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***Request From Instrumentation Study Centre.***

*Dear Sir/Madam,*

*In connection with the study materials for our course, we request you to kindly suggest some experiments and other literatures which you find will be appropriate for the students. We will try to incorporate your suggestions. Please follow the given format in this regard.*

*Please also include your name and address, designation for our record. The following section may be useful as reference.*

*With best wishes,*

*Pallab Das*

*Instrumentation Study Centre*

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## **Course structure :**

Our main target is to help student to grow interest in electronic and instrumentation. We will follow the style of our presentation in three steps.

### **i. Know this technical world :**

:In this section we will discuss about the history of the technological development. By some slide show we will present a chronological development of technology. We will show from the beginning of the discovery of fire by the ancient people to the space craft invention by the present day scientist.

You are requested to select few websites/books etc for this purpose.

Suggested website and books, literatures
<a href="http://en.wikipedia.org/wiki/History_of_technology">http://en.wikipedia.org/wiki/History_of_technology</a>
<a href="http://www.britannica.com/EBchecked/topic/1350805/history-of-technology">http://www.britannica.com/EBchecked/topic/1350805/history-of-technology</a>
<a href="http://www.engr.sjsu.edu/pabacker/history/introduction.htm">http://www.engr.sjsu.edu/pabacker/history/introduction.htm</a>

### **ii. Get to know what the seniors are doing:**

:In this section we will try to simplify the working principle of some instruments. We will also tell the story of the major inventions and the inventors.

You are requested to select few websites/books etc for this purpose.

Suggested websites and other books and literatures
<a href="http://en.wikipedia.org/wiki/Timeline_of_scientific_discoveries">http://en.wikipedia.org/wiki/Timeline_of_scientific_discoveries</a>
<a href="http://www.sciencechannel.com/famous-scientists-discoveries/100-greatest-discoveries.htm">http://www.sciencechannel.com/famous-scientists-discoveries/100-greatest-discoveries.htm</a>
<a href="http://www.sciencechannel.com/famous-scientists-discoveries">http://www.sciencechannel.com/famous-scientists-discoveries</a>

### iii. Do and know by your self:

:In this section we will show them how they can also do something by themselves. This section comprises some experimental and theoretical study. You are requested to select few websites/books etc for this purpose.

#### Name of the experiments :

Sl. No.	Experiments	Instruments required	For whom applicable
1.	Solar cell	Two DMM, solar cell, light source with variable intensity	Class 4 -12
2.	Electromagnet	Insulated Copper wire, 3 X1.5 V Battery, One iron nail	Class 4 -10
3.	Optical fibre	Optical fibre, one photo detector, light source (LED), mounting arrangement	Class 4 -10
4.	<a href="http://www.buildcircuit.com/all-projects/basic-electronic-projects/">http://www.buildcircuit.com/all-projects/basic-electronic-projects/</a>		
5.	Simplest and cheapest FM transmitter	Not specified, Basic electronics lab	Above class X
6.	Remote control switch	Basic electronics lab	Class 8 and above

#### Theoretical study :

In this section we will discuss basic idea of electronics and instrumentation. Some literatures for kids electronics may also be included.

You are requested to select few websites/books etc for this purpose.

Suggested websites and other books and literatures
<a href="http://v5.books.elsevier.com/bookscat/samples/9780750676069/9780750676069.PDF">http://v5.books.elsevier.com/bookscat/samples/9780750676069/9780750676069.PDF</a>
<a href="http://images.wikia.com/thesharkproject/images/0/00/MakingThings-Electronics.pdf">http://images.wikia.com/thesharkproject/images/0/00/MakingThings-Electronics.pdf</a>
<a href="http://www.gutenberg.org/ebooks/16593">http://www.gutenberg.org/ebooks/16593</a>

You are requested to select few websites/books etc for this purpose.

We hope that our following approach may be useful for the students in this field. Anyone can get some idea of our work.

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**To issue certificates both for the teacher and students:**

The teacher should submit a report indicating the details of the students and also the number of classes taken, topic covered, name and number of experiments done for the students. With his report the assessment of the teacher should also be included.

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