## Oriental College Of Technology, Bhopal

Date: 17 June 2014

## Policy of Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs .
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score =Class Room Assessment Score + Test Score, with minimum of $60 \%$ attendance
6. Student will be eligible for a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Exam Score $>=25 / 50$.
c. If one of the 2 criteria is not met, student will not get the certificate even if the Final score $>=$ 50/100.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:

1. Academic Committee
2. All HoD's, OCT


## Director

Oriental Cliche of Tocology Thana Hagar, Raven Road Bhopal

Reqistration Form

Name：

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## CHIEF PATRONS

Dr．K．L．Thakral
Founder Chairman．Oriental Group of Institutes and
Chancellor，Oriental University，Indore
PATRONS
Shri．Praveen Thakral
Chairman．Oriental Group of Institutes

## Mrs．Niraj Ghei

Chair Person，Oriental College of Technology：Bhopal
ADVISORY COMMITTEE
Dr．Ranjeeta Khare
Director，OCT．Bhopal

CONVENOR
Dr．L．K．Vishwamitra
octhodcse＠oriental．ac．in
Mobile：$\div 919630087969$
COURSE COORDINATOR
Ms．Bhavna Gupta
Mobile：$\mp 919584559227$

## ORGANISING COMMITTEE MEMBERS

Mr．Sourabh Jain
Mr．Saket Gupta

## CONTACT

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Mobile：+919630087969
Mr．Amit Dubey
Mobile：+919039911014

Oriental College of Technology，


## Value Added Course

on
＂C and C＋＋＂
［24－28，September，2018］
For II－Year Students

Organized By
Department of Computer Science Engineering

Oriental College of Technology， Thakral Nagar．Raisen Road，Bhopal－ 462021

Phone：：2529026．2529057．Fax：0755－2529472


Oriental College of Techrongogy Thakral iver：

## ABOUT THE ORIENTAL GROUP <br> Oriental Group of Institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self

 financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Computer Science is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research. The state-ifart facilities and competent faculties Spoyide an excellent climate for the all round deyelopment of the students. It has well qualified, coninited and motivated faculty members having specialization in, various streams. The CS Department offers M.Tech Course in Computer Science Engineering along with

Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

Computer Science Engineering plays prominent role in every domain and vital role in development of Nation. "C and C++"is Value Added course which will provide benefits to the participants in understanding many concepts in the field of programming and comprehending the algorithms behind technologies and their working.

## OBJECTIVES\& CONTENTS

C is a middle level programming language developed by Dennis Ritchie during the early 1970s while working at AT\&T Bell Labs in USA. The objective of its development was in the context of the redesign of the UNIX operating system to enable it to be used on multiple computers.
The origin of $\mathrm{C}++$ dates back to 1979 when Bjarne Stroustrup, also an employee of Bell AT \&T, started working on language C with classes. He borrowed desirable features from many other languages like Simula, Ada, ML, CLU and ALGOL 68. Thus, in addition to features of C language, $\mathrm{C}++$ also included classes, strong type checking, default function argument and basic inheritance. Till 1983, it was called C with classes, and in 1983 it was named C++. During 1998, a joint ANSI-ISO committee released the specification for $\mathrm{C}++$ language standards.
$\checkmark$ To learn the basics of programming in C and $\mathrm{C}++$.
$\checkmark$ To know the concept of OOPM.
$\checkmark$ To know the basics of file handling, arrays and pointers in the program.
$\checkmark$ Programs to solve real-world applications.

## ELIGIBILITY

The Second year Students of Computer Science Engineering branch are eligible to attend the $C$ and $\mathrm{C}++$ programming course.

## REGISTRATION

No Registration fees.

## INVITED SPEAKERS

Mr. Amit Dubey
Associate Professor, Dept CSE, OCT Bhopal


Oriental College of Technology, Bhopal

## Department of Computer Science and Engineering

## C\& C++Syllabus (CSE 20001)

Module 1-

Introduction and First Program, Variables and Data type, Console 10 Operations
Operators and Expressions

## Module 2-

Control Flow Statements, Working with Functions, Working with Arrays

## Module 3

Pointers, String Handling

Module 4

Structures and Unions, File Handling

## Module 5

Pre-Processor Directives, Command Line Arguments and Variable Arguments



SCHEDULE. Value Added Course on C and C + (CSE20001)
Days Value Added Course on C and C + + (2A.5ep-2018 To 28-Sep-2018)


2Sep2019 - Day-I

## Oriental College of Technology, Bhopal

## Department of Computer Science and Engineering

Marks Scored:

Semester: III
Subject Name/Code: C and C++ (CSE 20001)
Max Marks: 50

Name of Student: $\qquad$ Enrollment No: $\qquad$

1- What is the size of a boolean variable in $\mathrm{C}++$ ?
a) 1 bit b) 1 byte
c) 4 bytes d) 2 bytes
?. Which of the following is $\mathrm{C}++$ equivalent for print()?
a) cin
b) court
c) print
d) input

3 - Which of the following is an exit-controlled loop?
a) for b) while c) do-while d) all of the mentioned

4 - What is dynamic binding?
a) The process of linking the actual code with a procedural call during runtime
b) The process of linking the actual code with a procedural call during compile-time
c) The process of linking the actual code with a procedural call at any-time
d) All of the mentioned

5- What will be the output of the following program in both C and $\mathrm{C}++$ ?
\#include<stdio.h>
int main(int argo, char const *argv[])
?

```
printf("%dln", (int)sizeof('a'));
```

return 0;
ii) Output in C is 1 and in $\mathrm{C}++$ is 4 b) Output in C is 4 and in $\mathrm{C}++$ is 1
c) Output in C is 1 and in $\mathrm{C}++$ is 1 d) Output in C is 4 and in $\mathrm{C}++$ is 4 6 The operator used for dereferencing or indirection is $\qquad$
a) *
b) \&
c) $->$
d) $\rightarrow>$
7. Choose the right option. String * $x, y$;
a) $x$ is a pointer to a string, $y$ is a string
v) $y$ is a pointer to a string, $x$ is a string
c) both $x$ and $y$ are pointers to string types
d) $y$ is a pointer to a string
8. Which one of the following is not a possible state for a pointer.
a) hold theadices of the specific object
b) point one past the end of an object
c) zero col
d) poditatatio

9 What happens if the following line is executed in $C$ and $C++?--$ Cost int $a$;
Error in both C and $\mathrm{C}++$
b) Warning in both C and $\mathrm{C}++$
c) Error in C and successful execution in $\mathrm{C}++$
d) Error in $\mathrm{C}++$ and successful execution in C

10 What is a function template?
a) creating a function without having to specify the exact type
b) creating a function with having an exact type
c) creating a function without having blank spaces
d) creating a function without class

11 Which is used to describe the function using placeholder types?
a) template parameters
b) template type parameters
c) template type
d) type parameters

12 Pick out the correct statement.
a) you only need to write one function, and it will work with many different types
(h) it will take a long time to execute

て) duplicate code is increased
d) it will take a long time to execute \& duplicate code is increased

13 Is boot a fundamental data type in C++?
a) Yes
b) No, it is a typedef of unsigned char
c) No, it is an enum of \{false, true\}
d) No, it is expanded from macros

14 Find the odd one out.
a) std::vector<int>

ט) std::vector<short>
c) std::vector<long>
d) std::vector<bool>

15 For what values of the expression is an if-statement block not executed?
a) 0 and all negative values
b) 0 and -1
c) 0
ad) 0 , all negative values, all positive values except 1
16 Which of the two operators ++ and - work for the pol data type in C++?
a) None
b) ++
c) -
d) ++ \&

17 This set of C++ Programming Multiple Choice Questions \& Answers (MCQs) focuses on "Iriheritance-1".

1. What is Inheritance in $\mathrm{C}++$ ?
a) Wrapping of data into a single class
b) Deriving new classes from existing classes
c) Overloading of classes
d) Classes with same names

18 How matysspercifiers are used to derive a class?
a) 1
b) 2

 Bhopal
c) 3
d) 4

19How many specifiers are used to derive a class?
a) 1
b) 2
c) 3
d) 4

20-What is a copy constructor?
a) A constructor that allows a user to move data from one object to another
b) A constructor to initialize an object with the values of another object
c) A constructor to check the whether to objects are equal or not
d) A constructor to kill other copies of a given object.

21-Why constructors are efficient instead of a function init() defined by the user to initialize
the data members of an object?
a) Because user may forget to call init() using that object leading segmentation fault
b) Because user may call init() more than once which leads to overwriting values
c) Because user may forget to define init() function
d) All of the mentioned
?2- What is a friend function in $\mathrm{C}++$ ?
a) A function which can access all the private, protected and public members of a class
b) A function which is not allowed to access any member of any class
c) A function which is allowed to access public and protected members of a class
d) A function which is allowed to access only public members of a class

23-What happens if a user forgets to define a constructor inside a class?
a) Error occurs
b) Segmentation fault
c) Objects are not created properly
d) Compiler provides a default constructor to avoid faults/errors

24- Which of the following is correct about friend functions?
a) Friend functions use the dot operator to access members of a class using class objects
b) Friend functions can be private or public
c) Friend cannot access the members of the class directly
d) All of the mentioned

25- Pick the correct statement.
a) Friend functions are in the scope of a class
) Friend functions can be called using class objects
a) Friend functions can be invoked as a normal function
d) Friend functions can access only protected members not the private members


## C \& C++ Syllabus (CSE 20001)

1. A
2. $B$
3. A
4. C
5. $B$
6. A
7. $A$
8. D
9. D
10. A
11.B
11. A
12. A
14.D
15.C
16.B
13. B
14. C
15. C
20.B
16. D
17. A
23.D
24.D
18. C

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## Feedback Form

| Value Added Course | C and C++(CSE 20001) |
| :---: | :--- |
| Date: | $24-28$ Sep 2018 |
| Program Location: | CSE Dept Oriental College of Technology, Bhopal |
| Presenters): | Mr. Amid Dubey |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

$$
4=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$




[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


## Department of Computer Science $\because$ Engineering

This is to certify that Mr./Ms. EDITYA JELL of CS-III Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "C and C++" during $24-28$ Sept 2018 , organized by Computer Science and Engineering Department of Oriental College of Technology, Bhopal.

CoOrdinator, CS, OCT


Ki- Oriental College of Technology
Head of Department, CS OCT
-


Director, OCT


## ORIENTAL COLLEGE OF TECHNOLOGY, BIIOPAL DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## Report on Value Added Course on "C and $\mathrm{C}+\mathrm{F}$ "

Date and Time: 24-28, September, 2018
Organized by: CSE, OCT, Bhopal
Name of the Speakers: Mr. Ambit Dubey Associate Professor, Ms Bhavna Gupta, 'Assistant Professor, \& Mr. Saket Gupta, Assistant Professor .
Participants Details: For II -Year Students
Venue: CSE, OCT Campus

## Summary of the Event

Computer Science Engineering plays prominent role in every domain and vital role in development of Nation. "C and C++" is Value Added course which will provide benefits to the participants in understanding many concepts in the field of programming and comprehending the algorithms behind technologies and their working.

The Department of Computer Science and Engineering Oriental College of Technology organized "Value Added Course on "C and $C++$ " from 24 September, 2018 to 28 September, 2018 for the students of second year.
This Course syllabus was covered by Mr. Ami Dubey Associate Professor, Ms Bhavna Gupta, Assistant Professor and Mr. Saket Gupta, Assistant Professor CSE, OCT in 30 Hrs. of 5-Day program. Inaugural Ceremony started by Director Speech on 24 th September, 2018 and this course is conducted as per schedule and on 28 th September, 2018 valedictory function was conducted.


Prof. Bhavna Gupta
Course Coordinator CSS, OCT


Oriental College of Technology Thakral Nagar, Raiser Road Bhopal

## ORIENTAL COLLEGE OF TECHNOLOGY, MHOPAL <br> Approved by AICTE, New Delhi \& Govt, of M,P. Amilinted io Jtallv Gandhi Proudyogikl Vishwavidyalaya; Bhópal. <br> Oriontal Campus, Ralsen Rond, Bliopal-462021 (MP) INDI/

Date: 17 Junc 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs:
2. Only 'students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enfoll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bliopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible fôt a certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause ( $\mathrm{a}, \mathrm{b}$ ) is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

## Copy to:

Öriental Collego of Technology
Thakral Nagar, Raisen Road Bhepal

1. Academic Committec :
2. All HoD's , OCT


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& \text { Orlantal Collego of Technology } \\
& \text { Thakral Nagar, Ralsan Road } \\
& \text { Bhopal }
\end{aligned}
$$

## Registration Form

Enrollment No.

Branch:

Semester: $\qquad$
Address. $\qquad$

City \& Pin $\qquad$
E-mail id

Contact No: $\qquad$

## Place:

Signature

## Date:



## CHIEF PATRONS

Dr. K. L. Thakra!
Founder Chairman, Oriental Group of Institutes and Chancellor, Oriental University, Indore

## PATRONS

Shri. Praveen Thakral Chairman, Oriental Group of Institutes

## Mrs. Niraj Ghei

Chair Person, Oriental College of Technology, Bhopal

## ADVISORY COMMITTEE

Dr. Ranjeeta Khare
Director, OCT, Bhopal

## CONVENOR

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octhodit@oriental.ac.in
Mobile: +919827042079

## COURSECOORDINATOR

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Mobile: +918319454284
Mr. Sujeet Kumar
Mobile: +918602659579
ORGANISING COMMITTEE MEMBERS
Mr. Vishal Thakur
Mr. Avinash Sharma

## CONTACT

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## Oriental College of Technology,

 Bhopal

Value Added Course

on<br>"C and $C++"$<br>[ 10-15, September, 2018 ]<br>For II-Year Students<br>Organized By<br>Department of Information Technology

Oriental College of Technology,
Thakral Nagar. Raisen Road.Bhopal - 462021


## ABOUT THE ORIENTAL GROUP

1 Group of Institutes (Indore - BhopalYaalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Information Technology is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research $\mathrm{H}_{3}$ 而 facilities and competent excellent climate for the al the students. It has well qualiged commetted and motivated faculty members having specalization in various streams. The core competency of the

Department is in the area of Software Engineering, Database Management Systems, Data Structures etc. The Information Technology Department offers Undergraduate Program (B.E/ B.Tech) with an intake 120 Students.

## ABOUT THE COURSE

Information Technology department plays prominent role in every domain and vital role in development of Nation. C and C++ is Value Added course which will provide benefits to the participants in many ongoing research areas in latest technologies.

The C and $\mathrm{C}++$ is a programming Language used in variety of Programming fields and is a versatile language used in hardware programming and many fields.

ELIGIBILITY
The Second year Students of Information Technology branch are eligible to attend the Course on C and $\mathrm{C}++$

## REGISTRATION

## No Registration fees.

## SPEAKERS

Mrs. Amita Pandit
[Assistant Professor, Oriental College of Technology, Bhopal]
\&
Mr. Sujeet Kumar
[Assistant Professor, Oriental College of Technology, Bhopal]


Oriental College of Technology, Bhopal
Department of Information Technology
Syllabus of Value Added Course on
C \& C++

## odule - 1

ie C Language and its Advantages
The Structure of a C Program
Writing C Programs
Building an Executable Version of a C Program
Debugging a C Program
Examining and Running a C Application Program

- Data Types and Variables Data Types
- Operands, Operators, and Arithmetic Expressions


## Module -2

- Input/Output Management The Input/Output Concept
- Formatted Input Function
- Control-Flow Statements The Control-Flow Program Statements
- Looping Statements

Passing Data to Functions

- Passing an Address to Modify a Value in Memory
- Using Functions in the Checkbook Program


## Module - 3

- C Standard Library Functions Arrays, Pointers, Strings
- Arrays, Pointers, and Strings Arrays, Po Checkbook Program
- Using Arrays, Strings
- Arrays of Structures
- Passing Structures to Functions
- Nesting Structures
-Combining Command-line


## Module -4

$\mathrm{C}++$ classes Data members.and member functions

- Creating obieetse The new and delete operators

- Class 5 So dializition



- Copy constructor Assignment operator
- Template classes Static class members
fitance Base classes and derived classes
herited member access
Base class initialization
Protected members of a clâss
- Virtual functions Virtual destructors
- Virtual base classes Virtual base cla
- Constructor and destructor ord....catch block
- Exception handling try..
- Nested catch handlers



ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Jbjective type test on C and C++
Dated 15-Sept-2018

| Branch: | Information Technology |  |  |
| :--- | :--- | :--- | :--- |
| Semester: | III Semester | Max. Marks-20 |  |
| Subject: | Value added course on C and C++ | Subject Code: IT 20001 | Time: 1 Hour |
| Note |  |  |  |

Max Marks 50

1. Which of the following correctly declares an array?
A. int array[10];
B. int array;
C. array $\{10\}$;
D. array array[10];
2. What is the index number of the last element of an array with 9 elements?
A. 9
B. 8
C. 0
D. Programmer-defined
3. Which of the following accesses the seventh element stored in array?
A. array[6];
B. array[7];
C. array(7);
D. array;
4. Which of the following gives the memory address of the first element in array?
A. array[0];
B. array[1];
C. $\operatorname{array}(2)$;
D. array;
5.What is the output of this program?
\#include < stdio.h >
using namespace std;
int main()
$\{$
char $\operatorname{str}[5]=$ " ABC ";
cout $\ll \operatorname{str}[3]$;
cout \ll str;
return 0;
\}
A. ABC
B. ABCD
C. AB
D. None of the mentioned
5. What does inheritance allows you to do?
A. create a class

B-ereate a hierarchy of classes


CO.focess methods

1. Wone of the mentioned

WV/at is the syntax of inheritance of class?
Uclass ńmine
13. class hame : access specifer
© 8 Blass name : access specifer class name
D: None of the mentioned
many types of inheritance are there in c-l+?
. 2
d. 3
C. 4
D. 5
9.What is meant by containership?
A. class contains objects of other class types as its members
B. class contains objects of other class types as its objects
C. both a \& b
D. none of the mentioned

10How many types of constructor are there in $\mathrm{C}++$ ?
A. 1
B. 2
C. 3
D. 4

11 How many constructors can present in a class?
A. 1
B. 2
C. 3
D. multiple

12Where does the execution of the program starts?
A. user-defined function
B. main function
C. void function
D. none of the mentioned

13What are mandatory parts in function declaration?
A. return type, function name
B. return type,function name, parameters
C. both $a$ and $b$
D. none of the mentioned

14 which of the following is used to terminate the function declaration?
A. :
B.)
C. ;
D. none of the mentioned

15How many max number of arguments can present in function in c99 compiler?
A. 99
B. 90
C. 102
D. 127

16 The size of an object or a type can be determined using which operator?
a) malloc
b) sizeof
c) malloc
d) calloc

17 It is guaranteed that a $\qquad$ has at least 8 bits and a $\qquad$ has at least 16 bits.
a) int, float
b) char, int
c) bool, char
ad) efiar, short
46 Stye of $\mathrm{C}++$ objects are expressed in terms of multiples of the sizefor
nar, 1
int, 1
i) float, 8
d) char, 4

20 Identify the incorrect option.
a) $1<=\operatorname{sizeof}($ bool $)<=\operatorname{sizeof}$ (long)
b) sizeof(float) $<=$ sizeof(double) $<=$ sizeof(long double)
c) $\operatorname{sizeof}($ char $)<=\operatorname{sizeof}($ long $)<=$ sizeof(wchar_t)
d) $\operatorname{sizeof}(\mathrm{N})=\operatorname{sizeof}($ signed N$)=\operatorname{sizeof}($ unsigned N$)$

21 How many kinds of classes are there in $\mathrm{c}++$ ?
a) 1
b) 2
c) $3 \quad$ :
d) 4

22 What is meant by polymorphism?
a) class having many forms
b) class having only single form
c) class having two forms
d) class having four forms

23 How many types of inheritance are there in $\mathrm{c}++$ ?
a) 2
b) 3
c) 4
d) 5

24 What is meant by multiple inheritance?
a) Deriving a base class from derived class
b) Deriving a derived class from base class
c) Deriving a derived class from more than one base class
d) Deriving a derived base class

25 Which symbol is used to create multiple inheritances?
a) Dot
b) Comma
c) Dollar
d) star


|  |  |  |  |  | Session July－dec 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Student Name | 10．Sep－18 | 11－Sep－18 | 12－Sep－18 | 13－5ep－18 | 14－Sep－18 |
|  | 01261171001 | AAKARSH NEMA | knemel | Ancus | Anem | Anema |  |
|  | 012611717002 | AASTHA IAIN | ashlis | Aashl | Aarthe | Amotha | tastha |
|  | $0126[1711003$ | ABHISHEK MISHRA | A | A | A | A | A |
| 4 | 012611711004 | AGYA MISHRA | Alaye | days |  | Ama |  |
|  | T171005 | AKANKSHA TYAG | （1） | （1） | （A） | （1） |  |
| 6 | 012611711006 | AMAN BAGHEL | aver | A | Som | A |  |
|  | 1007 | ANKIT KUMAR SHRIVASTAV | Ankit | Anvit | Ankit | Anckit | fnut |
| 8 | 01261171008 | ANKIT MISHRA | dm | Amu | can |  |  |
|  | 012611711009 | ANSHIKA GUPTA | Aupter | （Aupta | Abpla | Aluphor | Ruph |
|  | 01261171010 | ANUBHAV SINGH Jadoun | Hewhbov | Henurhev | Hfubibuy | Trubus | सmi． |
| 11 | 01261171011 | ANUSHA RABANSHI | cthustey | Amushos | Struw | Ampuse | Anusi |
| 12 | 01261171012 | ARCHI JAIN | ARChi | Archi | Archi | ARChi |  |
| 13 | 0126117101 | ARHAM SIDDIQUE | haw | Acham | Abur Corit | Achar．． | Archam |
| 14 | 01261171014 | ARPIT CHOUDHARY | Chrer | chapit | Cstopix | Arua |  |
| 15 | 012611771015 | ARYA AWASTHI | Auga | Arya |  | A） | Aska |
| 16 | 01261171016 | ASHFAQ BEG | Asik | paspez | Arsio | ANami | Nomi |
| 17 | 012611771017 | AVANY KSHATRIYA |  | AJami | Coumpin | Quepsh． | Djecan |
| 18 | 211711018 | DEEPESH KAURAV | experal | Qcypor | Liuk | Path |  |
| 19 | 012611711019 | DEVANSH PATHAK | Rathak | durat |  |  |  |
| 20 | 012617171021 | harsh kumar nagar | 田 | （ $\mathrm{H}_{2}$ | （H） | $\mathrm{H}_{2}$ | （1） |
| 21 | 01261171022 | HARSH YADAV | Htoroly | Harely | Hfowb | Hoory | Hower |
|  | 012611711023 | KIRTISH BARMECHA | Renerish | krisis | kurech | kurish | Ruras |
| 23 | 01261171024 | MD ADIL | Adil | Adil | Adi | Adil | A |
| 24 | 01261171025 | MOHIT SHARMA | H2 | $\mu^{2}$ | Ms | 㿥 |  |
| 25 | 0126171 | MUKESH KUMAR | （n） | （M） | （M） | （N） | M |
| 26 | 01261171027 | muskan bhargava | mancorg | （nishery | Mamey | Mskory | ， |
| 27 | 01261171027 | mUSKAN JAIN | thorkan | nuk |  |  |  |
| 28 | 0126117 | NEHA CHOUDHA | Aeha | Now | Nam | Nu． |  |
| 29 | 01261171030 | PIYUSH JAGTAP | Finuobr | Fifusuz | Xiymer | Xiymb |  |
| 30 | 0126IT171031 | PRABHAV JAIMAN | four | R |  | O |  |
|  | 012611771032 | PRADYUMN JAIN | dow | Sem | Axy | （）＋， |  |
|  | 12617171033 | PRANSHUL KHEMARİ |  |  | fre |  |  |
|  | 01261171034 | PRATEEK MISHRA | A | A | A |  |  |
| 34 | 01261171035 | PRIYA PATEL | Prive | Priva | Priya | Priya |  |
| 35 | 01261727036 | bahul kumar | A | 80 |  |  |  |
|  | $0126515120$ | 䐴沙ranan kumar | 不教 |  |  | $\text { स } \mid P$ | 1／4．at |
| 37 |  | BEFHANSHUJAIN | Reain－ | Reain－ | （R）aiz－ | R Jaiv | －Regies |
| 38 |  | SAM ${ }^{\text {a }}$ HAV JAIN | Les | es | （8） | 4. | \％8 |
| 39 | 0126） $\mathrm{K} \times 1.106009$ | SaRANSH GUPTA | Sorense | Slarenin | SSara | $\mathrm{B}^{2}$－Sance | Stanams |
| 40 | 012611711041 | SARVAGYA BADKUL | Lizovay | Sfury | Sarvayy | 4 Sancer | Y Sapuagy |
|  | 12617171042 | SATYAM KUMAR | Saty | Sath |  | O 3 atio | aty |



# ORIENTAL COLLEGE OF TECHNOLOGY DEPARTMENT OF INFORMATION TECHNOLOGY 

## Course Code: IT 20001

ded Course: C \& C++ Programming
ATTENDANCE SHEET


|  |  | SHUDHANSHU KUMAR | 0 | 0 | 0 | NOT ELIGIBLE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 171047 | SINGH | 30 | 33 | 63 | ELIGIBLE |
|  | 17171048 | SOMIL GUPTA | 44 | 46 | 90 | ELIGIBLE |
| $01261 T 171050$ |  | UTKARSH GUPTA |  |  |  | ELIGIBLE |
|  |  | VEDANT SINGH | 26 | 46 | 72 |  |
|  |  | GAUTAM | 46 | 37 | 83 | ELIGIBLE |
| , 0 | 012617171051 | VIDHI SHARMA | 40 | 36 | 76 | ELIGIBLE |
| 51 | $01261 T 171052$ | VIPUL PAWAR | 29 | 29 | 58 | ELIGIBLE |
| 52 | $01261 T 171053$ | VISHAL NIKHORIYA | 31 | 34 | 65 | ELIGIBLE |
| 53 | 0126IT171054 | YASH THAKUR |  |  |  |  |




## Course Evaluation/ Feedback Form

| Vaine Added Course <br> Special course | C and C++ |
| :--- | :--- |
| Duration | 10 to 15 September 2018 |
| Venue | Oriental College of Technology, Bhopal |
| Presenter(s): $\quad$ Mrs Amita Pandit, Mr Sujeet Kumar |  |

Please respond to the following statements by using the $\sqrt{ }$ mark to indicate the extent to which you agree or disagree with each statement.

| Content | Excellent | Very <br> Good | Good | Fair | Poor |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Course Content |  |  |  |  |  |
| The mastructor's contribution to the course was: |  |  |  |  |  |
| Subject Knowledge of Instructor |  |  |  |  |  |
| Course Organization was: |  |  |  |  |  |
| Delivery of Instructor |  |  |  |  |  |

Instructor's use of examples and illustrations was:
Quality of questions or problems rais by the instructor was:
Student's confidence in instructor's knowledge was: Instructor's enthusiasm was:

Encouragement given to students to participate was:
answers to student questions were:
Wuitiability of extra help when needed was:
se of class time was:
istructor's interest in student's progress was:
nount you learned was:
arity of student requirements was:
ellectual challenge was:


# ORIENTAL COLLEGE OF TECHNOLOGY. BHOPAL 

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalayan, Efugezi Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


## DEPARTMENT OF INFORMATION TECHNOLOGY

SEssion: 2018-19

## CERTIFICATE

This is to certify that Mr./Ms Piyush Jagtap of IT III Semester, OCT, Bhopal, has Swatewfult
Completed the "Value Added Course" on "C \&C++" during 10-15 Sept 2018, urgarzat Fs Departhrent afythformation Technology, Oriental College of Technology, Bhopal.

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Department of Information Technology


## Report on Value Added Course on C and C++

Date and Time: 10 September, to 15 Sepetember, 2018. Venue: Department of Information Technology ,OCT Campus, Bhopal. Organized by: Information Technology Department, OCT , Bhopal. Name of the Speakers: The speakers were from Department of Information Technology OCT, Bhopal they are Mrs Amita Pandit and Mr Sujeet Kumar. Participants Details: The students participated were Second Year Students

## Summary of the Event

The value added courses adds value to the basic ongoing degree program. The students get an insight into the technological advancements and the recent trends that are prevailing in the outside world which gives an added benefit to the placement and gives added advantages to the employment opportunities of the students
The course is divided into five modules and at the end there was an assessment by which the students are awarded certificates.
On 10 September 2018, the course started with the inaugural and presidential speech o Director, Oriental College of Technology. In his presidential speech emphasized on the need $t$ collaborate the academic and the non academic education.

The course was conducted strictly according to the schedule and at last the convener of $t$ course gave away the vote of thank.. At the end the convener thanked all the faculties, office st and student volunteers for their unconditional support in organizing thes cqurse.


Director


Oriental College of Technology Thakral Nagar, Raisen Road Bhopal


# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL <br> Approved by AIC̣TE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi.Proudyogiki Vishwavidyalaya;Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA 

Date: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs .
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible fồr a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(a, b)$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:
Director
Oriental College of Technology
Thakral Nagar, Risen Road Bhopal

1. Academic Committee :
2. All HoD's, OCT




ABOUT TIE ORIENTAL GROUP
Oriental Group of Institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses, The college is having an excellent library; internet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Electronics \& Communication is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research. The state-of-art facilities and competent faculties provide an excellent climate for the all round development of Cifecstidents. It has well qualified, committed and Onotivated faculty members having specialization in yorkors streams. The core competency of the

Department is in the area of VLSI, Arduino \& Embedded System.
The EC Department offers M.Tech Course in Electronics along with Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

Electronics \& Communication Engineering plays prominent role in every domain and vital role in development of Nation. "PCB Designing" is Value Added course which will provide benefits to the. participants in many ongoing research areas in latest technologies.

## OB.IECTIVES \& CONTENTS

A PCB is sort of like a layer cake, there are
 alternating layers of different materials which are laminated together with heat and adhesive such that the result is a single object.
$\checkmark$ To know latest's trends in PCB Designing. $\checkmark$ To know the basics of bread board.
$\checkmark$ To know the basics of layout designing through software.
$\checkmark$ To know the basics of etching, drilling, component mounting, testing procedure.

## ELIGIBILITY

The Second year Students of Electronics \& Communication Engineering branch are eligible to attend the PCB designing course.

REGISTRATION
No Registration fees.

## INVITED SPEAKERS

Mr. Abhigyanam Giri
Director, İd Eyes Pvt. Ltd. Bhopal
 Oriental Collegg of Raisen Road
Thakral Nagar, Ropal
Bhop

# Oriental College of Technology, Bhopal 

Electronics \& Communication Engineering
Value Added Course: PCB Designing
Course Code: EC 20001

## Module 1

## Computerized capture of electronic designs

Introduction to all types of electronics components, bread board and testing/measuring instruments. Practical verification of electronic components with Multimeter. Creation of symbolic representation of circuits (schematic diagram), Searching, loading and, placing of components, Wiring connections between components, Updating component, information in PCB layout (Auto packaging), Different tools used for PCB designing

## Module 2

## Introduction to PCB Layout

PCB Structure and Standards, Tracks, Pads and Vias, Netlist, ${ }^{4}$ Design of PCB layout of a circuit, Define the Board Outline, etching \& drilling of PCB , Place the components, Routing of the components Manual and Automatic, Detection and repair of Design rules violation, clearance errors and missing or incomplete connections, 3D View of the designed board.

## Module 3

## Analysis Components

Debugging Tools, Thermal Analysis and Electromagnetic Analysis, Multisim MCU Module, Source Code Editor, MCU Design Overview, MCU Wizard, Building an MCU Workspace, Errors and Warnings, Simulation of Machine Code File, Multisim MCU Module Source Code Editor, Opening a Debug View, Debug Window Settings, Simulation Markers, Breakpoints, Memory View, Miscellaneous Problem for Multisim.

## Module 4

## PCB Designings

Making circuit on PCB Design Software, Deploying basic circuits from paper to schematic window Testing the schematic for errors, Making Board Layout, Checking for errors and finalizing layout

## Module 5

## Testing and Trouble shooting

Testing and troubleshooting once your PCB is ready, Various trouble shooting techniques.

