

SCHEDULE OPERATION, TESTING AND MAINTENANCE FOR PRIVATE AUTOMATIC BRANCH EXCHANGE

| Item | Description of Operation, Testing, Servicing and Maintenance | Frequency of Visit | | |
|---|---|--------------------|---------|------------|
| | | Daily | Monthly | Six Months |
| 1.0 ROOM | | | | |
| 1.1 | General cleaning Room, surrounding area, floor and ceiling surface to be cleaned. | | | X |
| 1.2 | General cleaning of all parts of PABX including equipment and accessories system. | | | X |
| 2.0 POWER SUPPLY | | | | |
| 2.1 | Make sure battery charger output should reading between -48 volts to 56 volts. | | | X |
| 2.2 | Make sure backup battery is 48 volts in total. | | | X |
| 2.3 | Make sure the LED is off except the lowest LED for power supply unit (card). | | | X |
| 2.4 | Check all connection and make sure all power cable is firmly tightened. | | | X |
| 2.5 | General cleaning. | | | X |
| 3.0 MAINTENANCE TERMINAL & ALARM | | | | |
| 3.1 | Turn off and turn on the computer to start up the maintenance terminal. | | | X |
| 3.2 | Check if the maintenance terminal displays the major alarm. Rectified the alarm, record and report. | | | X |
| 3.3 | Check if the maintenance terminal displays minor alarm. Rectified the alarm, record and report. | | | X |
| 3.4 | Check if the maintenance terminal displays silent alarm. Rectified the alarm, record and report. | | | X |
| 3.5 | Generate report for traffic class. | | | X |
| 3.6 | Check all connections and make sure all the cable and power cable is firmly tightened. | | | X |
| 4.0 CONTROLLED CARD | | | | |
| 4.1 | Check all the controller card is working in a good condition. Make sure only green LED is on. | | | X |
| 4.2 | Check all connections and make sure all the cable and power cable is firmly tightened. | | | X |
| 5.0 PERIPHERAL CARD | | | | |
| 5.1 | View circuit status for the extension card. Report and rectify if faulty. | | | X |
| 5.2 | View circuit status for the trunk card. Report and rectify if faulty. | | | X |
| 5.3 | View circuit status for digital card. Make sure only green LED is on. | | | X |
| 5.4 | Check all connections and make sure all the cable and power cable is firmly tightened. | | | X |
| 6.0 OPERATOR CONSOLES | | | | |
| 6.1 | Check circuit status for the operator consoles card. Report and rectify if faulty. | | | X |
| 6.2 | Check operator consoles and headset condition, Report and rectify if faulty. | | | X |
| 6.3 | Check all connections and make sure all the cable and power cable is firmly tighten. | | | X |

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| 7.0 SOFTWARE PACKING | | | | |
| 7.1 | Verify software version, record and report. | | | X |
| 8.0 TRUNK TEST | | | | |
| 8.1 | Test ISDN incoming dialing, record and report. | X | | |
| 8.2 | Test ISDN outgoing dialing, record and report. | X | | |
| 8.3 | Test ISG Trunk for outgoing to all UiTM campuses, rectify if nonfunctional, record and report. | X | | |
| 9.0 CALL BILLING SYSTEM | | | | |
| 9.1 | Test with call to make sure the system can capture and generate report. | X | | |
| 9.2 | Generate report as lists below: | | | |
| | a) The 25 most expensive call by extension per month. | | X | |
| | b) The 25 most longest call by call per month. | | X | |
| | c) Outgoing whole call analysis to the other 13 UiTM branches. | | X | |
| | d) Outgoing whole call analysis base to telecommunications service provider. | | X | |
| 9.3 | Check the tariff configuration, record and report. | | | X |
| 9.4 | Record and report the date and time when the Call Billing System fail to capture data from PABX. | X | | |
| 9.5 | To test network connection to the call billing server. The ping test must be done from the server itself. Ping test between Call Billing Server in UiTM Shah Alam to other UiTM Campuses. The response time must be less than 50ms. | X | | |
| 9.6 | Check all connections and make sure all the cable and power cable is firmly tightened. | | X | |
| 10.0 VOICE MAIL SYSTEM | | | | |
| 10.1 | Make sure the greeting is correct. | | | X |
| 10.2 | Make sure all the public holiday is setup accordingly. | | | X |
| 10.3 | VMS shall provide voice message from both the external and internal callers to unattended and busy extensions automatically. | | | X |
| 10.4 | Check all connections and make sure all the cable and power cable is firmly tightened. | | | X |
| 11.0 LIGHTNING PROTECTION SYSTEM | | | | |
| 11.1 | Check E1 data surge protection for extension. If found faulty replace, record and report. | | | X |
| 11.2 | Check all lightning protection equipment as below. If found faulty replace, record and report. | | | |
| | a) Lightning Current Arrestor and monitoring module – level 1. | | | X |
| | b) Lightning Voltage Arrestor and monitoring module – level 2. | | | X |
| | c) Series Surge Suppressor for DB. | | | X |
| | d) Series Surge Suppressor for modem, buffer, call billing, voice mail system and maintenance terminal. | | | X |
| | e) Data line surge protection for ISDN line. | | | X |

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| 12.0 EARTHING SYSTEM | | | | |
| 12.1 | Earthing Strip and Earthing chamber system inspected and rectified. | | | X |
| 12.2 | The Earthing value must below 1 ohm, record and report. | | | X |
| 13.0 TESTING FIBER OPTIC CABLE | | | | |
| 13.1 | Test all connection. Report the reading per fiber core. If found the connection is faulty or lost is high, repair the connection, record and report. | | | X |
| 14.0 SYSTEM BACKUP | | | | |
| 14.1 | Duplicate and store. | | X | |
| 15.0 INVENTORY | | | | |
| 15.1 | Inventory for the whole PABX systems including : a) Maintenance Terminal Systems. b) Call Billing Systems. c) Voice Mail Systems. d) Earthing and Lightning Protection Systems. e) Digital Phone and Operator Console. f) Battery Charger, UPS and Power Inverter. g) Multiplexer. | | | X X X X X X X |
| 16.0 REPORT | | | | |
| 16.1 | The contractor must prepare a report in the form of softcopy and hardcopy to UiTM. | | X | |
| 16.2 | Provide reports and records to UiTM as requested by Superintendent Officer (S.O) UiTM. | | X | |
| 16.3 | Inspect and submit a written report to the Superintendent Officer (S.O) upon the following : a) Condition of PABX room. b) Condition of PABX hardware. c) Condition of PABX software. d) Condition of Lightning Protection Systems. e) Details of any repairs required. | | X X X X X | |