Tech ME	Semester I	A	P	A	P	P
2113820020	MAYANK SINGHANIA	B.Sc. (H) Agriculture	Semester I	P	P	P	P	P
2113820011	PARTH SAINI	B.Sc. (H) Agriculture	Semester I	P	P	P	A	P
2102210012	MUSTAFA	B.Com Program	Semester I	P	P	P	P	P
2102210011	SIMPLE SINGH	B.Com Program	Semester I	P	P	A	P	P
2102210010	RAJ PATEL	B.Com Program	Semester I	P	P	P	P	P
2102210009	Yukta Vashisth	B.Com Program	Semester I	P	P	P	A	P
2102210008	SAURAV YADAV	B.Com Program	Semester I	P	P	P	P	P
2102210007	ABHISHEK	B.Com Program	Semester I	A	P	P	P	P
2102210005	NIHIT SHARMA	B.Com Program	Semester I	P	P	A	P	P
2102210004	PARUL YADAV	B.Com Program	Semester I	A	P	P	P	P
2102210003	SRISHTI GOYAL	B.Com Program	Semester I	P	P	P	A	P
2102210002	GEETANJALI KUMARI	B.Com Program	Semester I	P	P	P	P	P
2102210001	SHIVAM TYAGI	B.Com Program	Semester I	P	P	A	P	P

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COURSE INCHARGE

Indr

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

DEAN
School of Distance Education & Technology



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2021-22
COURSE CODE: VAC082
COURSE TITLE: ORACLE

ROLL NO	NAME	3-Oct-21	5-Oct-21	10-Oct-21	12-Oct-21	17-Oct-21	19-Oct-21	24-Oct-21	26-Oct-21	1-Nov-21	3-Nov-21	5-Nov-21
2101840007	SAKSHAM TANWAR	P	P	P	P	P	P	P	P	P	P	P
2101840006	VINESH	P	P	A	P	P	P	P	P	P	A	P
2101840006	VINESH SANGWAN	P	P	P	P	P	P	P	P	P	P	P
2101840005	ATRI RISHI	P	A	P	P	P	P	P	P	P	P	A
2101840004	MAYANK CHAUDHARY	P	P	P	A	P	P	P	P	P	P	P
2101840003	HETANSH MALIK	P	P	P	P	P	P	P	P	P	P	A
2101840002	MAYANK	P	A	A	P	P	P	P	A	P	P	P
2101840001	RASHIKA RANJAN	P	P	P	P	P	P	P	P	P	P	A
2102080096	TASLEEM	P	P	A	P	P	A	P	P	A	P	P
2102080085	AARAV GUPTA	P	P	P	P	P	A	P	P	P	P	P
2102080052	ANGELA SHARMA	P	P	P	P	P	P	P	P	P	P	P
2102080039	KARAN NACHAAL	P	P	P	P	P	P	P	P	P	P	P
2101030001	HIMANSHU YADAV	P	P	P	P	P	P	P	P	P	P	A
2101020002	MADHAV GUPTA	P	P	P	P	P	P	P	P	P	P	P
2101020001	TANIA BANERJEE	P	A	A	P	A	P	P	P	P	P	P
2101020005	LAKSHAY KUMAR SUHAG	P	P	P	P	P	P	P	P	P	P	A
2113820020	MAYANK SINGHANIA	P	P	P	P	P	P	P	P	P	P	P
2113820011	PARTH SAINI	P	P	P	P	P	P	P	P	A	P	P
2102210012	MUSTAFA	P	A	A	P	A	P	P	P	P	P	P
2102210011	SIMPLE SINGH	P	P	P	P	P	P	P	P	P	P	A
2102210010	RAJ PATEL	P	P	P	P	P	P	P	P	P	P	P
2102210009	Yukta Vashisth	P	P	P	P	P	P	P	P	A	P	P
2102210008	SAURAV YADAV	P	P	P	P	P	P	P	P	P	P	P
2102210007	ABHISHEK	P	A	A	P	A	P	P	P	P	P	P
2102210005	NIHIT SHARMA	P	P	P	P	P	P	P	P	P	P	A
2102210004	PARUL YADAV	P	P	P	P	P	P	P	P	P	P	P
2102210003	SRISHTI GOYAL	P	P	P	P	P	P	P	P	A	P	P
2102210002	GEETANJALI KUMARI	P	A	A	P	A	P	P	P	P	P	P
2102210001	SHIVAM TYAGI	P	P	P	P	P	P	P	P	P	P	A

20/11/21
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K.R. Mangalam University
(Haryana)
Gohana Road, Gurugram, (Haryana)

DEAN (SOET)
K.R. Mangalam University



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2021-22
COURSE CODE: VAC082
COURSE TITLE: ORACLE