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|  | SCHEDULE |  |
| :---: | :---: | :---: |
| 5 Days Value Added Course on PCB Designing [24-Sep-2018 To 28-Sep-2018] |  |  |
| 24 Sep 2018 |  |  |
| Time | $\star$ Session | Teacher |
| 9:30-10:00 AM | Inaugural Programme | - |
| 10:00 AM-12:30PM | Introduction to Bread Board | Mr. Abhigyanam |
| 12:30-1:10PM | LUNCH |  |
| 01:10-3:10PM | Practice Session on Bread Board | Mr. Abhigyanam |
| 3:10-3:30PM | Break |  |
| 03:30-5:30PM | * Introduction to PCB | Mr. Abhigyanam |
| 25 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Practice Session on PCB | Mr. Amish Jha |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Practice Session on PCB including layout designing through software | Mr. Abhigyanam |
| 01:00-1:40PM | $\because \quad$ LUNCH |  |
| 01:40-4:30PM | Practice Session on PCB including layout pasting over PCB | Mr. Abhigyanam |
| 26 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Etching \& Drilling of PCB | Mr. Kapil Gupta |
| 11:00-11:30AM | - Break |  |
| 11:30-01:00PM | Component mounting | Mr. Amish Jha |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Testing of PCB | Mr. Abhigyanam |
| 27 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Assignment :Designing of multivibrator | Mr. Abhigyanam |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Class Room Assessment | Mr. Amish Jha |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Testing of PCB | Mr. Kapil Gupta |
| 28 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Assignment :Designing of Digital Lock Code [0011] | Mr. Kapil Gupta |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Objective Test | Mr. Kapil Gupta |
| 01:00-1:40PM | LUNCH |  |
| 01:40-2:30PM | Testing of PCB and Assignment submission | Mr. Abhigyanam |
| 2:30-3:30PM | Feedback from students | Mr. Abhigyanam |
| 3:30-4:30 PM | Valedictory \& Certificate distribution | Mr. Abhigyanam |

## Director

Oriental College of Technology Thakral Nagar, Raisen Road Bhopal
 Elecronics \& Commuscam Engineering Orienial Collage of Tecmulay, Bhopa

| ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Value Added Course on PCB Designing Objective Test, Date: 28-Sep-2018 |  |  |  |
| Branch: | Electronics \& Communication Engineering |  |  |
| Semester: | Third Semester |  | $\begin{aligned} & \text { Max. Marks-50 } \\ & \text { Minimum Marks:25 } \end{aligned}$ |
| Subject: | PCB Designing | Subject Code: EC 20001 | Time: 1:30Hrs |
| Note | All questions are compulsory. Each Question is of 2.5 Marks. |  |  |

1. The temperature range for soldering process is
A. $40^{\circ} \mathrm{C}$ to $100^{\circ} \mathrm{C}$
B. $180^{\circ} \mathrm{C}$ to $250^{\circ} \mathrm{C}$
C. $300^{\circ} \mathrm{C}$ to $500^{\circ} \mathrm{C}$
D. $600^{\circ} \mathrm{C}$ to $900^{\circ} \mathrm{C}$
E. $1000^{\circ} \mathrm{C}$ to $2000^{\circ} \mathrm{C}$
2. A soldering iron 'bit' is made of.......
A.Brass
B.Tin
C.Steel
D.Copper
3. Heat for soldering process is supplied by.
A.Soldering iron
B.Induction furnace
C.Electric resistance method
D.Any of the above
4. Soldering iron is made of wede shape in order to
A.Apply high pressure at edge
B.Retain heat
C.Retain solder
D.Arc welding
5. The purpose of using flux in soldering is to.
A.Increase fluidity of solder metal
,B.Feel up gaps left in a bad joint
C.Carbon steel
D.Prevent oxides forming
E.Wash away surplus solder
6. Brazing is the process of.......
A.Joining plastic sheets
B.Hard soldering using brass spelter
C.Casing in brass
D.Makeing steel look like brass
E.Any of the above


Diréctor
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7. The commonly used flux for brazing is $\qquad$
A.Resin
B. $\mathrm{NH}_{4} \mathrm{CL}$
C.Borax
D.Soft iron
8. The temperature range of brazing process is.
A. $150^{\circ} \mathrm{C}$ to $250^{\circ} \mathrm{C}$
B. $250^{\circ} \mathrm{C}$ to $450^{\circ} \mathrm{C}$
C. $500^{\circ} \mathrm{C}$ to $700^{\circ} \mathrm{C}$
D. $700^{\circ} \mathrm{C}$ to $900^{\circ} \mathrm{C}$
E. $1000^{\circ} \mathrm{C}$ to $2000^{\circ} \mathrm{C}$
8. The purpose of using borax in brazing is to.
A.Replace flux
B.Dissolve oxides when heating the work
C.Accelerate the formation of oxides on the work
D.Prevent the spelter from melting too quickly
E.Increase the fluidity of brazing process
9. The flux is brazing process is used in the form of.......
A.Powder
B.Liquid
C.Paste
D.Any of the above
E.None of the above
10. What is the ratio of tin \& lead in soldering metal alloy?
a) $50 \% \& 30 \%$
b) $20 \% \& 80 \%$
c) $10 \% \& 90 \%$
d) $60 \% \& 40 \%$
12. Resistibility has a relation with
a)Length of the material
b) Width of the material
c) Cross section area of the material
d)All of them
13. Color code for 1 ohm resistance is
a) Black, Brown, Gold
b) Brown, Black, Gold
c) Both of them
d) None of them
14. If a circuit uses 1200 volts at 800 mA , what is the inpurt power?
a) 1000 Watts
b) 554 Watts
c) 300Watts
d) 960 Watts
15.The three basic meters- voltmeter, ammeter and ohmmeter combined infol asase are known as a:
a)Kilometer
b) Wavemeter
c) Wattmeter
d)Multimeter


## Director

Oriental College of Technology
Thakral Nagar, Raisen Road Bhopal
16. The unit of electrical charge-is
a)Coulomb
b)Newton
c) Ampere
d) Volt
17.Bend the leads of componentiat $\qquad$ degree angle with PCB.
a) 40
b) 50
c) 35
d) 45
18. If colour code is Red, Brown, Red, Silver then value of $R$ is,
a) $21 \mathrm{~K} \mathrm{ohm}, 5 \%$
b) $22 \mathrm{ohm}, 5 \%$
c) $2100 \mathrm{ohm}, 10 \%$
d) $2.2 \mathrm{~K} \mathrm{ohm}, 10 \%$
19.A potentiometer is a :
a)Variable power supply
b)Variable resistor
c) Variable capacitor
d) Meter for measuring potential difference
20. Below mentioned material is used during PCB designing
a) $\mathrm{Fecl}_{3}$
b) AlCl 3
c) Both of above
d) None of above


## Oriental College of Technology，Bhopal

Electronics \＆Communication Engineering Department Value Added Course：PCB Designing Course Code：EC 20001
ATTENDANCE SHEET

| Sr．No． | Enroll No ． | Name of Student | 24－Sep－18 | 25－Sep－18 | 26－Sep－18 | 27－Sep－18 | 28－Sep－18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0126 EC 171001 | ABHISHEK PRASAD | Abviry s c | Ablusices | Abluishere | Almander | Play |
| 2 | 0126 EC 171002 | ADARSH PATHAK | Adarls． | （erdaun | Afdouth | Q datan | Qpobers |
| 3 | 0126 EC 171004 | AMARESH OJHA | Amare， | Amanes ${ }^{\text {a }}$ | Aminges | （A） | Amresch |
| 3 | $0126 \mathrm{EC171005}$ | Amit SAHU＂ | Anut | Amir | Ampt | Ampt | Amit |
| 5 | 0126 EC 171006 | ANIMESH NANDAN | Dusincol | Animar | Anvine | Animes | Animest |
| 6 | $0126 \mathrm{EC171007}$ | ANJALI BATTRA | Antali | A jiali | Anjali | （A） | Anjale |
| 7 | 0126 EC 171008 | ANKIT | Andit | Anhit | Andis | Ankit | Aulat |
| 8 | 0126 EC 171009 | ANKIT KUMAR | Anlait | （A） | Ancit | Andit | Anket |
| 9 | 0126 EC 171010 | ASHISH KUMAR | Alush | tish | dolinu | Arush | Athill |
| 10 | $0126 \mathrm{EC171011}$ | DHEERAJ MALVIYA | （A） | （4） | （4） | （A） | （4） |
| 11 | 0126 EC 171012 | HARSH BEHERE | Pransh | Aloush | Plorsh | （A） | Hovale |
| 12 | $0126 \mathrm{EC171013}$ | HARSHAL SAIYAM | Horchal | （A） | Hourkal | （4） | Harshal |
| 13 | 0126 EC 171014 | Himanshu rahangdale | Aumasth | Wemensta | Cunames | Rumb | Runars |
| 14 | 0126 EC 171015 | JUHI AWASTHI | A ${ }^{\text {che }}$ | duls | Dus | Allu | Quly， |
| 15 | $0126 \mathrm{EC171016}$ | Kajal wanil ${ }^{\text {T}}$ | kpumin | （A） | 人num | Wexas | Qumari |
| 16 | 0126 EC 171017 | MARIYAM ALI KHAN | c）asins | C－faring | Corifm | c）ariy | (c)anyon |
| 17 | $0126 \mathrm{EC171018}$ | NIKITA GUPTA |  | Nima | 沙的 |  | 事" |
| 18 | 0126 EC 171019 | Pavan trivedi | Tawars | （A） | ， | Tawar | Pawar |
| 19 | 0126EC171020 | SANDHYA TIWARI | Sandrue | Sencher | Sandhers | Sandman | Sanshga |
| 20 | 0126 EC 171021 | SAURABH SINGH | Saurbur | （A） | Sowabl | Sowne | Sowabl |
| 21 | 0126 EC 171022 | SHUBHAM SINGH | Pur |  | 8． | Sum | Shate |
| 22 | $0126 \mathrm{EC171023}$ | STUTI PATERIYA | （A） | （4） | （4） | （A） | （A） |
| 23 | 0126EC171024 | SUPRIYA PATEL | Sfatel | Sparel | Spotes | Spates | SPata |
| 24 | $0126 \mathrm{EC171025}$ | SYED HAMZA HUSAIN | Havs | flams | Humer | Hows | Htams |
| 25 |  |  | Yast | Vasd | Yash | Yasb | Youte |
| 26 | 0126EC83 ${ }^{\text {cog }}$ | SEEF ${ }^{\text {易HER：}}$ | （4） | （A） | （A） | （A） | （A） |

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## Oriental College of Technology,Bhopal

## Electronics \& Communication Engineering Department

Value Added Course: PCB Designing , 24-28 Sep 2018
Course Code: EC 20001
$\overbrace{r}$ ASSESSMENT SHEET,


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Gourse Evaluation/ Feedback Form

| Value Added Course | PCB Designing |  |
| :--- | :--- | :--- |
| Date: | $24-28$ Sep 2018 |  |
| Program Location: | Oriental College of Technology, Bhopal |  |
| Presenter(s): | Mr. Abhigyanam |  |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

$$
4=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$

| 1. The Course objectives were stated clearly and met. |  |
| :---: | :---: |
|  | $4$ |
| 2. The Course was well organized. |  |
|  |  |
| 3. The information and/or skills presented were relevant and useful | 4321 |
|  | - |
| 4. The presenter(s) provided adequate time for questions and answered them effectively. | $4321$ |
| 5. The presenter(s) allowed me to work with and learn from others. | 4321 |
|  | (4) 321 |
|  |  |
| 7. The physical arrangements were adequate. | 4321 |



1

Course Evaluation/ Feedback Form

| Value Added Course | PCB Designing |  |
| :--- | :--- | :--- |
| Date: | $24-28$ Sep 2018 |  |
| Program Location: | Oriental College of Technology, Bhopal |  |
| Presenter(s): | Mr. Abhigy̌anam |  |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

4=Strongly Agree
$3=$ Agree
2= Disagree
1=Strongly Disagree

1. The Course objectives were stated clearly and met.

4(3) 21
2. The Course was well organized.
3. The information and/or skills presented were relevant and useful

4(3) 21
4. The presenter(s) provided adequate time for questions and answered them effectively.
(4) 321
5. The presenter(s) allowed me to work with and learn from others:
6. The materials provided were sufficient \& appropriate for the program.

4 (3)21

4(3) 21
7. The physical arrangements were adequate.
4) 321
-

4 (3) 21

Oriental College of Technology Thakral Nagar, Raisen Rosd Bhopal


## Certificate of Completion

This is to certify that Mr./Ms. AMARESH OJHA of EC-III Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "PCB Designing" during 24-28 Sep 2018, organized by Department of Electronics \& Communication Engineering, Oriental College of Technology, Bhopal.



Head of Department,


Oriental College of Technology
Director, OCT

## Certificate of Completion

This is to certify that Mr./Ms. JUHI AWASTHI of EC-III Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "PCB Designing" during 24-28 Sep 2018, organized by Department of Electronics \& Communication Engineering, Oriental College of Technology, Bhopal.


Coordinator, IndEyes


Head of Department, EC, OCT

Director
Oriental College of Technology

 Binal ${ }^{\text {Director, }}$


nonearing

# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

## Department of Electronics \& Communication Engineering



# Report on Value Added Course on PCB Designing 

Date and Time: September 24, to September 28, 2018. Venue: EC, OCT Campus, Organized by: EC,OCT, Bhopal. Name of the Speakers: Mr. Abhigyanam Giri, Director IndEyes Infotech Pvt. Ltd., Mr. Amish Ku. Jha, Assistant Professor, EC, OCT \& Mr. Kapil Gupta, Assistant Professor, EC, OCT, Participants Details: Second year students of Electronics \& Communication Engineering.

## Summary of the Event

The Value added course Plays an important role in Strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syllabus, the Electronics \& Communication Engineering Department of Oriental College of Technology in association with IndEyes InfoTech Pvt. Ltd, had organized "Value Added Course on PCB Designing" from September 24, to September 28, 2018 for the students of second year.
This Course syllabus was covered by Mr. Abhigyanam Giri, Director IndEyes Infotech Pvt. Ltd. ,Mr. Amish Ku. Jha, Assistant Professor, EC, OCT \& Mr. Kapil Gupta, Assistant Professor, EC, OCT in 30 Hrs. of 5-Day program.
On September 24, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare, Directoforiental College of Technology. In herpresidential speech, she emphasized on the need to collaboble the academic and the non acadenic education.

On September 24, the Course coordinator, Mr. Abhigyanam Giri, guided all students on the topic "PCB Designing". In his speech, he had explained the need for every student to have skills to get a job. To bridge the gap between the academic and industry need, Value Added Courses are much essential. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes. He also explained about configuration and functioning of bread board.
On September 25, Mr. Amish Ku. Jha, explained, how to design layout through software on PCB.
On September 26, Mr. Kapil Gupta, explained, etching and drilling of PCB. Also Testing of PCB was done by Mr. Abhigyanam Giri.
On September 27, Mr. Abhigyanam Giri, given assignment to students on Designing of multivibrator, after that testing of PCB was done.
On September 28, Mr. Kapil Gupta, has given assignment to students on Designing of digital lock code, then testing of PCB was done.
At last, Prof. Arvind Sahu, Head EC, Convenor of Course gave away the vote of thanks. He thanked Mr. Abhigyanam Giri for providing his valuable time for successful conduction of this course for our students. He also thanked Mr. Amish Ku. Jha \& Mr. Kapil Gupta for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

## 3 <br>  <br> Prof. Arvind Sahu <br> Course Convenor <br> Head, EC, OCT

ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
Approved by AICTE., Ncw Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA
Date: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs.
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible for a certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(\mathrm{a}, \mathrm{b})$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:


1. Academic Committee -
2. All HoD's, OCT


Director
Oriental College of Technology
Thakral Nagar, Raisen Road
Ehodal


## AHOUT 111 ORIINTAL GROUP

Oriental Group of linstitutes (Indore = Ihopal. Jabalpur) India established in the year 1995 is a self financed premict education proup imparting education in the disciptines of Pingineering. Phamacy, Management and Advanced Computer Studies. The Oriental College of Techmology, offers six under praduate Dachelor of Ingineering courses and three post fraduate, Master of Techmology coursea The college is havine an excellent library, internet lab, modern labs for each department, central workshop, sports a games facilities etc.
Bhopal, the capital of Madhya Pradesti, is also known as cily of lakes. It is well connected to all parts of the country by rail and aif. The instifute is about 09 km from Bhopal railway station, and 07 km from Itabibganj tailway station and 18 km from Raja Bhoj Airport.

## DHOUT 1HE HISKTMEN!

The Department of Ilectrical \& Vlectronics is a major strength of the institute, The Department has an excellent proup of faculty with expericnce in teaching Industry and Rescarch. The state of art facily Pathownetent faculics provide an ex Gop, limats so the all round development of ink if Higei $f$ higse qeil qualificd, committed and mgainidefpostiy members having opectalizalion in vanouragin!

The IX Department offers M. Tech Courso in Power Itectonks along wih Undergraduate Program (II.I D. Tech) wilh an lonake of 18 and 120 respectively.

## AHOUTTHECOURSE

Dectical \& Eloctronics Engincering plays prominent tole in every domain and vital role in development of Nation, "PCII Designing" is Value Added course which will provide benefits to the parlicipants in many ongolng research areas in latest techmologles.

## OISECIYESNEONTENTS

A PCll is sont of like a layer cahe, there are altemating layers of different materials which are laminated together will hent and adhesive such that the result is a slingle object.
$\checkmark$ To know latest's liends in PCI Designing.

$\checkmark$ To know the baske of bread board.
$\checkmark$ Io know the basics of layout desiening through soflware
$\checkmark$ To know the hasies of etching, drilling, component mountine, testine procedure.


# Oriental College of Technology, Bhopal 

Electrical \& Electronics Enginecring<br>Value Added Course: PCB Designing<br>Course Code: EX 20001

## Module 1

## Computerized capture of electronic designs

Introduction to all types of electronics components, bread board and testing/measuring instruments. Practical verification of electronic components with Multimeter. Creation of symbolic representation of circuits (schematic diagram), Searching, loading and, placing of components, Wiring connections between components, Updating component, information in PCB layout (Auto packaging), Different tools used for PCB designing

## Module 2

## Introduction to PCB Layout

PCB Structure and Standards, Tracks, Pads and Vias, Netlist, Design of PCB layout of a circuit, Define the Board Outline, etching \& drilling of PCB, Place the components, Routing of the components Manual and Automatic, Detection and repair of Design rules violation, clearance errors and missing or incomplete connections, 3D View of the designed board.

## Module 3

## Analysis Components

Debugging Tools, Thermal Analysis and Electromagnetic Analysis, Multisim MCU Module, Source Code E ditor, MCU De sign Overview, MCU Wi zard, Building an MCU Workspace, Errors and Warnings, Simulation of Machine Code File, Multisim MCU Module Source Code Editor, Opening a Debug View, Debug Window Settings, Simulation Markers, Breakpoints, Memory View, Miscellaneous Problem for Multisim.

## Module 4

## PCB Designings

Making circuit on PCB Design Software, Deploying basic circuits from paper to schematic window Testing the schematic for errors, Making Board Layout, Checking for errors and finalizing layout

## Module 5

## Testing and Trouble shooting

Testing and troubleshooting once your PCB is ready, Various trouble shooting techniques.


Oriental College

## SCHEDULE

| 5 Days Value Added Course on PCB Designig l15 |  |  |
| :---: | :---: | :---: |
| Time | Inaugural Programme | Session |
| 9:30-10:00 AM | Introduction to breadboard | Mr. Praveen Choudhary |
| 10:00 AM-12:30PM | Introduction to breadboard |  |
| 12:30-1:10PM | Practice Session on Bread Board | Mr. Praveen Choudhary |
| 01:10-3:10PM | Practice Session on Break |  |
| 3:10-3:30PM | Bre | Mr. Praveen Choudhary |
| 03:30-5:30PM 16 ${ }^{\text {th }}$ Jan 2019 Teacher |  |  |
|  |  |  |
| Time | Session | Mr. Praveen Choudhary |
| 9:00-11:00AM | Practice Session on PCB | Mr. Praveen Choudhary |
| 11:00-11:30AM | Practice Session on PCB including layout |  |
| 11:30-01:00PM | designing through software |  |
| 01:00-1:40PM | LUNCH | Mr. Praveen Choudhary |
| 01:40-4:30PM | Practice Session on PCB including layout pasting over PCB |  |
| $17^{\text {th }}$ Jan 2019 Teacher |  |  |
| Session |  | Mr. Lalit Jain |
| 9:00-11:00AM Etching \& Drilling of PCB |  |  |
|  | Break | Mr. Lalit Jain |
| 11:00-11:30AM | Component mounting |  |
| 11:30-01:00PM | LUNCH | Mr. Lalit Jain |
| 01:00-1:40PM | Testing of PCB $\quad$ Mr. Latit Jam |  |
| 01:40-4:30PM |  |  |  |
| Time | Assignment | Mr. Lalit Jain |
| 11:00-11:30AM | Break | Mr. Lalit Jain |
| 11:30-01:00PM | Class Room Assessment |  |
| 01:00-1:40PM | $\frac{\text { LUNCH }}{\text { Testing of PCB }}$ | Mr. Lalit Jain |
| 01:40-4:30PM | Testing of PCB $\quad$ Mr. Lalit Jain |  |
| Session $\quad$ Teacher |  |  |
| $\frac{\text { Time }}{\text { 9:00-11:00AM }}$ | Assignment |  |
| 9:00-11:00AM | Break |  |
| 11:00-11:30AM | Objective Test $\quad$ Mr. Praveen Choud |  |
| 11:30-01:00PM |  |  |  |
| 01:00-1:40PM | Testing of PCB and Assignment submission | Mr. Praveen Choudhary |
| 01:40-2:30PM |  | Mr. Praveen Choudhary |
|  | Feedback from students | Mr. Praveen Choudhary |
| Director <br> Oriental College of Technology Thakral Nagar, Raisen Road Bhopal |  |  |
|  |  |  |  |  |


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| :---: | :---: | :---: | :---: |
| Value Added Course On PCB Designing Objective Test, Date:19 Jan 2019 |  |  |  |
| Branch: | Electrical \& Elec | ics Engineering | Max. marks-50 |
| Semester | IV Sem |  | Minimum marks- 25 |
|  |  |  | Time: 1:30 Hrs |
| Subject <br> Note |  |  |  |

1) Which among the below mentioned packages does not belong to the category of 'Small Outline Package'?
a. SO
b. SOP
c. SOT
d. SON
2) Which type of solderability testing is carried out for the generation of solder sample due to immersion of wire or sheet metal specimen in a bath of molten solder?
a. Solder Bath Testing
b. Meniscus Rise Testing
c. Solder Iron Testing
d. None of the above
3) Which among the below stated soldering methods is also renowned as 'High Frequency Resistance Soldering'?
a. Iron Soldering
b. Furnace Soldering
c. Torch Soldering
d. Electrical Soldering
4) Which among the below mentioned approaches belongs to the category of In-circuit Testing?
a. Impedance Testing
b. Component Testing
c. Apply Signal and
d. All of the above

5) High current circuits are purposely located or placed near the edge of PCB in accordance to the supply lines for $\qquad$
a. Removal of heat
b. Isolation of stray current
c. Reduction of path length
d. All of the above
6) What is/are the necessity/ies to provide guarding to precision differential amplifiers?
a. To increase leakage resistance
b. To reduce capacitance between signal conductors \& ground
c. Both $a$ and $b$
d. None of the above
7) Which phenomenon is not reduced by the circuit paths of lowest impedances especially provided by power and return planes for shielding purposes?
a. Radiation
b. Convection
c. Noise
d. Crosstalk
8) Which among the below specified assertions is not a grounding consideration associated with ADC as well as DAC?
a. Analog side to analog ground
b. Digital side to digital ground
c. Use of separate power supply and connection of their ground leads to single point reference
d. Reduction of inductive loop area between power and return traces
9) Which among the below stated devices/equipments are preferred for elimination of ground and supply line noise especially in TTL/CMOS / ECL PCB designing?
a. Coupling capacitor
b. Decoupling capacitor
c. Snubber circuits
d. All of the above
10) Which among the below mentioned assertions is not a way of cross-talk reduction while designing digital PCBs?
a. Decrease in the distance between conductors
b. Shielding of clock lines with guard strips
c. Reduction in the loop area of circuits
d. Avoid running of parallel traces for longer distances especially for asynchronous signals
11) Which among the below specified condition is precise in the crosstalk verification mechanism using logic flow in opposite direction with the limit of avoiding dangerous interference in digital PCB designing?
a. $Z_{\text {even }}>Z_{\text {odd }}$
b. $Z_{\text {odd }} \geq 0.5 Z_{\text {even }}$





4. $/ \mathrm{cm}=$ 2
12) Which among the following assists in obtaining the desired value of wave impedance in reflection phase while designing digital CBs?
A. Wiatin of signal fines
B. Distance between signal line and ground line
C. Signal Delays
D. Bootle Passing
a. A\&B
h. 1 BRC
c. C. \& D
4. A, $1:$, C, D
13) Which problems are about to occur if PCB is not designed properly in a confined manner for digital circuits?
A. Diffraction
11. Diffraction
C. Ground \& Supply-line Noise

万. Electromagnetic Interference
a. AB. 18
b. $1 \& \mathrm{C}$
c. CAD
d. A, B, C, D
14) What effects can be observed if the separate power and ground planes are provided with large conducting surfaces for better decoupling in PCB layouts?
a. Increase in self inductance
b. Reduction in self-inductance
c. Stability in self-inductance
4. None of the above
15) What should be the resistance of 0.6 mm wide conductor with 15 cm length and $25 \mu \mathrm{~m}$ thickness of standard copper toil? (Assume $p=1.7241 \times 10^{6}\left(a t 20^{\circ} \mathrm{C}\right.$ )
a. 1182 ml
b. $1: 82 \mathrm{ma}$
c. $\{72 \mathrm{Ami}$
d. 192 A m
16) Which type of VCB requires minimum soldering on component side in order to avoid replacement oriented difficulties?
a. Fingle-vides PCA
b. Demble-wided [CA
c. Both and b
4. Hone of the above
17) Which factors contribute to the occurrence of mechanical stress?
a. Resonance
b. Cracked Solder Joints
c. Both $a$ and $b$
d. None of the above
18) The actual cost of PCB can be evaluated on the basis of $\qquad$
a. PCB size \& material
b. Number of layers
c. Vias on PCB
d. All of the above
19) Which terminology of PCB represents a thin photosensitive polymer by supporting photographic pattern of single traces or IC pads for etching?
a. Prepreg
b. Etching
c. Photo-resist
d. Solder mask
20) What is the ratio of tin $\&$ lead in soldering metal alloy?
a) $\mathbf{5 0 \%} \& 50 \%$
b) $\mathbf{2 0 \%} \& 80 \%$
c) $10 \% \& 90 \%$
d) $\mathbf{6 0 \%} \& 40 \%$



Director of Tochminzs
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## Oriental College of Technology, Bhopal

Department of Electrical \& Electronics Engineering
PCB Designing
15 to 19 Jan 2019


## Oriental College Of Technology,Bhopal

## Electrical \& Electronics Engineering Department

Value Added Course: PCB Designing, 15-19 Jan 2019
Course Code: EX 20001
ASSESSMENT SHEET

| Sno | Enrollment No. | Name of students | Class room assessment score(marks/5 0) | ```Objective test score(mark s/50)``` | Total score | Eligible to receive certificate or not |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0126EX171001 | Alima Khan | 45.5 | 47 | 92.5 | Eligible |
| 2 | 0126EX171002 | Amit Kumar Patel | 30 | 35 | 65 | Eligible |
| 3 | $0126 \mathrm{EX171003}$ | Ankit Kumar Patel | 38 | 40 | 78 | Eligible |
| 4 | $0126 \mathrm{EX171004}$ | Anshul Dashputre | 29 | 40 | 69 | Eligible |
| 5 | 0126EX171005 | Ashutosh Tiwari | 30 | 42 | 72 | Eligible |
| 6 | 0126EX171006 | Dinesh Punde | 45.5 | 30 | 75.5 | Eligible |
| 7 | 0126 EX 171007 | Gouri Soni | 32 | 42 | 74 | Eligible |
| 8 | 0126EX171008 | Hari Prasad Tripathi | 42 | 40 | 82 | Eligible |
| 9 | 0126EX171009 | Monika Katolkar | 45 | 45 | 90 | Eligible |
| 10 | 0126EX171010 | Praveen Kumar Dwivedi | 29 | 40 | 69 | Eligible |
| 11 | 0126 EX 171011 | Rishabh Shukla | 30 | 42 | 72 | Eligible |
| 12 | 0126EX183D01 | Nirbhay Kumar | 30 | 35 | 65 | Eligible |



Director Tectnology
Direct of Technology
Oriental College of
Thakral Nagar, Raisen Road
Bhopal kral Nagar, Bhopal

Course Evaluation/ Feedback Form

| Value Added Course | PCB Designing |
| :--- | :--- |
| Date: | $15^{\text {th }}$ to 19 Jan 2019 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s): | Mr. Praveen Choudhary |

Please respond to the following statements by using the 4-point rating scale to indicate which you agree or disagree with each statement. Please circle the number that applies.




1

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


## Session: 2018-19

Department of Electrical \& Electronics Engineering

## CERTIFICATE

This is to certify that Mr. /Ms Alima Khan of EX-IV Sem , OCT, Bhopal, has Completed the "Value Added Gourses"on "PCB Designing" during 15-19, Jan. 2019, organized by Department ofeseotrical \& Electronics Engineering, Oriental College of Technology, Bhopal. Thakral Nagar, Raisen Road
Technology, Bhopal. Ehopal


Co-ordinator, EX, OCT


Director, OCT

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

## Department of Electrical \& Electronics Engineering



## Report on Value Added Course on PCB Designing

# Date and Time: January 15, to January 19, 2019. Venue: EX,OCT Campus. Organized 

By: EX,OCT, , Bhopal. Name of the Speakers: Mr. Lalit Jain, Assistant Prof. EX Deptt. OCT Bhopal Mr. Praveen Choudhary, Assistant Prof. EX Deptt. OCT Bhopal
Participants Details: Second year students of Electrical \& Electronics Engineering.

## Summary of the Event

During the course students will develop basic skills in the use of modern PCB layout design software and techniques. Schematics, printed circuit board layouts, symbols, and wiring diagrams will be produced on PC workstation; terminology and the manufacturing process of printed circuit boards will be covered.
"Value Added Course on PCB Designing" January 15, to January 19, 2019 for the students of second year .

On January 15, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare
, Director, Oriental College of Technology. In his presidential speech she emphasized on the need to collaborate the academic and the non academic education.

On January 15, the Course coordinator, Mr. Rishabh Shukla, guided all students on the topic "PCB Designing". In his speech, he had explained the need for every student to have skills to get a job. He also explained about configuration and functioning of bread board.

On January 15, Mr. Praveen Choudhary, Session on Bread Board.
On January 16, Mr. Praveen Choudhary, Practice Session on Pe software


On January 17, Mr. Lalit Jain, explained Etching \& Drilling of PCB
On January 18, Mr. Lalit Jain, has given assignment to students on testing of PCB was done
On January 19. Mr. Praveen Choudhary, conduct test on Testing of PCB and Assignment submission.
At last. Prof. Preeti Gupta. Head EX. Convenor of Course gave away the vote of thank. He thanked Mr. Praveen Choudhary and Mr. Lalit Jain for providing his valuable time for successful conduction of this course for our students. He also thanked all the faculties. office staff and student volunteers for their unconditional support in organizing this Course

## Prof. Preeti Gupta

## Course Convenor

- EX, OCT




## Oriental College of Technology, Bhopal

Date: 17 June 2014

## Policy of Value Added Course

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4. The course is free to enrol and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
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b. Exam Score $>=25 / 50$.
c. If one of the 2 criteria is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.


Copy to:

1. Academic Committee
2. All HoD's, OCT
Eun Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

ORIENTAL COLLEGE OF
TECHNOLOGY, BHOPAL


## Value Added Course

()n
"MATLAB"

127-31, Aug-2018|

For II - Year Students

## Organised By

Department of Mechanical Engineering


Oriental College of Technology
Thakral Nagar, Raisen Road, Bhopal - 462021
Phone:: 2529026, 2529057. Fax: 0755-2529472

## CHIEF PATRONS

Dr. K. L. Thakral
Founder Chairman. Oriental Group of Institutes and
Chancellor. Oriental University. Indore

## PATRONS

Shri. Praveen Thakral
Chairman. Oriental Group of Institutes
Mrs. Niraj Ghee
Chair Person, Oriental College of Technology, Bhopal

## ADVISORY COMMITTEE <br> Dr. Ranjeeta Khare <br> Director, OCT, Bhopal

CONVENOR
Dr. Netra Pal singh
octhodme(@)oriental.ac.in =

## COURSE COORDINATOR

Mr. Saumitra Kumar Sharma
Mobile: +919589455704
saumitra204@gmail.com

## ORGANISING COMMITTEE MEMBERS

Mr. Dharmendra Yadav
Mr. Shahnawaz Ansari
Mr. Rajesh Kumar
Mr. Rajeev Ranjan

## CONTACT

Mr. Shahnawaz Ansari
Mobile: +918253033270
Shahnawaz91@gmail.com
Mr. Saumitra Kumar Sharma
Mobile: +919589455704
saumitra204@gmail.com

## Registration Form

Name:

Enrollment No.

Branch:
$\qquad$

Address $\qquad$
$\qquad$
$\qquad$
$\qquad$

City \& Pin. $\qquad$

E-mail id.

Contact No:


Place
Oriental College of Technolary Thakral Nagar, Raisen Road Bhopal

Date:

Signature with Seal

# Oriental College of Technology, Bhopal <br> Mechanical Engineering <br> Value added course - MATLAB <br> Time Durations - 30 Hrs <br> Course code - ME-20001 <br> Syllabus 

## Introduction to MATLAB

Using the Command Widow to execute simple programming tasks, advantage of the Workspace and Command History Windows, and using the Help files. Built-in functions will be introduced and will practice their use on scalars.

## Vectors and matrices

Students will create vectors and matrices, and solve simple sets of linear equations in the Command Window. The difference between array and matrix multiplication will be considered.
MATLAB handles polynomials will be described, with relevant common functions discussed. The students will attempt simple programming exercises based on these functions.

## M-files

Students will learn to use the MATLAB Editor to create and run m-files. Looping structures in MATLAB and the advantages of vectorisation over loop structures in many instances will be described, using built-in functions. The students will write simple m-files to solve problems using these concepts and those of the previous section.

## Plotting

Students will learn to use MATLAB's 2D plotting capabilities, following a brief function mfiles and user-defined functions demonstration. There will be a brief introduction to 3D plotting

## Programming Tasks

Students will have time to develop their MATLAB skills by undertaking more programming tasks.

## Function m-files

Students will learn to use function m-files, write user-defined functions, and function functions, using them to solve appropriate problems.

## Ordinary differential equations

The students will learn how to use MATLAB to solve simple systems of ODE's, with mention of the various built in solvers. Students will write function m-files, write userdefined functions, and function functions, using them to solve appropriate problems.

Consolidation Exercises_ - exercises will be done on above course content on feedback basis.


Oriental College of tain
Thakral Nagar, Raisin lima Bhopal

| SCHEDULE |  |  |
| :---: | :---: | :---: |
| 5 Days Value Added Course on MATLA ${ }^{\text {\| }}$ [ $7-31$, Aug-2018 |  |  |
| 27 Aug-2018 Teacher |  |  |
| Time | Session |  |
| 10:00-10:30 AM | Inaugural Programme | Mr. Saumitra Sharma |
| 10:30 AM-12:30PM | Introduction to MATLAB |  |
| 12:30-1:10PM | $\frac{\text { LUNCH }}{\text { simple programming task }}$ | Mr. Rajesh Kumar |
| 01:10-3:10PM | simple programming tas |  |
| 3:10-3:30PM | Break | Mr. Dharmendra Yadav |
| 03:30-6:00PM | Workspace and Command History Windows using help file |  |
| 28 Aug-2018 Teacher |  |  |
| Time | Session | Mr. Saumitra Sharm |
| 9:00-11:00AM | Vectors and matrices | Mr. Saumitra Starm |
| 11:00-11:30AM | Break | Mr. Dharmendra Yadav |
| 11:30-01:00PM | MATLAB handles polynomials |  |
| 01:00-1:40PM | LUNCH | Mr. Rajesh Kumar |
| (1):40-4:30PM | array and matrix multiplication |  |
| 29 Aug- 2018 Teacher |  |  |
| Time | Session | Mr. Dharmendra Yadav |
| 9:00-11:00AM | MATLAB Editor to create and run m-iiles |  |
| 11:00-11:30AM | Break | Mr. Saumitra Sharma |
| 11:30-01:00PM | $\frac{\text { Advantages of vectorisation over loop structures }}{\text { LUNCH }}$ |  |
| 01:00-1:40PM | Write simple m-files to solve problems using these | Mr. Rajesh Kumar |
| 01:40-4:30PM | Write simple m-files to solve problems using these concepts |  |
| 30 Aug- 2018 |  |  |
| Time | Session | Teach |
| 9:00-11:00AM | MATLAB's 2D plotting capabilities | Mr. Saumitra Sharma |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Brief introduction to 3D plotting | Mr. Dharmendra Yadav |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30 PM 31 Aug-2018 |  |  |
|  |  |  |
| 10:00-12:00AM | MATLAB to solve simple systems of ODE's |  |
|  |  |  |
|  |  |  |
|  |  |  |
| 02:40-3:30PM | Assignment submission | Mr. Rajesh Kumar |
|  | Feedback from students | Mr. Saumitra Sharma |
| 3:30-4:30PM | Valedictory \& Certificate distribution | Mr. Dharmendra Yadav / |
| 4:30-5:30 PM $\quad$ Valedictory \& Certificate distribaion |  | Mr. Rajesh Kumar |
| , | Oriental College of Thakral Nagar, Raisen tuad Bhopal | $\frac{1}{1 x}$ |



Value Added Course on MATLAB
Objective Test, Date: 31 Aug- 2018

Branch:

Semester:

Subject:
Note

Mechanical Engineering

## III Semester

MATLAB

Max. Marks -50
Minimum Marks:25
Time: $\mathbf{1 : 3 0 H r s}$

All questions are compulsory. Each Question is of 2.5 Marks.

1. What is the return type of angles function in MATLAB ?
a) Degrees
b) Radiun
c) Radians \& Degrees
d) Depends on the argument
2. What will be the output of atan2(-1,1) in Matlab?

| a) | Error |
| :--- | :--- |
| b) | $\mathrm{pi} / 4$ |
| c) | 0.7854 |

3. MATLAB stands for?
a) matrix laboratory
b) math library
c) matric library
d) matrix library

- Which command is used to clear a command window?
a) clear
b) close all
c) clc
d) clear all

5. To determine whether an input is MATLAB keyword, command is?
a) iskeyword
b) key word
c) inputword
d) isvarname
6. Command used to display the value of variable $x$.
a) display
b) $\operatorname{disp}(x)$
c) $\operatorname{disp} x$
d) vardisp(' $x$ ')
7. Command is used to save command window text to file.
a) saveas
b) texttofile
c) diary
d) todiary
8. To stop the execution of a MATLAB command, used keys?
a) $\mathrm{ctrl}+\mathrm{c}$
b) $\mathrm{ctrl}+\mathrm{s}$
c) $\mathrm{ctrl}+\mathrm{b}$
d) ctrl+enter
9. Which is the invalid variable name in MATLAB?
a) $\times 6$
b) last
c) $6 x$
d) $Z$
10. If the coefficient matrix of a linear system has rank 4 , and the augmented matrix has rank 5 ,
then:
A. The system has infinitely many solutions
B. The system is inconsistent
C. There are fewer variables than equations
D. The system is homogeneous


Oriental College of Tech:
Thakral Nagar, Raise Fou Bhopal
11. Which of the following is not a pre-defined variable in Matlab?
A. pi
B. $\operatorname{Inf}$
C. I
D. gravity
12. Io print a newline in a fprintf statement, you must use the following escape character:
A. $n / 1$
B. nl
C. nxt
D. n
13. I む $\backslash$ and $y$ be solutions to a system of $n$ homogeneous linear equations. If $z=a x+b y$
A. $z$ is a solution to the system for all $a$ and $b$
C. The solution has $n-2$ parameters
B. $z$ is a solution only if $a=0$ and $b=0$
D. There are at most 2 leading variables
14. What are the characters in Matlab are represented in their value in memory?
A. decimal
B. ASCII
C. hex
D. string
15. Which one of the following lists contains only legal MATLAB variable names?
A. year-2012, time
B. myTime, 1stVar
C. MyScorel, student 1_ID
D. 2nd_Var, my_currency
16. This Matlab command clears all data and variables stored in memory:
A. clc
B. clear
C. delete
D. deallocate
17. What does MatLab consist of?
A. MatLab Language
B. MatLab working environment
C. Handle Graphics
D. All of the above
18. What are the things for which MATLAB can be used
A. Performing very simple calculations
B. Plotting mathematical relationships in two dimensional and three dimensional
C. For operations of matrix
D. All of these
19. Which of the following is used to see if two elements are equal in MATLAB?
A. ! =
B. $==$
C. isequal
D. $=$
20. To convert inches to millimeters, which of the following function is used?
a) $i 2 \mathrm{~m}=$ inline $(\mathrm{d} . / 25.4, \mathrm{~d}) ;(\mathrm{b})$
b) $i 2 \mathrm{~m}=$ inline('d./25.4', 'd');(c)
c) $i 2 \mathrm{~m}=$ inline $(\mathrm{d} . * 25.4)(\mathrm{d})$
d) function i2m = inline('d','d.*25.4')



# Oriental College of Technology Bhopal 

Department of Mechanical Engineering
Attendance sheet for value added cource on MATLAB



Dirsctor
Oriental College of Technology
Thakral Nagar, Raisen Road Bhopal


## COURSE EVALUATION/ FEEDBACK FORM

| Value Added Course | MATLAB |
| :--- | :--- |
| Date: | 27-31,Aug-2018 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s): | Mr. Saumitra Kumar Sharma |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree o disagree with each statement. Please circle the number that applies.

$$
4=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$



## August 27, to August 31, 2018.



Oriental College of Tecinology
Thakral Nagar, Raisen Road

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

[Approved by AICTE, New. Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal Oriental Campus, Risen Road, Bhopal-462021 (MP) [INDIA]


Session: 2018-19

## Department of Mechanical Engineering

 CERTIFICATEThis is to certify that Mr./Ms. PUNIT RAJ of III Sem, OCT, Bhopal, has Completed the "Value Added Course" on "MATLAB" during 27-31,Aug-2018, organized by Department of Mechanical Engineering, Oriental College foffluer Technology, Bhopal.


