Report

The Department of Computer Science conducted certificate course in **Computer Hardware –Troubleshoot and Maintenance** of 36 hours duration, from 11.11.2019. to 19.11.2019. The course enhanced student's technical knowledge and troubleshooting skills in configuration, operations and maintenance of PC systems. The course included theory along with hands-on training. The course was conducted by Mr. Brijesh Mandrekar. Total 10 students successfully completed the course and were awarded certificate of completion. The course was coordinated by Dr.Udaysingh Rane. Head Department of Computer Science.

Date : 25.11.2019

(Dr. Udaysingh Rane)

Head Department of Computer Science.

Dnyanprassarak Mandal's College And Research Centre ASSAGAO BARDEZ - GOA 403 507

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Department of Computer Science

CERTIFICATE COURSE IN COMPUTER HARDWARE TROUBLESHOOT & MAINTENANCE

Duration: 36 hours (Theory and hands on training) **Year: 2019 - 20**

Objective :This course expands the student's technical knowledge and troubleshooting skills in the configuration, operation and maintenance of PC systems.

Learning Outcome: On completion of the course students

Co1: will be able to diagnose various faults in computer hardware and its peripherals.
CO2: will be efficient in repairing computer system.
CO3: can efficiently assemble and disassemble the PC and its various parts.
CO4: will be able to install various operating systems and configurations.
CO5: will be able to install various device drivers, anti virus and other software.

COURSE CONTENT

1. COMPUTER HARDWARE

A. BASIC COMPUTER SYSTEM & PERIPHERALS:
Input and output devices, their types and configurations CPU, Memory devices - types - primary and secondary

B. MOTHERBOARD:
Study of Motherboard RAM, ROM, CMOS, POST, BUS (Address, Data, System) connection of various devices such as Display adapter, Ports(serial and parallel) & modem on the motherboard. Importance of CPU cooling, Motherboard troubleshooting.

C. INPUT DEVICES:
a. Keyboard - types of keyboard and their functioning
b. Mouse - types of mouse and their functioning

D. OUTPUT DEVICES:
a. Display unit- types of display unit - different technology used
b. Printers - types of printers - their functioning
c. Audio devices - types of audio devices

E. STORAGE DEVICES:
a. HDD: types of HDD and its configurations
b. Optical Devices: CD and DVD - their configurations
c. USB Devices: Different types of usb devices and its configurations

F. Assembling and disassembling of PC
Assembling and diassembling of various PC components

G. GENERAL TROUBLESHOOTING AND MAINTENANCE
Startup problems - how to identify and resolve. Display problems. How to check SMPS and its working. Maintenance of various components and peripherals.

H. INSTALLATION OF OPERATING SYSTEM AND OTHER SOFTWARES
Installation of various operation systems and softwares - Windows and Linux

I : VARIOUS BRANDS IN PC BUILDING
Various component and peripheral manufacturing brands

For details Contact: Dr. Udaysingh Rane, Head, Dept. of Computer Science

Dnyanprassarak Mandal's

College and Research Centre, Assagao, Bardez-Goa 403507

ATTENDANCE SHEET

(CertificateCourses)

Academic Year: 2019-2020
Department: Computer Science
Name of the Teacher: Brijesh A. Mandrekar
Name of the Course: Computer Hardware, Troubleshoot and Maintenance
Semester:

Sr. No.	Admission No.	Class & Div	Name of the Student	Date & Hours							
				11/11/19 9 to 1·30	12/11/19 9 to 1·30	13/11/19 9 to 1·30	14/11/19 9 to 1·30	15/11/19 9 to 1·30	16/11/19 9 to 1·30	18/11/19 9 to 1·30	19/11/19 9 to 1·30
1	1704006	T.Y.BCA	Hazarat Mohammad	P	P	P	P	P	P	P	P
2	1902004	F.Y.Bsc	Rutuja Gaonkar	P	P	P	P	P	P	P	P
3	1902101	F.Y.Bsc	Rutvik Sawant	P	P	P	P	P	P	P	P
4	1902099	F.Y.Bsc	Girish Naik Gaonkar	P	P	P	P	P	P	P	P
5	1902098	F.Y.Bsc	Anjali Zambaulikar	P	P	P	P	P	P	P	P
6	1901024	F.Y.Ba	Basamma Malgiti	P	P	P	P	P	P	P	P
7	1902094	F.Y.Bsc	Sarthak Behera	P	P	P	P	P	P	P	P
8	1902018	F.Y.Bsc	ShivaKumar Harijan	P	P	P	P	P	P	P	P
9	1801078	S.Y.Ba	Sagar Joshi	P	P	P	A	P	P	P	P
10	1801128	S.Y.Ba	Sainath Bagkar	P	P	P	A	P	P	P	P

Date: 19/11/19

Signature of the Teacher:

B.M.'S COLLEGE OF ARTS SCIENCE & COMMERCE * COMPUTER LAB. ASSAGAO

Signature of the HOD:

Dnyanprassarak Mandal's

College and Research Centre

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Certificate

This is to certify that **Mr. RUTVIK R. SAWANT**

completed a Certificate course of 36 hours duration on **'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE'** *organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.*

Date:

Dr. Udaysingh Rane
Head, Dept. of Computer Science

Dr. D. B. Arolkar
Principal

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This is to certify that **Mr. HAZRAT MOHAMMAD MANGAL**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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Head, Dept. of Computer Science

Dr. D. B. Arolkar
Principal

Date:

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This is to certify that **Ms. ANJALI ZAMBAULIKAR**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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This is to certify that **Mr. SAGAR V. JOSHI**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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This is to certify that **Ms. BASUMMA MALLAPPA MALGITI**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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This is to certify that **Mr. GIRISH V. NAIK GAONKAR**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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Dr. D. B. Arolkar
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This is to certify that **Mr. SHIVAKUMAR M. HARIJAN**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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This is to certify that **Mr. SARTHAK S. BEHERA**

completed a Certificate course of 36 hours duration on 'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE' organized by the Department of Computer Science of Dnyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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This is to certify that **Mr. SAINATH P. BAGKAR**

completed a Certificate course of 36 hours duration on **'COMPUTER HARDWARE, TROUBLESHOOT AND MAINTENANCE'** organized by the Department of Computer Science of Duyanprassarak Mandal's College and Research Centre from 11th November 2019 to 19th November 2019.

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Dr. Udaysingh Rane
Head, Dept. of Computer Science

Dr. D. B. Arolkar
Principal

Date: