



# ALVAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

A unit Of Alva's Education Foundation®, Moodbidri  
(Affiliated to VTU, Belgaum, Approved by AICTE, New Delhi, Recognized by Govt of Karnataka)

## DEPARTMENT OF MECHANICAL ENGINEERING

### CATIA V6 Classes –Value Added Program (VAP)



Date:- 06/06/2018

### Course Objective

- ✓ You will learn advanced solutions for conceptual design, 3D modeling, and documentation.
- ✓ You will learn to do product design, industrial design and styling (optimize form, fit, function and user experience), 2D design, drafting, documentation with powerful tools for layout, drawing.
- ✓ You will do 3D modeling, assembly design, surface Modeling, and sheet metal design

### Introduction

Computer Graphics-Aided Three-Dimensional Interactive Application (CATIA) is the world's leading computer-aided design (CAD)/computer-aided manufacturing (CAM)/computer-aided engineering (CAE) package. Developed by Dassault System and marketed worldwide by IBM, CATIA delivers one of the best Product Lifecycle Management (PLM) solutions. It provides a single platform to design, analyze, and manufacture a product; this makes the product development faster and easier. CATIA is used by various industries, including automobiles, aerospace, industrial equipment, and ship building. CATIA Version 6 (V6) was first released in mid-2008. The new CATIA V6 user interface allows designers to directly work with solid models rather than using the feature-based design approach of CATIA V5.

### Key Main Features:

A number of enhancements were made to CATIA V6 to make the process of product development easier and faster as compared to the previous versions of CATIA. The key enhancements made in CATIA V6 are as follows: • Global collaborative innovation • Real-time working environment • Single platform for product development • Systems engineering improvements We discuss each of these enhancements in detail. Catia V6

### Global Collaborative Innovation:

The users of CATIA V6 can access the collaborative three-dimensional (3D) environment of Dassault System that allows an unlimited number of online users from all over the world to participate in the virtual 3D brainstorming conference. Once connected, users can use the online

collaborative tools available for 3D brainstorming to coreview and co-design the product. With CATIA V6, designers, engineers, and even the prospective users of the product are able to collaborate on the product in such a way as if they were together in the same room. CATIA also supports asynchronous collaboration among users, which means that even the offline users can share the changes made in the product.

### **Real-Time Working Environment:**

CATIA V6 provides a unique real-time working environment to design highly realistic 3D models. For example, it allows different groups of users, related to customer services, technical training, and maintenance operations, to interact with each other and create enhanced 3D-based composite documents for all types of products by using their company's existing PLM investments. It also provides new materials, effects, and paint shaders to give a realistic appearance to virtual models. Single Platform for Product Development A new product goes through various stages from design to manufacturing during its development life cycle. CATIA V6 reduces the complexity of developing a product by allowing the integration of various product development approaches within a single platform. It allows you to store the data related to all the phases, such as designing and manufacturing, of a project at a single place from where it can be accessed and used by the designers, engineers, and manufacturers working on the project. Systems Engineering Improvements: Systems engineering has evolved as a collective, integrated, and multidisciplinary model for product development to manage the increasing complexity of products and projects. It enables you to produce systems that satisfy customer needs and reduce risk as well as the costs associated with the development of a project. CATIA V6 has introduced a unique requirements, functional, logical, and physical (RFLP) approach that provides a comprehensive and collaborative definition across different views (requirements, functional, logical, and physical) of a product. In other words, the RFLP approach simplifies the product development process by allowing you to work on different views of a product by bringing them together on the same platform

### **Course: - Catia V6R2013- Essentials**

**Course Time:** 5.00 PM to 6.30 PM

**Even semester from 4/10/2017 to 13/11/2017 (20hrs):**

Course content:

- ✓ Introduction to Catia V6
- ✓ Overview PLM as a concept
- ✓ Sketchers Tools (2D design)

✓ Part Modelling

Coordinator: Mr.Kiran C H

Mr. Veerendar Kumar B

### Weakly based Classes Schedule

Sl No	Monday	Tuesday	Wednesday	Thursday	Friday	No of students
<b>Catia Batch1</b>	✓		✓		✓	<b>28</b>
<b>Catia Batch 2</b>		✓		✓		<b>27</b>