Co-Ordinator, ME, OCT


HOD, ME, OCT


Director, OCT

# ORIENTAL COLLEGE OF TMEHNOLOGY, BHOPAL 

Department of Mechanical Engineering


Report on Value Added Course on MATLAB
Date and Time: August 27, to August 31, 2018.
Venue: ME, OCT Campus.
Organized by: ME,OCT, , Bhopal.
Name of the Speakers: Mr. Dharmendra Yadav, Assistant Professor, ME, OCT, Mr. Saumitra Sharma, Assistant Professor, ME, OCT and Mr. Rajesh Kumar, Assistant Professor, ME, OCT. Participants Details: Second year students of Mechanical Engineering Dept.

## Summary of the Event

The Value added course Plays an important role in Strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syllabus, the Mechanical Engineering Department of Oriental College of Technology had organized "Value Added Course on MATLAB" from August 27, to August 31, 2018 for the students of second year.

This Course syllabus was covered by Mr. Dharmendra Yadav, Assistant Professor, ME, OCT, Mr. Saumitra Sharma, Assistant Professor, ME, OCT and Mr. Rajesh Kumar, Assistant Professor, ME, OCT in 30 Hrs. of 5-Day program.

On August 27, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare, Director, Oriental College of Technology. In his presidential speech she emphasized on the need to collaborate the academic and the non academic education.


Course coordinator has given Introduction to MATLAB with Simple Programming Tasks, Workspace And Command History Windows Using Help File.
On August 28, the Course coordinator, Mr.Saumitra Kumar Sharma, Mr. Rajesh Kumar and Mr. Dharmendra Yadav, guided all students on the topic Vectors and matrices, MATLAB Handles Polynomials And Array and Matrix Multiplication.In his speech, They have explained the need for every student to have skills to get a job. They also explained about configuration and functioning of Matlab.

On August 29, Mr. Dharmendra Yadav, explained, MATLAB Editor to create and run m-files, Mr. Saumitra Sharma, explained, Advantages of vectorisation over loop structures. Write simple m-files to solve problems using these concepts by Mr. Rajesh Kumar.

On August 30, Mr.Saumitra Sharma taught MATLAB's 2D plotting capabilities also given assignment to students on the same.

On August 31, Mr. Dharmendra Yadav, has given assignment to students on Brief introduction to 3D plotting Brief introduction to 3D plotting after that assessment of class done.

At last, Prof. Netra Pal Singh, Head ME, Convenor of Course gave away the vote of thank. He thanked Mr. Saumitra Sharma for providing his valuable time for successful conduction of this course for our students. He also thanked Mr. Rajesh Kumar \& Mr. Dharmendra Yadav for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

Prof. Netra Pal Singh
Course Convenor
ME, OCT
 <br> \title{
ORIENTL <br> \title{
ORIENTL <br> ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL <br> Apporad by AICTE: New Delhi is Govt, of MIIP. Alliliated to Itajiv Gandhi Proudyogikl Vishwavidyalaya, Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA
}

Datc: 17 Junc 2014

## Policy for Value Added Course

1. The mininuum duration of each Value Added Course will be of 30 hrs .
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to cnroll and leam from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Teclmology, Bhopal
5. Criteria to get a Cerificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible föra certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score >=25/50.
c. If one of the two clause $(\mathrm{a}, \mathrm{b})$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course nanne, Course duration.


# ORIENTAL COLLEGE OF TECIINOLOGY, BHOPAL 

## Department of Civil Engineering

## AUTO CAD

## Value added courso

## Time Durations - $\mathbf{3 0} \mathrm{Hrs}$

CE-20001

## Course coordinator - Mr.Alok Goyal

## Scssion-1

1. Introduction
2. Computer Hardware and Software Concepts
3. Introduction of Personal Computer and Operating Systems WINDOWS-XP, Windows-7, File Management

## Session- 2

1. Construction of plane and complex geometrical figures
2. Principles of Projections
3. Projections of Straight Lines and Solids
4. Section of Solids

## Session- 3

1. Setting up a drawing starting from scratch
2. Setting up a drawing using a Wizard
3. Using and creating a template file
4. Opening an existing drawing
5. Screen layout
6. Pull-down menus
7. Screen icons
8. Command line
9. status bar
10. Dialogue boxes
11. Drawing Commands
12. Lines, Ray, Construction Line
13. Multiline and polylines



Director
Oriental College of Technology Thakral Nagar, Ralsen Road Bhopal

14. Rectangles
15. Arc, Circle and Ellipse
16. Polygon, Spline

## Session- 4

1. Co-ordinate input methods (directive, absolute, relative and polar)
2. Starting a New Drawing/Opening an existing drawing
3. Drawing Commands
4. Hatching Command Text (multi-line \& single line) and Formatting Text Styles
5. View Commands \& Drawing Settings and Aids
6. Modify Command - 1) Hatching 2) Text (multi-line \& single line ) and Formatting Text Styles
7. Dimension Command Formatting Dimension Style and Multi-leader Style
8. Drawing Settings and Aids
9. Saving and Plotting

## Session- 5

1. Individual Project \& Team Project



Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

| Department of Civil Engineering |  |  |
| :---: | :---: | :---: |
| Value Added Course - AUTOCAD |  |  |
| Schedule |  |  |
| Date - 10/09/2018-14/09/2018 |  |  |
| 10/09/2018 Faculties |  |  |
| Time | Notules |  |
| 0:30-10:00 AM | Inaugural Programme | Mr. Alok Goyal |
| 10:00 AM-12:30PM | Introduction to AUTOCAD | Mr.Aok |
| 12:30-1:10PM | LUNCII | Mr. Alok Goyal |
| 01:10-3:10PM | Leaming of 2D drawings |  |
| 3:10-3:30PM | Break | Mr. Alok Goyal |
| 03:30-5:30PM | Introduction to 3D Drawings | Mr. Alok |
| 11/09/2018 Teacher |  |  |
| Time | Session | Mr. Alok Goyal |
| 9:00-11:00AM | Introductions to principle of projection |  |
| 11:00-11:30AM | Break | Mr. Alok Goyal |
| 11:30-01:00PM | Arc, circle and ellipse | Mr. Alok Goya |
| 01:00-1:40PM | LUNCH | Mr. Alok Goyal |
| 01:40-4:30PM | Introductions to Sections of Solids |  |
| 12/09/2018 Teacher |  |  |
| Time | Session | Mr. Alok Goyal |
| 9:00-11:00AM | Learning of 3D drawing | Mr. |
| 11:00-11:30AM | Break | Mr. Alok Goyal |
| 11:30001:00PM | Various Structural elements such as staircase |  |
| 01:00-1:40PM | LUNCH | Mr. Alok Goyal |
| Time | Session | Teacher |
| 9:00-11:00AM | Practice Session on Various commands of AUTOCAD | Mr. Alok Goyal |
| 11:00-11:30AM | Break | Mr. Alok Goyal |
| 11:30-01:00PM | Practice Session on 2D \& 3D drawing | Mr. Alok Goya |
| 01:00-1:40PM | Saving \& plotting commands | Mr. Alok Goyal |
| 14/09/2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Assignment :Designing of 2 BHK plan | Mr. Alok Goyal |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Objective Test | Mr. Alok Goyal |
| 01:00-1:40PM | LUNCH |  |
| 01:40-2:30PM | Submission of 2D plan and Assignment submission | Mr. Alok Goyal |
| 2:30-3:30PM | Feedback from students | Mr. Alok Goyal |
| 3:30-4:30 PM | Valedictory \& Certificate distribution | Mr. Manish Kumar Sharma |
|  | Director <br> Oriental College of Technology Thakral Nagar, Raisen Road Bhopal | Civanginering <br> Orisntal Collece of Techollog Bithorti. |

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

|  | Department of Civil Engineering |  |  |
| :---: | :---: | :---: | :---: |
|  | Value Added Course on AUTO CAD |  |  |
|  | Objective Type Test |  |  |
|  | Date: 14/09/2018 |  |  |
| Branch: | Civil Engineering |  |  |
| Semester: | Third Semester |  | $\begin{aligned} & \text { Max. Marks-50 } \\ & \text { Minimum Marks:25 } \end{aligned}$ |
| Subject: | AUTO CAD | Subject Code: CE 20001 | Time: 1:301Irs |
| Note | All questions are compulsory. Each Question is of 2.5 Marks. |  |  |

1. Which is the latest version of AutoCAD software?
a) 2016
b) 2017
c) 2018
d) 2019
2. Which key is used to obtain properties palette in AutoCAD?
a) Control +1
b) Control+2
c) Control +3
d) Control +4
3. AutoCAD was first released in the year:
a) 1858
b) 1966
c) 1898
d) 1982
4. How many units are available in AutoCAD?
a) 4
b) 5
c) 7
d) 6
5. Which mode allows the user to draw $90^{\circ}$ straight lines :
a) Osnap
b) Ortho



Oriental College of Technoingy Thakral Nagar, Raisea kued thonal
c) Linear
d) Polar tracking
6. To obtain parallel lines, concentric circles and parallel curves; $\qquad$ is used.
a) Array
b) Fillet
c) Copy
d) Offset
7. The default grid spacing in both X and Y directions is:
a) 10
b) 20
c) 5
d) 15
S. How many workspaces are available in AutoCAD?
a) 2
b) 4
c) 3
d) 5
9. Scale command can be accessed easily by typing:
a) SL
b) S
c) SC
d) C
10. Which command is used to divide the object into segments having predefined length?
a) Divide
b) Chamfer
c) Trim
d) Measure
11. When drawing in 2 D , what axis do you NOT work with?
a) $X$
b) Y
c) $Z$
d) WCS
12. The primary difference between the Model tab and the Layout tabs) is $\qquad$ .
a) the Model tab is used for drawing in 3D and a Layout is used for drawing in 2D
b) the Model tab is where you create the drawing and a Layout tab represents the sheet that you will plot or print on
c) the color of the background
d) the Model tab displays the drawing you are copying from and the Layout tab is where you lay out the new drawing
13. Which of the following is NOT a property of an object
a) Line weight
b) Measure
c) Hyperlink
d) Elevation

14. Which command convert discrete objects in polyline
a) Union
b) Subtract
c) Join
d) Poly line

Discuss
15. To print the entire project, you will choose to regulate what to plot
a) Display
b) Extends
c) Limits
d) Window
16. What is the usefulness of viewports?
a) Allows us to see the screen or on paper different views of the same project
b) Give us the ability to see projects have become a newer version of Auto CAD from our
c) We can make a change in one part of the plan, without affecting the rest
d) None of the above

Discuss
17. What is the difference between the Scale commands from the command Zoom
a) Scale for single object, while the Zoom whole plan
b) No difference
c) H Scale can grow / shrink a shape up 10 times, while the Zoom has no limits
d) H Scale changes the size of objects, while the Zoom changes the visibility of the project
18. What you cannot create from the command Offset
a) Vertical straight
b) Concentric circles
c) Three parallel lines
d) Parallel arcs
19. Which state grid is use to design perspective
a) Parametric
b) Isometric
c) Pro-oplic
d) Rectangular
20. What is the command used for Plagiostomi angle?
a) Chamfer
b) Fillet
c) Offset
d) Mirror


Oriental College of Technology
Thakral Nagar, Raisen Road
Bhopal

# Oriental College of Technology,Bhopal 

Department of Civil Engineering
Auto Cad (Value Added Course)
Course Code: CE 20001
Date - 10/09/2018 - 14/09/2018
ATtendences sileet


# Oriental College of Technology,Bhopal 



Value Added Course: AUTO CAD
Course C'ode: CE: 20001
Date - $10 / 09 / 2018$ to $14 / 09 / 2018$
ASSESSMENT SIIEET

| Sr.N |
| :---: |
| 1 |
| 2 |
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|  |



Thon:

| Value Mided Course | Courso Evaluatlon/ Foodb |
| :---: | :---: |
| Date: | 10/1992018. $14 / 09 / 2018$ |
| Program Location: | (riental College of Technology, Bhopal |
| Presenter(s): | Alr. Alok Goyal |

Platse respont to the following statements by using the d-point rating seale to indleate the extent to whith you agree or diagree with each statement. Please circle the number that applies.

$$
f=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1-\text { Strongly Disagree }
$$

| 1. The Course objectives were stated clearly and met. | $4 / 321$ |
| :---: | :---: |
| 2. The Course was well organized. | $1 / 321$ |
| 3. The information and/or skills presented were relevant and useful | , 321 |
| 4. The presenter(s) provided adequate time for questions and answered them effectively. | $1 / 321$ |
| 5. The presenter(s) allowed me to work with and learn from others. | $43 / 21$ |
| 6. The materials provided were sufficient \& appropriate for the program. | $\sqrt{3} 21$ |
| 7. The physical arrangements were adequate. | $\sqrt{321}$ |



Oriental College of Technolngy Thakral Nagar, Ralsen Road - Bhopal

# Oriental College of Technology, Bhopal 

Department of Civil Engineering
Value Added Course: AUTO CAD)
Course Code: CE 20001
Date - 10/09/2018 to 14/09/2018


# ORIENTAL COLLEGE OF TECHNOLOGY 

## BHOPAL



## Department of Civil Engineering

## Report on Value Added Course on "AUTOCAD"

Date and Time: 10/09/2018 to 14/09/2018.
Venue: CE, OCT Campus.
Organized by: CE, OCT, Bhopal.
Name of the Speakers: Mr. Manish Kumar Sharma (HOD CE), Mr.Alok Goyal
Participants Details: Second year students of Department of Civil Engineering.

## Summary of the Event

The Value added course plays an important role in strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syllabus, the Civil Engineering Department of Oriental College of Technology had organized "Value Added Course on Auto Cad" from 10/09/2018 to 14/09/2018 for the students of second year.

This Course syllabus was covered by Mr. Manish Kumar Sharma (HOD CE), Mr.Alok Goyal CE, OCT in 30 Hrs. of 5-Day program.

On 10/09/2018, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare, Director, Oriental College of Technology. In his presidential speech she emphasized on the need to collaborate the academic and the non academic education.



Director
Oriental College of Technology Thakral Nagar, Raisen Road Bhooal

On 10/09/2018, Mr. Mannish Kumar Sharma (HOD CE), Mr.Alok Goyal, make students Learned Introduction to AUTO CAD Software \& Introduction to 2D \& 3D drawings. On 11/09/2018. Mr. Mr.Alok Goyal, make students Leaned Introductions to principle of projection. Are circles and eclipse. On 12/09/2018, Mr.Alok Goyal, make students learned 3D Drawing \& Drawing various structural elements of a building \& Footings. On 13/09/2018, Mr. Alow Goyal Conducted Practice Session on Various commands of AUTOCAD such as saving and plotting commands. On 14/09/2018, Mr.Alok Goyal, assigned to draw Designing of 2 BHK plan followed by value added course assessment test organised by Mr.Alok Goyal. At last Mr. Marish Kumar Sharma (HOD CE) Convenor of Course gave away the vote of thank. He also thanked Mr.Alok Goyal for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

Mr. Manish Kumar Sharma

## Course Convenor

CE, OCT



Director
Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

# Oriental College Of Technology, Bhopal 

Date: 17 June 2014

## Policy of Value Added Course

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5. Criteria to get a Certificate: Final score = Class Room Assessment Score + Test Score, with minimum of $60 \%$ attendance
6. Student will be eligible for a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Exam Score $>=25 / 50$.
c. If one of the 2 criteria is not met, student will not get the certificate even if the Final score $>=$ 50/100.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:

1. Academic Committee
2. All HoD's, OCT


Director
Oriental Cargo at Tomanogy
Thatial Facer Ruben Road
Bhopal


## ABOUT THE ORIENTAL GROUP

Oriental Group of institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Phamacy. Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate. Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Computer Science is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research.The state-of-art facilities and competent faculties provide an excellent climate for the all round perofleqegith of the students. It has well qualififdermated hidd motivated faculty members havnitis pofingration if various streams. The CS Departireth offefsoch. Tech Course in Computer Science Engineerangaloing yo

Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

Computer Science Engineering plays prominent role inevery domain and vital role in development ofNation. "Advanced Java Programming"is a ValueAddedcourse which will focus on providing knowledge on developing web applications, advanced Java fundamentals like JSP, JDBC, etc.

## OBJECTIVES\& CONTENTS

Advanced Java is everything that goes beyond Core Java - most importantly the APIs defined in Java Enterprise Edition, includes Servlet programming, Web Services, the Persistence API, etc. It is a Web \& Enterprise application development platform which basically follows client \& server architecture.
$\checkmark$ To know about JDBC (Java Database Connectivity) and their architecture.
$\checkmark$ To know about Java Servlets and JSP(Java Servlet Pages).
$\checkmark$ To know about Applets and Java network programming.
$\checkmark$ To learn about Java Beans and Swing.
$\checkmark$ To know about Frameworks and basics of Struts, Java Development

## ELIGIBILITY

The Third yearStudentsof Computer Science Engineering branch are eligible to attend theAdvanced Java Programming course.

## REGISTRATION

No Registration fees.
INVITED SPEAKERS
Mr. Sourabh Jain
Associate Professor, Dept CSE, OCT Bhopal

int c ;
while ( $c=$ in.read ()) $:=-1$ )


Director
Oriental College of Technology
Thakral Nager, Fasen Road
Ehopal

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

## Department of Computer Science \& Engineering

## Advanced Java Programming Syllabus (CSE 30001)

## Basics of Servlet

Servlet: What and Why?, Basics of Web, Servlet API, Servlet Interface, GenericServlet HttpServlet, Servlet Life Cycle, Working with Apache Tomcat Server, Steps to create a servlet in Tomcat, How servlet works?, servlet in Myeclipse, servlet in Eclipse, servlet in Netbeans

## Basics of JSP

Scripting elements, Implicit Objects, Directive Elements, Exception Handling, Action Elements, Expression Language, MVC in JSP, JSTL, Custom tags, Project Development in JSP

## Java Mail API

Sending Email, Sending email through Gmail server, Receiving Email, Sending HTML content

## Basics of Struts 2

Struts : What and Why?, Model 1 vs Model, Struts 2 Features, Steps to create Struts 2 application Understanding Action class, Understanding struts.xml file, Struts 2 in Eclipse IDE, Struts 2 in Myeclipse IDE

## Introduction to JavaEE

The Need for JavaEE., Overview on the JavaEE Architecture, JavaEE Key Standards

## Web Technology

HTML 5, CSS, Javascript, JQuery, AJAX.


Faculty Coordinator



Head of Department

SCHEDULE- Advanced Java Programming(CSE 30001)
s Days Value Added Course on Advanced Java Programming (10Sep 2010 to 14Sep 2010)


ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
Department of Computer Science \& Engineering

Marks Scored:

Semester: V
Name of Student: $\qquad$ Enrollment No: $\qquad$

1) Which one of the following is not true?
(a) A class containing abstract methods is called an abstract class.
(10) Abstract methods should be implemented in the derived class.
(c) An abstract class cannot have non-abstract methods.
(d) A class must be qualified as 'abstract' class, if it contains one abstract method.
(e) None of the above.
2) Which of the following is true?
(a) A finally block is executed before the catch block but after the try block.
(b) A finally block is executed, only after the catch block is executed.
(c) A finally block is executed whether an exception is thrown or not.
(d) A finally block is executed, only if an exception occurs.
(e) None of the above.
3) Among these expressions, which is(are) of type String?
(a) " 0 "
(b) "ab" + "cd"
(c) ${ }^{0} 0$ '
(d) Both (A) and (B) above (e) (A), (B) and (C) above.
4) What is the type and value of the following expression? (Notice the integer division)
$-4+1 / 2+2^{*}-3+5.0$
(a) int -5
(b) double - 4.5
(c) int -4
(d) double -5.0
5) What is printed by the following statement?

System.out.print("Hetto 2 world!");
(a) Hello, word! (b) Heth, world!
(c )Hello,


World.
(d) "Hello, Inworld!" (e) None of the above.
6) Which of the following is TRUE?
(a) In java, an instance field declared public generates a compilation error.
(b) int is the name of a class available in the package java.lang
(c) Instance variable names may only contain letters and digits.
(d) A class has always a constructor (possibly automatically supplied by the java compiler).
(e) The more comments in a program, the faster the program runs.

## 7) A constructor

(a) Must have the same name as the class it is declared within.
(b) Is used to create objects.
(c) May be declared private
(d) Both (A) and (B) above

3:) (a), (b) and (c) above.
8) What is byte code in the context of Java?
(a) The type of code generated by a Java compiler.
(b) The type of code generated by a Java Virtual Machine.
(c) It is another name for a Java source file.
(d) It is the code written within the instance methods of a class.
(e) It is another name for comments written within a program.
9) The java run time system automatically calls this method while garbage collection.
(a) finalizer()
(b) finalize()
(c) finally()
(d) finalized()
10) An overloaded method consists of,
(a) The same method name with different types of parameters
(b) The same method name with different number of parameters
(c) The same method name and same number and type of parameters with different return type
(d) Both (a) and (b) above
(e) (a), (b) and (c) above.

## 11) What is the output of the following code:



String sl = "Hello";
String s2 = new String(s1);
System.out.println(s1=s2);
\}
\}
(a) true
(b) false
(c) 0
(d) 1
12) All exception types are subclasses of the built-in class
(a) Exception
(b) RuntimeException
(c) Error
(d) Throwable
13) In java, objects are passed as
(a) Copy of that object
(b) Method called call by value
(c) Memory address
(d) Constructor
14. Which of the below is not a subinterface of Queue?
a) BlockingQueue
b) BlockingEnque
c) TransferQueue
d) BlockingQueue
15. What is the remaining capacity of BlockingQueue whose intrinsic capacity is not defined?
) Integer.MAX_VALUE
b) BigDecimal.MAX_VALUE
c) 99999999
d) Integer.INFINITY
16. What is the difference between Queue and Stack?
a) Stack is LIFO; Queue is FIFO
b) Queue is LIFO; Stack is FIFO
c) Stack and Queue is FIFO
d) Stack and Queue is LIFO
17. What are the use of front and rear pointers in CircularQueue implementation?
a) Front pointer points to first element; rear pointer points to the last element
b) Rear pointer points to first element; front pointer points to the last element
c) Front and read pointers. gginf dq (be first element
d) Front pointer points to the frit elenment; rear pointer points to null Object

18. Which data structure is used in Breadth First Traversal of a graph?
a) Stack
b) Queue
c) Array
d) Tree
19. Where does a new element be inserted in linked list implementation of a queue?
a) Head of list
b) Tail of list
c) At the centre of list
d) All the old entries are pushed and then the new element is inserted
20. If the size of the array used to implement a circular queue is MAX_SIZE. How rear moves to traverse inorder to insert an element in the queue?
a) $\mathrm{rear}=($ rear $\% 1)+\mathrm{MAX}$ SIZE
b) rear=(rear+1)\%MAX SIZE
c) rear=rear+(1\%MAX_SIZE)
d) rear=rear\%(MAX_SIZE+1)
21. PriorityQueue is thread safe.
a) True
b) False
22. What is the remaining capacity of Blocking Queue whose intrinsic capacity is not defined?
a) Integer.MAX_VALUE
b) BigDecimal.MAX_VALUE
c) 99999999
d) Integer.INFINITY
23. What is difference between dequeue() and peek() function of java?
a) dequeue() and peek() remove and return the next time in line
b) dequeue() and peek() return the next item in line
c) dequeue() removes and returns the next item in line while peek() returns the next item in line
d) peek() removes and returns the next item in line while dequeue() returns the next item in line
24. What are the use of front and rear pointers in CircularQueue implementation?
a) Front pointer points to first element; rear pointer points to the last element
b) Rear pointer points to first element; front pointer points to the last element
c) Front and read pointers point to the first element
d) Front pointer points to the first element; rear pointer points to null object
35. What is the correct method used to insert and delete items from the queue?
a) push and pop
b) enqueue and dequeue
c) enqueue and peek
d) add and remove


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Advanced Java Programming Syllabus (CSE 30001)
Ans
1-c
2-c
3-d
4-d 5-c 6-d 7-c 8-a 9-b 10-d 11-b 12-d 13-c 14-b 15-a 16-a 17-c 18-b 19-b
$\$$ 20-b 21-a 22-a 23-c 24-c 25-b

## 2





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| 62 012 <br> 63 012 | $126 C S 161063$ | PANKA KUMAR | 38 | 40 | 78 | Eligible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6401 | 0126CS161065 | PARUL SHRIVASTAVA | 37 | 40 | 77 | Eligible |
| 6501 | 0126CS161066 | PIYUSH BHAWSAR | 35 | 45 | 80 | Eligible |
| 6601 | 0126CS161067 | PRADEEP KUMARPATEL | 45 | 45 | 90 | Eligible |
| 6701 | 0126 CS161068 | PRAFUL VISHWAKARMA | 35 | 40 | 75 | Eligible |
| 6801 | 0126CS161069 | PRAGYA PAWAR | 38 | 40 | 78 | Eligible |
| 6901 | 0126 CS161070 | PRAJAKTA DATAR | 42 | 40 | 82 | Eligible |
| 7001 | 0126CS161071 | PRANJAL SRIVASTAVA | 38 | 40 | 78 | Eligible |
| 7101 | $0126 \mathrm{CS161072}$ | PRATEEK KUMAR | 37 | 40 | 77 | Eligible |
| 7201 | $0126 \operatorname{CS161073}$ | PRIYA SONI | 35 | 45 | 80 | Eligible |
| 7301 | 0126CS161074 | PRIYANSHI SONI | A | A | 0 | Not Eligible |
| 7401 | 0126CS161075 | PRIYANSHU SHRIVASTAV | 42 | 40 | 82 | Eligible |
| 7501 | 0126CS161076 | PUJA VERMA | 38 | 40 | 78 | Eligible |
| 7601 | 0126CS161077 | PULKIT MATHUR | 37 | 40 | 77 | Eligible |
| 7701 | 0126CS161078 | RACHIT THAKUR | 35 | 45 | 80 | Eligible |
| 7801 | 0126CS161079 | RAGHVENDRA MEENA | A | A | 0 | Not Eligible |
| 790 | 0126CS161080 | RAHUL JHA | 35 | 40 | 75 | Eligible |
| S0 0 | 0126CS161081 | RAJAT TIWARI | 30 | 30 | 60 | Eligible |
| 810 | 0126CS161082 | RAJEEV RANJAN | 35 | 35 | 70 | Eligible |
| 82 | 0126CS161083 | RAM NARAYANVISHWAKARM | 42 | 40 | 82 | Eligible |
| 83 | 0126CS161084 | RAVI KUMAR | 38 | 40 | 78 | Eligible |
| 84 | 0126CS161085 | RITU YADAV | 35 | 45 | 80 | Eligible |
| 86 |  | SAGAR SHANKARAN | A | A | 0 | Not Eligible |
| 87 |  | SAHA KUSHWAHA | A | A | 0 | Not Eligible |
| 88 |  | SAKSHI GUPTA | 35 | 35 | 70 | Eligible |
|  |  | SAKSHI KHARPATE | 42 | 40 | 82 | Eligible |
|  |  | SAKSHI SINHA | 38 | 40 | 78 | Eligible |
|  |  | SAKSHI THAKUR | 37 | 40 | 77 | Eligible |
|  |  | SAMRIDHI AGRAWAL | 35 | 45 | 80 | Eligible |
|  |  | SAROJ KUMAR | 45 | 45 | 90 | Eligible |
|  |  | SAWAN SHRIVASTAVA | 35 | 40 | 75 | Eligible |
|  |  | SAYMA NAAZMANSOORI | 30 | 30 | 60 | Eligible |
|  |  | SHASHANK BHARDWAJ | 35 | 35 | 70 | Eligible |
|  |  | SHIVAM SINGH | 42 | 40 | 82 | Eligible |
|  |  | SHIVANI SAHU | 38 | 40 | 78 | Eligible |
|  |  | SHIVANSH KASYAP | 35 | 35 | 70 | Eligible |
|  |  | SHRIKANT JANJALKAR | 42 | 40 | 82 | Eligible |
|  |  | SHUBHAM CHAKRAWARTI | 35 | 35 | 70 | Eligible |
|  | 10126 CS161102 | SHUBHAM KUMARBORKER | 42 | 40 | 82 | Eligible |
|  | 20126 CS161103 | SHUBHAM KUMARPATEL | 38 | 40 | 78 | Eligible |
|  | 3126CS161104 | SHUBHAM SAHA | 37 | 40 | 77 | Eligible |
|  |  | SIMRAN VISHWAKARMA | 35 | 45 | 80 | Eligible |
|  |  | SMRITI | 45 | 45 | 90 | Eligible |
|  |  | SNEHILANAND | 35 | 40 | 75 | Eligible |
|  |  | SINGH SANKALPSANDEEP | 38 | 40 | 78 | Eligible |
|  | 0126CS161109 | SOURABH DANGI | 35 | 35 | 70 | Eligible |
|  | 9 0126CS161110 | SRUSHTI CHANDRAWANSHI | A | A | 0 | Not Eligible |
|  | 0126CS161111 | SUDHANSHU KUSHWAHA | 35 | 35 | 70 | Eligible |
|  | $1{ }^{1}$ | SUJEET PATEL |  |  | 82 | Eligible |
| 114 | $40126 C 5161115$ | TANUSHREE BADORIA | 37 | 40 | 77 | Eligible |
| 115 | $50126 C 5161116$ | TUSHAR DAMAHE | 35 | 45 | 80 | Eligible |
| 116 | 6 0126CS161117 | UTKARSH GANGWAR | 45 | 47.5 | 92.5 | Eligible |
| 117 | $70126 C 5161118$ | UTKARSH RATHORE | 35 | 40 | 75 | Eligible |
| 118 | $80126 C 5161119$ | UTKARSH SONI | 38 | 40 | 78 | Eligible |
| 119 | 9 0126CS161120 | VAIBHAV TIWARI | 42 | 40 | 82 | Eligible |
| 120 | $00126 C 5161121$ | VAISHNAVI YADAV | 38 | 40 | 78 | Eligible |
| 121 | $10126 C 5161122$ | VINAMRA JAIN | 37 | 40 | 77 | Eligible |
| 122 | $20126 C 5161123$ | VINAY RAO | 35 | 45 | 80 | Eligible |
| 123 | $30126 C S 161124$ | VISHAL SANODIYA | A | A | 0 | Not Eligible |
| 124 | 4 0126CS161125 | aryASH RAI | 38 | 40 | 78 | Eligible |
| 125 | 50126 CS 161126 | E $¥$ SS ${ }^{\text {PTASWI SHRIVASTAVA }}$ | 35 | 45 | 80 | Eligible |
| 126 | $601261461+{ }^{\text {a }}$ |  | 45 | 45 | 90 | Eligible |

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## Feedback Form

| Value Added Course | Advanced Java Programming (CSE 30001) |
| :---: | :--- |
| Date: | $10-14$ Sep 2018 |
| Program Location: | CSE Dept Oriental College of Technology, Bhopal |
| Presenter(s): | Mr. Sourabh Jain |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disyee with each statement. Please circle the number that applies.

$$
\text { 4=Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$

| 1. The Course objectives were stated clearly and met. | $4 \sqrt{31}$ |
| :---: | :---: |
| 2. The Course was well organized. | 4321 |
| 3. The information and/or skills presented were relevant and useful | $4-31$ |
| 4. The presenter(s) provided adequate time for questions and answered them effectively. | 431 |
| \$ The presenter(s) allowed me to work with and learn from others. | 421 |
| 6. The materials provided were sufficient \& appropriate for the program. | 431 |
| 7. The physical arrangements were adequate. | 4821 |



## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

[Approved by AICTE, New Delhi \& Govt. of M,P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal Oriental Campus, Raisen Road, Bhopal-it 2021 (MP) INDIA]


## Department of Computer Science \& Engineering

This is to certify that Mr./Ms. ADITYA BANSAL of CS-V Sem , OCT, Bhopal, has Successfully Completed the "Value Added Course" on "Advance JHVA Programming" during 10-14 Sept 2018, organized by Computer Science and Engineering Department of Oriental College of Technology, Bhopal


phererir Technology Thakral Naga, Raisen Road


## oriental college of technology, bhopal DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## Report on Value Added Course on "ADVANCED JAVA PROGRAMMING",

Date and Time: 10-14, September, 2018
Organized by: CSE, OCT, Bhopal
Name of the Speakers: Mr. Saurabh Jain, Associate Professor, Mr. Saket Gupta Assistant Professor Participants Details: For III -Year Students
Venue: CSE, OCT Campus *

Summary of the Event

Computer Science Engineering plays prominent role in every domain and vital role in development of Nation. "Advanced Java Programming" is Value Added course which will provide benefits to the participants in many ongoing research areas in latest technologies.

The Department of Computer Science and Engineering Oriental College of Technology organized "Value Added Course on "Advanced Java Progranining"from 10 September 2018 to 14 September, 2018 for the students of Third year.

This Course syllabus was covered by Mr. Saurabh Jain Associate Professor, Mr. Saket Gupta Assistant Professor, CSE, OCT in 30 Hrs. of 5-Day program.

Inaugural Ceremony started by Director Speech on 10 th September 2018 and this course is conducted as per schedule and on 14 th September, 2018 valedictory function was conducted.

Prof. Bhavna Gupta
Course Coordinator
CSE, OCT



## Director

Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Approved by AICTE, New Delhi \& Govt, of MaP. Aminted to kajiv Gandhi Proudyogiki Vishwavidyalaya; Bhopal Oriental Campus, Ralsen Road, Bliopal-462021 (MP) INDIA

Date: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 his.
2. Orly students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to en foll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score = Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible foot. a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause ( $a, b$ ) is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:

## 1. Academic Committee <br> 2. All HOD's, OCT



> Oriental Collector Thakral Nog ot Technology Bhopal


dun
Director

Birectór<br>Oriental College of Technology:<br>Thakral Nagar, Raisen Road Bhopal

## CHIEF PATRONS

## Registration Form

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Director, OCT, Bhopal

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Mobile: +919827042079

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Mobile: +918319454284
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Mrs. Alka Tripathi

## ING COMMITTEE MEMBERS <br> ORGANISING COMMIT Sharma Mr. Avinash Shat

## Oriental College



Value Added Course
st

## "JAVA"

[04-08, Sepromber, 20IS]
For III-Terr Suniens

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Department of Iaformand Tediansery




## ABOUT THE ORIENTAL GROUP

giental Group of Institutes (Indore - Bhopalfabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.

Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport

## ABOUT THE DEPARTMENT

The Department of Information Technology is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching Induatry and Research. The state-of-art (\%) exdecrintiomafis fo ghe all round development of suncents. $1 t^{0} h p 5 \%$ qualified, committed and notivated factary 3 ne mbers having specialization in farious streams. The core competency of the

Department is in the area of Software Engineering, Database Management Systems, Data Structures etc. The Information Technology Department offers Undergraduate Program (B.E/ B.Tech) with an intake 120 Students.

## ABOUT THE COURSE

Information Technology department plays prominent role in every domain and vital role in development of Nation. JAVA is Value Added course which will provide benefits to the participants in many ongoing research areas in latest technologies.

## OBJECTIVES \& CONTENTS

Java is a widely used programming language expressly designed for use in the distributed environment of the finternet. ... Java can be used to create complete applications that may run on a single computer or be distributed among servers and clients in a network.