ROLL NO	NAME	10-Nov-21	12-Nov-21	17-Nov-21	21-Nov-21	24-Nov-21	26-Nov-21	1-Dec-21	3-Dec-21	8-Dec-21
2101840007	SAKSHAM TANWAR	P	P	P	P	P	P	P	A	P
2101840006	VINESH	A	P	P	P	P	P	P	P	P
2101840006	VINESH SANGWAN	P	P	P	P	P	P	P	P	P
2101840005	ATRI RISHI	P	P	P	P	P	P	P	P	P
2101840004	MAYANK CHAUDHARY	P	P	P	P	A	P	P	P	A
2101840003	HETANSH MALIK	P	P	P	P	P	A	P	P	A
2101840002	MAYANK	A	P	P	P	P	P	P	P	A
2101840001	RASHIKA RANJAN	P	P	P	P	P	P	A	P	P
2102080096	TASLEEM	P	P	P	P	P	P	P	P	A
2102080085	AARAV GUPTA	P	P	P	P	A	P	P	P	P
2102080052	ANGELA SHARMA	P	A	P	P	P	P	A	P	P
2102080039	KARAN NACHAAL	P	A	P	P	P	P	P	P	P
2101030001	HIMANSHU YADAV	P	P	P	P	P	P	P	P	P
2101020002	MADHAV GUPTA	P	P	A	P	P	P	P	P	P
2101020001	TANIA BANERJEE	P	P	A	P	P	P	P	P	P
2101020005	LAKSHAY KUMAR SUHAG	P	P	P	P	P	P	P	P	P
2113820020	MAYANK SINGHANIA	P	P	P	P	P	A	P	P	A
2113820011	PARTH SAINI	P	P	P	P	A	P	P	P	P
2102210012	MUSTAFA					P	P	A	P	P
2102210011	SIMPLE SINGH	P	P	A	P	P	P	P	P	P
2102210010	RAJ PATEL	P	P	P	P	P	A	P	P	A
2102210009	Yukta Vashisth	P	P	P	P	A	P	P	P	P
2102210008	SAURAV YADAV	P	P	P	P	P	P	A	P	P
2102210007	ABHISHEK	P	P	P	P	P	P	P	A	P
2102210005	NIHIT SHARMA	P	P	A	P	P	P	P	P	P
2102210004	PARUL YADAV	P	P	P	P	P	A	P	P	A
2102210003	SRISHTI GOYAL	P	P	P	P	A	P	P	P	P
2102210002	GEETANJALI KUMARI	P	P	P	P	P	P	A	P	A
2102210001	SHIVAM TYAGI	P	P	P	P	P	P	P	P	P

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Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

gao
COURSE INCHARGE

U. Singh
Dean
School of Engineering & Technology (SOET)
K.R. Mangalam University



ATTENDANCE SHEET

VAC COURSE FOR ACADEMIC YEAR 2021

COURSE CODE: VAC082

COURSE TITLE: ORACLE

ROLL NO	NAME	10-Dec-21	15-Dec-21	17-Dec-21	22-Dec-21	24-Dec-21	29-Dec-21	Total	Present	Percentage
2101840007	SAKSHAM TANWAR	P	P	A	A	P	A	31	27	87.10
2101840006	VINESH	A	P	P	P	A	A	31	25	80.65
2101840006	VINESH SANGWAN	P	P	P	A	A	A	31	27	87.10
2101840005	ATRI RISHI	P	P	P	P	A	A	31	24	77.42
2101840004	MAYANK CHAUDHARY	P	P	P	A	A	A	31	25	80.65
2101840003	HETANSH MALIK	P	A	P	P	P	P	31	25	80.65
2101840002	MAYANK	P	P	P	A	P	A	31	24	77.42
2101840001	RASHIKA RANJAN	P	A	P	P	A	A	31	25	80.65
2102080096	TASLEEM	A	P	P	P	P	P	31	27	87.10
2102080085	AARAV GUPTA	P	P	P	P	P	A	31	25	80.65
2102080052	ANGELA SHARMA	A	P	P	P	A	A	31	27	87.10
2102080039	KARAN NACHAAL	A	P	P	P	A	A	31	27	87.10
2101030001	HIMANSHU YADAV	P	P	P	P	A	P	31	27	87.10
2101020002	MADHAV GUPTA	P	A	P	P	P	A	31	27	87.10
2101020001	TANIA BANERJEE	A	P	A	P	P	A	31	24	77.42
2101020005	LAKSHAY KUMAR SUHAG	P	A	P	P	A	P	31	27	87.10
2113820020	MAYANK SINGHANIA	A	P	P	P	A	A	31	27	87.10
2113820011	PARTH SAINI	P	A	P	P	A	A	31	25	80.65
2102210012	MUSTAFA	A	P	A	P	P	P	31	25	80.65
2102210011	SIMPLE SINGH	P	A	P	P	P	A	31	25	80.65
2102210010	RAJ PATEL	A	P	P	P	A	A	31	27	87.10
2102210009	Yukta Vashisth	P	P	A	P	P	P	31	27	87.10
2102210008	SAURAV YADAV	P	P	A	P	A	A	31	27	87.10
2102210007	ABHISHEK	A	P	A	P	P	P	31	26	83.87
2102210005	NIHIT SHARMA	P	A	P	P	P	P	31	25	80.65
2102210004	PARUL YADAV	A	A	P	P	A	P	31	27	87.10
2102210003	SRISHTI GOYAL	P	P	P	P	P	P	31	24	77.42
2102210002	GEETANJALI KUMARI	A	P	A	A	P	P	31	25	80.65
2102210001	SHIVAM TYAGI	P	A	P	P	A	A	31	27	87.10