### Odd Semester from 19/02/2018 to 25/05/2018 (40hrs)

**Time :-** 5.00 PM to 6.30 PM

#### **Course Content:**

- ✓ Part Modeling
- ✓ Assembly Drawing
- ✓ Drafting
- ✓ Wire frame/Surface Modeling
- ✓ Sheet Metal

**Program Coordinator:** Prof Kiran C H, ME

Mr. Veerender Kumar B, ME

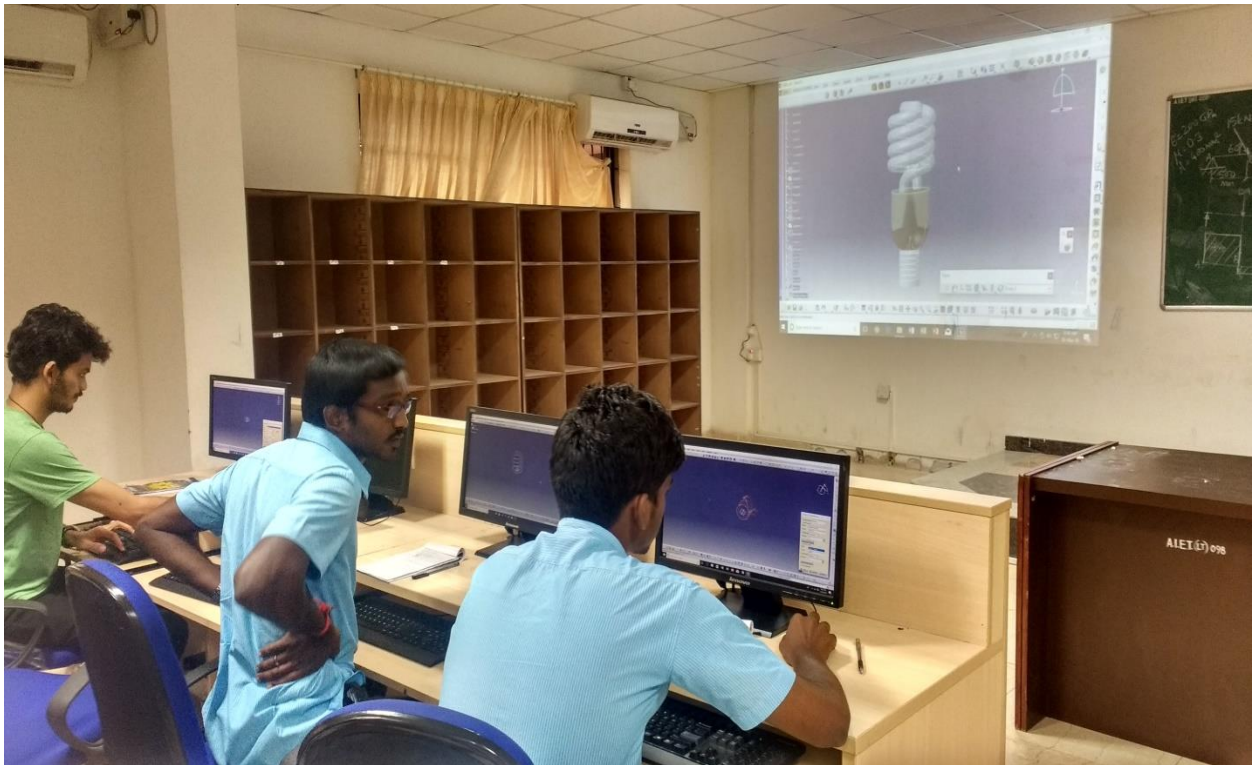
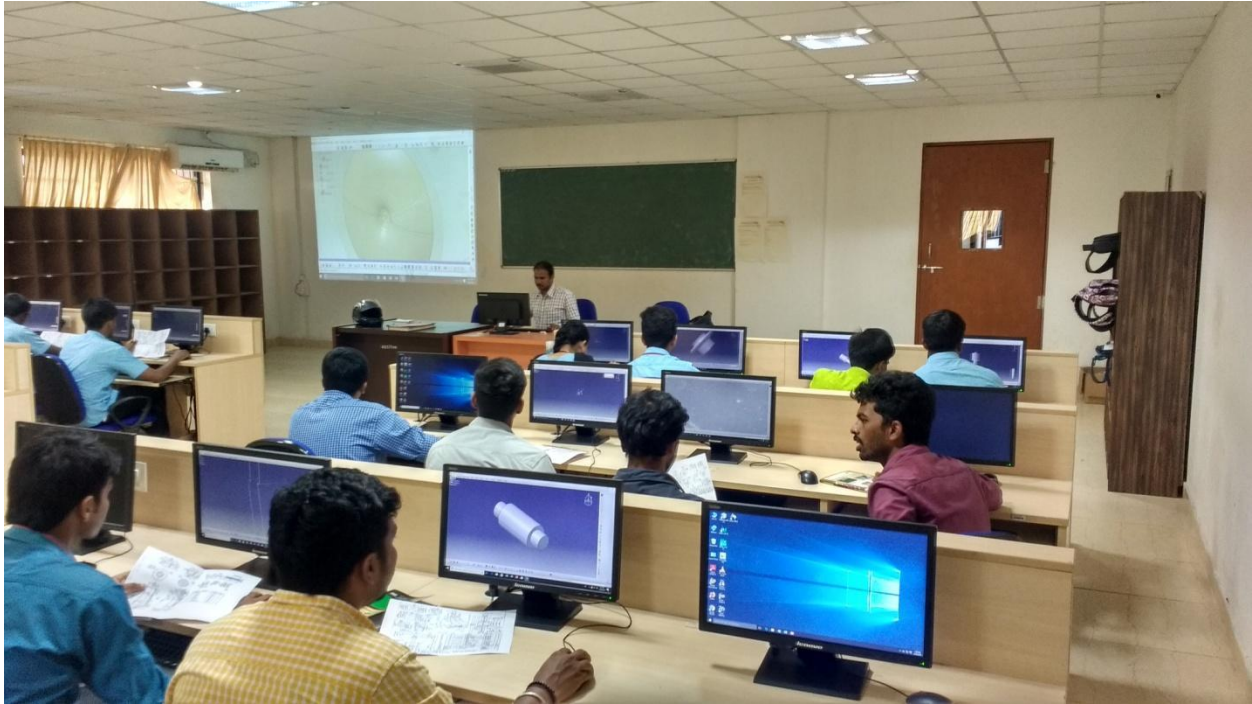
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<b>Catia Batch 2</b>		✓		✓		<b>27</b>