## ELIGIBILITY

The
$\square$
year Students of Information Technology branch are eligible to attend the Course on JAVA

## REGISTRATION

## No Registration fees.

SPEAKERS
2Mr. Imran Khan
[Aspreteltoflessor, Oriental College of


## Thakral Nagar, Rais.en fina ind

[Ass㣽tâpplofessor, Oriental College of Technology, Bhopal]


## Oriental College of Technology, Bhopal

## Department of Information Technology

Syllabus of Value Added Course on
JAVA

## Module -1

- The Java Virtual Machine Variables and data types
- Conditional and looping constructs
- Arrays
- Fields and Methods
- Overloading methods
- Garbage collection
- Nested classes
- Overriding methods


## Module -2

- Polymorphism
- Making methods and classes final
- Abstract classes and methods
- Interfaces $\qquad$
- The Exception class
- Cloning objects
- The JDK LinkedList class
- Strings
- String conversions


## Modules

- Package access
- Documentation comments
- Configuring applets
- Applet capabilities and restrictions
- Layout Managers
- Event Handling
- The Action Listener interface
- Panels
- Classes for various controls, such as label, choice, list,
- Checkbox, etc.
- Dialogs and frames


## Module-4

- Using menus

Using the adapter classes
S) ectronization

pot Stream and OutputStream classes
5

Concepts of URLs

Module - 5
Java security
JDBC Product
Types of Drivers

- Two-Tier Client/Seryer Mode
- Three-Tier Client/Sever Model
- Basic Steps of JDBC
- Creating and Executing SQL Statement
- The Result Set Object
- Working with Database MetaData
- Interface $\rightarrow$ - 2 Advanced Servlets
- Servlet Interaction


## odule - 5

- Life cycle of Servlet
- Java Servlet Development Kit
- Javax.servlet package.
- Reading Servlet Parameters
- Reading Initialization Parameters
- The javax.servlet.http Package
- Handling HTTP



## SCHEDULE

5 Days Value Added Course on JAVA [04-Sep-2018 To 08-Sep-2018]
04Sep 2018

| 04Sep 2018 |  |  |
| :---: | :---: | :---: |
| Time | Session | Teacher |
| 9:30-10:00 AM | Inaugural Programme |  |
| 10:00 AM-12:30PM | Introduction to JAVA Virtual Machine, Variables and types, Conditional Loping Statements | Mr Imran Khan |
| 12:30-1:10PM | LUNCH |  |
| 01:10-3:10PM | Arrays ,Fields and Methods ,Overloading Methods Garbage Collection | Mr Imran Khan |
| 3:10-3:30PM | Break |  |
| 03:30-5:30PM | Nested Classes, Overriding methods | Mr Imran Khan |
| 05Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Polymorphism, Making methods and classes Final | Mr Imran Khan |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Abstract classes and methods, Interfaces | Mr Imran Khan |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Exception class, Cloning objects JDK Linked List Class Strings, Strings Conversions | Mr Imran Khan |

06Sep 2018

| Objective type test on JAVA |  |  |  |
| :--- | :--- | :--- | :--- |
| Branch: | Information Technology |  |  |
| Semester: | V Semester | Subject Code: IT 30001 | Time: 1 Hour |
| Subject: | Value added course on JAVA |  |  |
| Note | All questions are compulsory | Max Marks 50 |  |

1. What is the range of short data type in Java?
a) -128 to 127
b) -32768 to 32767
c) -2147483648 to 2147483647
d) None of the mentioned
2. What is the range of byte data type in Java?
a) -128 to 127
b) -32768 to 32767
c) -2147483648 to 2147483647
d) None of the mentioned
3. Which of the following are legal lines of Java code?
int $w=$ (int) 888.8 ;
byte $x=($ byte $) 100$;
long $y=($ byte )100;
byte $z=$ (byte) 100 L ;
a) 1 and 2
b) 2 and 3
c) 3 and 4
d) All statements are correct
4. An expression involving byte, int, and literal numbers is promoted to which of these?
a) int
b) long
c) byte
d) float
5. Which of these literals can be contained in float data type variable?
a) $-1.7 e+308$
b) $-3.4 e+038$
c) $+1.7 \mathrm{e}+308$
d) $-3.4 \mathrm{e}+050$
6. Which data type value is returned by all transcendental math functions?
a) int
b) float
c) double
d) long
7. What will be the output of the following Java code? class average \{
OLOGY public static void main(String ergs[])
double num [] $=\{5.5,10.1,11,12.8,56.9,2.5\} ;$

$$
\eta=0
$$

        \(r(\operatorname{lnt} \mid=0 ; 1<6 ;++1)\)
        result \(=\) result + numb \([\) i ;
        System.out.print(result/6);
    )
    )
    a) 16.34
b) 16.566666644
c) 16.46666666666667
d) 16.46666666666666

8 What will be the output of the following Java code? class increment \{
public static void main(String ergs[])
1

$$
\text { int } \mathrm{g}=3 \text {; }
$$

System.out.print(++g * 8);
\}
\}
a) 25
b) 24
c) 32
d) 33

9 What is the order of variables in Enum?
a) Ascending order
b) Descending order
c) Random order
d) Depends on the order() method

10Can we create an instance of Enum outside of Enum itself?
a) True
b) False
11. What will be the output of the following Java code? enum Season
\{ WINTER, SPRING, SUMMER, FALL \};
System.out.println(Season.WINTER.ordinal());
a) 0
b) 1
c) 2
d) 3

12 If we try to add Enum constants to a TreeSet, what sorting order will it use?
a) Sorted in the order of declaration of Enums
b) Sorted in alphabetical order of Enums
c) Sorted based on order() method
dy sifted in descending order of names of Enums.
13Whic method returns the elements of Enum

15Are enums are type-safe?
a) True
b) False

16Which of these is long data type literal?
a) $0 \times 99 \mathrm{fffL}$
b) $A B C D E F G$
c) $0 \times 99 \mathrm{fffa}$
d) 99671246

17 Which of these can be returned by the operator $\&$ ?
a) Integer
b) Boolean
c) Character
d) Integer or Boolean

18Literals in java must be appended by which of these?
a) L
b) I
c) D
d) L and I

19Literal can be of which of these data types?
a) integer
b) float
c) boolean
d) all of the mentioned

20 Which of these can not be used for a variable name in Java?
a) identifier
b) keyword
c) identifier \& keyword
d) none of the mentioned

21Which of these is an incorrect string literal?
a) "Hello World"
b) "Hello\nWorld"
c) "\"Hello World\""

22Which of these operators is used to allocate memory to array variable in Java?
a) malloc
b) alloc
c) new
d) new malloc

23 Which of these is an incorrect arrar declar
a) int arr[] = new int[5]
b) int [] arr = new int[5]
c) int arrfy ciewaint[5]
d) intarr 揌 int [5] new
$24 W h i c h o f$ theseis an incorrectoratimett?
a) Qis necessaryto use new grefsor to initialize an array
b) ARpy-can ke pitialized using ofomma separated expressions surrounded by curly braces
$\pi$ be initialized when they are ueciarea of the mentioned
Which of these is necessary to specify at time of array initialization?

## Column

c) Both Row and Column
d) None of the mentioned





note - three students of sventh sem have been allowed for java courses



10010
ORIENTAL COLLEGE OF TECHNOLOGY DEPARTMENT OF INFORMATION TECHNOLOGY
Value Added Course: JAVA Programming
Course Code: IT 30001

## SEM: 5 SEM




## ORIENTAL COLLEGE OF TECHNOLOGY. BHOPAL

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidylitur fixiacia: Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


## DEPARTMENT OF INFORMATION TECHNOLOGY

SEssion: 2018-19

## CERTIFICATE

This is to certify that Mr./Ms Shravani Chinni of IT V Semester, OCT, Bhopal, has Sacamestas
Completed the "Value Added Course" on "JAVA Programming" during 04-08 Sem Z振 organized by Department of Information Technology, Oriental College of Techames
$\mathrm{Co}=\mathrm{Dr}$ dinator, IT, ICT

Course Evaluation/ Feedback Form

| ded Course | IAVA |
| :--- | :--- |
|  | 04 TO 08 September 2018 | or(s):

ipond to the following statements by using the $\checkmark$ mark to indicate the extent to which you agree or disagree stateme'nt.


## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

## Department of Information Technology



## Report on Value Added Course on JAVA

Date and Time: September $04^{\text {th }}$, to September $08^{\text {th }}$, 2015. Venue: Department of Information Technology ,OCT Campus, Bhopal. Organized by: Information Technology Department, OCT, Bhopal. Name of the Speakers: The speakers were from Department of Information Technology OCT, Bhopal they are Mr Imran Khan , Mrs Amita Pandit. Participants Details: The students participated were Third Year Students

## Summary of the Event

The value added courses adds value to the basic ongoing degree program. The students get an insight into the technological advancements and the recent trends that are prevailing in the outside world which gives an added benefit to the placement and gives added advantages to the employment opportunities of the students
The course is divided into five modules and at the end there was an assessment by which the students are awarded certificates.
On $4^{\text {th }}$ of September, the course started with the inaugural and presidential speech of Director, Oriental College of Technology. In his presidential speech emphasized on the need to collaborate the academic and the non academic education.
The course was conducted strictly according to the schedule and at last the convener of the course gave away the vote of thank.. At the end the convener thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

Prof. Roopali Soni
Course Convenor
IT, OCT


Oriental College of Technology Thakral Nagar, Raisen Road


## Value Added Course on JAVA

September $04^{\text {th }}$, to September $08^{\text {th }}, 2018$



Oriental College of Technolog: Thakral Nagar, Raisen Road

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA

Date: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs .
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible for a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(a, b)$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:

1. Academic Committee
2. All HoD's, OCT


> Director Oriental College of Technology Thakral Hagar, Raisen Road Bhopal

## Registration Form

## Name:

Enrollment No

Branch:

Semester:.

Address.

City \& Pin.

E-mail id.

Contact No

Place:

Signature

Date:


Head of the Department

## CHIEF PATRONS

Dr. K. L. Thakral
Founder Chairman, Oriental Group of Institutes and Chancellor, Oriental University, Indore

## PATRONS

Shri. Praveen Thakral Chairman, Oriental Group of Institutes

Mrs. Niraj Ghei
Chair Person, Oriental College of Technology, Bhopal
ADVISORY COMMHTTEE
Dr. Ranjeeta Khare
Director, OCT, Bhopal

## CONVENOR

Mr. Amish Ku. Jha
octhodec@oriental.ac.in
Mobile: +919098715184

## COURSE COORDINATOR <br> Mr. Abhigyanam Giri <br> Mobile: 7566601006 Mr. Amish Jha Mobile: +919098715184

ORGANISINGC COMMIX TEE MEMBERS $\equiv$ Mr. Amishtha Mr. Amishona Mr. Kapil Gupta
ryinze CONTACT
Mr. Amish Ku. Jha
octhodec@oriental.ac.in
Mobile: +919098715184

Oriental College of Technology,


## Value Added Course

on
"EMBEDDED SYSTEM"
[11-15 FEB 2019]
For III-Year Students

In Association with


IndEyes
Organised By
Department of Electronics \& Communication Engineering

Oriental College of Technology
Thakral Nagar, Raison Road
Bburnital College of Technology,
Thakral Nagar. Raisen Road, Bhopal - 462021 Phone: 2529v26, 2529057, Fax: 0755-2529472

## ABOUT THE ORIENTAL GROUP

Oriental Group of Institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Electronics \& Communication is a major strength of the institute. The
competency of the Department is in the area of VLSI, Arduino \& Embedded System.
The EC Department offers M.Tech Course in Electronics along with Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

Electronics \& Communication Engineering plays prominent role in every domain. "EMBEDDED SYSTEM" is Value Added course through which participants to know latest technologies. An embedded system is a small computer that forms part of a larger system, device or machine. Its purpose is to control the device and to allow a

## INVITED SPEAKERS

Mr. Abhigyanam Giri
Director, Ind Eyes Pvt. Ltd. Bhopal
 user to interact with it. They tend to have one, or a limited number of tasks that they can perform.

## OBJECTIVES \& CONTENTS

An embedded system is a combination of computer hardware and software designed for a specific function or functions within a larger system.
$\checkmark$ Introduction to the Embedded system
$\checkmark$ simple Hardware design
$\checkmark$ Software Application
$\checkmark$ Software Debugging
Raspberry Pi and Open CV applications

 Department has an excellent group of faculty-with VIzattend the "Embedded system" ocourse. Orillege of Technology

REGISTRATffakral Nagar, Raisen Roflead of artment
No Registration fees.
Bhopal Oriental Colis
gy, Bhooal

# Oriental College of Technology, Bhopal 

Electronics \& Communication Engineering<br>Embedded Systems (Value Added Course)<br>Course Code: EC 30001

## Module 1: C and Embedded C

Foundations of C programming Types, declarations and expressions, control flow, functions and program structure Arrays, pointers, structures, Input and output handling dynamic memory management linked lists, command-line argument handling, Stacks and queues Program design.

## Module 2: Introduction to Embedded Systems

What is Embedded System? Standard component of Embedded Systems - Processor, memory, I/O, peripherals, software, algorithms, Processor types - Microcontrollers, Microprocessors, DSP, FPGA Memory types - RAM, SRAM, DRAM, DDRAM, EPROM, EEPROM, OTP Peripherals - Parallel and Serial Ports, UART, timers, Real time clocks, I2C bus, DMA controllers, Analogue Interfaces - A to D and D to A conversion, CODECs Interrupts and Interrupt handling.

Module 3: 8051 Architecture and C51 Assembly Language Programming 8051 Architecture - Oscillator, Clock, Internal memory and RAM, SFRs, Internal ROM, I/O pins and ports, external memory, counters and timers, serial data I/O, Interrupts, assembly language instructions, data operations, logical operations, arithmetic operations, program control, configuration and programming of 8051 Ports, timers and interrupts, Interfacing 8051 with LEDs, Keypad and 7Segment Display and programming Interfacing with LCD and programming, Interfacing with ADC and programming, Serial Data communication programming.

Module 4: Embedded C Embedded Software development using C Porting 8051 Assembly code to C Cross compilation, Downloading, Testing, Debugging.

Module 5: Design of Embedded Systems Problem definition, requirements and specifications, Software planning - Hardware design and software design.

Module 6: Project Water Level Controller using 8051 Microcontroller
Use: Water Level Controller using 8051 Microcontroller project will help in automatically controlling the water motor by sensing the water level in a tank.

Components Required : AT89C51 Microcontroller (or any 8051 based Microcontroller), 8051 Programmer (Programming Board), 11.0592 MHz Quartz Crystal, $2 \times 33 \mathrm{pF}$ Capacitor, 2 x $10 \mathrm{~K} \Omega$ Resistor ( $1 / 4 \mathrm{Watt}$ ) , $10 \mu \mathrm{~F}$ Capacitor, Push Button, $1 \mathrm{~K} \Omega \times 8$ Resistor Pack (for Pull - up), $16 \times 2$ LCD Display, 5V Relay, $4 \times 2 \mathrm{~N} 2222$ (NPN) Transistors, DC Motor (for demonstration), $10 \mathrm{~K} \Omega$ Potentiometer, 1 N 4007 PN Junction Diode, Programming cable, Connectíng wires, Power Supply, Keil $\mu$ Vision IDE, Willar Software (for burning code), Proteds (for circuit diagram).

Oriental College of Techn
Pemateo

## SCHEDULE

| 5 Days Value Added Course on Embedded System |  |  |
| :---: | :---: | :---: |
| 11 Feb 2019 |  |  |
| Time Slot | Session | Teacher / Instructor |
| 9:20-09:30 AM | Inaugural Programme | Mr. Abhigyanam Giri |
| 09:30 AM-01:00PM | Introduction to Foundations of C programming Types | Mr. Abhigyanam Giri |
| 01:00-02:00PM | LUNCH |  |
| 02:00-3:30PM | Introduction to Embedded Systems | Mr. Amish Jha |
| 3:30-3:45PM | Break |  |
| 03:45-04:45PM | 8051 Architecture and C51 Assembly Language Programming | Mr. Amish Jha |
| 12 Feb 2019 |  |  |
| Time | Session | Teacher / Instructor |
| 9:00-11:00AM | Practice Session on assigned kit | Mr. Amish Jha |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Practice Session on assigned kit | Mr. Amish Jha |
| 01:00-2:00PM | LUNCH |  |
| 02:00-4:30PM | Practice Session on assigned kit | Mr. Kápil Gupta |
| 13 Feb 2019 |  |  |
| Time | Session | Teacher / Instructor |
| 9:00-11:00AM | Embedded Software development using C Porting 8051 | Mr. Kapil Gupta |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Design of Embedded Systems | Mr. Amish Jha |
| 01:00-2:00PM | LUNCH |  |
| 02:00-4:30PM | Software planning \& Hardware design | Mr. Kapil Gupta |
| 14 Feb 2019 |  |  |
| Time | Session | Teacher / Instructor |
| 9:00-11:00AM | Introduction to Water Level Controller using 8051 Microcontroller | Mr. Amish Jha |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Class Room Assessment | Mr. Amish Jha |
| 01:00-2:00PM | LUNCH |  |
| 02:00-4:30PM | Knowing components for Water Level Controller using 8051 Microcontroller | Mr. Kapil Gupta |
| 15 Feb 2019 |  |  |
| Time | Session | Teacher / Instructor |
| 9:00-11:00AM | Designing of Water Level Controller | Mr. Kapil Gupta |
| 11:00-11:30AM | Break | Mr. |
| 11:30-01:00PM | Objective Test | Mr. Kapil Gupta |
| 01:00-1:40PM | LUNCH | Mr. Kapil Gupta |
| 01:40-2:30PM | Testing of Project | Mr. Amish Jha |
| 2:30-3:30PM | Filling of Students Feedback form | Mr. Abhigh Jha |
| 3:30-4:30 PM | CO. Valedictory \& Certificate distribution | Mr. Abhigyanam Giri |


| ORIENTAL COLLEGE OFTECHNOLOGY, BHOPAL |  |  |  |
| :---: | :---: | :---: | :---: |
| Value Added course on Embedded System Objective Test, Date 11-15 Feb-2019 |  |  |  |
| Branch : | Electronics \& Com | cation Engineering |  |
| Semester: | VI |  | Max. Marks-50 Minimum Marks:25 |
| Subject: | Embedded System | Subject Code: EC 30001 | Time : $1: 30 \mathrm{Hrs}$ |
| Note | One marks for Q. 1 to 30 and Two marks for Q. 31 to 40. |  |  |

1. Which of the following consist two lines of legs on both sides of a plastic or ceramic body?
a) SIMM b) DIMM c) Zig-zag d) Dual in-line
2. Which of the following can transfer multiple bits of data simultaneously?
a) serial port b) sequential port c) concurrent unit d) parallel port
3. Which of the following are interfaced as inputs to the parallel ports?
a) LEDs b) switch c) alphanumeric display d) seven segmented display
4. Which of the following are interfaced as the outputs to the parallel ports? a) keyboards b) switches
c) LEDs d) knobs
5. How many registers are there to control the parallel port in the basic form?
a) 1 b) 3 c) 2 d) 5
6. Which of the following is also known as tri-state? a) output port b) input port c) parallel port d) output-input port.
7. How buffers are enabled in the parallel ports?
a) by the data register b) by data direction register c) by individual control register d) by data and individual control register
8. Which of the following registers offers high impedance?
a) data register b) data direction register c) individual control bit d) data register and data direction register
9. Which of the following can be used as a chip select?
a) Multifunction I/O port b) parallel port c) DMA port d) memory port
10. Which of the following is necessary for the parallel input-output port?
a) İnductor b) pull-up resistor c) push-up resistor d) capacitor

11 . Which of the following can be described as general-purpose?
a) Multifunction I/O port b) input port c) DMA port d) output port
12. What does UART stand for?


Oriontal
Thakral Nagar of Technology Enopal universal address receiver transmitter d) unique address receiver transmitter
a) Counter b) timer c) clock d) first bit
14. Which of the signal is set to one, if no data is transmitted?
a) READY
b) START c) STOP
d) TXD
15. What rate can define the timing in the UART?
a) bit rate b) baud rate c) speed rate d) voltage rate
16. How is baud rate supplied?
a) baud rate voltage b) external timer c) peripheral d) internal timer
17. Which is the most commonly used UART?
a) 8253
b) 8254 c
c) 8259 d
d) 8250
18. Which company developed 16450 ?
a) Philips b) Intel c) National semiconductor d) IBM
19. What does ADS indicate in 8250 UART?
a) address signal b) address terminal signal c) address strobe signal d) address generating signal
20. Which of the following signals are active low in the 8250 UART?
a) BAUDOUT
b) DDIS
c) INTR
d) MR
21. Which of the signal can control bus arbitration logic in 8250 ?
a) MR b
DDIS
c) INTR
RCLK
22. Which of the following can be used for long distance communication?
a) I 2 C b
b) Parallel port c
c) SPI
d) RS232
23. Which of the following can affect the long distance communication?
a) clock b) resistor c) inductor d) capacitor
24. Which are the serial ports of the IBM PC?
a) COM1
COM4 and COM1
c) COM1 and COM2 d) COM3
25. Which of the following can provide hardware handshaking?

## a) RS232 b) Parallel port c) Counter d) Timer

26. Which of the following have an asynchronous data transmission?
a) SPI b) RS232 c) Parallel port d) I2C
27. How many areas does the serial interface have?

## a) 1 b) 3 c) 2 d) 4

28. The RS232 is also known

a) UART b) SPI c) Physicaninterace Electrical interface
29. How much voltage does the MC +489 can take ?
a) 12 V b) 5 V c) 3.3 V d) 2.2 V

30 . Which of the following is not a serial protocol?
a) SPI b) I2C c) Serial port d) RS232
31. Which of the following is an ideal interface for LCD controllers? a) SPI b) parallel port c) Serial port d) M-Bus
32. Which of the following works by dividing the processor's time?
a) single task operating system b) multitask operating system c) kernel d) applications
33. Which of the following decides which task can have the next time slot?
a) Single task operating system b) applications c) kernel d) software
34. Which of the following controls the time slicing mechanism in a multitasking operating system?
a) Kernel b) single tasking kernel c) multitasking kernel d) application manager
35. Which of the following provides time period for the context switch?
a) Timer b) counter c) time slice d) time machine
36. Which of the following can periodically trigger the context switch?
a) Software interrupt b) hardware interrupt c) peripheral d) memory
37. Which interrupt provides system clock in the context switching?
a) Software interrupts b) hardware interrupt c) peripheral d) memory
38. The special tale in the multitasking operating system is also known as
a) Task control block b) task access block c) task address block d) task allocating block
39. Which of the following stores all the task information that the system requires?
a) Task access block b) register c) accumulator d) task control block .
40. Which of the following contains all the task and their status?
a) register b) ready list c) access list d) task list

## CLASS ROOM ASSESSMENT <br> Max Marks: 50 <br> Min Marks:25

## Q: Design water level controller using 8051 microcontroller.




Oriental College of Technology Thakral Nagar, Raisen Road

Bhopal

DEPARTMENT OF ELECTRONICS \& COMMUNICATION ENGINEERING
Value Added Course: Embelded Course Course Code: EC 30001
Students Attendance Sheet, $11-15$ Feb 2019


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| $\mathbf{4}$ | 0126 EC 161004 | AB |
| $\mathbf{5}$ | 0126 EC 161005 | AD |
|  |  |  |


| 6 | 0126 EC 161006 |
| :---: | :--- |
| 7 | 0126 EC 161007 |

AKANSHA SHUKLA

| 7 |
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| $\mathbf{1 4}$ | 0126 EC 161014 | ANS |
| $\mathbf{1 5}$ | 0126 EC 161015 | ANU |
| $\mathbf{1 6}$ | 0126 EC 161016 | AN |
| $\mathbf{1 7}$ | 0126 EC 161017 | AN |
| $\mathbf{1 8}$ | 0126 EC 161018 | AN |
| $\mathbf{1 9}$ | 0126 EC 161019 | AN |
| $\mathbf{2 0}$ | 0126 EC 161020 | AP |
| $\mathbf{2 1}$ | 0126 EC 161021 | AP |
| $\mathbf{2 2}$ | 0126 EC 161023 | AS |
| $\mathbf{2 3}$ | 012 CC |  |

ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
DEPARTMENT OF ELECTRONICS \& COMMUNICATION ENGINEERING
Value Added Course: Embedded Sustem
Course Code: $\left.E^{( } 3000\right)$
Students Attendance Sheet


ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
DEPARTMENT OF ELECTRONICS \& COMMUNICATION ENGINEERING
Value Added Course; Embedded fystom
Course Code : E(3000)
Students Attendance Sheet

| enroll ${ }^{\text {a }}$ | name of student | $11 / 2$ |  | ${ }^{13676}$ | $\frac{14 / 2 \cdot 2 \mid}{9 / 204}$ | storesh |
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ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
DEPARTMENT OF ELECTRONICS \& COMMUNICATION ENGINEERING
Value Added Course: Embedded System
Course Code :EC- 30001
Students Assessment Sheet, 11-15 Feb 2019


ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
department of electronics \& communication engineering
Value Added Course: Embedded System
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ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
department of electronics \& communication engineering
Value Added Course: Embedded System
Course Code :EC- 30001
Students Assessment Sheet, 11-15 Feb 2019


Course Evaluation/ Feedback Form

| Value Added Course | Embedded system |
| :--- | :--- |
| Date: | $11-15$ Feb 2019 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s): | Mr. Abhigyanam giri, Mr. Amish Jha |

Please respond to the following statements by using the $\checkmark$ mark to indicate the extent to which you agree or disagree with each statement.

| Course | Excellent | Very <br> Good | Good | Fair | Poor |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Relevance of the content |  |  |  |  |  |
| Allocation of time on subjects |  |  |  |  |  |
| Balance in variety in Delivery |  |  |  |  |  |
| Effectiveness of the trainer |  |  |  |  |  |
| Support material provided |  |  |  |  |  |
| The course met my expectations |  |  |  |  |  |
| I would recommend course to the friend |  |  |  |  |  |



## Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

Department of Electronics $\mathcal{\&}$ Communication Engineering

## Certificate of Completion

This is to certify that Mr./Ms. Anuja Shrivastava of EC-VI Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "Embedded System" during 1115 Feb 2019, organized by Department of Electronics \& Communication Engineering, Oriental College of Technology, Bhopal.


Head of Department, EC, OCT Director, OCT

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Department of Electronics \& Communication Engineering

## Certificate of Completion

This is to certify that Mr./Ms. Kuldeep Soni of EC-VI Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "Embedded System" during 11-15 Feb 2019, organized by Department of Electronics \& Communication Engineering, Oriental College of Technology, Bhopal.



# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

Department of Electronics \& Communication Engineering


## Report on Value Added Course on Embedded System

Date and Time: February 11, to February 15, 2019. Venue: EC, OCT Campus, Organized by: EC, OCT, Bhopal. Name of the Speakers: Mr. Abhigyanam Giri, Director IndExes Infotech Pvt. Ltd., Mr. Amish Mu. Sha, Assistant Professor, EC, OCT \& Mr. Kapil Gupta, Assistant Professor, EC, OCT, Participants Details: Third year students of Electronics \& Communication Engineering.

## Summary of the Event

The Value added course Plays an important role in Strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syllabus, the Electronics \& Communication Engineering Department of Oriental College of Technology in association with IndEyes InfoTech Pvt. Ltd, had organized "Value Added Course on Embedded System" from February 11, to February 15,2019 for the students of third year.
This Course syllabus was covered by Mr. Abhigyanam Giri; Director IndEyes Infotech Pvt. Ltd. ,Mr. Amish Mu. Jhà, Assistant Professor, EC, OCT \& Mr. Kapil Gupta, Assistant Professor, EC, OCT in 30 Hrs. of 5-Day program.
On February 11, the course started with the inaugural and presidential speech of Dr. Ranjeeta the need to collaborate theacademic and the non academic education.


Director Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

The Course coordinator, Mr. Abhigyanam Giri, guided all students on the topic "Embedded System". In his speech, he had explained the need for every student to have skills to get a job. To bridge the gap between the academic and industry need, Value Added Courses are much essential. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes. He also explained, introduction to foundations of C programming types.

On February 12, Mr. Amish Mu. Jha, has taken Practice session on assigned kit.
On February 13, Mr. Kapil Gupta, explained, Embedded software development using C porting 8051.

On February 14, Mr. Amish Sha, Introduction to water level controller using 8051 microcontroller.
On February 15, Mr. Kapil Gupta, explained designing of water level controller.
At last, Mr. Amish Sha, Head EC, Convenor of Course gave away the vote of thanks. He thanked Mr. Abhigyanam Giri for providing his valuable time for successful conduction of this course for our students. He also thanked Mr. Kapil Gupta for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

Mr. Amish Sha

Course Convenor
Head, EC, OCT


Oriental College of Technology
Thakral Nagar, Raisen Road
Bhopal

ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
Approved by AICTE., Ncw Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA
Date: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs.
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible for a certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(\mathrm{a}, \mathrm{b})$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:


1. Academic Committee -
2. All HoD's, OCT


Director
Oriental College of Technology
Thakral Nagar, Raisen Road
Ehodal

## Registration Form

Name:

Enrollment No

Branch: $\qquad$

Semester:

Address.


City \& Pin

E-mail id

Contact No:

Place:

Signature

Date

ORGANISING COMMITTEE MEMBEIES
Mobile: +917024119755
COURSE COORDINATOR
Mr. Rishabh Shukla
Mobile: +919584741706
Founder Chairman, Oriental Group of Institutes and
Chancellor, Oriental University, Indore

## PATRONS

Shri. Praveen Thakral
Chairman, Oriental Group of Institutes

## Mrs. Niraj Ghei

Chair Person, Oriental College of Technology, Bhopal

## ADVISORY COMMITTEE

Dr. Ranjeeta Khare
Director, OCT, Bhopal
CONVENOR
Mrs. Preeti Gupta
octhodex@oriental.ac.in

ORGANISING COMMITTEE
Mr. Rishabh Shukla Mr. Praveen Chudhary

In Association with

## Oriental College of Technology

Bhopal


## Value Added Course

On

## "MATLAB \& Its Applications'

[11 $1^{\text {th }}$ to 15 ${ }^{\text {th }}$ September 2018]


## IndEyes

## CONTACT

Mrs. Preeti Gupta
octhodex@oriental.ac.in
Mobile: +917024119755
Mr. Rishabh Shukla
Mobile: +919584741706

Organised By
Department of Electrical $\&$ Electronics Engineering


Oriental College of Technology,
Thatral Nagar. Raven Road i Bhopal - th Phone 2529026, 2529057 Fax 0755-252947

Signature with Seal Head of the Department

## ABOUT THE ORIENTAL GROUP

Oriental Group of Institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy. Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate. Master of Technology courses. The college is having an excellent library, intemet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.


## ABOUT THE DEPARTMENT

The Department of Electrical \& Electronics is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research. The state-of-art facilities and competent faculties provide an excellent climate for the all round development of the students. It has well qualified, committed and motivated faculty members having specialization in various streams.
The EX Department offers M. Tech Course in Power Electronics along with Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

MATLAB is a widely used software environment for scientific computing produced by The Math Works Inc. For technical programming and coding, MATLAB is considered to be the fastest and high-performing tool. In MATLAB environment, problems are expressed in the form of mathematical schemes.

## OBI (INF



Out objective for problremortals training course is to oriental Collagenfirichnalagk and equip students Tbakreal Nagar, Ralsen Road in a mathematical based environment. In this trainmen wokstiop we are offing student, a techno wal environment with handson teaching and tat . .aton

The basic data element of MATLAB is matrix. You can perform different functions, image. video processing and test your algorithms using MATLAB. helping you to interact with your data for better record keeping.

## ELIGIBILITY

The Students Electrical \& Electronics Engineering branch are eligible to attend the course.

REGIStRATION
No Registration fees.

## SPEAKERS

Mrs. Preeti Gupta
HOD, EX Depth. OCT Bhopal
Mr. Aditya Pratap Singh Assistant Prof. EX Dept t. OCT Bhopal:"

Mr. Hemant Mahala Assistant Prof. EX Depth. OCT Bhopal ${ }^{\circ}$


# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

## Department of Electrical \& Electronics Enginecring

Value Added Course: MATLAB \& Its Applications
Course Code: EX30001

## Module 1:

## Fundamentals of MATLAB

Fundamental of MATLAB, Variables Creation, Arithmetic Operations, Math \& Trigonometric Functions, Predefined Variables, Strings, Arrays \& Cell Arrays, Vector and matrix data, 3D matrix visualization, 2D matrix visualization, Matlab Scripts \& m-functions, Conditional Statements,

## Module 2:

## Introduction to Toolboxes \& Technologies

Symbolic Math Toolbox, Fuzzy Logic Toolbox, Global Optimization Toolbox - Genetic Algorithm, Neural Network Toolbox, Curve Fitting Toolbox, Instrumentation Control Toolbox.

## Module 3:

## Simulink

Introduction to Block-Sets, Simulation Properties, Commonly Used Block Sets, Inports \& Outports, Subsystem, Sinks \& Sources, Scope Properties, Importing \& Exporting data, Connecting Blocks \& Properties, Working with Mux \& Demux, Creating Bus, Logic \& Math Operations, Look-up Tables, Circuit Designing, Circuit Simulation, Waveform Analysis, Encryption \& Decryption of Waveform

## Module 4:

## Control System Toolbox

Introduction to Control Systems \& its application, Linear System Modeling, Designing SISO \& MIMO Models, Frequency Domain \& Time Domain Analysis.PID Controller Design, Using SISO Design Tool \& LTI Viewer.