[Signature]
COURSE INCHARGE

[Signature]
Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

[Signature]
Dean
School of Engineering & Technology (SOET)



VALUE ADDED COURSE(VAC)

ACADEMIC YEAR 2021-22

COURSE CODE: VAC082

COURSE TITLE: ORACLE

COURSE OFFERED BY: SCHOOL OF ENGINEERING AND TECHNOLOGY (SOET)

LIST OF STUDENTS COMPLETING THE COURSE

S.NO	SESSION	ROLL NO	NAME	PROGRAMME	SEMESTER	COURSE CODE	COURSE TITLE	SCHOOL
1	2022-23	2101840007	SAKSHAM TANWAR	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
2	2022-23	2101840006	VINESH	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
3	2022-23	2101840006	VINESH SANGWAN	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
4	2022-23	2101840005	ATRI RISHI	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
5	2022-23	2101840004	MAYANK CHAUDHARY	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
6	2022-23	2101840003	HETANSH MALIK	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
7	2022-23	2101840002	MAYANK	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
8	2022-23	2101840001	RASHIKA RANJAN	B.Sc. (H) DS	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
9	2022-23	2102080096	TASLEEM	BBA	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
10	2022-23	2102080085	AARAV GUPTA	BBA	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
11	2022-23	2102080052	ANGELA SHARMA	BBA	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
12	2022-23	2102080039	KARAN NACHAAL	BBA	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
13	2022-23	2101030001	HIMANSHU YADAV	B.Tech EEE	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
14	2022-23	2101020002	MADHAV GUPTA	B.Tech ME	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
15	2022-23	2101020001	TANIA BANERJEE	B.Tech ME	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
16	2022-23	2101020005	LAKSHAY KUMAR SUHA	B.Tech ME	Semester I	VAC082	ORACLE	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
17	2022-23	2113820020	MAYANK SINGHANIA	B.Sc. (H) Agriculture	Semester I	VAC082	ORACLE	SCHOOL OF ARCHITECTURE & DESIGN(SOAD)
18	2022-23	2113820011	PARTH SAINI	B.Sc. (H) Agriculture	Semester I	VAC082	ORACLE	SCHOOL OF ARCHITECTURE & DESIGN(SOAD)
19	2022-23	2102210012	MUSTAFA	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
20	2022-23	2102210011	SIMPLE SINGH	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
21	2022-23	2102210010	RAJ PATEL	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
22	2022-23	2102210009	Yukta Vashisth	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
23	2022-23	2102210008	SAURAV YADAV	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
24	2022-23	2102210007	ABHISHEK	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
25	2022-23	2102210005	NIHIT SHARMA	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
26	2022-23	2102210004	PARUL YADAV	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
27	2022-23	2102210003	SRIHITI GOYAL	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
28	2022-23	2102210002	GEETANJALI KUMARI	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)
29	2022-23	2102210001	SHIVAM TYAGI	B.Com Program	Semester I	VAC082	ORACLE	SCHOOL OF MANAGEMENT & COMMERCE(SOMC)

Registrar

K.R. Mangalam University
Ganga Road, Gurugram (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SAKSHAM TANWAR**, University Enrolment No **2101840007** of **B.Sc. (H) DS** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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Controller of Examination

Jof

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **VINESH**, University Enrolment No **2101E40006** of **B.Sc. (H) DS** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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Controller of Examination

Jef

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **VINESH SANGWAN**, University Enrolment No **2101840006** of **B.Sc.**
(H) DS programme has successfully qualified **VALUE ADDED COURSE VAC082**
(ORACLE) during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

hahajan

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K.R. Mangalam University
Sohna Road, Gurugram. (Haryana)



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This is to certify that **ATPI PISHTI**, University Enrolment No **2161840005** of **B.Sc. (H) DS** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **MAYANK CHAUDHARY**, University Enrolment No **2101840004** of **B.Sc. (H) DS** programme has successfully qualified **VALUE ADDED COURSE VAC082** (**ORACLE**) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **HETANSH MALIK**, University Enrolment No **2101840003** of **B.Sc. (H.YDS)** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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WE HEREBY certify that **MAZANK** University Enrolment No **2101840092** of **B.Sc. (H) DS** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Old Semester)**.