### Catia V6 Tentative Assessment Test schedule

1 <sup>st</sup> Assessment	2 <sup>nd</sup> Assessment	3 <sup>rd</sup> Assessment
Part Modeling and Assembly	Surface Modeling	Sheet Metal Modeling
05/10/2017	05/05/2018	4/05/2018
<b>Completed</b>	<b>Completed</b>	<b>Completed</b>

**Photo of students practicing**





# ALVA'S INSTITUTE OF ENGINEERING

MIJAR.

Class : CATEA 46

## ATTENDANCE CUM INTERNAL

Subject :  
No. of Classes held : 43

Sl. No.	U.S.N.	Name	Tests Max Marks					Average Marks	7/10	8/10	9/10	10/10	11/10	12/10	13/10	14/10	15/10	16/10	17/10	18/10	19/10	20/10
			I	II	III	IV	V															
1	14/019	Chethan H N																				
2	12/049	Maruthi H T																				
3	14/059	Naveen																				
4	14/065	Nagaraj Pojase																				
5	14/076	Rakesh J																				
6	14/090	Sharath Naik J																				
7	14/100	Srinivas N																				
8	15/018	Avin Ashok B.P	A <sup>+</sup>																			
9	15/026	Bharath B U	A																			
10	15/033	Girish Manish	A																			
11	15/036	Harsika R	A																			
12	15/042	Karthik K	A <sup>+</sup>																			
13	15/044	Kiran R H	A <sup>+</sup>																			
14	15/049	Maheesh	A																			
15	15/052	Manoj Kumar N S	A <sup>+</sup>																			
16	15/056	Moinuddin Sha	A																			
17	15/058	Muttappa B Kamati	A																			
18	15/062	Nikhil Y J	A <sup>+</sup>																			
19	15/063	Nithin Kumar N G	A																			
20	15/068	Pavan Kumar B C	A																			
21	15/067	Prashanth M	A <sup>+</sup>																			
22	15/071	Ravi Shirohi	B																			
23	15/072	Rohan N	B																			
24	15/079	Shridhar G C	AB																			
25	15/081	Sunil D R	A																			
26	15/082	Thippesha B N	B																			
27	14/104	Vasun Kumar	A																			
28	15/109	Balishmeeth	B																			
29	15/109	Ganesh V Naik	B																			