## Module 5:

## Fuzzy Logic Toolbox

Introduction to Fuzzy Logic \& its Fundamental, Designing Logic \& Membership Functions, Building System with Fuzzy Logic Toolbox GUI Tool, Fuzzy logic Working in command Line, Fuzzy logic working in Simulink


## SCIIEDULE

| 5 Days Value Added Course on MATLAB \& Its Applications [11 $1015^{\text {ts }}$ Sept. 2018] |  |  |
| :---: | :---: | :---: |
| $11^{\text {t/ }}$ Sept. 2018 |  |  |
| Time | Session | Teacher |
| 9:30-10:00 AM | Inaugural Programme |  |
| 10:00 AM-12:30PM | Fundamentals of MATLAB | Mrs. Preeti Gupta |
| 12:30-1:10PM | LUNCH |  |
| 01:10-3:10PM | Practice Session on Matrix | Mrs. Preeti Gupta |
| 3:10-3:30PM | Break |  |
| 03:30-5:30PM | Matlab Scripts \& m-functions | Mrs. Preeti Gupta |
| $12^{\text {T }}$ Sept. 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Introduction to Toolboxes \& Technologies | Mrs. Preeti Gupta |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Global Optimization Toolbox | Mrs. Preeti Gupta |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Neural Network Toolbox | Mrs. Preeti Gupta |
| $13{ }^{\text {th }}$ Sept. 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Introduction to Simulink | Mr. Kaushal Sen |
|  |  |  |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Connecting Blocks \& Properties | Mr. Kaushal Sen |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Circuil Designing | Mr. Kaushal Sen |
| $14^{\text {th }}$ Sept. 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Assignment | Mr. Kaushal Sen |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Class Room Assessment | Mr. Kaushal Sen |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Control System Toolbox | Mr. Kaushal Sen |
| $15^{\text {th }}$ Sept. 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Assignment | Mrs. Preeti Gupta |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Objective Test | Mrs Preen Gupta |
| 01:00-1:40PM | LUNCH |  |
| 01:40-2:30PM | Fuzay Lyye Toolbox | Mrs Preeti Gupta |
| 2:30-3:30PM | Feedbackito cofoents mogy | $\frac{\text { Mrs. Preeti Gupta }}{\text { Mrs. Preeti Gupta }}$ |
| 3:30-4:30 PM | Valedictors \& Duipecte qembitur |  |


| ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL |  |  |  |
| :---: | :---: | :---: | :---: |
| Value Added Course On MATLAB \& Its Applications Objective Test, Date: 15 sept 2018 |  |  |  |
| Branch: | Electrical \& Electronics Engineering |  |  |
| Semester | 5 Sem |  | Max. marks-50 <br> Minimum marks-25 |
| Subject | Matlab \& its Applications | Subject Code: Ex30001 | Time: 1:30 Hrs |
| Note | All questions are compulsory. Each Question is of 2.5 Marks. |  |  |

1. If the coefficient matrix of a linear system has rank 4, and the augmented matrix has rank 5, then:
a) The system has infinitely many solutions
b) The system is inconsistent
c) There are fewer variables than equations
d) The system is homogeneous
2. Which of the following is not a pre-defined variable in Matlab?
a) pi
b) inf
c) i
d) gravity
3. To print a newline in a fprintf statement, you must use the following escape character:
a) $t$
b) nl



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c) nxt
d) $n$
4. What are the characters in Matlab are represented in their value in memory?
a) decimal
b) ASClI
c) $h e x$
d) string
5. Which one of the following lists contains only legal MATLAB var: able names?
a) year-2012, time
b) myTime, IstVar
c) MyScore I, student l_ID
d) 2nd_Var, my_currency
6. This Matlab command clears all data and variables stored in memory:
a) clc
b) clear
c) delete
d) deallocate
7. What does MatLab consist of?
a) Matlab Language
b) MatLab working environment
c) Handle Graphics
d) All of the above
8. What are the things for which MATLAB can be used
a) Performing very simple calculations
b) Plotting mathematical relationships in two diefolsidnal
c) For operations of matrix


d) All of these
9. Which of the following is used to sec if two elements are equal in MATLAB?
a) $!=$
b) $=$
c) isequal
d) $=$
10. Which of the following MATLAB expression gives $\mathbf{- 1}$.
a) $\cos (180)$
b) $\cos \mathrm{d}(\mathrm{pi})$
c) $\operatorname{sind}(3 * p i / 2)$
d) $\sin (-\mathrm{pi} / 2)$
e) None of the above
11. Which of the following determines the number of elements $N$ of the matrix $B$ ?
a) $N=\operatorname{size}(B)$
b) $\mathrm{N}=\operatorname{elem}(\mathrm{B})$
c) $N=\operatorname{prod}(\operatorname{size}(B))$
d) $\mathrm{N}=$ numel(B)
12. The difference between a function and a script is:
a) only a function file can be run from the command line
b) only a function requires inputs
c) only a script file can perform a series of commands
d) functions cannot save variable values
e) function variable names only have meaning within the function, whereas script variables are available to other programs
13. Which of the following MATLAB calculations
a) $1+4 / 5$
b) $6 / 2 \cdot 3$

c） $3 \times 2 \cdot 3$
d） $1+2+3 / 1+2+3$
c）None of the above
14．A student does an experiment to measure the change in a pendular＇s oscillation period with the length of the pendulum．What is the most appropriate creel chart type to display this data？
a）Line
b）Scatter
c）Column
d）Donut
c）Surface
15．The sum（）command cannot do $\qquad$
a）lutinite summat hon
b）Numeric summation
c）long summation
d）signed summation
16．To calculate the sum of only absolute variable v in a series，we un e
a）ง um（a by）
b）alum（）
c）vimabes（）
d） $\operatorname{abs}(\sin ())$
17．To enter a value and change the course of working of a function white it is working，we use the $\qquad$
a）dbotop
b） db
c）her bound
d）enter
18．To end the debugging mode，we use the $\qquad$
a）dloquit
b）dhend
c）debugend
d）No such function the debugging yu⿰⿻上丨匕⿱丶万⿱⿰㇒一乂，
a）dhwont
 Thakral Nagar，Rail
Bhopal

b) dbcontinue
c) continue
d) debugcont
20. What are the functions to see the graph of a continuous and a discrete function?
a) plot() \& stem()
b) cont () \& disco
c) plot() \& disca)
d) cont() \& stem( )


## Oriental College of Technology, Bhopal

Department of Electrical \& Electronics Engineering MATLAB \& Its Applications

11 to 15 Sept 2018

|  |  | 11 to 15 Sept 2018 |  |  |  |  |  |
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| 2 | 0126EX161003 | $A_{\text {man Y Yadav }}$ | Aman. | Amah | Aman. | Aman | Aman |
| 3 | 0126Ex161004 | Anbesa | (a) | (a) | (s) | (6) | as |
| 4 | 0126EX161005 | Ankias Singh Parihar | Avule | A Musita | Aspritk | A Andila | Ankita |
| 5 | 0126 Ex161006 | Anurg Kumar Tivari | Anmers | Anum | Anuers | Anaug | Anury |
| 6 | 0126Ex161008 | Apit Shrivastava | 4- | (i) | C | A | A |
| 2 | 0126Ex161009 | Arun Kumar Patel | A | A | A | A | A |
| 8 | 0126 Ex161010 | Astish Kumar Chouley | An' | dr- | A) | du | d |
| 9 | 0126Ex161001 | Bhupendra Jharasade | Bh2 | Bu- | Bue | Bhen | BKん |
| 10 | 01261: 1610012 | Chean Okhade | inf | Cris | Cla | Ca | CH |
| 11 | 01226x161013 | Chitrass Deshmukh | Chat, | Acti | CuIf | clat | -hit |
| 12 | 01206X161014 | Deeppak Singh Rathour | D | A | 1. | D. | 1 |
| 13 | 0126EX161015 | Gopal Ubnare | (2) | Cor | W) | Cor | (2) |
| 14 | 0126 Ex 16010 | Harshii Raj | Praj | raj | Ras. | 12aj- |  |
| 15 | 01268: X16017 | K.runa Gohhe | (x) | (x) | Cd | (r)- | 1 |
|  | 0126Ex161018 | Madtu Kumari | madh | madl | Mad | Mad | Madr |
| 17 | 0126: X161019 | Mama V Viay Mali | M | M | ria | in | M |
| 18 | 0126-×161020 | Manith Kumar | Mausl | mande | mauin | many |  |
| 19 | $01261 \times 161021$ | Manis Verma | mowh | moust | mands | manil | mans |
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| 23 | $01221 \times 161025$ | Nishant Prakash | Q | $Q$ | Q | Q | A. |
| 24 | 01261 | Nilif IKka | $\rightarrow$ k | 16 | A | A | A |
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## Oriental College of Technology, Bhopal

Department of Electrical \& Electronics Engineering MATLAB \& Its Applications

11 to 15 Sept 2018

|  |  | 5 Sept 2018 |  |  |  |  |  |
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| sr, ${ }^{\text {a }}$ | Enrollmmen No | Name of Sucucent | 11912018 | ${ }^{129 / 2018}$ | $139 / 2018$ | 149972018 | 15992019 |
| 1 | 0126Ex161002 | Albli lich Bhargawa | Ar | Al | dr | A | eld |
| 2 | 0126EX161003 | Aman Yada | Amin. | Aman | Amath. | Aman | Am |
| 3 | 0126EX161004 | Anbesa | (a) | (as) | (a) | (6) | as |
| 4 | 0126e: atiolos | Ankias Singh Parihar | Averte | Aumita | Ansalk | Avaika | Ankita |
| 5 | 0120ex\|61006 | Anurag Kumar Tiwari | Anves | Aunas | Anumes | Anaveg | Anury |
| 6 | 0126EX161008 | Appi Strivastava | (4) | (i) | A | 48 | A |
| \% | 0126Ex161009 | Arun Kumar Pate | A | A | A | A | A |
| s | 01206. 1161010 | Astish Kumar Choubey | An | dr- | d) | de | dr |
| 9 | 0126EX160011 | Blupendra Jharrade | BuN | Bu- | Bun | Bhen | BKh |
| 10 | 0126Ex101012 | Chetan Okhade | ind | Chor | $\mathrm{Cl}_{1}$ | C | Chor |
| 11 | 0126-X161013 | Chirausl Desthmukh | crater | $\mathrm{arch}^{\text {che }}$ | Cult | chit | -his |
| 12 | 01201 $\times 161014$ | Dcepak Singh Rathour | D | D | A | D. | $1)$ |
| 13 | 0126Ex16015 | Gopal U Unare | (i) 0 | cor | W) | (Co) | (a) |
| 14 | 0126EX161016 | Harshit Raj | 鹪j | Raj | RRaj | RRaj- | $\stackrel{120}{ }$ |
| 15 | 0126E×161017 | Karrua Gohhe | (x) | (2) | Cd | (1) | (1) |
|  | 0126Ex16018 | Madtu Kumari | madh | Madl- | Mad | madl | Madt |
|  | 0126: X161019 | Mamas Vijay Mali | $\mathrm{Mr}_{2}$ | m | Pin | in | M |
| 18 | $01201 \times 161020$ | Manish Kumar Mishra | Mansi | maust | manial | many |  |
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| 21 | $01261 \times 161023$ | Necless Pandey | Neclest | reveles. | Nectesh | Nrectesh. | peresh |
|  | $01201 \times 161024$ | Nela, Joshi | Neha | Neha. | Nele | Nela | Nehe |
|  | $01261 \times 161025$ | Nishant Prakash | Q | Q | Q | Q | A |
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|  | $01261 \times 161028$ | Pradep Kumar furo | Pabiod | prabara | , \%at... | Bahar | Bahys |
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| Oriental College Of Technology, Bhopal <br> Electrical \& Electronics Engineering Department <br> Value Added Course: Matlab \& its Applications, 11-15 sept 2018 <br> Course Code: EX 30001 <br> ASSESSMENT SHEET |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sno | Enrollment No. | Name of students | Class room assessment score(marks/50) | Objective <br> test <br> scorc(mar <br> $\mathrm{k} / 50$ ) | Total score | Eligible to receive certificate or not |
| 1 | $\begin{aligned} & 0126 \mathrm{EX16100} \\ & 2 \end{aligned}$ | Abhishek Bhargava | 30 | 45 | 75 | Eligible |
| 2 | $\begin{aligned} & 0126 \text { EX16100 } \\ & 3 \end{aligned}$ | Aman Yadav | 30 | 30 | 60 | Eligible |
| 3 | $\begin{array}{\|l\|} \hline 0126 \mathrm{EX} 16100 \\ 4 \end{array}$ | Anbesa | 35 | 45 | 80 | Eligible |
| 4 | $\begin{array}{\|l\|} \hline 0126 E X 16100 \\ 5 \end{array}$ | Ankita Singh Parihar | 45.5 | 30 | 75.5 | Eligible |
| 5 | $\begin{array}{\|l\|} \hline 0126 \mathrm{EX16100} \\ 6 \end{array}$ | Anurag Kumar <br> Tiwari | 30 | 45 | 75 | Eligible |
| 6 | $\begin{array}{\|l\|} \hline 0126 \mathrm{EX16100} \\ 8 \end{array}$ | Arpit Shrivastava | 30 | 30 | 60 | Eligible |
| 7 | $\begin{array}{\|l} \hline 0126 E \times 16100 \\ 9 \end{array}$ | Arun Kumar Patel | A | A | 0 | Not Eligible |
| 8 | $\begin{array}{\|l\|} \hline 0126 E \times 16101 \\ 0 \end{array}$ | Ashish Kumar Choubey | 30 | 45 | 75 | Eligible |
| 9 | $\begin{aligned} & 0126 \mathrm{EX} 16101 \\ & 1 \end{aligned}$ | Bhupendra Jharbade | 30 | 30 | 60 | Eligible |
| 10 | $\begin{aligned} & 0126 \mathrm{E} \times 16101 \\ & 2 \end{aligned}$ | Chetan Okhade | 35 | 45 | 80 | Eligible |
| 11 | $\begin{aligned} & 0126 \mathrm{E} \times 16101 \\ & 3 \end{aligned}$ | Chitransh <br> Deshmukh | 45.5 | 30 | 75.5 | Eligible |
| 12 | $0126 \pm \times 16101$ | Deepak Singh | 30 | 45 | 75 | 1 ligible |
|  |  |  | Orion Tha | 1 Iroctor lego of Toc agar, Raise Bhopal | nology Road |  |


|  | 4 | Rathour |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | $\begin{aligned} & 0126 \mathrm{EX} 16101 \\ & 5 \end{aligned}$ | Gopal Ubnare | A | A | 0 | Eligible |
| 14 | $\begin{aligned} & 0126 \mathrm{EX} 16101 \\ & 6 \end{aligned}$ | Harshit Raj | 32 | 42 | 74 | Eligible |
| 15 | $\begin{aligned} & 0126 E X 16101 \\ & 7 \end{aligned}$ | Karuna Gokhe | 42 | 40 | 82 | Eligible |
| 16 | $\begin{aligned} & 0126 \mathrm{EX} 16101 \\ & 8 \end{aligned}$ | Madhu Kumari | 38 | 40 | 78 | Eligible |
| 17 | $\begin{aligned} & 0126 \mathrm{EX} 16101 \\ & 9 \end{aligned}$ | Mamta Vijay Mali | 38 | 40 | 78 | Eligible |
| 18 | $\begin{aligned} & 0126 \mathrm{EX} 16102 \\ & 0 \end{aligned}$ | Manish Kumar Mishra | 29 | 40 | 69 | Eligible |
| 19 | $\begin{aligned} & 0126 \mathrm{EX} 16102 \\ & 1 \end{aligned}$ | Manish Verma | 30 | 42 | 72 | Eligible |
| 20 | $\begin{aligned} & 0126 \mathrm{EX} 16102 \\ & 2 \end{aligned}$ | Mudassir Ahmad | 45.5 | 30 | 75.5 | Eligible |
| 21 | $\begin{aligned} & 0126 \mathrm{EX16102} \\ & 3 \end{aligned}$ | Neelesh Pandey | 32 | 42 | 74 | Eligible |
| 22 | $\begin{aligned} & \hline 0126 \mathrm{EX} 16102 \\ & 4 \end{aligned}$ | Neha Joshi | 42 | 40 | 82 | Eligible |
| 23 | $\begin{aligned} & 0126 \mathrm{EX} 16102 \\ & 5 \end{aligned}$ | Nishant Prakash | 30 | 42 | 72 | Eligible |
| 24 | $\begin{aligned} & 0126 \mathrm{EX16102} \\ & 7 \end{aligned}$ | Nitin Ekka | A | A | 0 | Not Eligible |
| 25 | $\begin{aligned} & 0126 \mathrm{EX16102} \\ & 8 \end{aligned}$ | Pradeep Kumar Sahu | 26 | 30 | 56 | Eligible |
| 26 | $\begin{aligned} & 0126 \mathrm{E} \times 16102 \\ & 9 \end{aligned}$ | Prakash Dubey | A | A | 0 | Not Eligible |
| 27 | $\begin{aligned} & 0126 E \times 16103 \\ & 0 \end{aligned}$ | Pranjal Vyas | 30 |  |  | Eligible |


|  |  |  |  | 40 | 78 | Eligible |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | $\begin{aligned} & 0126 \mathrm{E} \times 16103 \\ & 1 \end{aligned}$ | Rahul Kumar Yadav | 38 |  |  |  |
|  |  |  |  | 40 | 69 | Eligible |
| 29 | $\begin{aligned} & 0126 \mathrm{E} \times 16103 \\ & 2 \end{aligned}$ | Raj Anand | 29 |  |  |  |
|  |  |  |  | 42 | 72 | Eligible |
| 30 | $\begin{aligned} & 0126 \mathrm{EX} 16103 \\ & 4 \end{aligned}$ | Rituja Bokade | 30 |  |  |  |
|  |  |  |  | 30 | 75.5 | Eligible |
| 31 | $\begin{aligned} & 0126 \mathrm{EX} 16103 \\ & 5 \end{aligned}$ | Rivanshu Sharma |  | 42 | 74 | Eligible |
| 32 | $\begin{aligned} & 0126 \mathrm{EX16103} \\ & 7 \end{aligned}$ | Sachin Gupta | 42 | 40 | 82 | Eligible |
| 33 | $\begin{aligned} & 0126 \mathrm{E} \times 16103 \\ & 8 \end{aligned}$ | Saket Kumar |  |  |  |  |
|  |  |  | 30 | 42 | 72 | Eligible |
| 34 | $\begin{aligned} & 0126 \text { EX16103 } \\ & 9 \end{aligned}$ | Samarth Sharma |  |  |  |  |
|  |  |  | 28 | 35 | 63 | Eligible |
| 35 | $\begin{aligned} & 0126 \mathrm{EX} 16104 \\ & 0 \end{aligned}$ | Satyam Samrat |  |  |  |  |
|  |  |  | 27 | 45 | 72 | Eligible |
| 36 | $\begin{aligned} & 0126 \mathrm{E} \times 16104 \\ & 1 \end{aligned}$ | Shivam Kushwaha |  |  |  |  |
|  |  |  | 40 | 40 | 80 | Eligible |
| 37 | $\begin{aligned} & 0126 \mathrm{EX} 16104 \\ & 3 \end{aligned}$ | Shreya Tamrkar |  |  |  |  |
|  |  |  | 28 | 30 | 58 | Eligible |
| 38 | $\begin{aligned} & 0126 \mathrm{E} \times 16104 \\ & 5 \end{aligned}$ | Shubham Prakash |  |  |  |  |
|  |  |  | 30 | 30 | 60 | Eligible |
| 39 | $\begin{aligned} & 0126 \mathrm{E} \times 16104 \\ & 6 \end{aligned}$ | Shubhank Thakur |  |  |  |  |
|  |  |  | A | A | 0 | Eligible |
| 40 | $\begin{aligned} & 0126 \text { EX16104 } \\ & 7 \end{aligned}$ | Siddh |  |  |  | Not |
|  |  |  | A | A | 0 | Eligible |
| 41 | $\begin{aligned} & 0126 \mathrm{Ex} 16104 \\ & 8 \end{aligned}$ | Sonal Atewar |  |  |  |  |
|  |  |  | 38 | 40 | 78 | Eligible |
| 42 |  | Sujal Nagle |  |  |  |  |
|  |  | Sumit Ankar |  |  | 69 | Eligible |
| 43 | 0126E×16105 |  |  |  |  |  |



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|  | 0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44 | $\begin{aligned} & 0126 \text { EX16105 } \\ & 1 \end{aligned}$ | Sumit Kumar | 30 | 42 | 72 | Eligible |
| 45 | $\begin{aligned} & 0126 \mathrm{EX} 16105 \\ & 2 \end{aligned}$ | Tanya Mohil Sharma | 45.5 | 30 | 75.5 | Eligible |
| 46 | $\begin{aligned} & 0126 \text { EX16105 } \\ & 3 \end{aligned}$ | Tripti Goswami | A | A | 0 | Not Eligible |
| 47 | $\begin{aligned} & 0126 \mathrm{EX} 16105 \\ & 4 \end{aligned}$ | Urvashi Dani | 38 | 40 | 78 | Eligible |
| 48 | $\begin{array}{\|l\|} \hline 0126 \mathrm{EX} 16105 \\ 5 \end{array}$ | Utkarsh Malviya | 29 | 40 | 69 | Eligible |
| 49 | $\begin{array}{\|l} \hline 0126 E X 16105 \\ 6 \end{array}$ | Utkarsh Patel | 30 | 42 | 72 | Eligible |
| 50 | $\begin{aligned} & 0126 \text { EX16105 } \\ & 7 \end{aligned}$ | Vaibhav Singh Chauhan | 45.5 | 30 | 75.5 | Eligible |
| 51 | $\begin{aligned} & \hline 0126 \mathrm{EX} 16105 \\ & 8 \end{aligned}$ | Varun Kumar Vaishy | 32 | 42 | 74 | Eligible |
| 52 | $\begin{aligned} & \hline 0126 \text { EX16105 } \\ & 9 \end{aligned}$ | Vikas Kumar Singh | A | A | 0 | Not Eligible |

Course Evaluation/ Feedback Form

| Value Added Course | Matlab \& its Applications |
| :--- | :--- |
| Date: | $11-15^{\text {th }}$ Sept. 2018 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s): | Mrs. Preeti Gupta |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.
$4=$ Strongly Agree $\quad 3=$ Agree $\quad 2=$ Disagree $\quad l=$ Strongly Disagree

| The course contents compared with you expectations. | (4) 321 |
| :---: | :---: |
| 2. The teaching aids were effectively used. | (4) 321 |
| 3. The course contents handed out was useful. | (4) 321 |
| 4. The presenter(s) encouraged interaction and were helpful. | $4(3) 21$ |
| 5. The presenter(s) allowed me to work with and learn from others. | (4) 321 |
| 6. The materials provided were sufficient \& appropriate for the program. | (4) 321 |
| 7. The physical arrangements were adequate. | 4(3) 21 |



# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


Session: 2017-2018
Department of Electrical \& Electronics Engineering

## CERTIFICATE

This is to certify that Mr. /Ms. Anbesa of EX-V Sem, OCT, Bhopal, has Completed the "Value Added Course" on "MATLAB \& Its Applications" during 11-15 Sept. 2018, o:zanizcu' by Deparineit of Eldewica! \& Electronics Engineering, Oriental College of Technology, Bhopal.

Thakral Hagar, Raisen Road
Bhopal
Coordinator, EX, OCT

# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

Department of Electrical \& Electronics Engineering


Report on Value Added Course on MATLAB \& Its Applications Date and Time: September 11, to September 15, 2018. Venue: EX,OCT Campus. Organized By: EX,OCT, , Bhopal. Name of the Speakers: Prof. Preeti Gupta., Assistant,, Prof. EX Deptr. OCT Bhopal, Mr. Kaushal Sen, Assistant Prof. EX Deptt. OCT Bhopal, Participants Details: II year students of Electrical \& Electronics Engineering.

## Summary of the Event

During the course students Basic topics should every engineer to be able to pass, advanced topics depend on study program specialization and other topics are suitable for the research or student thesis. Evaluation of student's performance is a difficult process. In the most cases students are evaluated few times a term. With our proposed evaluation student are forced to study before every practice.
"Value Added Course on MATLAB \& Its Applications" September 11, to September 15, 2018 for the students of II year.
On January 15, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare , Director, Oriental College of Technology. In his presidential speech she emphasized on the need to collaborate the academic and the non academic education.
On February 15, the Course coordinator, Mr. Rishabh Shukla, guided all students on the topic "MATLAB \& Its Applications". In his speech, he had explained the need for every student to have skills to get a job.
At last, Prof. Preeti Gupta. Head EX. Convenor of Course gave away the vote of thank. He thanked Mr. Kaushal and all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

Prof. Precti Gupta

EX,OCT



# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL <br> Appound by AICIE, New Dethis Gont, of NIP Amiliated to Rajiv Gandhi Proudyogikl Vishwavidyalaya, Bhopal Oriental Campus, Inisen Road, Dhopal-462021 (MP) INDIA 

Date: 17 Junc 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs .
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible for a certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(a, b)$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

# Caviffonme $17.061^{1 / 4}$ Director, 0 CT <br> Director <br> Oriental Collegs of Technology <br> Thakrel Nagat, Raisen Road <br> Brepal 

Copy 10:

1. Academic Committee -
2. All HoD's , OCT


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Oriental College of Technology,
Bhopal

## For III -Year Students

Oriental College of Technology, [10-14, September, 2018] CHIEF PATRONS
 Founder Chairman, Orien:al Group of insstitues
Oriental Univessity, Indore PATRONS
Shri. PATRaveen Thakral
Chairman, oriental Group of Institute
Mrs. Niraj Ghei
1 $\frac{\text { ADVISORY COMMITTEE }}{\text { Dr. Ranjeeta Khare }}$

Registration Form
9

$8 / 80$

## ORIENTAL, COLLEGE OF TECIINOLOGY, BHOPAL

## STAAD.PRO - Value Added course

Syllabus
CE30001

## Course Co-ordinator: Vasundhra Dubey

Course duration: $\mathbf{3 0}$ hrs

## Module - 1

- Overview of Structural Analysis and Design
- Calculating Shear Force and Bending Moment values for various supports and load types
- Introduction o STAAD.Pro V8i o STAAD Editor.


## Module - 2

- Co-ordinate Systems o Global Vs Local
- Creating a New Project in STAAD.Pro
- Units
- Model Generation o Creating Nodes \& Members
- Select Menu


## Module - 3

- Model Editing Tools
- Translational Repeat
- Circular Repeat
- Move
- Mirror
- Rotate


## Module-4

- Insert Node For a Single Member
- For Multiple Members
- Add Beam
- Point to Point
- Between Midpoints
- Perpendicular Intersection
- Curved Member


## Module - 5

- Model Editing Tools
- Connect Beams Along
- Stretch Selected Members
- Intersect Selected Members o
- Merge Selected Members
- Renumber
- Split Beam
- Break Beams at Selected Nodes


Director
Oriental College of Technology
Thakral Nagar, Raisen [....S Bheral

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL



1. Which of the following sub-pages are in Foundation Plan Pages?
A) Linear Grid Setting
B) Radial (irid Setup
C) Column Positioning
D) Column Dimension and width
2. In track parameter, we have which of the following values?
A) $2,3,4$
B) $0,1,2$
C) $1,0,2$
D) $1,2,3$
3. By default, Response Reduction Factor Value for Special RC Moment Resisting Frame is?
A) 1
B) 3
C) 6
D) 5
4. In Concentrated Load, $P$ is:
A) All of the above
B) Force Direction
C) Perpendicular distance from the member
D) Value of Load
5. In how many ways can we assign support to Nodes?
A) 1
B) 4
C) 2
D) 5


Oriental College of Technology
Thakral Nagar, Raisen Road Bhopal
6. In Meshing Parametric dialog box, by default, bias value is $\qquad$ and divi value is $\qquad$ .1
A) Bias is 1 Divi is 15
B) Bias is 1 Divi is 11
C) Bias is 2 Divi is 10
D) Bias is 1 Divi is 10
7. STAAD.Pro Perform Analysis is:
A) Taking into consideration the Displacement of Nodes
B) Taking into consideration the Stifliness Correction
C) Multi- Iteration Analysis
D) None of the Above
S. You can also edit the parameters in structure wizard's models.
A) true
B) false
9. Indian Standard Criteria for Earthquake Resistant design of Structure is?
A) Is 1893-2003
B) $1 \mathrm{~s} 1893-2002$
C) Is $1892-2005$
D) Is 1892-2003
10. In floor load, Y is the:
A) Affective height
B) Floor height
C) Building height
D) All of the Above


Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

Oriental College of Technology,Bhopal






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Oriental College of Technology
Thakral Nagar, Raisen Road Bhopal

 tisente with each statement. Flease cirele the number thet applics



## Oriental College of Technology, Bhopal

Department of Civil Engineering
Stadd Pro (Value Added Course)
Course Code: CE 30001
Date - 10/09/2018-14/09/2018



Director
Oriental College of Technology Thakral Nagar, Raisen Road Bhopal



# ORIENTAL COLLEGE OF TECHNOLOGY 

## BHOPAL



## Department of Civil Engineering

## Report on Value Added Course on "Stadd Pro"

Date and Time: 10/09/2018 to 14/09/2018.
Venue: CE, OCT Campus.
Organized by: CE, OCT, Bhopal.
Name of the Speakers: Mr. Manish Kumar Sharma (HOD CE), Mr.Alok Goyal, Mr. Dharmendra Singh Dangi, Mr. Baldev Barde, Mr. Amar Jain
Participants Details: Third year students of Department of Civil Engineering.

## Summary of the Event

The Value added course plays an important role in strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syKabus, the Civil Engineering Department of Oriental College of Technology had organized "Value Added Course on Stadd Pro" from 10/09/2018 to 14/09/2018 for the students of second year.
This Course syllabus was covered by Mr. Manish Kumar Sharma (HOD CE), Mr.Alok Goyal, Mr. Dharmendra Singh Dangi, Mr. Baldev Barde, Mr. Amar Jain, OCT in 30 Hrs. of 5-Day program. On 10/09/2018, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare, Director, Oriental College of Technology. In his presidential speech she emphasized on the need to

On 10/09/2018, Mr. Dharmendra Singh Dangi \& Mr. Matdev Marde, make students Learned Intmoduction to STADD PRO Soflware \& Introduction to creating a new project, Nodes and members.. On 11/09/2018, Mr. Dharmendra Singh Dangi, make students I.earned Model Editing tools © multiple members. On 12/09/2018, Mr. Amar Jain \& Mr. Baldev Barde, make students leamed critical load analysis. On 13/09/2018. Mr. Amar Jain \& Mr. Baldev Barde make student learned Streteh Selected Members, Break Beans at Selected Nodes. On 14/09/2018. Mr. Amar Jain, assigned Load analysis of a structure followed by Value added course assessment test organised by Mr. Baldev Barde. At last Mr. Manish Kumar Sharma (HOD CE) Convenor of Course gave away the vote of thank. He also thanked Mr.Alok Goyal, Mr. Dharmendra Singh Dangi, Mr. Baldev Barde, Mr. Amar Jain for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

## Mr. Manish Kumar Sharma

## Course Convenor

CE, OCT



# Oriental College Of Technology, Bhopal 

Date: 17 June 2014

## Policy of Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs.
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score =Class Room Assessment Score + Test Score, with minimum of $60 \%$ attendance
6. Student will be eligible for a certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Exam Score $>=25 / 50$.
c. If one of the 2 criteria is not met, student will not get the certificate even if the Final score $>=$ 50/100.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

## Copy to:

1. Academic Committee
2. All HoD's, OCT



Director
Oriental College of Tochmogy
Thatral Hagar Ruben Road
Bhopal

Registration Form

## CHIEF PATRONS

Dr. K. L. Thakral
Founder Chairman, Oriental Group of Institutes and Chancellor, Oriental University, Indore

## PATRONS

Shri. Praveen Thakral
Chairman, Oriental Group of Institutes

## Mrs. Niraj Ghei

Chair Person, Oriental College of Technology, Bhopal

## ADVISORY COMMITTEE

Dr. Ranjeeta Khare
Director, OCT, Bhopal

## CONVENOR

Dr. L. K. Vishwamitra
octhodcse@oriental.ac.in
Mobile: +919630087969

## COURSE COORDINATOR

## Ms. Bhavna Gupta

Mobile: +919584559227

## ORGANISING COMMITTEE MEMBERS

Mr. Sourabh Jain
Mr. Saket Gupta

## CONTACT

Dr. L. K. Vishwamitra
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Mobile: +919630087969

Mr. Amit Dubey
Mobile: +919039911014

## Oriental College of Technology,

 Bhopal

Value Added Course

On
"Machine Learning"
[17-21, September, 2018]
For IV-Year Students

Organized By
Department of Computer Science Engineering

Oriental College of Technology, Thakral Nagar, Raisen Road,Bhopal - 462021 Phone: 2529026, 2529057, Fax: 0755-252947, 2


Director
Oriental College of Tommolny
Thatral Negar, Ratom fious Showal

## ABOUT THE ORIENTAL GROUP

 Oriental Group of Institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Computer Science is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research. The state-of-art facilities and competent faculties provide an excellent clinnate for the all round development of the students. Has Retit qualified, committed and motivated facukt member having specialization in various strean thr es Department offers M.Tech Course in Computer Science Engineering along with

Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

Computer Science Engineering plays prominent role in every domain and vital role in development of Nation. "Machine Learning" is a Value-Added course which will focus on providing vast knowledge on data, algorithms and automation of the systems.

## OBJECTIVES\& CONTENTS

Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention.
$\checkmark$ To know the basics of Machine Learning and data visualization.
$\checkmark$ To know about neural networks and implementation of convolution neural networks.
$\checkmark$ To know about RL-frameworks, applications of ML and Support Vector machines.

## ELIGIBILITY

The Fourth year Students of Computer Science Engineering branches are eligible to attend the Machine Learning course.

## REGISTRATION

## No Registration fees.

## INVITED SPEAKERS

## Mr. Pradeep Mishra

Associate Professor, Dept CSE, OCT Bhopal


# oriental college of technology, bHOPAL <br> <br> department of computer science and engineering 

 <br> <br> department of computer science and engineering}

## MACHINE LEARNING SYLLABUS (CSE 40001)

## Module-I

Introduction to machine learning, data Visualization, data processing, data normalization, imitations, application regression, machine learning models, supervised and unsupervised rearning.

## Module -II

Activation functions like sigmoid, Linearity vs non linearity, Types of neural network, initialization of weight, training, testing.

## Module -III

Convolution layer, convolution neural network and flattening, sub sampling, inception network, implementation of CNN.

Module -IV
'臂-framework, Recurrent neural network, Reinforcement Learning, RL-framework, MDP, Bellman equations, Value Iteration and Policy Iteration

## Module -V

Application of machine learning, Support Vector Machines, Bayesian learning, in computer vision, speech processing, natural language processing

$4 \sqrt{4 N}$
Head of Department
SCHEDULE- Value Added Courso on Machine Learning(CSE-40001) 5 Days Value Added Course onMachine Learning[17Sep 2010 to 21Sep 2010]

Mr. Pradeep Mishra

| Instructor |
| :---: |
| Mr. Sourabh Jain |
| Mr. Pradeep Mishra |
| Mr. Pradeep Mishra |
| Mr. Sourabh Jain |

$\qquad$ Enrollment No: $\qquad$

Which of the following is a widely used and effective machine learning algorithm based on the idea of bagging?
a. Decision Tree
b. Regression
c. Classification
d. Random Forest
2. To find the minimum or the maximum of a function, we set the gradient to zero because:
a. The value of the gradient at extrema of a function is always zero
b. Depends on the type of problem
c. Both A and B
d. None of the above
3. The most widely used metrics and tools to assess a classification model are:
a. Confusion matrix
b. Cost-sensitive accuracy
c. Area under the ROC curve
d. All of the above
4. Which of the following is a good test dataset characteristic?
a. Large enough to yield meaningful results
b. Is representative of the dataset as a whole
c. Both A and B
d. None of the above
5. Which of the following is a disadvantage of decision trees?
a. Factor analysis
b. Decision trees are robust to outliers
c. Decision trees are prone to be over fit

d. None of the above
6. How do you handle missing or corrupted data in a dataset?
a. Drop missing rows or columns
b. Replace missing values with mean/median/mode
c. Assign a unique category to missing values
d. All of the above
7. What is the purpose of performing cross-validation?
a. To assess the predictive performance of the models
b. To judge how the trained model performs outside the sample on test data
c. Both A and B
8. Why is second order differencing in time series needed?
a. To remove stationary
b. To find the maxima or minima at the local point
c. Both A and B
d. None of the above
9. When performing regression or classification, which of the following is the correct way to preprocess the data?
a. Normalize the data $\rightarrow \mathrm{PCA} \rightarrow$ training - answer
b. PCA $\rightarrow$ normalize PCA output $\rightarrow$ training
c. Normalize the data $\rightarrow$ PCA $\rightarrow$ normalize PCA output $\rightarrow$ training
d. None of the above
10. Which of the folllowing is an example of feature extraction?
a. Constructing bag of words vector from an email
b. Applying PCA projects to a large high-dimensional data
c. Removing stopwords in a sentence
d. All of the above
11. What is pca.components_in Sklearn?
a. Set of all eigen vectors for the projection space-answer
b. Matrix of principal components
c. Result of the multiplication matrix
d. None of the above options
12. Which of the following is true about Naive Bayes?
a. Assumes that all the features in a dataset are equally important
b. Assumes that all the features in a dataset are independent
c. Both A and B
d. None of the above options
13. Which of the following statements about regular zation is not correct?


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Whowat Ren Road
a. Using too large a value of lambda can cause your hypothesis to underfit the data.
b. Using too large a value of lambda can cause your hypothesis to overfit the data.
c. Using a very large value of lambda cannot hurt the performance of your hypothesis.
d. None of the above
14. How can you prevent a clustering algorithm from getting stuck in bad local optima?
a. Set the same seed value for each run
b. Use multiple random initializations
c. Both A and B
d. None of the above
15. Which of the following techniques can be used for normalization in text mining?
a. Stemming
b. Lemmatization
c. Stop Word Removal
d. Both A and B
16. In which of the following cases will K-means clustering fail to give good results? 1) Data points with outliers 2) Data points with different densities 3) Data points with nonconvex slapes
a. 1 and 2
b. 2 and 3
c. 1,2 , and 3
d. 1 and 3
17. Which of the following is a reasonable way to select the number of principal components " $k$ "?
a. Choose k to be the smallest value so that least $99 \%$ of the varinace is retained.
b. Choose k to be $99 \%$ of $\mathrm{m}\left(\mathrm{k}=0.99^{*} \mathrm{~m}\right.$, rounded to the nearest integer).
c. Choose k to be the largest value so that $99 \%$ of the variance is retained.
d. Use the elbow method
18. You run gradient descent for 15 iterations with $\mathrm{a}=0.3$ and compute $\mathrm{J}($ (theta $)$ after each iteration. You find that the value of $J$ (Theta) decreases quickly and then levels off. Based on this, which of the following conclusions seems most plausible?
a. Rather than using the current value of $a$, use a larger value of $a($ say $a=1.0)$
b. Rather than using the current value of $a$, use a smaller value of $a($ say $a=0,1)$
c. $\mathrm{a}=0.3$ is an effective choice of learning rate
d. None of the above
19. What is a sentence parser typically used for?
a. It is used to parse sentences to check if they are utf-8 compliant.
b. It is used to parse sentences to derive their most likely syntax tree structures.
c. It is used to parse sentences to assign POS tags to all tokens.
d. It is used to check if sentences can be parsed into meaningfiy t pkens.

