# **Mobile Handset Repair**

# **Duration: 30 Hours**

# Exam Marks: 50

### **Objectives:**

- This course is specially designed for any degree (B.Sc., BCA, B.Com and BA) students. The course is designed for 30 hrs of theory and 20 hrs of hands on. The students will have both theoretical as well as hands on experiments with the electronics.
- After learning this course a student will be able to
- Understand basic communication system.
- Understand the working of mobile communication system.
- Understand the working of mobile.
- Understand and recognize different components of a mobile.
- Trouble shoot the fault in the mobile.

#### Scope:

- At the end they will be able to repair the mobile.
- They can run their own repair shop.

Module I: Basics 8 Hours

- Basics of mobile communication and electronics.
- Study of Digital Electronics.
- ➤ Assembling & disassembling of different types of mobile phones.
- ➤ Use of various tools & instruments used in mobile phone repairing.
- Details of various components used in mobile phones.
- > Study of basic parts of mobile phones (mic, speaker, vibrator, LCD, antenna, etc).
- > Testing of various parts with multimeter.
- Use of jhatkamachine(DC Supply).

### Module II: Hardware

8 Hours

- Basic Circuit Board / Motherboard Introduction.
- ➤ Names of different BGA ICs.
- Work of different BGA and Glass ICs.
- ➤ How to recognise different ICs.
- ➤ Soldering &desoldering components using soldering iron.
- Soldering &desoldering components using rework station.
- Working on SMD / BGA ICs and the PCB.

# Module III: Troubleshooting & Advance Troubleshooting

8 Hours

- Fault finding & troubleshooting.
- > Steps of repairing hardware problems.
- Circuit tracing, jumpering techniques and solutions.
- > Troubleshooting through schematic diagrams.
- Repairing procedure for fixing other new hardware faults.
- Advanced troubleshooting techniques.

### **Module IV: Support Program**

6 Hours

- ► How to open and manage your own mobile repair shop.
- ➤ How to successfully work as a technician.
- Where to procure tools, spare parts and accessories.
- ➤ How to deal with customers and distributers.
- > Technical support guidance through us.

Various other technical support websites.	
ab Experiments:	20 hrs
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<ul> <li>Conduct the theory exam for 50 marks at the end of the course</li> </ul>	е.