MOODBIDRI - 574 225

B1

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**AND TECHNOLOGY**  
MOODBIDRI - 574 225  
**ASSESSMENT STATEMENT**

B2

Class :  
Subject :

No. of Classes held :

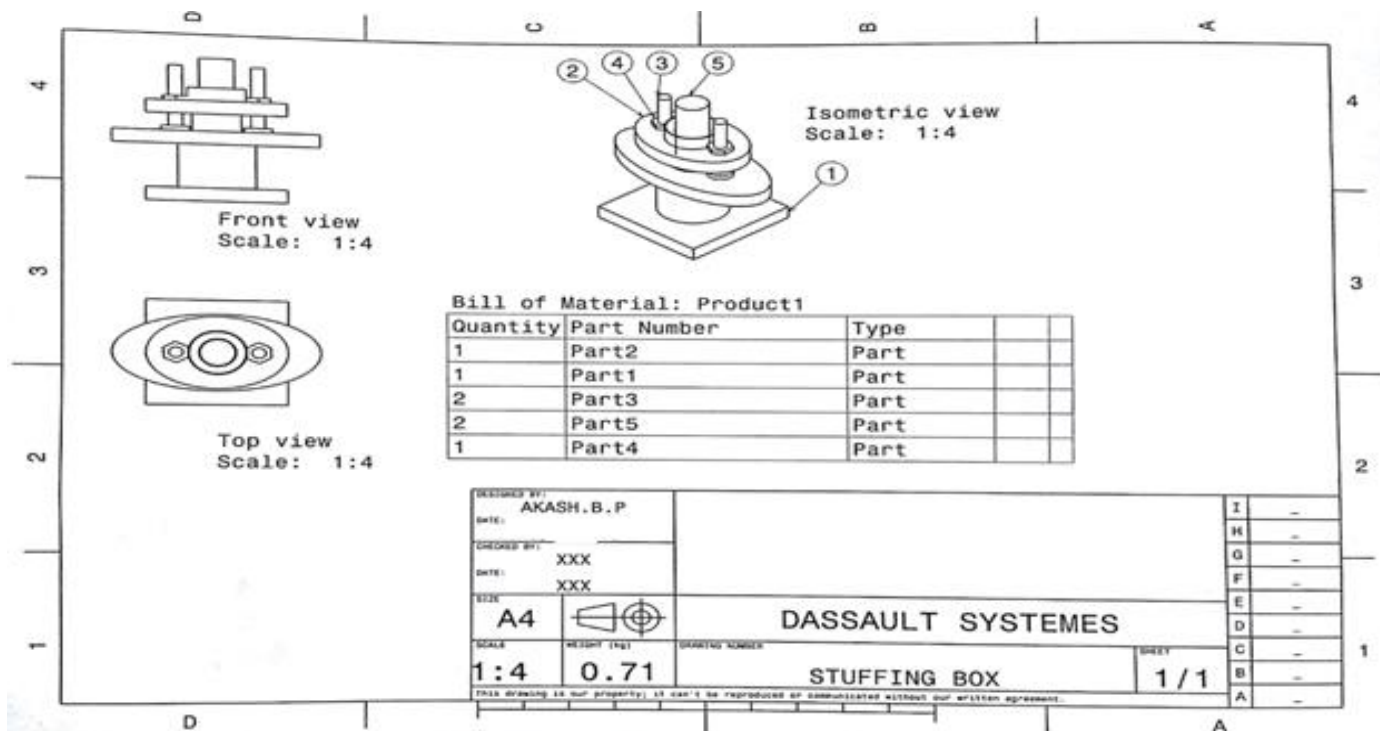
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1	141022	Dhanush R								
2	141032	Ishrahim K F								
3	141708	Vasun Gajendra S								
4	141709	Ganesh Naik								
5	141715	bakshemeste Arvin								
6	141720	Prasad								
7	141726	Ganesh Shetty D								
8	151083	Udit Manjekar	B							
9	151085	Veerendra S	B							
10	151089	Vinay S N	B							
11	151093	Vishal G K	A							
12	151094	Vishal N C	A+							
13	151096	Yashappa M K	A+							
14	151715	Jaidev K	A							
15	151720	Pavan V	B							
16	151723	Prasanna H S	A							
17	151724	Prathik P	A							
18	151725	Ravati R K	A+							
19	151736	Sumanee R Gowda	B							
20	161400	Adarsh J	B							
21	161404	Bhusaban D	B							
22	161408	Dharanvees B M	B							
23	161411	Girish R	A+							
24	161413	Hadeek B S	A+							
25	161414	Mahesudhan K	B							
26	161415	Mahalakhumi P D	B							
27	151033	Girish								
28										
Staff Initials										