20. Suppose you have trained a logistic regression classifier and it outputs a new example $x$ with a prediction ho ( $x$ ) $=$ 0.2 . This means
a. Our estimate for $P(y=1 \mid x)$
b. Our estimate for $\mathrm{P}(\mathrm{y}=0 \mid \mathrm{x})$
c. Our estimate for $\mathrm{P}(\mathrm{y}=1 \mid \mathrm{x})$
d. Our estimate for $\mathrm{P}(\mathrm{y}=0 \mid \mathrm{x})$
21. Which of the following is a widely used and effective machine learning algorithm based on the idea of bagging?
a. Decision Tree
b. Regression
c. Classification
d. Random Forest
22.) Which of the following is a good test dataset characteristic?
a. Large enough to yield meaningful results
o. Is representative of the dataset as a whole
c. Both A and B
d. None of the above
23.) How do you handle missing or corrupted data in a dataset?
a. Drop missing rows or columns
b. Replace missing values with mean/median/mode
c. Assign a unique category to missing values
d. All of the above
24.) Why is second order differencing in time series needed?
a. To remove stationary
b. To find the maxima or minima at the local point

Both A and B
d. None of the above
25) Which of the following statement is true in following case?
a. Feature F1 is an example of nominal variable.
b. Feature F1 is an example of ordinal variable.
c. It doesn't belong to any of the above category.
d. Both of these


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


sions




## Feedback Form

| Value Added Course | Machine Learning (CSE 40001) |
| :---: | :--- |
| Date: | $17-21$ Sep 2018 |
| Program Location: | CSE Dept Oriental College of Technology, Bhopal |
| Presenters): | Mr. Pradeep Mishra |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

$$
4=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$


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Oriental
Thana
a Road
[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


## Department of Computer Science \& Engineering

 Successfully Completed the "Certificate" on "Machine Learning" during 17-21 Sept 2018, organized by Computer Science and Engineering Department of Oriental College of Technology, Bhopal


Head of Department e "S OCT


Director, OCT


## oriental college of technology, bhopal DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## Report on Value Added Course on "Machine Learning"

Date and Time: 17-21, September, 2018
Organized by: CSE, OCT, Bhopal
Name of the Speakers: Mr. Pradeep Mishra Associate Professor, Mr Saurabh and Ms Bhavna Gupta Assistant Professor.
Participants Details: For IV -Year Students
Venue: CSE, OCT Campus

## Summary of the Event

Computer Science Engineering plays prominent role in every domain and vital role in development of Nation. "Machine Learning" is a Value-Added course which will focus on providing vast knowledge on data, algorithms and automation of the systems.

The Department of Computer Science and Engineering Oriental College of Technologyoorganized "Value = Added Course on "Machine Learning" from 17 September 2018 to 21 September, 2018 for the students of Fourth year. ${ }^{4}$

This Course syllabus was cov̂ered by Mr. Pradeep Mishra Associate Professor, Mr. Saurabh Jain Associate Professor and Ms Bhavna Gupta Assistant Professor, CSE, OCT in 30 Hrs. of 5-Day program. Inaugural Ceremony started by Director Speech on 17 th September, 2018 and this course is conducted as per sंchedule and on 21 st September, 2018 valedictory function was conducted.


## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL <br> Approved by NCTE, Nev Delhi \& Govt. of M.P. Amiliated to Rajlv Gandhi Proudyogiki Vishwavidyalaya;:Bhópal

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs.
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible fort a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(a, b)$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

## Copy to:



Director "OCT Birsctór Oriental College of Techno Thakral Nagar, Raiser 7 Bhopal

1. Academic Committee :
2. AH HOD's, OCT


## Registration Form

Name:

Enrollment No $\qquad$

Branch:. $\qquad$

Semester:

Address. $\qquad$

City \& Pin

E-mail id.

Contact No:

Place:

Signature


## CHIEF PATRONS

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Founder Chairman, Oriental Group of Institutes and Chancellor, Oriental University, Indore

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## Mrs. Niraj Ghei

Chair Person, Oriental College of Technology, Bhopal

## ADVISORY COMMITTEE

Dr. Ranjeeta Khare Director, OCT, Bhopal

## CONVENOR

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## COURSE COORDINATOR

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Miss. Ruchi Jain
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Mobile: +919827042079
Miss. Ruchi Jain
Mobile: +919827612431

## Oriental College of Technology,

 Bhopal

## Value Added Course

## OR <br> "Machine Learning"

[22-26, Octaber, 2013]
For IV-Fear Stuidents

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Oriental College at Tetimainge



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Thakral Nangat, Raiscia

## ABOLT THE ORIE NTAL GROLP

Oriental Group of Institutes (Indore - BhopalJatalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering. Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Information Technology is a najor strength of the institute. The Department has n excellent group of faculty with experience in eaching. Industry and Research. The state-of-art chities and, eompetent faculties provide an cehen elifthatior the all round development of students. 3 , vated faculty member having specialization in Fous streams. The core competency of the

Department is in the area of Software Engineering, Database Management Systems, Data Structures etc. The Information Technology Department offers Undergraduate Program (B.E/ B.Tech) with an intake 120 Students.

## ABOLT THE COURSE

Information Technology department plays prominent role in every domain and vital role in development of Nation. MACHINE LEARNING is Value Added course which will provide benefits to the participants in many ongoing research areas in latest technologies.

## OBIECTIVES \& CONTENTS

Machine Learning is a widely used programming language expressly designed for use in the distributed environment of the internet. ... Machine Learning can be used to create complete applications that may run on a single computer or be distributed among servers and clients in a network.

ELIGIBILITI
The Fourth year Students of Information Technology branch are eligible to attend the Course on MACHINE LEARNING

REGISTRATION
No Registration fees.
SPEAKERS
Mr. Nileebh Kumar
[Assistant Professor, Oriental College of
Technology, Bhopal]
Mr. Imran Khan
[Assistant Professor, Oriental College of Technology, Bhopal] \&

Miss. Ruchi jain
[Assistant Professor, Oriental College of Technology, Bhopal]


Director Oriental College of Technology Thakral Nagar, Raisen Road Bropal

Oriental College of Technology, Bhopal

Department of Information Technology

Syllabus of Value Added Course on

Machine Learning

## Module - 1

- Data Science, AI \& ML
- Use Cases in Business and Scope
- Scientific Method Ÿ Modeling Concepts
- CRISP-DM Method


## Module -2

- Commands and Syntax
- Packages and Libraries
- Introduction to Data Types
- Data Structures in R. Vectors, Matrices, Arrays, Lists, Factors, Data Frames
- Importing and Exporting Data.
- Control structures and Functions


## Module-3

- Data exploration (histograms, bar chart, box plot, line graph, scatter plot)
- Qualitative and Quantitative Data Ÿ Measure of Central Tendency (Mean, Median and Mode),
- Measure of Positions(Quartiles, Deciles, Percentiles and Quantiles),
- Measure of Dispersion (Range, Median, Absolute deviation about median, Variance and Standard deviation), Anscombe's quartet
- Other Measures: Quartile and Percentile, Interquartile Range


## Module-4

- Relationship betweenattributes: Covariance, Correlation Coefficient, Chi Square
- Measure of Distribution (Skewness and Kurtosis),
- Box and Whisker Plot (Box Plot and its parts, Using Box Plots to compare distribution) and other statistical graphs


## Module - 5

- Probability (Joint, marginal and conditional probabilities)
- Probability distributions (Continuous and Discrete)
- Density Functions and Cumulative functions

CIIEDULS
5 Days Value Added Course on Machlac Learning |22-Oct-2018'To 20.Oct-2018]
220 Cl 2018

| 220 ct 2018 |  |  |
| :---: | :---: | :---: |
| Tlme | Sesslon | Teacher |
| 9:30-10:00 AM | Inaugural Programme |  |
| 10:00 AM-12:301M | Introduction to Data Science and AI and ML | Mr Nilabh Kumar |
| 12:30-1:10PM | LUNCII |  |
| 01:10-3:10PM | Use Case in Business and Scope | Mr Nilabh Kumar |
| 3:10-3:30PM | Break |  |
| 03:30-5:30PM | CRISP - DM Method | Mr Nilabh Kumar |
| 230 ct 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Commands and Syntax | Mr Nilabh Kumar |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Packages and Library,Introduction to Data types, Data Structures | Mr Nilabh Kumar |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Importing and Exporting Data, Control Structures and Functions | Mr Nilabh Kumar |
| 240ct 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Data Exploration (Histograms, Bar Chart etc) | Mr Nilabh Kumar |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Qualitative and Quantitative data, Measure of positions | Mr Nilabh Kumar |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Measure of Dispersion and other Measure | Mr Nilabh Kumar |
| 25 Oct 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Relationship between attributes: Covariance etc | Miss Ruchi Jain |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Measure of Distributions, Box and Whisker Plot | Mr Imran Khan |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Class Room Assessment | Miss Ruchi Jain |
| 260 ct 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Probability (Joint, Marginal and conditional Probabilities) | Miss Ruchi Jain |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Probability DIstribution | Miss Ruchi Jain |
| 01:00-1:40PM | LUNCH |  |
| 01:40-2:30PM | Density Functions and Cumulative Functions. | Miss Ruchi Jain |
| 2:30-3:30PM | Objective test | Miss Ruchi Jain |
| 3:30-4:30 PM | Valedictory \& Certificate distribution | Miss Ruchi Jain |



| Objective type test on Machine Learning |  |  | Dated 26-Oct-2018 |
| :--- | :--- | :--- | :--- |
| Branch: | Information Technology | Max. Marks-20 |  |
| Semester: | VII Semester | Time: 1 Hour |  |
| Subject: | Value added course on Machine <br> Learning | Subject Code: IT 40001 |  |
| Note | All questions are compulsory |  |  |

Max Marks 50

1. Which of the following is a widely used and effective machine learning algorithm based on the idea of bagging?
a. Decision Tree
b. Regression:
c. Classification
d. Random Forest - answer
2.To find the minimum or the maximum of a function, we set the gradient to zero because:
a. The value of the gradient at extrema of a function is always zero - answer
b. Depends on the type of problem
c. Both A and B
d. None of the above
3.The most widely used metrics and tools to assess a classification model are:
a. Confusion matrix
b.Cost-sensitive accuracy
c. Area under the ROC curve
d. All of the above - answer
2. Which of the following is a good test dataset characteristic?
a. Large enough to yield meaningful results
b. Is representative of the dataset as a whole
c. Both A and B -answer
d. None of the above
3. Which of the following is a disadvantage of decision trees?
a. Factor analysis
b. Decision trees are robust to outliers
c. Decision trees are prone to be overfit - answer
d. None of the above
4. How do you handle missing or corrupted data in a dataset?
a. Drop missing rows or columns
$b$.Replace missing values with mean/median/mode
c. Assign a unique category to missing values
d. All of the above - answer
5. Whatisthepurpose of performing cross-validation?

Oses the predtefive performance of the models



7ONHO

Why is second order differencing in time series needed?

* a. To remove stationarity
b.To find the maxima or minima at the local point
c. Both A and B-answer
d. None of the above

9. When performing regression or classification, which of the following is the correct way to preprocess the data?
a. Normalize the data $\rightarrow$ PCA $\rightarrow$ training - answer
b.PCA $\rightarrow$ normalize PCA output $\rightarrow$ training
c. Normalize the data $\rightarrow$ PCA $\rightarrow$ normalize PCA output $\rightarrow$ training
d. None of the above
10. Which of the following is an example of feature extraction?
a. Constructing bag of words vector from an email
b.Applying PCA projects to a large high-dimensional data
c. Removing stopwords in a sentence
d.All of the above - answer
11. What is pca.components_in Sklearn?
a. Set of all eigen vectors for the projection space - answer
b.Matrix of principal components
c. Result of the multiplication matrix
d.None of the above options
12. Which of the following is true about Naive Bayes ?
a. Assumes that all the features in a dataset are equally important
b.Assumes that all the features in a dataset are independent
c. Both A and B-answer
d. None of the above options
13. Which of the following statements about regularization is not correct?
a. Using too large a value of lambda can cause your hypothesis to underfit the data.
b.Using too large a value of lambda can cause your hypothesis to overfit the data.
c. Using a very large value of lambda cannot hurt the performance of your hypothesis.
d. None of the above - answer
14. How can you prevent a clustering algorithm from getting stuck in bad local optima?
a. Set the same seed value for each run
b. Use multiple random initializations - answer
c. Both A and B
d. None of the above
15. Which of the following techniques can be used for normalization in text mining?

## a.Stemming

$$
\begin{aligned}
& \text { a. } 1 \text { and } 2 \\
& \text { b. } 2 \text { and } 3 \\
& \text { c. } 1,2 \text {, and } 3-\text { answer }
\end{aligned}
$$

d. 1 and 3
17. Which of the following is a reasonable way to select the number of principal components " $k$ "?
a. Choose $k$ to be the smallest value so that at least $\mathbf{9 9 \%}$ of the varinace is retained. - answer
b.Choose k to be $99 \%$ of $\mathrm{m}\left(\mathrm{k}=0.99^{*} \mathrm{~m}\right.$, rounded to the nearest integer).
c. Choose k to be the largest value so that $99 \%$ of the variance is retained.
d.Use the elbow.method
18. You run gradient descent for 15 iterations with $a=0.3$ and compute $J$ (theta) after each iteration. You find that the value of (Theta) decreases quickly and then levels off. Based on this, which of the following conclusions seems most plausible?
a. Rather than using the current value of $a$, use a larger value of $a$ (say $a=1.0$ )
b. Rather than using the current value of $a$, use a smaller value of $a$ (say $a=0.1$ )
$c . a=0.3$ is an effective choice of learning rate - answer

## d. None of the above

19. What is a sentence parser typically used for?
a. It is used to parse sentences to check if they are utf-8 compliant.
b.It is used to parse sentences to derive their most likely syntax tree structures. - answer
c. It is used to parse sentences to assign POS tags to all tokens.
d.It is used to check if sentences can be parsed into meaningful tokens.
20. Suppose you have trained a logistic regression classifier and it outputs a new example $x$ with a prediction $h o(x)=0.2$. This means
a. Our estimate for $P(y=1 \mid x)$
b. Our estimate for $\mathrm{P}(\mathbf{y}=0 \mid x)$ - answer
c. Our estimate for $\mathrm{P}(\mathrm{y}=1 \mid \mathrm{x})$
d. Our estimate for $\mathrm{P}(\mathrm{y}=0 \mid \mathrm{x})$
21. What is a top-down parser?
a) Begins by hypothesizing a sentence (the symbol S) and successively predicting lower level constituents until individual preterminal symbols are written
b) Begins by hypothesizing a sentence (the symbol S) and successively predicting upper level constituents until individual preterminal symbols are written
c) Begins by hypothesizing lower level constituents and successively predicting a sentence (the symbol S)
d) Begins by hypothesizing upper level constituents and successively predicting a sentence (the symbol S)

22 Among the following which is not a horn clause?
a) $p$
b) $\varnothing p \vee q$
c) $p \rightarrow q$
d) $p \rightarrow \varnothing q$

23The action 'STACK(A, B)' of a robot arm specify to $\qquad$

24 Which of the following can be used to create sub-samples using a maximum dissimilarity approach ?

## A. minDissim

## B. maxDissim

C. inmaxDissim

Br:All-of the Mentioned
OSLWhicite the following can be used to impute data sets based only on information in the training set
b) Place blocks $A, B$ on the table in that order
c) Place blocks B, A on the table in that order
d) Place block $A$ on block $B$

## A. Coist Process

Borepiactss

# ORIENTAL COLLEGE OF TECHNOLOGY DEPARTMENT OF INFORMATION TECHNOLOGY 

Course Code：IT 40001
ue Added Course：Machine Learming
ATTENDANCE SHEET

| SEM： 7 SEM |  |  |  |  | Session July－dec 2018 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SNo | Enrollment No | Student Name | 22－Oct－18 | 23－Oct－18 | 24－Oct－18 | 25－Oct－18 | 26－Oct－18 |
|  | SNo | 012617151001 | AASHISH AMAN KHATRI | Athajer | Akhurs | A | Akhalu | क人vals |
|  | 2 | 0126IT151004 | ABHISHEK TILATIYA | Abouster． | AbFhisher | Atruisher | Abrishli | Astisher |
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|  | 5 | 012617151007 | AKASH NIGAM | Akash | Akash | Aras | Akash | Akesh |
|  | 6 | 012617151008 | ALOK SHARMA | Alok．＇ | Alok． | Alok | Alok． | Alok．． |
|  | 7 | 0126IT151009 | AMAN PANDEY | －A | A | A |  |  |
|  | 8 | 126IT151010 | AMANDEEP KUMAR | Aminullep：－ | Amaneley | Am | Amimelery | Arnemeler |
|  | 9 | 126IT151011 | AMITESH SINHA | Arvitesh | Amitesh | Amilish | Amiter＇ | Amiser |
|  | 10 | 126 IT 151012 | AMOL SRIVASTAVA | Amols． | Amols． | Amols． | Amols． | Amols． |
|  | 11 | 1261 T151013 | ANISHA JAY | Anisha | Arvich | Anishe， | Arishe | Anisha |
|  | 120 | $1261 T 151015$ | ANKIT TIWARI | Anckit Twari | Ankit Tiwasi | Ankit Tiwari | Ankitimi | Antkikit |
|  | 13 | 1261 T151016 | ANKITA ANAND | A | A | CAB | CTA | Pt |
|  | 1401 | $1261 T 151017$ | ANKITA JAIN | Aiain | Atais | Aiain | नjain． | Ajaju |
|  | 1501 | 1261 T151018 | ANSHIKA MISHRA | Alutive |  | mase | fensk | A合的 |
|  | 16 | 12617151019 | ANSHU KUMAR | A．Kermer | A－Kumith | A．kumsen | At．Kumbe | A．Kunce |
|  | 17 | 12617151021 | ANUBHA JAIN | Hnilols | Finula | Anubla | Finubla． | firuele |
|  | 18 01 | 2617151022 | ANUPAM MALVIYA | Anupan． | Anuparar | Anupam． | Arupan． | Ancupare． |
|  | 19 | 2617151023 | ANUPAM MISHRA | （St） | （N） | （t） | Sx1 | CP |
|  | 20 | 26IT151024 | ANURAG KUMAR | thurear | trueay | Anwerr | Anvery | Anveall |
| 21 | 1101 | 2617151025 | ANUSHA GUPTA | Anusider | Anushle． | （Ancisipta． | （Anoin ${ }^{\text {a }}$（ | Anules |
| 22 | 2201 | 26 IT151027 | APURVA SHARMA | A | Aposerar | Apurva | H | Aporve |
| 23 | 33 | 26 IT151028 | ARPITA AGARWAL | Arpita | Arpita | Arpita | Arpita | Arpita |
| 24 | 4 | 26 IT151029 | AYUSH RAIKWAR | （c） | （c） | （cx） | （c） | Cx |
| 25 | 501 | $2617151030^{\circ}$ | AYUSHI MANI TRIPATHI | Any usher | Aych | Ay ${ }^{\text {as }}$ | Aycusi | AYush |
| 26 | 6 | $261 T 151031$ | AYUSHI NEMA | Anemas | Anemer 2 | Alvena | Anvemers | －Anuma |
| 27 |  | 26IT151032 A | AYUSHI SHRIVASTAVA | A shejivartova | A．Shriventensa | A Shrivastave | A－shrivastar | A．shrivesta |
| 28 | 012 | 26IT151033 A | AYUSHI SINGH | Cedushi | Q Austr | Qeuxil | Aucis |  |
| 29 | － 012 | 26IT151034 | BHARAT MAHESHWARI | Brarat．． | BWarat．． | ＂Bharat．． | Fharat． | RRMarat－ |
| 30 |  | 61T151035 | BHAVNA GURUDEV | A | A | A | A | A |
| 31 | 012 | 6IT151036 | BHOLA KUMAR | Brola Kuma | Bhalakume | Shola Kumar | Bholakum | Bholak |
| 32 | 012 | 6IT151037 | CHITRANSH VYAS | Chite． | ehins | Chitw | （etist） | Chiwo |
| 33 | 012 | 6 IT151038 DI | IIKSHA SINGH |  | gikshasingt2 | Shesha \＆ug／z | pouslassuq | D－4020 |
| 34 | 012 | 6IT151039 DI | DIPANJAN SINHA | Tepanjasing．＂ | Lepanum． | bepany ${ }^{\text {and }}$ ，．． | Depanjow | $\mathrm{DaCSO}^{4}$ |
| 35 | 012 | 6 IT151041 HA | HARSHITA SHARMA | Harshira | Harshila | Horshita | Tarshila | HaC |
| 36 | 0126 | 6IT151042 HEM | EMA KUMARI | Htema | Atrma | diema | dtema | chiors |
| 37 | 0126 | 6IT151043 JYO | YOTI RIJHWANI | jyati | jugti | dyote | gyoti |  |
| 38 |  | IJ151044 KA | ANCHAN KUMARI | Sanchan | ¢ A | Winchens |  |  |
| 39 |  | HGudis $Q_{n}$ KA | ARTIK KHARE | HEone | Hecm | A |  | $56$ |
| 40 |  | 1151094，${ }^{0}$ | ARTIK SHUKLA | dartile snutas． | Warlik Shestur | Kovitio Shethre | $\frac{1}{\text { Kabluksh }}$ | $\frac{\text { pogen }}{\text { kostiks }}$ |
| 41 |  |  | NAL UPVEJA | Kunal． | Kunal | Kunal | Ruviel | Kunal |
| 42 |  | 1T15趧4\％ | JNIKA JAIN | kuriekjaxi | Kemikejain | keinilajaln | Cuxatyáa． | Punitatay |
| 43 | 0126 | 1751049,1 | KSS MEHTA | Lakshmichia | $A$ | LatesiMehta | Ladsinvilfí | Pand |
| 44 | 0126 | 451050 MA | ANISH BODKHE | Manish | Manish | Manish | d（abiob | Mame |




## ORIENTAL COLLEGE OF TECHNOLOGY

 DEPARTMENT OF INFORMATION TECHNOLOGYValue Added Course: Machine Learming
Course Code: IT 40001

ATTENDANCE SHEET
SEM: 7 SEM


Session July-dec 2018

| Total | Eligible or Not eligible |
| :---: | :---: |
| 100 |  |
| 64 | ELIGIBLE |
| 79 | ELIGIBLE |
| 83 | ELGIBLE |
| 62 | ELIGIBLE |
| 70 | EUGIBLE |
| 75 | ELIGIBLE |
| 0 | NOT ELIGIBLE |
| 56 | ELIGIBLE |
| 48 | NOT ELGGIBLE |
| 72 | ELIGIBLE |
| 79 | ELIGIBLE |
| 72 | ELIGIBLE |
| 41 | NOT ELIGIBLE |
| 88 | ELIGIBLE |
| 80 | ELIGIBLE |
| 68 | ELIGIBLE |
| 46 | NOT ELIGIBLE |
| 52 | ELIGIBLE |
| 73 | ELIGIBLE |
| 75 | ELIGIBLE |
| 76 | ELIGIBLE |
| 43 | NOT ELIGIBLE |
| 87 | ELIGIBLE |
| 80 | ELIGIBLE |
| 75 | ELIGIBLE |
| 71 | ELIGIBLE |
| 80 | ELIGIBLE |
| 58 | ELIGIBLE |
| 81 | ELIGIBLE |
| 0 | NOT ELIGIBLE |
| 72 | ELIGIBLE |
| 98 | ELIGIBLE |
| 72 | ELIGIBLE |
| 64 | ELIGIBLE |
| 76 | ELIGIBLE |
| 88 | ELIGIBLE |
| 70 | ELIGIBLE |
| 40 | NOT ELIGIBLE |
| 74 | ELIGIBLE |
| 77 | ELIGIBLE |
| 61 | ELIGIBLE |
| 69 | ELIGIBLE |
| 30 | NOT ELIGIBLE |
| 74 | ELIGIBLE |
| 82 | ELIGIBLE |
| 86 | ELIGIBLE |
| 81 | ELIGIBLE |
| 75 | ELIGIBLE |
| 81 | ELGIBLE |
| 82 | ELIGIBLE. |
| 83 | ELIGIBLE |
| 77 | ELGIBLE |



## ORIENTAL COLLEGE OF TECHNOLOGY. BHOPAL

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyaleyz, Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA]


## DEPARTMENT OF INFORMATION TECHNOLOGY

Session: 2018-19

## CERTIFICATE

This is to certify that Mr./Ms Priyal Jain of IT VII Semester, OCT, Bhopal, has Smurstis Completed the "Value Added Course" on "Machine Learning" during 22-26 0CE ZBIE, organized by-Department of Information Technology, Oriental Colleǧe of Twhontay: Bhopal'

## Course Evaluation/ Feedback Form

lue Added Courso Machine Leo ing
pecial course
uration
22 To 26 October 2018
Oriental College of Technology, Bhopal
'enue Mr Nilabh Kumar, Miss Ruchi Jain , Mr Imran Khan
2rsenter(s):
lease respond to the following statements by asing the $\checkmark$ mark io indicate the extent to whicht you agree ar disageree ith each statement.

| The course as a whole was: |
| :--- |
| The course content was: |
| The instructor's contribution to the course was: |
| The instructor's effectiveness in teaching the subject matter |

## was:

Course Organization was:
Cirrity of instructor's voice was:
Explanations by instructor were:
Instructor's use of examples and illustrations was:
Quality of questions or problems raised by the instructor was:
Student's confidence in instructor's knowledge was:
Instructor's enthusiasm was:
Encouragement given to students to participate was:
Answers to student questions were:
Availability of extra help when needed was:
Use of class time was:
In:iructor's interest in student's progress was:
Amount you learned was:
Clarity of student requirements was:


# Report on Value Added Course on Machine Learning 

Date and Time: 22 October, to 26 October, 2018. Venue: Department of Information Technology ,OCT Campus, Bhopal. Organized by: Information Technology Department, OCT, Bhopal. Name of the Speakers: The speakers were from Department of Information Technology OCT , Bhopal they are Mr Nilabh Kumar ,Miss Ruchi jain .Participants Details: The students participated were Fourth Year Students

## Summary of the Event

The value added courses adds value to the basic ongoing degree program. The students get an insight into the technological advancements and the recent trends that are prevailing in the outside world which gives an added benefit to the placement and gives added advantages to the employment opportunities of the students

The course is divided into five modules and at the end there was an assessment by which the students are awarded certificates.

On October 22, the course started with the inaugural and presidential speech of Director, Oriental College of Technology. In his presidential speech emphasized on the need to collaborate the academic and the non academic education.

The course was conducted strictly according to the schedule and at last the convener of the course
gave away the vote of thank.. At the end the convener thanked all the faculties, office sta' and student volunteers for their unconditional support in organizing this Course.


Director<br>Oriental College of Technology<br>Thakral Nagar, Raisen Road Bhopal

# Value Added Course on Machine Learning 



# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL <br> Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal 

 Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIADate: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs .
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible fort a certificate only if :
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(\mathrm{a}, \mathrm{b})$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:

1. Academic Committee
2. All HoD's , OCT
3. All HoD's, OCT
 Thakral Hagar, Raisen Road Bhopal


## ABOUT THE ORIENTAL GROUP

Oriental Group of Institutes (Indore - Bhopal- Jabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate, Master of Technology courses. The college is having an excellent library, internet lab, modern labs for each department, central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as city of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.

## ABOUT THE DEPARTMENT

The Department of Electronics \& Communication is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching, Industry and Research. The state-of-art facilities and competent faculties provide an excellent climate for the all round development of the students. It has well qualified, committed and motivated faculty-members having specialization in various streams The core competency of the Department/scing the-area of VESI,

The EC Department offers M.Tech Course in Electronics along with Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

Electronics \& Communication Engineering plays prominent role in every domain. "APPLICATIONS OF IOT" is Value Added course through which participants to know latest technologies. Internet of Things is a new revolution of the Internet. A world where the real, digital and the virtual are converging to create smart environments that make energy, transport, cities and many other areas more intelligent. A device become a smart device is called IOT.

## OBJECTIVES \& CONTENTS

Internet of Things offers advanced connectivity of devices, systems, and services that goes beyond machine-to-machine communications and covers a variety of protocols, domains, and applications.
$\overline{\sqrt{ }}$ Introduction to the Internet of Things
$\sqrt{ }$ IOT architecture
$\sqrt{\text { IOT Protocol }}$
$\checkmark$ Detail of IOT Simulator
$\sqrt{\text { Open Source Platform for IOT }}$
ELIGIBILITY
The Fourth year Students of Electronics \& Communication Engineering branch is eligible to attend the "APPLICATIONS OF IOT" course.

REGISTRATION
No Registration fees.
Director
Oriental College of Technology Thakral Nagar, Raisen Road

## INVITED SPEAKERS

Mr. Abhigyanam Giri
Dírector, Ind Eyes Pvt. Ltd. Bhopal


INTERNET OF THINGS


# Oriental College of Technology, Bhopal 

Electronics \& Communication Engineering Value Added Course: Applications of IoT Course Code: EC 40001

Module 1: What is IOT, architecture of network, architecture of device, what is embedded system, why we use embedded system in IOT, IOT applications.

Module 2: Basic electronic components of IOT, resistors, LED, transistors, capacitors, diode, zener diode, relay, switch.

Module 3: What is Arduino and ESP8266, History of ESP8266 and Arduino, Software and Hardware description, comparison between ESP8266 and Arduino, programming software. 1

Module 4: Glow LED, Different patterns of LED, Pull up and pull down condition of switch, LED by switch, LED by two switch, Hello printing on LCD, Different name pattern on LCD.

Module 5: Wireless Protocols (SPI, USART, I2C, Modbus, UART), Networking Protocols (OSI Reference Model, Ethernet, TCP/IP,).

Module 6: RF Module, GSM Module, LAN Module, Bluetooth module, Wi-Fi Module.

Module 7 : Project: IOT based Weather Reporting System
Use: It allows the people to directly check the weather stats online without the need of a weather forecasting agency. System uses temperature, humidity as well as rain sensor to monitor weather and provide live reporting of the weather statistics. The system constantly monitors temperature using temperature sensor, humidity using humidity sensor and also for rain.

## Components required:

Hardware: Atmega Microcontroller, DHT11 Digital Temperature Humidity Sensor, Rain Drop Sensor, ESP8266 Wifi Module, LCD Display, Crystal Oscillator, Resistors, Capacitors, Transistors, Cables and Connectors, Diodes, PCB and Breadboards, LED, Transformer/Adapter, Push BTHAns Switch, IC Sockets,


## SCHEDULE

5 Days Value Added Course on Applications of IoT [24-Sep-2018 To 28-Sep-2018]

| 24 Sep 2018 |  |  |
| :---: | :---: | :---: |
| Time | Session | Teacher |
| 9:30-10:00 | Inauguration | Mr. Abhigyanam |
| 10:00 AM-12:30PM | Introduction to IoT | Mr. Amish Jha |
| 12:30-1:10PM | LUNCH |  |
| 01:10-3:10PM | Introduction to Embedded system | Mr. Amish Jha |
| 3:10-3:30PM | Break |  |
| 03:30-5:30PM | IOT applications | Mr. Kapil Gupta |
| 25 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Basic electronic components of IOT | Mr. Abhigyanam |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | What is Arduino and ESP8266 | Mr. Amish Jha |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | comparison between ESP8266 and Arduino | Mr. Kapil Gupta |
| 26 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Different name pattern on LCD | Mr. Abhigyanam |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Wireless Protocols (SPI, USART, I2C, Modbus, UART) | Mr. Abhigyanam |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | RF Module, GSM Module | Mr. Amish Jha |
| 27 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Introduction to IOT based Weather Reporting System | Mr. Amish Jha |
| 11:00-11:30AM | Break |  |
| 11:30-01:00PM | Class Room Assessment | Mr. Abhigyanam |
| 01:00-1:40PM | LUNCH |  |
| 01:40-4:30PM | Components Required | Mr. Abhigyanam |
| 28 Sep 2018 |  |  |
| Time | Session | Teacher |
| 9:00-11:00AM | Designing of IOT based Weather Reporting System | Mr. Abhigyanam |
| 11:00-11:30AM Break |  |  |
|  |  |  |
|  |  |  |
| 2:00-3:30PM |  | Mr. Amish Jha |
| . 3:30-4:30PM |  |  |
| 4:30-5:30 PM TVAMbledictory \& Certificate distribution |  |  |

Oriental College of Technology Thakral Nagar, Raisen Road

| ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Value Added course on Applications of IoT Objective Test, Date 24-28 ${ }^{\text {th }}$ Sep 2018 |  |  |  |  |
| Branch : | Electronics \& Communication Engineering$77^{\text {m}}$ |  |  |  |
| Semester: |  |  |  | Max. Marks-50 <br> Minimum Marks: 25 |
| Subject: | Applications of loT |  | ode: EC 40001 | Time 1:30 Hrs |
| Note | 1. The question from 1 to 10 is of 1 mark each. <br> 2. The question from 11 to 30 is of 2 marks each. |  |  |  |
| 1. Machine learning is <br> a. The selective acquisition of knowledge through the use of manual programs <br> b. The autonomous acquisition of knowledge through the use of manual programs <br> c. The selective acquisition of knowledge through the use of computer programs <br> d. The autonomous acquisition of knowledge through the use of computer programs |  |  | b. Network Layer <br> c. Transport Layer <br> d. Session Layer |  |
|  |  |  | 7. WPA is a security mechanism in <br> a. WiFi <br> b. Cloud <br> c. Bluetooth <br> d. Ethernet |  |
| 2. HTTP resources are located by <br> a: unique resource locator <br> b. unique resource identifier <br> c. none of the mentioned <br> d. uniform resource identifier |  |  | 8. Network top switch is <br> a. Mesh <br> b. Token ring <br> c. Star <br> d. Token bu | gy with a central hub or |

service access point
a. none of the mentioned
b. node
c. pipe
d. port
4. A Denial of Service attack is:
a. Connection flooding
b. Bandwidth flooding
c. All of the mentioned
d. Vulnerability attack
5. A packet sniffer is
a. Active receiver
b. Both of the mentioned
c. Passive receiver
d. None of the mentioned
6. IPSec provides sedurity at:
a. Physical Leayer

b. Network Layer
c. Transport Layer
d. Session Layer
7. WPA is a security mechanism in
a. WiFi
b. Cloud
c. Bluetooth
d. Ethernet
8. Network topology with a central hub or switch is
a. Mesh
b. Token ring
c. Star
d. Token bus
9. Internet domain name and hostname are translated into IP address by
a. Domain name system
b. Domain name database
c. Router
d. Domain information system
10. Which protocol allows user at one site to establish connection to another site and pass keystroke from local to remote host:
a. Telnet
b. FTP
c. IP
d. HTTP
11. How many times setup function runs in Arduino IDE:
a. None of the above
b. $\quad 10$
c. 2
d. 1 Thakral Nagar, Raisen Road
Bhopal
12. How many times loop function runs in Arduino IDE:
a. 4
b. forever
c. 1
d. 5
13.What error occurs when you execute?
$\mathrm{x}=\mathrm{abc}$
a. NameError
b. SyntaxError
c. ValueError
d. TypeError
14.PWM stands for:
a. None of the above
b. Pulse Width Mode
c. Pulse With Modulation
d. Pulse Width Modulation
15.Raspbian is:
a. Assembler
b. Language
c. Compiler
d. OS

## 16. CGI stands for:

a. Common Gateway Interest
b. Common Gateway Interrupt
c. Common Gate Interference
d. Common Gateway Interface

## 17.MQTT is:

a.
b. Based on client-server architecture
c. Based on publish-subscribe architecture
d. Based on both of the above
e. Based on none of the above
18.What is the access point (AP) in wireless LAN?
a. none of the mentioned
b. wireless devices itself
c. both (a) and (b)
d. device that allows wireless devices to connect to a wired network

19 kn wireless ad-hoc network
a. none of the mentioned
b. access point is not required
c. nodes are not required
d. access point is must
20. Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?
a. ALOHA
b. CSMA/CA
c. CDMA
d. none of the mentioned
21. Which is the correct operator for power( $\left(x^{\wedge} y\right)$ ?
a. $x^{\wedge} y$
b. $x^{\wedge \wedge} y$
c. $x^{* *} y$
d. None of the mentioned
22. What is WPA?
a. wi-fi protected access
b. wired process access
c. wired protected access
d. wi-fi process access
23. The answer of $2+3 \mathrm{~L}$ is:
a. $\quad 5.0$
b. 5 L
c. 5
d. Error
24. An interconnected collection of piconet is called
a. micronet
b. scatternet
c. mininet
d. none of the mentioned
25. In a piconet, there can be up to $\qquad$ parked nodes in the net.
a. 511
b. 63
c. 255
d. 127
26. Secure shell (SSH) network protocol is used for
a. remote command-line login $16 / 2$ Oriental College of Technology Thakral Nagar, Raisen Road
－b．remote command execution
c．all of the mentioned
d．secure data communication

