

# PERIYAR UNIVERSITY

SALEM – 636011



PERIYAR INSTITUTE OF DISTANCE EDUCATION  
(PRIDE)

## *DIPLOMA IN MOBILE PHONE SERVICING*



**REGULATIONS AND SYLLABUS**  
**(Effective from the Academic Year 2014 – 2015)**

**REGULATIONS**  
**DIPLOMA IN MOBILE PHONE SERVICING**  
**(Effective from the Academic Year 2014 – 2015)**

1. OBJECTIVE OF THE COURSE:

To impart knowledge in Wireless Communication and to provide basic conceptual skills in Mobile Phone servicing, skills to enable the aspiring students to exploit mobile phone servicing.

2. ELIGIBILITY FOR ADMISSION:

A candidate who has passed in **SSLC(or) HSC (or) UG (or) PG** courses.

3. DURATION OF THE COURSE:

One Year (1-year)

4. COURSE OF STUDY AND SCHEME OF EXAMINATIONS:

<b>S.No</b>	<b>Paper Code</b>	<b>Title of the Paper</b>	<b>Training Duration</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
1	DMS01	<b>Theory-1:</b> Wireless Communication	-	3 Hours	100
2	DMS02	<b>Theory-2:</b> Mobile Phone Fundamentals	-	3 Hours	100
3	DMS03	<b>Theory-3:</b> Mobile Phone Servicing	-	3 Hours	100
4	DMSTR01	<b>Inplant Training:</b> Mobile Phone Servicing	20-Days	-	100 (Inplant Training Report:40 Viva-Voce:60)

5. EXAMINATIONS:

A) The examination shall be three hours durations to each theory paper at the end of the year. The candidate failing in any subject(s) will be permitted to appear for each failed subject(s) in the subsequent examinations.

B) The students have to undergo the inplant training for the duration of 20 – days. The training centre should be the authorized service centre such as **Nokia, Samsung, Sony, LG ,Micromax, Microsoft, Apple and etc.**

After completion of inplant training (20-days ) ,students have to submit the inplant training report at the time of examination. The students should enclose the undergone training certificate (given by the authority of authorized service center) within the training report.

C) FORMAT OF CERTIFICATE :

Date:

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr/Miss/Mrs. (Name) ID.NO (REG.NO) a student of **DIPLOMA IN MOBILE PHONE SERVICING** from **PERIYAR INSTITUTE OF DISTANCE EDUCATION - 636011** has undergone the inplant training at \_\_\_\_\_ Division, from \_\_\_\_\_ to \_\_\_\_\_ (**20 DAYS**). During the training period his/her code and conduct were -----.  
We wish him/her all the best for his/her better future

Office seal

For **XXXXX**

**Authorized Signatory**

***The report shall be presented in the following manner:***

1.Certification 2.Index. 3. Introduction 4. Company background-organization and activities. 5. Scope and object of the study / personal observations. 6. Result / Inference / Conclusion. 7. Suggestions. 8. Acknowledgements. 9. List of reference .

***Guidelines for evaluation / assessment of the report:***

1. Introduction, Acknowledgements, references. 2. Company background activities. 3. Training areas / Training details. 4. General presentation, neatness and accuracy of the data furnished. 5. Report contents, with data, graphs, drawings, etc and observations. 6. Result / Reference / Conclusion.

**6. QUESTION PAPER PATTERN:**

Time: 3Hours

Maximum Marks: 100

PART A( 15 x 2 = 30Marks)

Answer ALL Questions(3 Questions from each unit)

PART B(5 x 5 = 25 Marks)

Answer ANY FIVE Questions

Any FIVE Questions Out Of 10(2 Questions from each unit)

PART C( 3 x 15 = 45 Marks)

Answer ANY THREE Questions out of 6)

( A minimum of one Questions from each unit)

**7. PASSING MINIMUM:**

A candidate shall be declared to have passed the examination, if they secure not less than **40 marks** in each examination.

**8. CLASSIFICATION OF SUCCESSFUL CANDIDATES:**

Successful candidates passing all the examinations securing the marks (i) 60% and above and (ii) 50% and above but below 60% in the aggregate of the marks prescribed for all subjects shall be declared to have passed the examination in **First class** and **Second class** respectively. All other successful candidates shall be declared to have passed in the examination in the **Third class**.

**9. COMMENCEMENT OF THE REGULATIONS:**

The above regulations shall take with effect from the academic year **2014 – 2015**.

<b>DMS01</b>	<b>Theory-1: Wireless Communication</b>	<b>3 HOURS</b>	<b>MAX.MARKS:100</b>
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#### UNIT - I

Overview of Analog, Digital, and Data Communications: History, Generation of cell phones, 1<sup>st</sup> Generation, 2<sup>nd</sup> Generation, 3<sup>rd</sup> Generation, 4<sup>th</sup> Generation, Mobile Frequencies – Cellular frequency band system – Frequency for Radio Transmission – Signals – Wave Propagation - Antennas.