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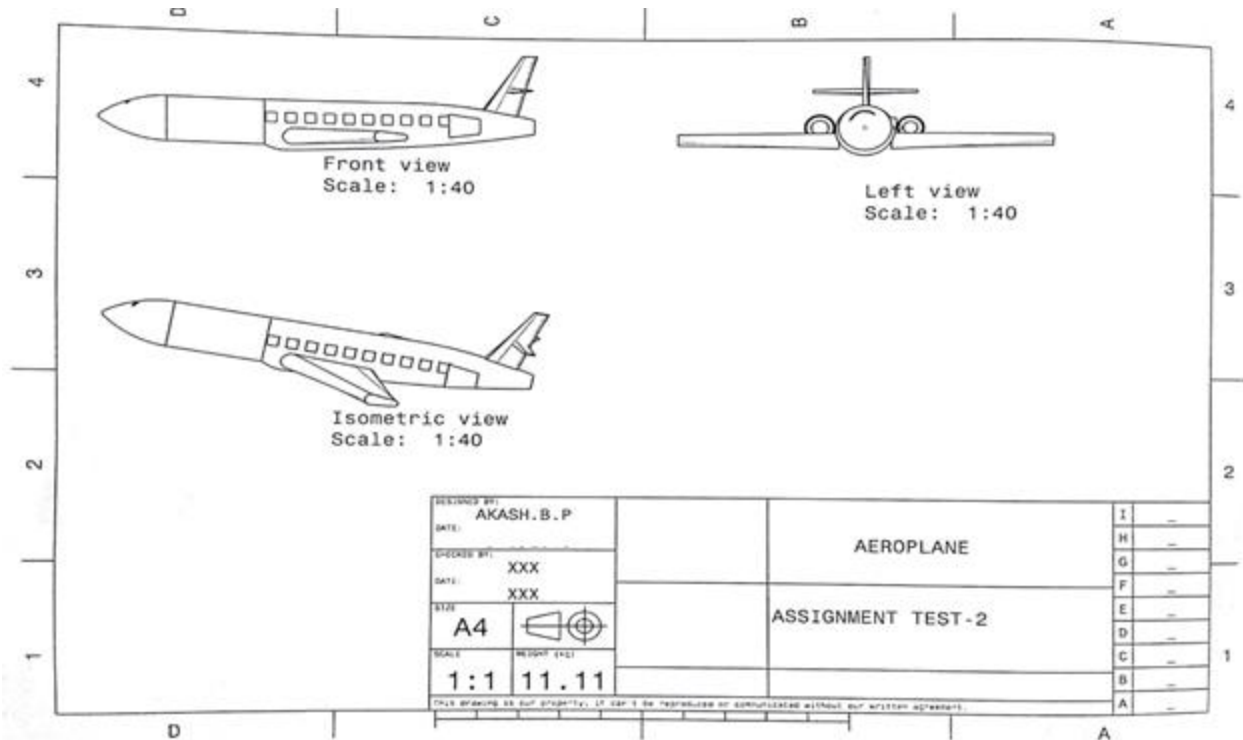
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## Assignment Test

