**PART B**

**Aim of The Project**: Prepare Report on Embedded system

**Brief description**: -

* Embedded systems are everywhere in our lives, from TV remote control to the microwave, to control the central heating to the digital alarm clock next to our bed.
* They are in cars, washing machines, cameras, drones and toys. Complexity varies from low systems, with a single microcontroller chip, to very high systems with multiple units, peripherals and networks mounted inside a large equipment rack.
* The purpose of embedded system usage is a strategy to accomplish these aspects of the arrangements utilizing gadgets equipment and software engineering related ideas.
* These systems are generally connected with solutions for a specific issue or prerequisite. The usefulness of such frameworks can be handily recorded down and can be followed to unmistakable and brief genuine necessities.

**Aim** **of Micro-Project: -**

The Micro-Project Aims To: -

* Study the importance of embedded systems.
* Study various properties of embedded systems.
* Study functioning of embedded systems.
* Study different type of embedded system and it’s working.

**Course Outcome Integrated:**

1. Able to understand the general process & aspects of Embedded Systems
2. Able to understand different components of a micro-controller & their role
3. Be familiar with the basics of interfacing hardware and software.

**Actual Procedure Followed:**

1. **Group Formation: -** ETI is a subject that helps us to upgrade our knowledge regarding some important emerging trends in technology. The basic aim of micro- project is to accelerate the attainment of the various outcomes in the course. In the first 2 weeks of April the subject was introduced. The syllabus as well as details of micro-project were discussed. A group of 10 members was formed and the group leaders were selected. The schedule of plan “a”,” b” & “presentation of micro-project” were finalized. The various micro-project topics related to subject were discussed our guide gave us the opportunity to select the topic of our choice.
2. **Finalization of Micro-Project: -** After attending the lectures for 2 weeks. We selected the topic for micro-project. We discussed the topic with our guide regarding the concept which we are going to apply in the project. We individually tried to explain the basic platform of project.
3. **Planning: -** After finalization of the project we started working on the project. We started the planning phase. We discussed among ourselves regarding the resources such as testing material, software requirements, etc. In this week we completed ‘part a plan’ of the micro-project which is nothing but an initial description about the project. We submitted it to the guide.
4. **Module Distribution &Analysis Part: -** Once the planning was over regarding resources, etc. We finalized the module which we will be writing. According to members we distributed the modules. We started the analysis of project.
5. **Design Part: -** In this part we focused on designing the structure of the project. We planned to apply some formatting to give an attractive look to the structure.
6. **Implementation: -** In the week we actually started the technical phase. In this phase we technically applied the formatting as decided. Each member was designing project modules which were assigned to them. Finally, the project was within the schedule time.
7. **Presentation: -** In this week we had to present the micro-project. Each member of group presented their own parts with confidence in front of guide. She asked us various queries regarding the topics. We explained her about the various components of the project. She asked us to do some changes regarding some topics.
8. **Submission: -** This week was submission week. We submitted our project along with ‘part a & b plan’ to the guide. We also submitted the hard copies and soft copies of project to the guide

**Actual Resources Used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr No** | **Name of Resources Required** | **Specification** | **Quantity** | **Remarks** |
| 1 | Computer | **Processor-**Amd  **Hard Disk-**2 Tb  **Ram-**16gb  **Operating System-**Windows 10 Pro | 1  1  1  1 | Hardware used |
| 2 | Microsoft word | MS office 2010 | -- | Software used |

**References:**

We do have used a few references during the process of building our project. The references used are from Websites, Books etc.

The references used are:

* **Websites:**

1: www.sciencedirect.com

2: [www.en.wikipedia.org](http://www.en.wikipedia.org/wiki/Operating)

3: www.tutorialspoint.com

* **Reference Books:**

1: Exploring Arduino.

2: Computer organization and design.

**Skill Developed/Learning Out of This Micro Project:**

* Since we worked in a group, we developed the skill of ‘TEAMWORK’ in us.
* We learnt in brief about concept, purpose, architecture of embedded system.
* We learnt about the importance of embedded system in our daily life.