

Mobile Repairing and Software Installation Technician

Class: B.Sc. - I

DURATION: Six Months

Mr. G. R. Attar

Department of Electronics

1. Title: **Mobile Repairing and Software Installation Technician**

2. Year of implementation: 2020

3. Structure of Skill Development Course:

Eligibility	Duration	Theory Hours	Practical Hours	Total Hours	Credits	No. of students in batch	NSQF Level
H.S.C Pass	6 Month	20	30	50	03	30	L4

4. Evaluation Structure:

Theory Marks			Practical Assessment			Project/Field Visit	Total
ISE	ESE	Total	Exam	Journal	Total	Submission+Viva Voice	100
10	30	40	30	10	40	20	

Syllabus

Learning Objectives:

1. To Factual Knowledge about mobile repairing Skill.
2. To Conceptual knowledge of Software Installation.

Theory Syllabus

Unit I: Mobile Phone Components Identification & Working (10)

Functional block diagram of Mobile Phone, Types of mobile phones, Battery, Charger, LCD and its types, Keypad, Connectors, Mic, Speaker, Antenna, PCB.

Unit II: Problems Findings and repairing techniques. (10)

Testing & Checking Active and Passive components by using electronic instruments, Installation of operating system, Add-on software's, and flashing software's, software problems and their solutions.

Learning Outcome:

At the end of this course, the students should be able to

1. Explain Architecture of Mobile Phone
2. Skill of finding the fault

Practical Syllabus

Objectives:

1. To study PCB of mobile phones.
2. To Understand and familiarize with use of DSO, Micro Iron, SMD Rework Machine, Hot Air-gun and Multimeter.
3. To study different jumper and display changing methods
4. To learn different mobile flashing techniques.

List of Experiments: Practical Training (30 hours)

- 1) Identification of section's on PCB
- 2) Checking of SMD component working on PCB.
- 3) Soldering & De-soldering Practice
- 4) Proper use of Micro Iron, SMD Rework Machine, Hot Air-gun, Etc.
- 5) Chip Component Removing & Replacing.
- 6) Jumper Practice. (Antenna Switch Jumper, Track Breakage Jumper, Display Cont. Jumper)
- 7) Display Changing Practice (Patta Displays)
- 8) Ribben & Patta changing Practice.
- 9) Driver IC changing Practice.
- 10) Study of Mobile flashing techniques.

Learning Outcomes:

After completion of the practical, Student are able to:

1. Identify active and passive electronic components on PCB of mobile phones.
2. Understand use of DSO, Micro Iron, SMD Rework Machine, Hot Air-gun and Multimeter
3. Analyse different jumper and display changing methods and apply different mobile flashing techniques.
4. Establish Self business.

Reference books:

1. Repair and Maintenance of Mobile Cell Phones, OAsis Home
2. Advance Mobile Repairing by Sanjib Pandit, BPB Publications, December 2010
3. Android & Windows Mobile Phone Repairing, BPB Publications
4. Mobile Phone Repair and Maintenance, Commonwealth of Learning, November, 2017

BOS Sub Committee:

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YCIS, Satara

Mr. S.D. Jadhav , Member
Assistant Professor, Department of Electronics,
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Expert

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