



# SANT HIRDARAM GIRLS COLLEGE, BHOPAL

## Department of Computer Science

Session 2021-22

### Certificate Course on “**Hardware & Software**”

#### Course Objectives:

- This course provides foundational understanding of how computers process information through hardware and software.
- To train the officials to acquire basic knowledge in computer hardware and peripherals for installation, PC assembly, trouble shooting and maintenance including system management and its backup and to undertake disaster prevention.

#### Course Outcome:

- The student will be able to know the Basic of Computer assembling and trouble shooting.
- This course will provide the brief knowledge of Computer Hardware and Software.
- Students will learn about Design of basic computer.
- Student will become a System Administrator.

#### Course Module:

**SANT HIRDARAM GIRLS COLLEGE, BHOPAL**  
DEPARTMENT OF COMPUTER SCIENCE

Presents  
**CERTIFICATE COURSE**  
On  
**HARDWARE/SOFTWARE**

*Duration - 1 Month*  
*Fees - Rs. 1500/-*

**Registration Link - <https://forms.gle/NDDgNRSSddqDNu7S8>**

**Contact Details : +918839876742, +918109594054**

shgc.computerscience ComputerSociety2016 computerscience.shgc@gmail.com

1. Identifying PC Components internal.

- Microprocessor
- Power supply
- Motherboard
- Memory (Ram)
- SMPS

3. Working with a processor.

- Microcontroller
- Microprocessor
- Embedded Processor
- DSP and Media Processor

4. Working with memory.

- RAM  
DDR1, DDR2, DDR3, DDR4
- ROM  
PROM, EPROM, EEPROM

5. Working with power supply.

- ATX
- ATX 12V
- SFF (Small Form Factor)
- EPS12V

6. Working with a motherboard.

- CPU socket
- Memory slots
- SATA connector (Storage)
- Power connector
- Chipset
- Floppy connector
- IO Chip
- Rear fan connector
- Chassis fan connector
- IO connectors
- USB ports
- Audio connector

- IDE connector
- CMOS battery header
- PCI peripheral component interconnect slots
- Non-volatile memory (ROM) to hold the Boot program
- Clock generator to synchronize with components
- Expansion card slot

7. Working with a hard disk.

- SATA
- IDE

8. Identifying PC Components: Storage Devices (Hard disk).

- Secondary
- Primary
- Portable
- Cloud Storage

9. Working with floppy disks, CDs and DVDs.

10. Identifying PC Components: Display Card & Audio Card.

11. Working with BIOS and CMOS.

12. Identifying PC Components: PORTS.

13. Working with ports.

14. Working with keyboards and mice.

15. Working with printer & scanner.

16. Working with SCSI Device.

17. Working with video/Monitor.

18. Identifying PC Components: input and output Device.

19. Identifying PC Components: Networking Devices.

- Router
- Switch
- Hub
- Wired
- Wireless

20. Working with modem.
- What is Modulation?
  - What is Demodulation?
21. Working with device drivers.
- video
  - Sound
  - Printer
  - USB
  - Camera and many more
22. Working with system utility.
23. Operating System installation.
- Window 11, 10, 8.1, 7, XP
  - Linux Ubuntu, Kali
24. Troubleshooting.
25. Disassembling a PC
26. Assembling a PC
27. What is Software & its types.
- Application Software
  - System Software
  - Firmware
  - Programming Software
  - Driver Software
  - Freeware
  - Shareware
  - Open Source Software
  - Closed Source Software
  - Utility Software

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**Course Fee: Rs 1500/- (Per Student)**

**Duration of Course: 1 month**

**Completion of Course: 7 Feb 2022 - 7 March 2022**

## GLIMPSES OF CERTIFICATE COURSE



**Bhopal, Madhya Pradesh, India**

Unnamed Road, Behata, Bairagarh, Bhopal, Madhya Pradesh 462030, India

Lat 23.26587°

Long 77.346371°

07/03/22 02:45 PM

## कम्प्यूटर सॉफ्टवेयर एवं हार्डवेयर सर्टिफिकेट कोर्स का समापन

भोपाल ( हिनप्र )। संत हिरदाराम कन्या महाविद्यालय के कम्प्यूटर साइंस विभाग के कम्प्यूटर सॉफ्टवेयर एवं हार्डवेयर विषय पर सर्टिफिकेट कोर्स का समापन हुआ। मासिक प्रशिक्षण अवधि वाली इस कार्यशाला में विषय विशेषज्ञ के रूप में विवेक शर्मा, सीईओ, यूनीसन इन्फोटेक, भोपाल उपस्थित थे।

इस अवसर पर महाविद्यालय की प्राचार्य डॉ. डालिमा पारवानी ने कहा कि वर्तमान समय सूचना प्रौद्योगिकी का है। सभी छात्राओं को कम्प्यूटर का आधारभूत ज्ञान होना आवश्यक है जिससे कि भविष्य में आने वाली कुछ भौतिक समस्याओं का निदान छात्राएं स्वयं कर सकें।

कार्यशाला के मुख्य प्रशिक्षक विवेक शर्मा ने कहा कि महाविद्यालय छात्राओं के हित में इस प्रकार के आयोजन निरंतर करता रहता है। आपने प्रशिक्षण अवधि में रैम, रोम, केश मेमोरी, प्रोसेसर, एसएमपीएस, हार्ड डिस्क, मदर बोर्ड, सीपीयू, असेम्बलिंग एवं डिसेम्बलिंग एवं सीएमओएस बैटरी को प्रायोगिक ज्ञान से समझाया।