#### UNIT - II

Cellular system- CDMA/ TDMA / FDMA System – EDGC – WCDMA – UMTS – GPRS Techniques.

#### UNIT – III

GSM System bands – Radio interface – Protocols- Handover – Security system- Bluetooth – Wi-Fi- Wi-Max.

#### UNIT – IV

Installation of: UFS Driver, UFS Suite & Flashing Files – IMEI Number Detection – Mobile GSM utility codes.

#### UNIT – V

Wireless Options- Mobile OS Introduction – OS Formatting-Computer Connections – SIM Card Reader – Memory Card Reader – Virus Prevention- Removing Virus.

#### **REFERENCE BOOKS:**

- 1.Mobile Communication- Jochen Schiller- Person Education Ltd.(UNIT I,II &III)
2. Modern Mobile Phone Repair: Using Computer Software and Service Devices- M. Lotia,Pradeep Nair- BPB Publications.( UNIT IV &V)
3. Mobile Computing Technology, Application And Service Creation –Asoke K-Talukder,Roopa R.Yavagal.

<b>DMS02</b>	<b>Theory-2: Mobile Phone Fundamentals</b>	<b>3 HOURS</b>	<b>MAX.MARKS:100</b>
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#### UNIT – I

Cell phone open Method-Screw Type- Lock Type- Screw with lock type- slider type- Flip top Mobile- Palmtop Mobile.

#### UNIT –II

Headphone hand free with mic- Double side hand free - Bluetooth hand free - memory card & Types: Memory card Readers - Single type - Multi card readers - Screen Guard.

#### UNIT – III

Inside Components: Display-LCD Display- TFT Display - STN Display - display Flex cable - Display Cleaners - Display Connectors - cell phone Inner Keypads - Cell phone Keypads – Joysticks - Internal Antenna.

#### UNIT – IV

Cell phone ICs: PF IC - RF IC - Network IC - Audio IC – CPU - Ram IC - ROM IC - UEM IC- Power IC - charging IC- FM IC - Bluetooth IC - camera IC - Keypad Light Controller IC- SIM card Control IC- Display Control IC.

#### UNIT – V

Mobiles camera Types: QCIF, QVGA, CIF, VGA, SVGA, XGA, SXGA, UXGA.

#### **REFERENCE BOOKS:**

- 1.Modern Mobile Phone Repair: Using Computer Software and Service Devices- M. Lotia,Pradeep Nair- BPB Publications.
2. Modern Mobile Phone Introduction & Servicing- Manahar Lotia - BPB Publications.

<b>DMS03</b>	<b>Theory-3: Mobile Phone Servicing</b>	<b>3 HOURS</b>	<b>MAX.MARKS:100</b>
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#### UNIT – I

Using Millimeter- soldering & De soldering Normal Resistor- Speaker testing Method- External Speaker- Buzzer Testing Method-Testing the Mic- Vibrator Motor Testing- battery Connectors Testing.

#### UNIT – II

Keypad LED- SMD LED types- LED Testing Method- Damaged LED Finding Method- MMC Port-Cracked Screw.

#### UNIT –III

Jumpering Tools- Audio Jumpering Ringer Jumpering- Vibrator Jumpering- Keypad Jumpering- display Jumpering- Keypad LED Jumpering, On-Off Switch –Jumpering.

#### UNIT – IV

Mobile Troubleshooting List: Ripped Keypads-Water Damages-.Power Problems-Network Problems-.Insert SIM Problems-Locking Problems-charging Problems.

#### UNIT –V

LED Problems-Display Problems-Ringer Problems-Incoming Voice Not hearing problems-Outgoing Voice not send -Auto shut off Problems-Camera Not Working Problems.

#### REFERENCE BOOKS:

1.Modern Mobile Phone Repair: Using Computer Software and Service Devices- M. Lotia,Pradeep Nair- BPB Publications.

<b>DMSTR01</b>	<b>Inplant Training: Mobile Phone Servicing</b>	<b>Duration : 20-Days</b>	<b>MAX.MARKS :100*</b> <b>(Inplant Training Report:40</b> <b>Viva-Voce:60)</b>
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**Focusing areas are:**

1. Parts and functions .
2. Peripherals and attachments .
3. Symptoms diagnosis and repair.
4. Trouble shooting hardware and software problems .
5. Assembly and disassembly .

**( \*The Inplant Training Report marks and Viva-Voce marks are awarded by the external examiner during the Viva-Voce examinations)**

**\*\*\*\*\*END\*\*\*\*\***