27．The network layer concerns with
a．bits
b．frames
c．none of the mentioned
d．packets

28．Ethernet frame consists of
a．none of the mentioned
b．IP address
c．both（a）and（b）
＝ニニニニニニニニニニニニニニニニニニニニ＝ニニ＝ニ＝＝ニ＝＝＝ニ＝＝
d．MAC address
e．
29．What is internet？
a．interconnection of local area networks
b．a vast collection of different networks
c．a single network
d．none of the mentioned

30．DNS database contains
a．hostname aliases
b．hostname－to－address records
c．all of the mentioned
d．name server records

## Class Room Assessment

Q：Describe the IOT based weather reporting system with the help of circuit diagram and block diagram．Design the circuit using Printed circuit board．


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| S.NO. | ENROLL NO | AL COLLEGE OF <br> department of electronics Value Added Cours Course Cod Students Att | TECHN <br> COMMUNICAT <br> Applicatio <br> :EC- 400 <br> dance Sh | iON ENGINEE of IoT 01 eet | $24-28 \rho_{e p}-2018$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NAME OF STUDENT | September - 2018 |  |  |  |  |
|  |  |  | 24-Sep | 25-Sep | 26-Sep | 27-Sep | 28-Sep |
| 1 | 0126EC151001 | AADESH GAIKWAD | octors | Adosh | Adush | Alosh | Tdash |
| 2 | 0126EC151002 | AASHISH KUMAR SINGH | Hesingh | Atsingh | Atssingh | Aksingh | Akshing. |
| 3 | 0126EC151003 | ABHINAV DHARMADHIKARI | $A B S$ | $A B S$ | ABS | $A B S$ | ABS. |
| 4 | 0126EC151004 | AISHRAJ LALWANI | $A B S$ | ABS | ABS | ABS | ABS |
| 5 | 0126EC151009 | ANKIT KUMÅR SRIVASTAVA | Zshrivas. | Zshrives | Zstrivas | Estrivas | 3 Sinrivas. |
| 6 | 0126EC151010 | ANKIT RAJ | Ankite | Ankith | AnkitR | Antitl | Ankitr. |
| 7 | 0126 EC 151011 | ANKIT TIWARI | ABS. | ABS | ABS | ABS | ABS |
| 8 | 0126 EC 151012 | ANSHU DUBEY | Anshew | Anstus | Ansha | Ansha | monshe |
| 9 | 0126EC151013 | ANUPAMA SINGH | (4.) singh | A Singh | (A)sisil | (1) Singh | (A)Singh |
| C0 | 0126EC151014 | ANURAG GUPTA | four | Atrus. | Dry. | Anvy. | Annues. |
| 11 | 0126 EC 151016 | APOORVA KHARE | Aprown | Apeosie | Apoorva | Apoorn | Apows |
| 12 | 0126 EC 151017 | ARPIT KAUSHAL | A | Asitè | Aript | Arpit | Aript |
| 13 | 0126EC151018 | ARYAN SHARMA | nstowers | Lsharimg | Asharms | A shensa | Arharmg |
| 14 | 0126EC151019 | ASHISH PRAKASH | ABS | ABS | ABS | ABS | ABS |
| 15 | 0126EC151020 | ATUL PRASAD GUPTA | Alul | Atul | Atwel | Atruel | Atul |
| 16 | 0126 EC 151021 | AVANI AWASTHI | iftios | Abtus. | ARN | Aratue. | 戌fuo. |
| 17 | 0126EC151022 | AVNISH RAMAN | Kamen | faman. | Karnem | Kaman | laman |
| 18 | 0126 EC 151023 | AYUSH JOSHI | Orhil | Oshiy | Ostiy | Oshil | Qrhis |
| 19 | 0126 EC 151024 | DARSHANA SINGH | dsino | dfingh | dsingh | $d \text { singh }$ | dsingh |
| 20 | 0126EC151025 | DEEPAK NARSWANI | Deplea | Deobak | Aeepald | () popal | 2) copa |
| 21 | 0126EC151026 | DEEPAK KUMAR GUPTA | berat | besalc | beqak | beegak | bespak |
| 22 | 0126EC151027 | DEEPAK SINHA | 21) | 765 | गS. | HK | Me |
| $-23$ | 0126 EC 151028 | DEEPANJAL MITRA | feepajate | Jeepanyas | Hegranjali | jerpangati | Jepomingui |
| $1 \quad 24$ | 0126 EC 151030 | DIVYANSH GUPTA | Divyansh | Diveranst | Divgansh | Bivanst | Eivyarsb |
| 25 | 0126EC151032 | GAURAV SOHHANI | Grameow | GrawraN | Guwaw | Gauraw | Gecurear |
| 26 | 0126EC151033 | GOLU SHIVAM KUMAR | Coor | Coxel. | EEder | Ecolu | ECGchar |
| 27 | 0126 EC 151035 | HIMANSHU MISHRA | Hnisters | (1mishor | Hensisturg | (1) mishors | (1) mistreg |
| 28 | 0126EC151036 | HIMANSHU YADAV | ABS | $A B S$ | ABS | $A B S$ | ABSS |
| 29 | 0126EC151037 | INDRAJEET KUMAR | Ciumar | Eumor. | Kumer | Zrumer | Tkarmer |
| 30 | 0126EC151038 | IVA RAJ | $F$ |  | Tva |  | fina |
| 31 | 0126EC151039 | KARAN KUMAR | SR2. | $6$ | $\angle b^{2}$ | $\angle B$ | $E B$ |
| 32 | 0126EC151040 | KASTURI KAUSHIK | Rustacts | Pustured | Rusturs | Roasturs | Runturs |
| 33 | 0126EC151042 | KISHAN RAJ | Paj | Pay | Pas | Paj | - |
| 34 | 0126 EC 151043 | KUMAR ANKIT | $A B S$ | ABS | ABS | ABS | AB5 |
| 35 | 0126 EC 151044 | KUMAR SHANU | Wrhantan | 12 shos | KShenteo | Kshumten | Hshun |
| 36 | $0.126 \mathrm{E} 1 \mathrm{j} 1045$ | NoABHISHEK Neच | Nablistel | Mabluitic | Mabbistel | - Mabhish | Maskish |
| 37 | $012 \mathrm{6EH}$ | MANALI JAIN DIM | yain | Main | Mfain | ufain | yain |
| 38 | $0126 \mathrm{EC} 15 \mathrm{FD} 9 \mathrm{~F}$ |  | $\frac{11}{4}$ | yon | y a | , | $\sqrt{y}$ |
| 39 | $012 \text { हल ल }$ |  | diogy | Masuri | Maswar | Moysu |  |

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

department of electronics \& communication engineering Value Added Course: Applications of IoT

Course Code :EC- 40001
Students Attendance Sheet

| S.NO. | ENROLL NO | NAME OF STUDENT | Sepkember - 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 24-Sep | 25-Sep | 26-Sep | 27-Sep | 28-Sep |
| 40 | 0126EC151050 | NAVEETA JAISWAL | NANGE NA SACSUCL | $\begin{aligned} & \text { Mavechat } \\ & \text { IAsisual } \end{aligned}$ |  |  | $\begin{aligned} & \text { NATVECA } \\ & \text { BACAEL } \end{aligned}$ |
| 41 | 0126EC151052 | NIKET KARAN | Karam | Vooun | Krom | Lem | Csan |
| 42 | 0126 EC 151053 | NIKITA SEN | NS | NS. | N6 | NS | NS. |
| 43 | 0126 EC 151054 | NITYA RAWAT | Paroat | Hawet | crowat | sthooat | ridoat |
| 44 | 0126EC151056 | POOJA BAIRAGI | qponja | Lgrona | fronja | 9 ¢rja | 4800] ${ }^{\text {a }}$ |
| 45 | 0126EC151057 | PRACHI YADAV | Prachi | Prach: | Brache | Practi | Prache |
| 46 | 0126EC151058 | PRAFULL KUMAR PALIWAL | Rrupabiar | + Pframal | FKpainal | Fiperu an | kmunar |
| 47 | 0126EC151060 | PRATEEK KUMAR | ABS | AB.S | ABS | brateek | brateek |
| 48 | 0126 EC 151061 | PRINCE KUMAR | Prince | Prince | Prinas | Pronce | Stina |
| 49 | 0126EC151062 | PRIYA | Priva | Pripa | Priega | Priva | Prica |
| 50 | 0126EC151064 | PUSHPENDRA SINGH SENGAR |  | Fenm | trenga | Fenyer | $\frac{1}{f \text { senn }}$ |
| 51 | 0126EC151065 | RAJA SINGH | singh | Jush | Srash | Sing | Iman |
| 52 | 0126EC151066 | RAJAT CHOUDHARY | Raseet | Ravat | Bravat | Phasset | Ratat |
| 53 | 0126EC151067 | RAJEEV KUMAR MISHRA | NRED | (120) | (PM). | PR | Q |
| 54 | 0126EC151068 | RASHEE JAIN |  | Pain | - | $=\text { win }$ | Fain. |
| 55 | 0126EC151069 | RAUSHAN RAJ | Ranstan | Rausinan | Ranstan | Foushan | Rounthan |
| 56 | 0126 EC 151070 | RAVI KANT VERMA | Ravi | Chaui | Qavi | Pravi' | Qami |
| 57 | 0126EC151071 | RAVI SHANKAR | Sari | Slaw | Davi | Wavi | (Dace: |
| 58 | 0126EC151072 | RAVINDRA.S.PANWAR | havivisat | thuingert | Ravindara | Rounvinart | Ravinuras |
| 59 | 0126EC151073 | REEMA KARAMCHANDANI | Reumus | Recums | Reuns | Reemy | Reemy |
| 60 | 0126EC151074 | RIA KHARE | Rici | R ira | Ria | Ria | Rria |
| 61 | 0126 EC 151075 | RINKY PATEL | Tumete | Rap Pter | hankefated | Rentecales | Koulepot |
| 62 | 0126EC151077 | RITIK SHARMA | $A B S$ | ABS | $A B S$ | $A B^{5}$ | ARS |
| 63 | 0126 EC 151078 | RITIKA SAXENA | Ditika | Aitik | Rilite. | Bitche | Fiztices |
| 64 | 0126EC151079 | ROMIL AJMERA | Hanil | Roril | Ranil | Comil | Comil |
| 65 | 0126EC151081 | RUBEENA SHREEN | R8 | R8 | R8 | R8 | RS |
| 66 | 0126EC151082 | SACHIN DUBEY | dub | Tubay | dabe | T | \% |
| 67 | 0126 EC 151083 | SAKET KUMAR | Sapat | Selet | Saket | Saket | Sakt |
| 68 | 0126EC151084 | SAKSHI CHANDRAWANSHI | Sakshi | Sakshil | Sakshi | fakshi | Saksh |
| 69 | 0126EC151085 | SAKSHI CHATURVEDI | Sunst | Sahesi | gates | Gajar | satipe |
| 70 | 0126EC151086 | SAKSHI KANḰANE | $\sum 1$ | $k 1$ | $<1$ | $\varepsilon /$ | 5 |
| 71 | 0126 EC 151087 | SANGHAMITRA GOSWAMI | Stuanam | 1. Srinemis | Ggoswa | un | Gounms. |
| 72 | 0126EC151088 | SANJEET KUMAR | Sansect | sanfect | rameet | anjel | cancle |
| 73 | 0126 EC 151089 | SANKARSHAN MISHRA | Smunhs | Sy moun | Smiaty | Sminn | Esinuty |
| 74 | 0126EC151090 | SANTOSH KUMAR X , +6 W | Ramas | Toumar | Raumar | Damer | Rauman |
| 75 | 0726EC151091 | SANTOSH RATHOR COI | stanlog | fountas | 5 feenios | - Sanlor 1 | 1 echor |
| 76 | $0126 \mathrm{EC}+51093$ | SARANSH JAIN Nllege of lecmum | sfain | Stain | Stain | stain | 1 stair |
| 77 | 0126 EC 151094 | SHAHzAD AL Nagar, Ralsen | Sali | Sale: | Seli | Sadi | al. |
| 78 | 0126EC151095 | SHAIFALI SHRIVASPAVA | Slafers | shefucts | Shaferts | Shafalt | shefort |

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

department of electronics \& COMMUNICATION ENGINEERING
Value Added Course: Applications of IoT
Course Code :EC- 40001
Students Attendance Sheet

| S.NO. | ENROLL NO | NAME OF STUDENT | September $20 / 8$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 24-Sep | 25-Sep | 26-Sep | 27-Sep | 28-Sep |
| 79 | 0126 EC 151096 | SHASHANK MODI | Anedi | sarodi. | Shode. | Frodi | Snodi |
| 80 | 0126 EC 151097 | SHEEBA NIGAM | Tiram | Nijam | Aigars | Nigam. | (byan. |
| 81 | 0126 EC 151098 | SHIVAM PANDEY | Produr | Tandu | Vandur | Pandur | $1 \text { ande }$ |
| 82 | 0126EC151099 | SHIVAM PANDEY | Comely | Gerneley | Soundey | Spandey | Spardey |
| 83 | 0126EC151100 | SHRISHTI AGRAWAL | Arual | Auval | deoal | Alewal | drocel. |
| 84 | 0126EC151101 | SHRISHTI SONI |  | Sc | Sc | 5 I. |  |
| 85 | 0126EC151102 | SHRUTI SUMAN | Shruti | Shruti | Shriti | Shreit | Sheurti |
| 86 | 0126EC151103 | SHUBHAM SHARMA | Stay | Sthos | Stos | $3812$ | Ley |
| 87 | 0126EC151104 | SHUBHAM SUMBHE | Shubham | Shubham | shebham | Shubhem | Shutham |
| 88 | 0126EC151105 | SHYAMLI NIGAM | 万ymmatum | - $\sqrt{\text { ñ4amLiviner }}$ | C. | SnyAmitan | Cryamuan |
| 89 | 0126 EC 151106 | SOURABH KUMAR GOUR | Howes. | Cows. | ycens | fores. | Lows. |
| 90 | 0126 EC 151107 | SUBHAM KISHORE |  |  |  |  | Prienrec |
| 91 | 0126 EC 151108 | SUMIT ANAND | simit | Susit | flemit | Syourt | Erauit. |
| 92 | 0126EC151109 | SUMIT CHOUHAN | Hami | Auint | Aconz | Lfows | Hz |
| 93 | 0126 EC 151110 | SUNIL KUMAR SAHU | $A B S$ | $A B S$ | $A B S$ | $A B S$ | $A B S$. |
| 94 | 0126EC151112 | KUMARI SWASTIKA | inositiku | woatiku | Quatika | Scotita | Soalika |
| 95 | 0126 EC 151113 | SWATI AGARWAL | Bogain | Sayour | Sosing | Sogara | 8ugas |
| 96 | 0126 EC 151114 | SWATI SINGH |  | $f$ |  | $8$ |  |
| 97 | 0126EC151115 | SYED HIBA ALI | Ayed | fyed | Syed | Syed | Syed |
| 98 | 0126 EC 151116 | TUSHAR BHAVE |  | $\sqrt{12}$ | $\frac{1}{L B}$ | LB | $\sqrt{B}$ |
| 99 | 0126 EC 151117 | UDISHA GUPTA | Jobsat Cosy | Usient hural | Unisnt havt | Zosna huverio | UpHathou |
| 100 | 0126 EC 151118 | VAISHALI GANGIL | $v_{8}$ | $\sqrt{(9}$ |  | Vg | V(9. |
| 101 | 0126EC151119 | VANSHIKA MANWANI | Lmanwim | $\because \text { mainus }$ | Chminin | bonanian | $V \operatorname{lin}$ |
| 102 | 0126 EC 151120 | VARSHA SHUKLA | Varsha | Herrsta | Varsha | Varsha | Varsha |
| 103 | 0126 EC 151121 | VARSHA SONI | V. Soni | V. Comi | $V_{1} \operatorname{Sni}$ | $V$ Somi | $V_{\text {isoni }}$ |
| 104 | 0126EC151123 | VIVEK KUMAR | KumA! | Vicimar | kumar | Vrumar | $V_{\text {kmar }}$ |
| 105 | 0126 EC 151124 | YASH DAVE | $A B S$ | ABS | AB.S | ABS | ABS |
| 106 | 0126EC151125 | ZOYA KAMAL | Youa | Gova | Boya | Goya | zrowa |
|  |  |  | 0 O | $\checkmark$ | $\checkmark$ | \% | U |



| ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL <br> DEPARTMENT OF ELECTRONICS \& COMMUNICATION ENGINEERING <br> Value Added Course: Applications of IoT <br> Course Code :EC- 40001 <br> Students Assessment Sheet , 24-28 Sep-2018 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S.NO. | ENROLL NO | NAME OF STUDENT | Class Room Assessment Score (Marks/50) | Objective <br> Test Score (Marks/50) | Total Score | Eligible for Certificate or not |
| 1 | 0126 EC 151001 | AADESH GAIKWAD | 32 | 30 | 62 | Yes |
| 2 | 0126 EC 151002 | AASHISH KUMAR SINGH | 28 | 26 | 54 | Yes |
| 3 | 0126 EC 151003 | ABHINAV DHARMADHIKARI | A | A | 0 | No |
| 4 | $0126 \mathrm{EC151004}$ | AISHRAJ LALWANI | A | A | 0 |  |
| 5 | $0126 \mathrm{EC151009}$ | ANKIT KUMAR SRIVASTAVA | 35 | 40 | 75 | No - |
| 6 | 0126 EC 151010 | ankit ras As Per Pelica | (20) | (20) | 75 | Yes |
| 7 | 0126 EC 151011 | ANKIT TIWARI |  | (20) | (40) | No |
| 8 | 0126 EC 151012 | ANSHU DUBEY |  | A | 0 | No |
| 9 | $0126 \mathrm{EC151013}$ | ANUPAMA SINGH | 28 | 30 | 58 | Yes |
| 10 | $0126 \mathrm{EC151014}$ | ANURAG GUPTA |  | 30 | 62 | Yes |
| 11 | 0126 EC 151016 | APOORVA KHARE | 28 | 26 | 54 | Yes |
| 12 | 0126 EC 151017 | ARPIT KAUSHAL | 43 | 40 | 83 | Yes |
| 13 | 0126 EC 151018 | ARYAN SHARMA |  | 30 | 55 | Yes |
| 14 | 0126 EC 151019 | ASHISH PRAKASH | 45 | 45 | 90 | Yes |
| 15 | 0126 ECl 151020 | ATUL PRASAD GUPTA | 26 | A | 0 | No |
| 16 | 0126 EC 151021 | AVANI AWASTHI | 26 | 32 | 58 | Yes |
| 17 | 0126 EC 151022 | AVNISH RAMAN ${ }^{\text {- }}$ | 28 | 30 | 58 | Yes |
| 18 | $0126 \mathrm{EC151023}$ | AYUSH JOSHI | 35 | 38 | 73 | Yes |
| 19 | $0126 \mathrm{EC151024}$ | DARSHANA SINGH | 32 | 30 | 62 | Yes |
| 20 | 0126 EC 151025 | DEEPAK NARSWANI | 28 | 26 | 54 | Yes |
| 21 | 0126 EC 151026 | DEEPAK KUMAR GUPTA | 42 | 40 | 82 | Yes |
| 22 | 0126 EC 151027 | DEEPAK SINHA | 35 | 30 | 55 | Yes |
| 23 | 0126 EC 151028 | DEEPANJAL MITRA | 38 | 40 | 75 | Yes |
| 24 | 0126 EC 151030 | DIVYANSH GUPTA |  | 34 | 72 | Yes |
| 25 | 0126 EC 151032 | GAURAV SOHANI | 28 | 32 | 58 | Yes |
| 26 | $0126 \mathrm{EC151033}$ | GOLU SHIVAM KUMAR | 28 | 30 | 58 | Yes |
| 27 | 0126 EC 151035 | HIMANSHU MISHRA | 32 | 38 | 73 | Yes |
| 28 | 0126 EC 151036 | HIMANSHU YADAV | A | 30 | 62 | Yes |
| 29 30 | $0126 \mathrm{EC151037}$ | INDRAJEET KUMAR | A | A | 0 | No |
| 30 31 | 0126 EC 151038 | IVA RAJ | 32 | 30 | 62 | Yes |
| 31 <br> 32 | 0126 EC 151039 | KARAN KUMAR | 45 | 45 | 90 | Yes |
| 32 <br> 33 | $0126 \mathrm{EC151040}$ | KASTURI KAUSHIK | 41 | 42 | 83 | Yes |
| 33 | 0126 EC 151042 | KISHAN RAJ | 25 | 30 | 55 | Yes |
| 34 | $0126 \mathrm{ECL151043}$ | KUMAR ANKIT | A | 40 | 75 | Yes |
| 35 | 0126 EC 151044 | KUMAR SHANU | A | A | 0 |  |
| 36 | 0126 EC151045 | M. ABHISHEK | 26 | 32 [ | 58 | Yes |
| 37 | 0126 EC 151046 | MANALI JAIN | 28 | $30 \times 1$ | 12.58 | Yes |
| 38 | 0126EC151047 | MANDAVI DWIDEDI | 35 | 38 | 1) 73 | Yes |
| 39 | $0126 \mathrm{EC151048}$ | MAYURL UPADHYAY | 32 | 30 | 62 | Yes |
| 40 | 0126 ECL 51050 | NAVEETA JAISW.AL | 32 | 30 | 62 | Yes |
| 41 | 0126 EC 151052 | NIKET LARAN | 28 | 26 | nal 54 | Yes |
| 42 | 0126EC151053 | NİITA SEN | 38 | 37 | 75 | Yes |
| 43 | 0126 EC 151054 | NITYA RAWAT |  | 30 | 55 | Yes |
|  |  |  |  | 40 | 75 | Yes |

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

DEPARTMENT OF ELECTRONICS \& COMMUNICATION ENGINEERING Value Added Course: Applications of IoT
Course Code :EC- 40001
Students Assessment Sheet


## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

department of electronics \& communication engineering
Value Added Course: Applications of IoT
Course Code : EC- 40001
Students Assessment Sheet

| Students Assessment Sheet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S.NO. | ENROLL NO | NAME OF STUDENT | Class Room Assessment Score (Marks/50) | Objective Test Score (Marks/50) | Total Score | Eligible for Certificate or not |
| 87 | 0126EC151104 | SHUBHAM SUMBHE | 35 | 38 | 73 |  |
| 88 | 0126 EC 151105 | SHYAMLI NIGAM | 45 | 38 | 73 | Yes |
| 89 | 0126EC151106 | SOURABH KUMAR GOUR | 28 | 45 | 90 | Yes |
| 90 | 0126EC151107 |  | 28 | 26 | 54 | Yes |
| 91 |  | SUBHAM KISHORE | 43 | 40 | 83 | Yes |
| 91 | 0126EC151108 | SUMIT ANAND | 25 | 30 | 55 | Yes |
| 92 | 0126EC151109 | SUMIT CHOUHAN: | 35 | 40 | 75 | Yes |
| 93 | 0126 EC 151110 | SUNIL KUMAR SAHU | A | A | 0 | No |
| 94 | 0126 EC 151112 | KUMARI SWASTIKA | 45 | 45 | 90 | Yes |
| 95 | 0126 EC 151113 | SWATI AGARWAL | 28 | 26 | 54 | Yes |
| 96 | 0126 EC 151114 | SWATI SINGH | 42 | 40 | 82 | Yes |
| 97 | 0126 EC 151115 | SYED HIBA ALI | 25 | 30 | 55 | Yes |
| 98 | 0126 EC 151116 | TUSHAR BHAVE | 35 | 40 | 75 | Yes |
| 99 | 0126 EC 151117 | UDISHA GUPTA | 35 | 38 | 73 | Yes |
| 100 | 0126 EC 151118 | VAISHALI GANGIL | 32 | 30 | 62 | Yes |
| 101 | 0126 EC 151119 | VANSHIKA MANWANI | 28 | 26 | 54 | Yes |
| 102 | 0126 EC 151120 | VARSHA SHUKLA | 41 | 42 | 83 | Yes |
| 103 | 0126 EC 151121 | VARSHA SONI | 25 | 30 | 55 | Yes |
| 104 | 0126EC151123 | VIVEK KUMAR | 35 | 40 | 75 | Yes |
| 105 | 0126EC151124 | YASH DAVE | A | A | 0 | No |
| 106 | 0126EC151125 | ZOYA KAMAL | 35 | 40 | 75 | Yes |




Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

## Course Evaluation/ Feedback Form

| Value Added Course | Application of IOT |
| :--- | :--- |
| Date: | $24-28$ Sep 2018 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s); | Mr. Amish Jha, Mr. Abhigyanam Giri |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

$$
4=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$

| 1. The Course objectives were stated clearly and met. | 4 321 |
| :---: | :---: |
| 2. The Course was well organized. | $\text { (4) } 321$ |
| 3. The information and/or skills presented were relevant and useful | $\text { (4) } 3 \quad 21$ |
| 4. The presenter(s) provided adequate time for questions and answered them effectively. | $4(3)$ |
| 5. The presenter(s) allowed me to work with and learn from others. | (4) 321 |
| 6. The materials provided were sufficient \& appropriate for the program. | (4) $3 \quad 21$ |
| 7. The physical arrangements were adequate. | (4) $3 \quad 21$ |



Direcior
Oriental College of Technology Thakral Nagar, Raisen Road Bhopal

ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
Department of Electronics \& Communication Engineering

## Certificate of Completion

This is to certify that Mr./Ms. Ritika Saxena of EC-VII Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "Applications of IoT" during 2428 Sep 2018, organized by Department of Electronics \& Communication Engineering, Oriental College of Technology, Bhopal.


ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
Department of Electronics \& Communication Engineering
IndEyes

## Certificate of Completion

This is to certify that Mr./Ms. Aryan Sharma of EC-VII Sem, OCT, Bhopal, has Successfully Completed the "Value Added Course" on "Applications of Io" during 2428 Sep 2018, organized by Department of Electronics \& Communication Engineering, Oriental College of Technology, Bhopal.


## Value Added Couse On

## Applications of IoT

24-28 Sep 2018

uriental Coilege of Tecinoiugy Thakral Nagar, Raisen Road Bhopal

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Department of Electronics \& Communication Engineering


## Report on Value Added Course on Applications of IoT

Date and Time: September 24, to September 28, 2018. Venue: EC, OCT Campus, Organized by: EC,OCT, Bhopal. Name of the Speakers: Mr. Abhigyanam Giri, Director IndEyes Infotech Pvt. Ltd., Mr. Amish Ku. Jha, Assistant Professor, EC, OCT \& Mr. Kapil Gupta, Assistant Professor, EC, OCT, Participants Details: Fourth Year students of Electronics \& Communication Engineering.

## Summary of the Event

The Value added course Plays an important role in Strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syllabus, the Electronics \& Communication Engineering Department of Oriental College of Technology in association with IndEyes InfoTech Pvt. Ltd, had organized "Value Added Course on Applications of IoT" from September 24, to September 28, 2018 for the students of $4^{\text {th }}$ year.
This Course syllabus was covered by Mr. Abhigyanam Giri, Director IndEyes Infotech Pvt. Ltd. ,Mr. Amish Ku. Jha, Assistant Professor, EC, OCT \& Mr. Kapil Gupta, Assistant Professor, EC, OCT in 30 Hrs. of 5-Day program.


Director

On September 24, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare, Director, Oriental College of Technology. In her presidential speech, she emphasized on the need to collaborate the academic and the non academic education.
On September 24, the Course coordinator, Mr. Abhigyanam Giri, guided all students on the topic "Applications of IoT". In his speech, he had explained the need for every student to have skills to get a job. To bridge the gap between the academic and industry need, Value Added Courses are much essential. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes.Mr. Amish Ku. Jha, explained, Introduction to IoT. Mr. Kapil Gupta, explained the applications of IoT.

On September 25, Mr.Abhigyanam, explained the basic electronics components of IoT.
On September 26, Mr. Amish Jha, explained, RF module and GSM module.
On September 27, Mr. Amish Jha, explained introduction to IoT based weather monitoring system.

On September 28, Mr.Abhigyanam explained designing of IoT based weather monitoring system.

At last, Prof. Arvind Sahu, Head EC, Convenor of Course gave away the vote of thanks. He thanked Mr. Abhigyanam Giri for providing his valuable time for successful conduction of this course for our students. He also thanked Mr. Amish Ku. Jha \& Mr. Kapil Gupta for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

Prof. Arvind Sahu<br>Course Convenor



Head, EC, OCT


ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL
Approved by AICTE., Ncw Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDIA
Date: 17 June 2014

## Policy for Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs.
2. Only students who are registered for the semester will be allowed to attend the course.
3. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
4. The course is free to enroll and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
5. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Objective Test Score, with minimum of $60 \%$ attendance during the course.
6. Student will be eligible for a certificate only if:
a. Class Room Assessment $>=25 / 50$
b. Objective Test Score $>=25 / 50$.
c. If one of the two clause $(\mathrm{a}, \mathrm{b})$ is not met, student will not get the certificate even if the Final score $>=50 / 100$.
7. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

Copy to:


1. Academic Committee -
2. All HoD's, OCT


Director
Oriental College of Technology
Thakral Nagar, Raisen Road
Ehodal

## Registration Form

Enrollment N

Branch:

Semester
ddress

E-mail id

Contact Ne
 Etionat?

Mobric +917024110755

Mr Laht Jain
Mobile +917972366098
ORGANISING: COMMITTEE MEMBERS


Oriental College of Technology,


Value Added Course
On
"PLC\&SCADA"
$14^{12}$ to $8^{t h}$ Fect. 2019 /

In Association with
COURSE COORIINATOR
Mr. Rishabh Shukla
Mobile: +919584741706
IndEyes
Organised By
Departmeat of Electrical \& Eiketroales
Ingiaccriag

Orisental Cotlege of Techaodogy
Thakrol Surew Rasson Rowal Bhapod 662021


## ABOUT THE ORIFNTAL GROUP

Oriental Group of Institutes (Indore - BhopalJabalpur) India established in the year 1995 is a self financed premier education group imparting education in the disciplines of Engineering, Pharmacy, Management and Advanced Computer Studies. The Oriental College of Technology, offers six under graduate Bachelor of Engineering courses and three post graduate. Master of Technology courses. The college is having an excellent library, intemet lab, modern labs for each department. central workshop, sports \& games facilities etc.
Bhopal, the capital of Madhya Pradesh, is also known as cin of lakes. It is well connected to all parts of the country by rail and air. The institute is about 09 km from Bhopal railway station, and 07 km from Habibganj railway station and 18 km from Raja Bhoj Airport.


## ABOLT THE DEPARTMENT

The Department of Electrical \& Electronics is a major strength of the institute. The Department has an excellent group of faculty with experience in teaching. Industry and Research. The state-of-art facilities and competent faculties provide an excellent climate for the all round development of the students. It has well qualified, committed and $\checkmark$ motivated faculty members having specialization in various streams.
The EX Department offers M.Tech Course in Power Electronics along with Undergraduate Program (B.E/ B.Tech) with an intake of 18 and 120 respectively.

## ABOUT THE COURSE

## Programmable Logic Controller or PLC is a

computing system used to control electromechanical processes. SCADA stands for Supervisory Control and Data Acquisition. It is a type of industrial control system that is used to monitor and control facilities and infrastructure in industries.

OollegleconiJespnolegy al Nagap Raisen Road

Bhapal
Bhepal as practical howledge of the Industral Automation \& latest technologies being used to achieve industrial automation. The idea of organizing this workshop is to inculcate itg basic fundamentals of automation in the students and
provide them with a platform to work on, In The Near Future.

## ELIGIBILITY

The Students Electrical \& Electronics Engineering branch are eligible to attend the course.

REGISTRATION
No Registration fees.

SPEAKERS
Mr. Abhijeet Singh
Assistant Prof. EX Deptr. OCT Bhopal
Mr. Rishabh Shukla Assistant Prof. EX Deptt. OCT Bhopal

Mr . Praveen Choudhary
Assistant Prof. EX Deptt. OCT Bhopal


## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

Department of Electrical \& Electronics Engineering
Value Added Course: PLC \& SCADA
Course Code: EX 40001

## Module I:

## Presentation on Recent Trends in Industrial Automation \& PLC-SCADA

Introduction To Automation, Why We Need Automation, Where Automation?, Evolution In Industrial Automation (A Brief History), Different Type Of Industrial Control Mechanisms), Introduction To PLCs, PLC Advantages Over Microcontrollers, Area Of Applications, DATA Flow During Automation, Motor Drives Introduction \& Their Need, Sensors Introduction \& Their Need, HMI Introduction \& Its Need, SCADA Introduction\& Its Need

## Module II:

PLCs \& PLC Programming- Allen Bradley Micrologix 1000 PLC (Digital PLC), Delta (Analog PLC)

## Module III:

SCADA Programming- Basic \& Advanced- Wonderware InTouch

## Module IV:

Sensors- Proximity Sensor, Inductive Sensor, IR Sensor, Limit Switch/Level Switch

## Module V:

Projects-4 Projects will be covered during the training.


Director Orlental College of Technology Thakral Nagar, Raisen Road - Bhopal

## SCIIEDUE

S Days Vatue Added course on PLC \& SCADA $/ 4^{\text {th }}$ to $8^{15} \mathrm{Feb} .20191$

| 1 lme |
| :---: |
| 3) 301000 AM |
| 10.00 AM 12 BOMM |
| 12, 101,1090 |
| 01 10 1 1019 |
| 110.11019 M |
| (1) 617019 |

$4^{\text {is }}$ Feb 2010
Scesion Teacher
Inangural lingeramme
Prexemation on Recen I rends in Industrial Automation \& PIC:SCADA IUNEH

Detail ethidy of PIC A SCADA
Mr. Abhijeet Singh
Hreak
PC 1OE Basics, Buming it Interfacing Concepts

$5^{\text {He }}$ Feb 2010

| 1 mme | Scssion | Teacher |
| :---: | :---: | :---: |
| 000.1100AM | PCs d PC Programming | Mr. Rishabh Shukla |
| 110011.10 AM | Hreah |  |
| 11.3001001 Ma | Practice Session on Allen Bradey Mictologis 1000 PLC ( Digital PLC) | Mr. Rishabh Shukla |
| 0100.15019 | IUNCll |  |
| (1) 40 4 4010 M | Practice Session on Della (Analog PLC) | Mr. Rishabh Shukla |
| $6^{\text {h/ }}$ Febl 2010 |  |  |
| Time | Sesslon | Teacher |
| $0.00 \cdot 1100 \mathrm{ANI}$ | SCADA Programming- Basic a Advanced | Mr. Abhijeet Singh |
|  |  |  |
| 1100.11 .10 AM | Break |  |
| 11 601019 | Wondenvare lin louk | Mr. Abhyed Singh |
| (1)100 1-40190 | LUNCII |  |
| 01:40-4 301 M | Checking Lirors | Mr. Abhucet Singh |

$7^{\text {in }} \mathrm{Feb} 2019$

| Time | Session | Teacher |
| :---: | :---: | :---: |
| 0001100 AM | Assignment | Mr. Praveen Choudhary |
| 11 00 11:30AM | Breal |  |
| 11.30 .0100 PM | Class Room Assessment | Mr. Pravech Chowthary |
| 010014018 M | IUNCII |  |
| 0140 - 10 PM | Uetail study of Sensors | Mr. Praveen Chouthary |

## $8^{\text {B/ }}$ Feb 2019



## Dirselar

Oriental College of Technology Thatal Nocat, Raleon Road


## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL



1. What is the full form of SCADA?
a) Supervisory Control and Document Acquisition
b) Supervisory Control and Data Acquisition
c) Supervisory Column and Data Assessment
d) Supervisory Column and Data Assessment
2. DCS is a $\qquad$
a) Distributed Control System
b) Data Control System
c) Data Column System
d) Distributed Column System
3. What is SCADA?
a) Software
b) Process
c) System
d) Hardware
4. The control in SCADA is $\qquad$
a) Online control
b) Direct control
c) Supervisory control
d) Automatic control
5. When did the SCADA start?
a) 1980 s
b) 1990 s

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c) 1970 s
d) 1960 s
6. When did Windows become the world standard operating system?
a) 1980 s
b) 1990 s
c) 1970 s
d) 1960 s
7. Which of the following is an example of the SCADA system?
a) Emerson Delta V
b) Honeywell PlantScape
c) Yokogawa CENTUM
d) PowerStudio Deluxe
8. How many levels are present in a complex SCADA system?
a) 3-levels
b) 5 - levels
c) 4 - levels
d) 6 - levels
9. Which of the following is not the component of a SCADA system?
a) Database server
b) I/O system
c) PLC controller
d) Sparger controller
10. Which of the following is used for centralized network databases?
a) RAID 2
b) RAID 5
c) RAID 1
d) RAID 2
11. The minimum number of disks in RAID level 2 is $\qquad$
a) 3
b) 4
c) 2
d) 1
12. Which of the following is the heart of a SCADA system?
a) PLC
b) HMI
c) Alarm task
d) I/O task
13. Which of the following is also known as striping?
a) RAID 2
b) RAID 0
c) RAID 1
d) RAID 2


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14. The minimum number of disks in RAID level 4 is five.
a) True
b) False
15. RAID-1 is also known as mirroring.
a) True
b) False
16. The symbol-(L)- represent what instruction in the PLC Ianguage?
A. OUT output unlatch instruction.
B. OTL output latch instruction.
C. Examine off instruction.
D. Output energize instruction.
17. The address $T 4: 6 . A C C$ is used to address what?
A. Accumulator for timer 4 in file 6 .
B. Preset value of timer 6 in file 4 .
C. Accumulator for timer 6 in file 4 .
D. Accumulator for counter 6 in file 4 .
18. To reset the time for a PLC what condition must be true?
A. Reset rung of TON must be true.
B. Reset rung of TON must be false.
C. RST instruction with timer address must be true.
D. RST instruction with associated timer address must be false.
19.To increase the number of inputs and outputs of the PLC, one can use expansion modules.
A. True.
B. False.
C. None of the above.
20.Solenoids, lamps, motors are connected to:
A. Analog output.
B. Digital output.
C. Analog input.
D. Digital input.