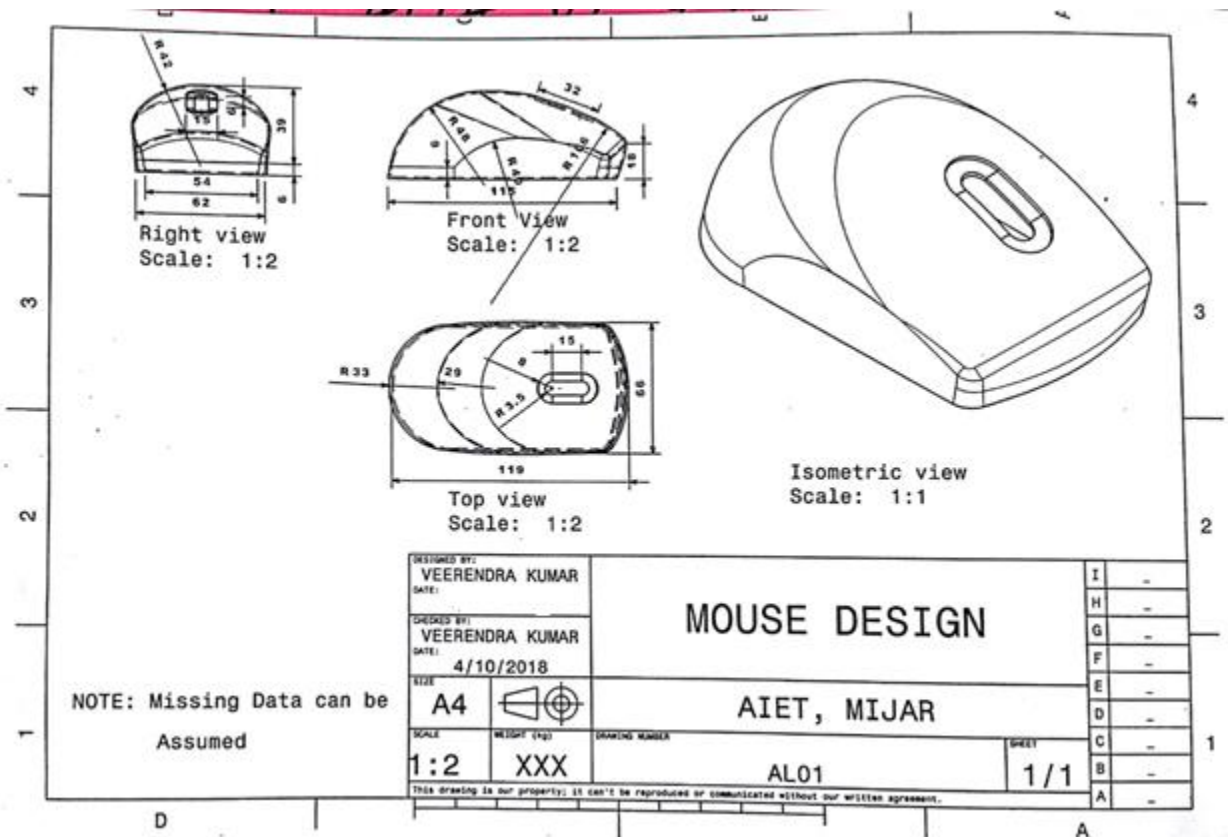
## Assignment test 1:



## Assignment test 2:



## Assignment test 3 :





Certificate Copy:



# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY



## Certificate

*This is to certify that*  
**Harsha R**  
*has successfully completed the training in*

**CATIA -V6**

*with **A** grade*  
*during the period of*  
**October 2017 to May 2018**

*(This certification prove the capability to work  
 with Catia V6 part design,  
 Assembly drawing, sheet metal, wire frame & surface design.)*

Program Coordinator  
 Prof. Kiran C.H

HOD, ME  
 Dr Harishanand K S

Principal  
 Dr Peter Fernandes

### Alva's Institute of Engineering & Technology

(A Unit of Alva's Education Foundation @, Moodbidri)  
 Shobhavana Campus, Mijar, Moodbidri – 574 225  
 (An ISO 9001:2008 Certified Institution, Affiliated to VTU, Belagavi,  
 Recognized by DTE, Govt. of Karnataka and Approved by AICTE, New Delhi)