Name of the faculty : Navenby Partap

Discipline : ECE

Semester :5 th

Subject : **CONSUMER ELECTRONICS**

Lesson plan Duration : 15 week

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| **Theory** | | |  | |
| **Week** | **Lecture Day** | **Topic**  **(Including Assignment test)** | **Practical** | **Topic** |
| 1st | 1 | Introduce Audio Systems: (08 hrs) | 1 | 1)To plot the frequency response of a Microphone |
|  | 2 | 1.1. Microphones and Loudspeakers | 2 |
|  | 3 | a) Carbon, moving coil, | 3 |
| 2nd | 4 | cordless microphone | 4 | 2. To plot the frequency response of a Loud Speaker |
|  | 5 | b) Direct radiating and | 5 |
|  | 6 | Horn loudspeaker | 6 |
| 3rd | 7 | c) Multi-speaker system | 7 | 3. Trouble shooting of CD/DVD Player |
|  | 8 | Introduce Sound Recording | 8 |
|  | 9 | a) Magnetic Recording | 9 |
| 4th | 10 | b) Digital Recording | 10 | 4. To observe the wave forms and measure voltage of B/W TV Receiver at different points. |
|  | 11 | Optical Recording ( CD system and DVD | 11 |
|  | 12 | Monochrome TV  a) Elements of TV communication system | 12 |
| 5th | 13 | b) Scanning and its need | 13 | 5. To observe the waveforms and measure voltages of colour TV Receiver at different points. |
|  | 14 | c) Need of synchronizing and blanking pulses, VSB | 14 |
|  | 15 | d) Composite Video Signal | 15 |
| 6th | 16 | e) Picture Tube  . | 16 | 6. Fault finding of colour T.V |
|  | 17 | Camera Tube : Vidicon and Plumbicon | 17 |
|  | 18 | g) TV Receiver: Block diagram, | 18 |
| 7th | 19 | function of each block, waveform at input and output of each block | 19 | 7. Demonstration and Operation of following.  (a) DTH System |
|  | 20 | Colour Television:  a) Primary, secondary colours | 20 |
|  | 21 | b) Concept of Mixing, Colour Triangle | 21 |
| 8th | 22 | c) Camera tube | 22 | c) Scanner |
|  | 23 | d) PAL TV Receiver | 23 |
|  | 24 | e) Concept of Compatibility with Monochrome Receiver | 24 |
| 9th | 25 | f) NTSC, PAL, SECAM system ( brief comparison) | 25 | Revise 1st Practical |
|  | 26 | LCD and LED Television: | 26 |
|  | 27 | Basic principle and working of LCD and LED TV | 27 |
| 10th | 28 | Cable Television: Working of Cable TV, | 28 | Revise 2nd Practical |
|  | 29 | DTH, HDTV (04 hrs) | 29 |
|  | 30 | Electronics Gadgets: Principle, Working and troubleshooting with special emphasis on control  panel | 30 |
| 11th | 31 | a) Scanner | 31 | Revise 3rd Practical |
|  | 32 | b) Digital Camera | 32 |
|  | 33 | c) VCD/DVD | 33 |
| 12th | 34 | Revision | 34 | Revise 4th Practical |
|  | 35 | Revision | 35 |
|  | 36 | Revision | 36 |
| 13th | 37 | Revision | 37 | Revise 5th Practical |
|  | 38 | Revision | 38 |
|  | 39 | Revision | 39 |
| 14th | 40 | Revision | 40 | Revise 6th Practical |
|  | 41 | Revision | 41 |
|  | 42 | Revision | 42 |
| 15th | 43 | Revision | 43 | Revise 7th Practical |
|  | 44 | Revision | 44 |
|  | 45 | Revision | 45 |