Oriental College of Technology, Bhopal
Department of Electrical \& Electronics Engineering

## PLC \& SCADA

4 Feb. to 8 Feb 2019

| ir. No. | Inrollmeut No. | Name of Student | 4/2/2019 | 5/2/2019 | 6/2/2019 | 7/2/2019 | 8/2/2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | $01201 \times 151001$ | Udur Rahman | $x \sqrt{6 d m}$ | drd |  | (A) 10 |  |
| 20 | $01201 \times 151002$ | Whijeet Kumar | $A$ | 1 | $\beta$ | $\bigcirc$ | 12 |
| 30 | $01201>151004$ | Whisheh Kumar |  | (ब) | $(6, x)$ | $A 1$ | $\sqrt{n}$ |
| 40 | 012061151005 | Abhishek Kumar Rampurya | Anons | hinithe | fint |  | $D^{\prime} \theta$ |
| 5 | 012015131000 | Adits a Kumar |  |  | $1 x \cdot \cdots$ |  |  |
| 6 | 01201 121007 | Ad!ta Nema |  | Nev | pert |  |  |
| $\cdots$ |  | Ajay Singh | $3$ | $\theta$ | A | A | A |
| S | 01261 1151009 | Ahash Kumar Verma | 1) | A | $\AA$ | , | $t$ |
| 9 | $01201 \times 151010$ | Ahshat Shrivastava | , | ก | , | $\lambda$ | $1$ |
| 10 | $01206 \backslash 151011$ | Ahunay Joshi | $\psi_{12}$ | (r) $n$ | $(\mathrm{c})\}$ |  | $r+9$ |
| 11 | 0126E×151013 | Aman Preet Kaur | hinn | $\sqrt{n}(\infty$ | MnN | $m$ | $\sqrt{21}$ |
| 12 | 012011151014 | Amit Kumar Singh |  | $f$ | N | $15$ |  |
| 13 | $01201 \times 151010$ | Ansy Chourey | Ducki | 101... | How | 15 | $1 \times$ |
| 14 | $01261 \times 151017$ | Amhesh Kumar Srivastay | Autw | nibus, | Aty | $\mathrm{Alul}^{\text {a }}$ | A成k |
| 15 | 012618151019 | Anuj Dubey | $0,10$ | wiv | hniv | $\mathrm{N}$ | $m(N)$ |
| 为 | $0126 \mathrm{~F} \times 151020$ | Anurag Panday | A1012 |  |  | $+1$ |  |
| 17 | 01201×151021 | Asind Kumar Dwivedi | Arnise | A) $w^{-1}$ | $1 r$ |  | $\mathrm{H}^{2}$ |
| 15 | 01201 1151022 | A | $1 J V$ | 110 | 111 | A | 1) |
| 19 | 01261 $\times 151024$ | Banty Kumar | $21 . x^{x}$ | $8, n+2$ | $10 n^{2}$ |  | $3^{3}$ |
| 20 | $01261 \times 151026$ | Chirag Chauhan | ( 11 | 1 | 11 | 17 | 0) |
| 21 | $0126 \mathrm{~F} \times 151027$ | D) Muheshjee | $N$ |  |  | $1$ | 1 |
| 22 | 01261 $\times 151028$ | Dcepak Kumar Ranjan |  |  |  |  | Det |
| 23 | -01261 $\times 151029$ | Deepansh Pahariya | $x-2$ | $r$ | $+2$ |  |  |
| 24 | . $01261 \times 151030$ | Gaurar Dubey | \& |  | $g$ | 9 | $i: 2$ |
| 25 | $50126 \mathrm{E} \times 151031$ |  |  |  | $1 m$ | Hin | $H 1=$ |


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| 20 | 012201 $\times 15104$ | Muallu Kumani | （ri） | （M） | （M） | （w） |  |
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|  | $012201 \times 151038$ | Nillul Simy | Mimi | rime | m＂m | Mich | तथ1 |
|  | $11201 \times 151019$ | Ni．tata Nepa |  |  |  |  |  |
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|  | 01201 $\times 151002$ | Pallawi | － | 分 | 9 | D |  |
|  | 01201 $\times 15104$ | Pavan S Singl Tiwari | 20， | （1－1／2 | Pro．． | Pa |  |
|  | 112201 $\times 15194$ | Pi，wh Somkusure | piyush | Prym | Pリッи | Plywer | Pyans |
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| ${ }^{\prime}$ | $01261 \times 151$ | Prutio Chowdlury | P－ | Pm | $p$ | 2 |  |
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| 4 | $01201 \times 15105$ | Pr．．Kaj | A | －${ }^{\circ}$ | a | 0 | $1)$ |
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## Oriental College Of Technology, Bhopal

## Electrical \& Electronics Engineering Department

Value Added Course: PLC \& SCADA, 4-8 Feb 2019
Course Code: EX 40001
ASSESSMENT SHEET

| Sno | Enrollment No. | Name of students | Class room assessment score(marks/50) | Objective test score(mar $\mathrm{ks} / 50$ ) | Total score | Eligible to receive certificate or not |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $0126 \mathrm{EX151001}$ | Abdur Rahman | 40 | 40 | 80 | Eligible |
| 2 | 0126EX151002 | Abhijeet Kumar | A | A | 0 | Not Eligible |
| 3 | 0126EX151004 | Abhishek Kumar | 35 | 30 | 65 | Eligible |
| 4 | 0126EX151005 | Abhishek Kumar Rampurya | 25 | 30 | 55 | Eligible |
| 5 | 0126EX151006 | Aditya Kumar | 27.5 | 35.5 | 63 | Eligible |
| 6 | 0126 EX151007 | Aditya Nema | 45 | 46 | 91 | Eligible |
| 7 | 0126EX151008 | Ajay Singh | A | A | 0 | Not Eligible |
| 8 | 0126 EX151009 | Akash Kumar Verma | A | A | 0 | Not Eligible |
| 9 | 0126EX151010 | Akshat Shrivastava | A | A | 0 | Not Eligible |
| 10 | $0126 \mathrm{EX151011}$ | Akshay Joshi | 27.5 | 35.5 | 63 | Eligible |
| 11 | $0126 \mathrm{EX151013}$ | Aman Preet Kaur | 45.5 | 30 | 75.5 | Eligible |
| 12 | $0126 \mathrm{EX151014}$ | Amit Kumar Singh | 32 | 42 | 74 | Eligible |
| 13 | $0126 \mathrm{EX151016}$ | Anay Chourey | 42 | 40 | 82 | Eligible |
| 14 | $0126 \mathrm{EX151017}$ | Anikesh Kumar Srivastav | 30 | 42 | 72 | Eligible |
| 15 | $0126 \mathrm{EX151019}$ | Anuj Dubey | 28 | 35 | 63 | Eligible |
| 16 | 0126EX151020 | Anurag Panday | 45.5 | 30 | 75.5 | Eligible |
| 17 | $0126 \mathrm{EX151021}$ | Arvind Kumar Dwivedi | 32 | $42$ | 74 | Eligible |
|  |  |  | Director Thakral Nagar, Raisen Road <br> College of tech Road Bhopal |  |  |  |





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Bhopal

| 66 | 0126 EX151076 | Shrevansh Diwan | 35 | 45 | 80 | Eligible |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 67 | 0126 EX151077 | Shrushti Umesh <br> Kokaje | 38 | 40 | 78 | Eligible |
| 68 | 0126 EX151078 | Shubham Bhardwaj | 29 | 40 | 69 | Eligible |
| 69 | 0126 EX151079 | Shubham Diwakar | 30 | 42 | 72 | Eligible |
| 70 | 0126 EX151080 | Sourabh Sarathe | 28 | 35 | 63 | Eligible |
| 71 | 0126 EX151081 | Sujit Kumar | 40 | 47.5 | 87.5 | Eligible |
| 72 | 0126 EX151082 | Sukirti Singh | 30 | 45 | Eligible |  |
| 73 | 0126 EX151083 | Sumit Kumar <br> Kushwaha | 30 | 72 | Eligible |  |
| 74 | 0126 EX151084 | Swati Singh | 28 | 35 | 63 | Eligible |
| 75 | 0126 EX151085 | Tabrej Alam | 27.5 | 35.5 | 63 | Eligible |
| 76 | 0126 EX151086 | Utkarsh Kumar | 45 | 46 | 91 | Eligible |
| 77 | 0126 EX151087 | Vaishali Khare | 28 | 63 | Eligible |  |
| 78 | 0126 EX151088 | Vishal Choudhary | 40 | 87.5 | Eligible |  |

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Course Evaluation/ Feedback Form

| Value Added Course | PLC \& SCADA |
| :--- | :--- |
| Date: | $4-8$ Feb 2019 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s): | Mr. Abhijeet Singh |

Please respond to the following statements by using the 4-point rating scale to indicate the extent to which you agree or disagree with each statement. Please circle the number that applies.

$$
4=\text { Strongly Agree } \quad 3=\text { Agree } \quad 2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$

1. The quality of the course contents compared with your expectations.
2.The presenter(s) inspires you by his/her knowledge in the course.
(4) 321
(4) 321
3.The information and/or skills presented were relevant and useful
2. The presenter(s) provided adequate time for questions and answered them effectively.
3. The course contents handed out was useful
4. The materials provided were sufficient \& appropriate for the program.
5. The presenter(s) encouraged interaction and were helpful..

4 (3) 21
(4) 321 .
$\qquad$


Oriental College of Technology
Thakral Thakral Nagar, Raisen Road

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bbopal
Oriental Campus, Raisen Road, Bhopal-462021 (MP) INDLA]


Session: 2018-2019

## Department of Electrical \& Electronics Engineering

## CERTIFICATE

This is to certify that Mr. /Ms. Abdur Rahman of EX-VIII Sem, OCT, Bhopal, has Completed the "Value Added Courses" on "PLC \& SCADA" during $4{ }^{\text {th }}$ Feb to $8^{\text {th }}$ Feb 2019, organized by Department of Electrical \& Electronics Engineering, Qriental College of Technology, Bhopal.


Director, OCT

# ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL 

## Department of Electrical \& Electronics Engineering



## Report on Value Added Course on PLC \& SCADA

Date and Time: Februan 04, to February 08, 2019. Venue: EX.OCT Campus. Organized By: EX.OCT, , Bhopal. Name of the Speakers: Mr. Abhiject Singh. Assistant., Prof. EX Depte OCT Bhopal. Mr. Praveen Choudhary, Assistant Prof. EX Deptr. OCT Bhopal. Mr. Rishabh Shukla Assistant Prof. EX Deptt. OCT Bhopal
Participants Details: Final year students of Electrical \& Electronics Engineering.

## Summary of the Event

During the course students collect Information regarding different types of PLC is acquired in Industrial Automation training so that the variations of the circuits can be learnt. And then the connection about PC and PLC and vice versa is learnt during PLC Training. Finally the different types of programmable logic controller. the concepts of ladder logic, and RLD (Relay Logic Diagram) is learnt during SCADA Training.
"Value Added Course on PLC \& SCADA" February 04, to February 08, 2019 for the students of Final year .

On January 15, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare . Director, Oriental College of Technology. In his presidential speech she emphasized on the need to collaborate the academic and the non academic education.

On February 15, the Course coordinator. Mr. Rishabh Shukla, guided all students on the topie "PLC \& SCADA". In his speech, he had explained the need for every student to have skills to get a job.

On February 15, Mr. Abhiject Singh, give detal study of PLC \& SCADA

(MC)
On February 17, Mr. Abhijeet Singh, explained SCADA Programming- Basic \& Advanced

On Februat 18. Me. Praveen Choudhary,given Room Assersmen:
On Februan 19. Mr. Abhiject Singh. conduct test and assignment.
It last. Prof. Preeti Gupta, Head EX. Convenor of Course gave away the vote of thank. He thanked Mr Abtijeet Singh. Mr. Praveen Choudhary and Mr Rishabh Shukla Jain for providing his valuable time for successful conduction of this course for our students. He also thanked all the Saculties, office staff and student voluntecrs for their unconditional support in organizing this Course

## Prof. Precti Gupta

## Course Convenor

EX.OCT



On Iebnary 16. Mr. Rishabh Shukla, Practice Session on Allen Bradley Micrologix 1000 PIC (Dieital

P()
On Feloraary 17. Mr. Abhiject Singh, explained SCADA Programming- Basic \& Advanced.
On Felvaary 18. Mr. Praveen Choudhary, given Room Assessment
On February 19. Mr. Abhijeet Singh, conduct test and assignment.
At last, Prof. Preeti Gupta. Head EX. Convenor of Course gave away the vote of thank. He thanked Mr. Abhüect Singh. Mr. Praveen Choudhary and Mr. Rishabh Shukla Jain for providing his valuable time for successful conduction of this course for our students. He also thanked all the facultics, office staff and student volunteers for their unconditional support in organizing this

## Course.

## Prof. Preeti Gupta

## Course Convenor

EX,OCT


## Oriental College of Technology, Bhopal

Date: 17 June 2014

## Policy of Value Added Course

1. The minimum duration of each Value Added Course will be of 30 hrs.
ts who are registered for the semester will be allowed to attend the course.
2. The assessment procedure will be based on the Class Room Assessment, Objective test \& attendance.
3. The course is free to enrol and learn from. But if student want a certificate, then they have to register and write the proctored exam conducted by us in person at Oriental College of Technology, Bhopal
4. Criteria to get a Certificate: Final score $=$ Class Room Assessment Score + Test Score, with minimum of $60 \%$ attendance
5. Student will be eligible for a certificate only if :
A. Class Room Assessment $>=25 / 50$
b. Exam Score $>=25 / 50$.
c. If one of the 2 criteria is not met, student will not get the certificate even if the Final score $>=50 / 100$.
6. Students will be issued with a certificate consisting of student name, semester, course name, Course duration.

7. Academic Committee
8. All HoD's, OCT

Copy to:


Director, OCT

## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL



Value Added Course
On
"3D PRINTING \& 3D SCANNING"

127-31, Aug-2018|

For IV - Year Students

Organised By


## CHIEF PATRONS

Dr. K. L. Thakral
Founder Chairman. Oriental Group of Institutes and
Chancellor, Oriental University. Indore

## PATRONS

Shri. Praveen Thakral
Chairman. Oriental Group of Institutes
Mrs. Niraj Ghei
Chair Person, Oriental College of Technology, Bhopal
ADVISORY COMMITTEE
Dr. Ranjeeta Khare
Director, OCT, Bhopal
CONVENOR
Dr. Netra Pal singh
octhodme@oriental.ac.in

## COURSE COORDINATOR

Mr. Shahnawaz Ansari
Mobile: +918253033270
Shahnawaz91@gmail.com

## ORGANISING COMMITTEE MEMBERS

Mr. Praveen Mishra
Mr. Saumitra Kumar Sharma
Mr. Amit Pratap Singh Bhadouria

## CONTACT

Mr. Shahnawaz Ansari Mobile: +918253033270

Shahnawaz91@gmail.com

Mr. Saumitra Kumar Sharma
Mobile: +919589455704
saumitra204@gmail.com

## Registration Form

Name:

Enrollment No. $\qquad$

Branch:

Semester:

Address.......
$\underline{\square}$
$\qquad$
$\qquad$
$\qquad$

City \& Pin. $\qquad$

E-mail id.

Contact No: $\qquad$

Place:


Signaturg riental College of Technology Thakral Nerar. Raison Rous

Signature with Seal
Head of the Department

# Oriental College of Technology, Bhopal <br> Mechanical Engineering 

Value added course - 3D PRINTING \& 3D SCANNING
Time Durations - 30Hrs
Course code - ME- 40001
Syllabus

Unit I- Introduction to 3D Printing \& 3D Scanning
Using the Command Widow to execute simple programming tasks, advantage of the Introduction, Prototyping fundamentals, Historical development, Advantages of AMT, Commonly used terms, process chain, 3D modelling, Data Conversion, and transmission, Checking and preparing, Building, Post processing, RP data formats, Classification of AMT process, Applications to various fields

Unit-II Liquid based systems: Stereo lithography apparatus (SLA): Models and specifications, process,working principle, photopolymers, photo polymerization, layering technology, laser and laser scanning, applications,advantages and disadvantages, case studies. Solid ground curing (SGC): Models and specifications, process, working ,principle, applications, advantages and disadvantages, case studies.

UNIT III Solid based systems: Laminated object manufacturing(LOM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages, Case studies.Fused Deposition Modelling (FDM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages, Case studies, practical demonstration

Unit-IV Powder Based Systems: Selective laser sintering (SLS): Models and specifications, process, working principle, applications, advantages and disadvantages, case studies. Three dimensional printing (3DP): Models and specification, process, working principle, applications, adoantages and disadvantages, case studies.


## SCHEDULE



| ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL |  |  |  |
| :--- | :--- | :--- | :--- |
| Value Added Course on 3D PRINTING \& 3D SCANNING <br> Objective Test, Date: 31,Aug-2018 |  |  |  |
| Branch: | Mechanical Engineering | Max. Marks-50 <br> Minimum Marks:25 |  |
| Semester: | VII Semester | Time: 1:30Hrs |  |
| Subject: | 3D PRINTING \& 3D SCANNing |  |  |
| Note | All questions are compulsory. Each Question is of 2.5 Marks. |  |  |

1. What program did we draw in and import into 123D Design?
a) Google Draw
b) Google
c) Google Drive
d) Sketchup
2. The inner flat planes of a model are called:
a) faces
b) planes
c) shapes
d) banana
3. The lines of a model are called:
a) lines
b) points
c) edges
d) spaces
4. What is one tool we use to fix sharp edges?
a) chamfer
b) smooth
c) part
d) fix
5. what does 3d mean?
a) movies
b) 3 dimensions
c) stereoseopio
d) computer graphics

6 . What can be 3 d ?
a) computer graphies
b) movies
c) sculptures
d) all of the above
7. Who creates 123D Design?
a) Alias
b) Makerware
c) Autodesk
d) Shapeways
8. Do you have to use 123D Design to 3d print?
a) Yes
b) no
9. What menu do I go to merge objects together?
a) Group
b) Combine
c) Translate
d) Scale
10. What button on the keyboard do we hold to move the camera?
a) shift
b) command
c) control
d) alt/option
11. If I have a model with hands that stand out for the sides what do I have to turn on to print it?
a) Raft
b) Structure
c) Supports
d) Fixtures
12. What tool do we use to cut a hole into a shape?
a) Combine
b) Scale
c) Extrude
d) Translate
13. What is the shortcut to re-size a model?
a) command $r$
b) command s
c) $r$
d) s
14. The view cube always rotates things in 3 dimensions except when I turn on:
a) orthographic views
b) flat views
c) architect views
d) camera views
15. What is the file format we would save from Google Drawing?
a) stl
c)


Oriental College of Technot- :
Thakral Nagar, Raisen Roul Bhopal
16. What is a website we could use to post our models and buy prints from?
a) Models R Us
b) Google Drawing
c) Yeggi
d) Shapeways
17. Who is the best 3 d print teacher? : P
a) Ms. Mandy
b) Ms. Mandy
c) Ms. Mandy
d) Ms. Mandy
18. What is the most important thing you should consider when making something in 3d?
a) Size
b) Gravity
c) Functionality
d) Quality
19. What is the first thing you should consider when making something in 3 d ?
a) quality
b) functionality
c) quality
d) size
20. What is the file format we export to print?
a) obj
b) $s t j$
c) stl
d) sit


## Oriental College of Technology Bhopal <br> ${ }^{2} 2$

Department of Mechanical Engineering
Attendance sheet for value added cource on 3D printing and 3D scanning

| S. <br> No. | $\begin{gathered} \text { ENROLLMENT } \\ \text { NO } \end{gathered}$ | NAME | $810 z-80-\angle Z$ | $\begin{gathered} \infty \\ \underset{\sim}{\infty} \\ \underset{\sim}{\infty} \\ \underset{\sim}{\infty} \end{gathered}$ | $\begin{aligned} & \infty \\ & \underset{\sim}{\infty} \\ & \text { N } \\ & \text { Ò } \\ & \text { ה̀ } \end{aligned}$ |  | $\begin{aligned} & \infty \\ & \stackrel{\infty}{7} \\ & \stackrel{\infty}{\infty} \\ & \stackrel{1}{m} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $0126 \mathrm{EX151015}$ | AMIT RAJ | P | , | P | . $P$ | $p$ |
| 2 | 0126ME151001 | AADARSH RAI | , | $p$ | P | . $P$ | $p$ |
| - 3 | 0126ME151002 | ABHISHEK PRASAD PRAJAPATI | P | , | $p$ | P | $p$ |
| 4 | 0126ME151004 | ABHISHEK VATSH | $p$ |  | $p$ |  | P |
| 5 | 0126ME151005 | ADARSH CHAUHAN | P | $P$ | P. | $p$ | P |
| 6 | 0126ME151006 | ADARSH KUMAR | $P$ | $P$ | . | , | $p$ |
| 7 | 0126ME151007 | ADITYA KUMAR | . | $P$ | , | $P$ | . |
| 8 | 0126ME151008 | ADITYA TIWARI | $\tau$ |  |  |  |  |
| 9 | 0126ME151009 | ADVAET SHARMA | P |  | $p$ | P | $P$ |
| 10 | 0126ME151011 | AKASH CHOUKSEY | $p$ | $p$ | P | $p$ | , |
| 11 | 0126ME151013 | AKSHAT RAGHUVANSHI | , | P | . | $P$ | P |
| 12 | 0126ME151014 | AKSSHAY SHARMA | $P$ | , | $p$ | ${ }^{\circ}$ | $p$ |
| 13 | 0126ME151015 | AMAAN AHMED | $p$ | , | . | . | $p$ |
| 14 | 0126ME151016 | AMAN PATIDAR | - | ، | - | 7 |  |
| 15 | 0126ME151017 | AMRATANSH DUTT CHOUBEY | P | $p$ | $p$ | $p$ | - |
| 16 | 0126ME151018 | ANKIT KUMAR LACHHWANI | $p$ | $P$ | $p$ |  | $p$ |
| 17 | 0126ME151019 | ANKIT SHARMA | $p$ | . | $p$ | $p$ |  |
| 18 | 0126ME151020 | ANKIT SINGH | $P$ | , | $p$ | , | A |
| ${ }^{-19}$ | 0126ME151021 | ANKUSH TIWARI | - | - |  | - |  |
| 20 | 0126ME151022 | ANSHUL SINGH | $p$ | $p$ | $p$ | $\cdot$ | P |
| 21 | 0126ME151023 | ANSHUMAN PATEL | + | $p$ |  | P | $p$ |
| 22 | 0126ME151024 | ANSUMAN SINGH PATEL | P | $p$ | , | - | $p$ |
| 23 | 0126ME151025 | ANUJ BAGDI | . |  | $p$ | P | , |
| 24 | 0126ME151026 | ANUP KUMAR | $p$ |  | $p$ | P | , |
| 25 | 0126ME151027 | ARPIT SINGHAL | . | . |  |  |  |
| 26 | 0126ME151028 | ARUN KUMAR KAPAIR | - | - |  |  |  |
| 27 | 0126ME151029 | ARYA TIWARI | P |  | $p$ |  | P |
| 28 | 0126ME151030 | ASHISH KAG | $p$ | . $P$ |  | $\urcorner$ | -P |
| 29 | 0126 me 151031 | ASHISH KUMAR | $\hat{0}$ | . | $p$ | , | $p$ |
| 30 | 0126 me 151032 | ASHISH OJHA | P | $p$ | P |  | $p$ |
| 31 | 0126 me 151033 | ASHISH SINGH | $P$ | P | P | P |  |
| 32 | 0126 me 151034 | ASHUTOSH DUBEY | - | - | $\cdots$ |  | - |
| 33 | 0126 me 151035 | ATUL MISHRA | $p$ |  | p | P | $\theta$ |
| -34 | 0126 me 151036 | ATUL PANDEY |  | $p$ |  | $p$ | $p$ |
| 35 | 0126 me 151037 | AVESH NIGAM | $p$ | $p$ | $p$ | , | $\rho$ |
| 36 | 0126 me 151038 | BHUPENDRA PATIDAR | 10 |  | P | P | P |
| 37 | Q126me 151040 | CHINMAY BAROLE | - |  |  | I- | - |
| $38^{\prime}$ | 0356me151041 | DEVRAJ KHIRA | 1 | $p$ | $p$ | pirectof |  |
|  | 0126me 151042 | DILKHUSH KUMAR | P | P | - |  |  |
| $1 \frac{1}{2}$ |  |  |  |  | Orienta Thakral Nagar, Bhodal. |  |  |

# Oriental College of Technology <br> Bhopal 

Department of Mechanical Engineering
Attendance sheet for value added course on 3D printing and 3D scanning



# Oriental College of Technology Bhopal 

## Department of Mechanical Engineering

Attendance sheet for value added cource on 3D printing and 3D scanning

|  | $\begin{gathered} \text { ENROLLMENT } \\ \text { NO } \end{gathered}$ | NAME | $\begin{aligned} & \infty \\ & \underset{\sim}{\infty} \\ & \underset{\sim}{\infty} \\ & \underset{\sim}{1} \end{aligned}$ |  | $\begin{aligned} & \infty \\ & \underset{\sim}{\infty} \\ & \underset{\sim}{\circ} \\ & \stackrel{1}{1} \\ & \underset{\sim}{1} \end{aligned}$ | $\begin{aligned} & \infty \\ & \underset{\sim}{\infty} \\ & \text { N } \\ & \text { O } \\ & i \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ö̀ } \\ & \underset{\sim}{\infty} \\ & \underset{\sim}{1} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 77 | 0126ME151084 | PREM SNEH | $p$ | P | $P$ | , | P |
| 78 | 0126ME151085 | PRIYANSHU BAHELIYA | , | $p$ | P | , |  |
| 79 | 0126ME151086 | RAHUL GUPTA | P | . |  | $p$ | p |
| 80 | 0126ME151087 | RAHUL SHRIVASTAVA |  | $p$ | P | $\Gamma$ | , |
| 81 | 0126ME151088 | RAJ MEHTA |  |  |  |  |  |
| 82 | 0126ME151089 | RAJAN KUSHWAHA | P | $p$ | $p$ | , | $p$ |
| 83 | 0126ME151090 | RAJAT CHOUDHA | . | , | , | 1 | - |
| 84 | 0126ME151091 | RAMAN KOTREY | P | $p$ | . | P | P |
| 85 | 0126ME151092 | RAVI PRAKASH PATEL | $p$ | 1 | d) | - |  |
| 86 | 0126ME151093 | RISHABH PANDYA | P |  | P | $\checkmark$ | P |
| 87 | 0126ME151095 | RITUVENDRA MISHRA | $p$ | $p$ | $p$ | P | P |
| 88 | 0126ME151096 | ROHIT SINGH | $p$ | . | P | $\bigcirc$ | P |
| 89 | 0126ME151097 | SAKSHAM SHARMA | $p$ | D | $p$ |  | P |
| 90 | 0126ME151098 | SALMAN MU̇STAFA SIDDIQUI | - | . | . |  | , |
| 91 | 0126ME151099 | SANTOSH KUMAR | P | - | $p$ | , | P |
| 92 | 0126ME151100 | SARTHAK VIRHA | . | 0 | . |  |  |
| 93 | 0126ME151101 | SATYAM PODDAR | P | p | - | $p$ | , |
| 94 | 0126ME151102 | SATYAM SHUKLA | $P$ | 1 P | $P$ | P | , |
| 95 | 0126ME151103 | SHIVA SONI | ' | P | $p$ | S | P |
| 96 | 0126ME151104 | SHIVAM NAYAK ; | P | $p$ |  | P | , |
| 97 | 0126ME151105 | SHIVAM SRIVASTAVA | . | $\rho$ | $p$ | $p$ | P |
| 98 | 0126ME151106 | SHIVASHRIT TIWARI |  | $\rho$ | , | , | . |
| 99 | 0126ME151107 | SHOUVIK MUKHERJEE | $p$ | . | $p$ | P | P |
| 100 | 0126ME151108 | SHUBHAM KUMAR | , | $p$ | $p$ | , | 1 |
| 101 | 0126ME151109 | SHUBHAM KUMAR | $p$ | , | $P$ | P | - |
| 102 | 0126ME151110 | SHUBHAM PATHAK | $\rho$ | $P$ | - | ק | P |
| 103 | 0126 ME 151111 | SHUBHAM SINGH | - |  |  |  |  |
| -104 | 0126ME151112 | SHUBHAM SINGH | $p$ | . 1 | $p$ | , | P |
| 105 | 0126ME151114 | SONU GUPTA | 1 |  | P | 7 | P |
| 106 | 0126ME151116 | SUDHANSHU KUMAR | $p$ | $\rho$ | P) | P | $\hat{r}$ |
| 107 | 0126ME151117 | SUDHANSHU TIWARI | $p$ | P | $p$ | , | $p$ |
| 108 | 0126ME151118 | SYED BASAR KAZMI | $p$ | $P$ | Pr | . | $p$ |
| 109 | 0126ME151119 | TANAY MANDLOI | $p$ | , | $p$ | ' | $1 P$ |
| 110 | 0126ME151120 | UPENDRA KUMAR YADAV |  | $P$ |  | $P 1$ | P |
| 111 | 0126ME151121 | VAIBHAV KUMAR | P | - | $p$ | $p$ | $\hat{\phi}$ |
| 112 | 0126ME151122 | VED PRAKASH RAJPUT |  | p | $p$ | $p$ |  |
| 113 | 0126ME151123 | VISHAL KUMAR | $P$ | $p$ | $p$ | Diject | fechnol |
| 1124 | 0126ME151124 | YASH KUMAR BATHAM | $P$ |  | ofienta | College- | aisen RO |
| $\frac{5}{4}$ | H066ME151125 | YASHRAI SINGH BAIS | - |  | Thak | I Nagat, | $\mathrm{al}$ |







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Oriental College of Technolo y Thakral Nagar, Raisen Road Ehopal

## COURSE EVALUATION/ FEEDBACK FORM

| flite Added Course | 3D PRINTING \& 3D SCANNING |
| :--- | :--- |
| Dart: | $27-31$, Aug-2018 |
| Program Location: | Oriental College of Technology, Bhopal |
| Presenter(s): | Mr. Shahnawaz Ansari |

please respond to the following statements by using the 4-point ratits
Please
disagree with each statement. Please circle the number that appas.

$$
2=\text { Disagree } \quad 1=\text { Strongly Disagree }
$$

$4=$ Strongly Agree
3= Agree

2= Disagree

| $4=$ Strongly Agree $3=$ Agree $\quad 2=$ Disagree |  |
| :---: | :---: |
| $4=$ Strongly Agree $\quad 3$ As | (4) 321 |
| 1. The Course objectives were stated clearly and met. | 4 |
| 2. The Course was well organized. | 4 (3) 21 |
| 3. The information and/or skills presented were relevant and usefur | (4) 321 |
| 4. The presenter(s) provided adequate time for questo | $4 \longdiv { 2 1 }$ |
| 5. The presenter(s) allowed me to work with | 4321 |
| 6. The materials provided | (4) 321 |

7. The physical arrangements were adequate.


## 3D Printing \& 3D Scanning"

August 27, to August 31, 2018.


## ORIENTAL COLLEGE OF TECHNOLOGY, BHOPAL

[Approved by AICTE, New Delhi \& Govt. of M.P. Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal Oriental Campus, Raisen Road, Bhopal-462021 (MP) [INDIA]


Session: 2018-19

## Department of Mechanical Engineering

## CERTIFICATE

This is to certify that Mr./Ms. NISHANT KUMAR JHA of VII Sem, OCT, Bhopal, has Completed the "Value Added Course" on "3D Printing and 3D Scanning" during 27-31,Aıg-2018, organized by Department of Mechanical Engineering, Oriental college 0 technology, Bhopal.


Co-Ordinator, ME, OCT


Director, OCT

## ORIENTAL COLLEGE OF TMEHNOLOGY, BHOPAL

## Department of Mechanical Engineering



Report on Value Added Course on "3D Printing \& 3D Scanning"
Venue: ME,OCT Campus.
Date and Time: August 27, to August 31, 2018.
Organized by: ME,OCT,Bhopal.

## Name of the Speakers

Mr. Shahnawaz Ansari, Assistant Professor, ME, OCT
Mr. Praveen Mishra, Assistant Professor, ME, OCT \&
Mr. APS Bhadouria, Assistant Professor, ME, OCT

Participants Details: Final year students of Mechanical Engineering Dept.

## Summary of the Event

The Value added course Plays an important role in Strengthening the technical skills of undergraduates. In the race of making good and bright career in short span of time, most of the time students neglect the aim and the need of education. In view of this changing pattern and condition of youth education in India, and to guide students on different topics which are not covered under the defined academic syllabus, the Mechanical Engineering Department of Oriental College of Technology in had organized "Value Added Course 3D Printing \& 3D Scanning" from November 14, to November 19, 2016 for the students of final year .

This Course syllabus was covered by Mr. Shahnawaz Ansari, Assistant Professor, ME, OCT Mr. Praveen Mishra, Assistant Professor, ME, OCT and Mr. APS Bhadouria, Assistant Professor, ME, OCT in 30 Hrs . of 5-Day program.
On August 27, the course started with the inaugural and presidential speech of Dr. Ranjeeta Khare, W/ aine 000 Qriental College of Technology. In his presidential speech she emphasized on the need to collabiote the academic and the non academic education.

On August 27, Mr. Shahnawaz Ansari, Course coordinator has given Introduction to 3D Printing \& 3D Scanning with Simple Programming Task. Mr. Praveen Mishra, guided all students on the topic of Commonly used terms. Post processing, RP data formats, Classification of AMT process, Applications to various fields explained by Mr. APS Bhadouria. He had explained the need for every student to have skills to get a job.

On August 28, Mr. Praveen Mishra, explained, Stereo lithography apparatus (SLA): Models and specifications post photopolymers, polymerization, layering technology, laser and laser scanning explained by Mr. APS Bhadouria. Later Models and specifications explained by Mr. Shahnawaz Ansari.

On August 29, Mr. APS Bhadouria taught Laminated object manufacturing. Fused Deposition Modeling (FDM) explained by Mr. Praveen Mishra and Case studies, practical demonstration explained by Mr. Shahnawaz Ansari.

On August 30, Mr. Praveen Mishra explained, selective laser sintering (SLS) and case studies.Mr. APS Bhadouria guided, students for Three dimensional printing (3DP). Models and specification, explained by Mr. Shahnawaz Ansari. Practice sessions taken by the all speakers also given assignment to students on the same,

On August 31, Mr. Shahnawaz Ansari, has given assignment to students on Fused Deposition Modeling (FDM)'\& Selective laser sintering (SLS) after that assessment of class done. Valedictory \& Certificate distribution done by . Mr. Praveen Mishra and Mr. APS Bhadouria.

At last, Prof. Netra Pal Singh, Head ME, Convenor of Course gave away the vote of thank. He thanked Mr. Shahnawaz Ansari for providing his valuable time for successful conduction of this course for our students. He also thanked Mr. Praveen Mishra \& Mr. APS Bhadouria for addressing the student audience on the said topic. At the end he thanked all the faculties, office staff and student volunteers for their unconditional support in organizing this Course.

## Prof. Netra Pal Singh

Course Convenor



Director
Oriental College of Technology Thakral Nagar, Raisen Road

Bhopal