Date: 21.02.2022

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This is to certify that **RASHIKA RANJAN**, University Enrolment No **2101840001** of **B.Sc. (E) DS** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **TASLEEM**, University Enrolment No **2102080096** of **BBA** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **AARAV GUPTA**, University Enrolment No **2102080085** of **BBA** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **ANGELA SHARMA**, University Enrolment No **2102080052** of **BBA** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **KARAN NACHIALE**, University Enrolment No **2102080039** of **BBA** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **KIMANSHU YADAV**, University Enrolment No **2101030001** of **B.Tech EEE** programme has successfully qualified **VALUE ADDED COURSE VAC082** (**ORACLE**) during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **MADHAV GUPTA**, University Enrolment No **2101020002** of **B.Tech**
ME programme has successfully qualified **VALUE ADDED COURSE VAC082**
(CRACLE) during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **TANIA BANERJEE**, University Enrolment No **2101020001** of **B.Tech ME** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **LAKSHAY KUMAR SUHAG**, University Enrolment No **2101020005** of **B.TechME** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

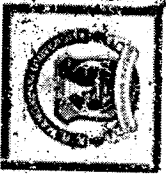
h. mahajan

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THIS IS TO CERTIFY THAT **MAVANK SINGHANIA**, University Enrolment No **2113820020** of
Department of **B.Sc.(H) Agriculture** programme has successfully qualified **VALUE ADDED COURSE**
in **VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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This is to certify that **PARTH SAINI**, University Enrolment No **2113820011** of **B.Sc. (H) Agriculture** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

hrajani

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This is to certify that **MUSTAFA A.**, University Enrolment No **2102210312** of **B.Com** Program programme has successfully qualified **VALUE ADDED COURSE VAC082** (GRACE) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **SIMPLE SINGH**, University Enrolment No **2102210011** of **B.Com** Program programme has successfully qualified **VALUE ADDED COURSE VAC082** (**GRACLE**) during Academic Session **2021-22** (**Odd Semester**).

Date: 21.02.2022

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This is to certify that **RAJ PATEL**, University Enrolment No **2102210010** of **B.Com** Program, programme has successfully qualified **VALUE ADDED COURSE VAC082** (**ORACLE**) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **Pratika Vasanthi**, University Enrolment No **2102210009** of **B.Com** Program, has successfully qualified **VALUE ADDED COURSE VAC082** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

h. shajam

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This is to certify that **SAURAV YADAV**, University Enrolment No **2102210008** of **B.Com** Program, programme has successfully qualified **VALUE ADDED COURSE VAC082** (ORACLE) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **ABHISHEK** University Enrolment No **2102210007** of **B.Com** Program programme has successfully qualified **VALUE ADDED COURSE VAC082** (ORACLE) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **NEET SHARMA**, University Enrolment No **2102210005** of **B.Com** Program programme has successfully qualified **VALUE ADDED COURSE VAC082** (**ORACLE**) during Academic Session **2021-22** (**Odd Semester**).

Date: 21.02.2022

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This is to certify that **PARUL YADAV**, University Enrolment No **2102210004** of **B.Com** Program programme has successfully qualified **VALUE ADDED COURSE VAC082** (**ORACLE**) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **SRISHRI GOYAL**, University Enrolment No **2102210003** of **B.Com** Program programme has successfully qualified **VALUE ADDED COURSE VAC082** (ORACLE) during Academic Session **2021-22** (Odd Semester).

Date: 21.02.2022

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This is to certify that **GEETANJALI KUMARI**, University Enrolment No **2102210002** of **B.Com Program** programme has successfully qualified **VALUE ADDED COURSE VAC082 (ORACLE)** during Academic Session **2021-22 (Odd Semester)**.

Date: 21.02.2022

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Do hereby certify that **SEIVANA THARAGI**, University Enrolment No **2102210001** of **B.Com** Programme has successfully qualified **VALUE ADDED COURSE VAC082** (**CRACLE**) during Academic Session **2021-22** (Odd Semester).

hahajan

Date: 21.02.2022

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