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**MSPM’S**

**Deogiri Institute of Engineering and Management Studies, Aurangabad**

**Department of Basic Science and Humanities**

Report on

Lenovo ideapad 520

Submitted By

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Under the Guidance of

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2018-2019



CERTIFICATE

This is to Certify that **Vaibhav Sathe (26076)** has successfully Completed his Report on date 29/8/2019.

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**Subject Teacher H.O.D. Director**

Lenovo Ideapad 520 (81BF00AVIN) Laptop (Core I5 8th Gen/8 GB/2 TB/Windows 10/4 GB) Specifications

Summary

PRICE IN INDIA₹ 82,500

DISPLAY15.6" (39.62 cm) display, 1920 x 1080 px

STORAGE2 TB HDD

PROCESSOR Intel Core i5 (8th Gen) Processor

RAM8 GB DDR4 RAM

LAUNCH DATE IN INDIA

Multimedia

SECONDARY CAM REAR FACING No

MICROPHONE TYPE Dual Array Digital Microphone

INBUILT MICROPHONE Yes

WEBCAM Yes

SPEAKERS Stereo Speakers

VIDEO RECORDING720p HD

Performance

GRAPHICS MEMORY4 GB

CLOCKSPEED1.6 Ghz

GRAPHIC PROCESSORNVIDIA GeForce MX150

PROCESSOR Intel Core i5-8250U (8th Gen)

Memory

MEMORY LAYOUT1 x 8 Gigabyte

EXPANDABLE MEMORY16 GB

RAM TYPEDDR4

MEMORY SLOTS1

RAM SPEED2133 Mhz

CAPACITY8 GB

Display Details

DISPLAY TYPELED

DISPLAY RESOLUTION1920 x 1080 Pixels

DISPLAY TOUCHSCREEN No

DISPLAY FEATURESFHD IPS Anti-Glare WLED-Backlit Display

DISPLAY SIZE15.6 Inches (39.62 cm)

Peripherals

DRIVE TYPEDVD Writer

KEYBOARD Standard Notebook Keyboard

POINTING DEVICE Touchpad with Multi-touch Gesture Support

OPTICAL DRIVE Super Multi DVD R/W Writer

FINGERPRINT SCANNER Yes

General Information

DIMENSIONSWXHXDx x  mm

OPERATING SYSTEM TYPE64-bit

WEIGHT2.2 Kg

OPERATING SYSTEM Windows 10 Home Basic

MODEL520 (81BF00AVIN)

BRAND Lenovo

COLORS Golden

Networking

WIRELESS LAN802.11 a/b/g/n/ac

BLUETOOTH Yes

BLUETOOTH VERSION4.1

Storage

HDD SPEEDRPM5400 RPM

HDD CAPACITY2 TB

HDD TYPESATA

Battery

POWER SUPPLY35 W AC Adapter W

BATTERY CELL2 Cell

BATTERY TypeLi-Ion

Ports

SD CARD READER Yes

VGA PORT Yes

USB 3.0 SLOTS2

HEADPHONE JACK Yes

MICROPHONE JACK Yes

Others

SALES PACKAGE Laptop, Battery, AC Adapter, User Guide

LOCKPORT No

WARRANTY1 Year

Ideapad 520-

Meet the Idea Pad 520. Featuring top-of-the-line processing and advanced graphics options, this 15” laptop is designed to impress. A step up from the Idea Pad 320, the Idea Pad 520 is finished in premium metal and offers Harman Speakers optimized with Dolby® Audio. A blend of style and substance, just like you.. From appearance to performance, everything about this laptop is exceptional. Its quality shows, inside and out. A remarkable laptop should have a remarkable look and feel, and this one is no exception. The Idea Pad 520 features a redesigned chassis with angled edges and metal surfaces, for a contemporary take on classic style. Available in three sophisticated tone-on-tone options with a soft-touch finish: Iron Grey, Gold, or Bronze. We also redesigned the touchpad, for a better user experience with multi-finger gestures. Touch, click and zoom - you’ll feel the difference.. The Idea Pad 520 offers advanced graphics performance, with up to NVIDIA® GeForce® MX150. A dedicated graphics card relies on its own processor, accelerating graphics performance by more than 3 times. Play games, edit video and more - with reduced screen tearing and advanced photo and video-editing performance.. The Idea Pad 520 brings you Windows 10 Home, featuring a host of exciting new features. Need a party playlist? Ask Cortana - your very own digital personal assistant. Cortana works with more than a thousand apps and services to ensure you’ll always have the answers you need. Best of all, it works across all your Windows 10 devices to keep you organized. The Idea Pad 520 offers up to Full High Definition resolution, with wide-angle IPS antiglare technology. Whether you’re lounging on the couch or want to watch with a friend, you’ll get the absolute most of your entertainment from any angle. The Idea Pad 520 offers a boost from the sound of the Idea Pad 320. Now featuring Harman Speakers with Dolby® Audio, you’ll experience crystal-clear audio with minimal distortion at any volume. Stream a playlist or tune into a conference call - you’ll hear every detail.

SEE LESS

Features & details

Processor: 8th Gen Intel I7-8550U

Operating System: Preloaded Windows 10 Home with lifetime validity

Display: 15.6 - inch Full HD (1920 x 1080) IPS Anti Glare display

Memory and Storage: 8GB DDR4 RAM with Nvidia GeForce MX150 (4G GDDR5) Graphics | Storage: 2TB HDD

Backlit keyboard | Laptop weight: 2.2kg | Battery backup: upto 6 hours | Rapid Charge: upto 2 hours battery life in 15 min charging - when turned off

This genuine Lenovo Laptop comes with 1 year onsite domestic warranty from Lenovo covering manufacturing defects and not covering physical damage. For more details, see Warranty section

Product information

Brand Lenovo Manufacturer Lenovo Series ideapad 520ColourBronzeItem Height22 Millimeters Item Width26 Centimeters Screen Size15.6 Inches Maximum Display Resolution1920x1080Product Dimensions37.8 x 26 x 2.2 cmItem model number81BF00KMINProcessor Brand Intel Processor TypeCore i7 8550URAM Size8 GB Memory TechnologyDDR4Hard Drive Size2 TBHard Disk Technology Mechanical Hard l Description Harman speakers, Dolby Audio Graphics Coprocessor NVIDIA GEFORCE MX150 (4G GDDR5)Graphics Card Ram Size4 GB Number of USB 3.0 Ports2Number of HDMI Ports1Number of Audio-out Ports1Number of Ethernet Ports1Number of Microphone Ports1Operating System Windows 10 Home Lithium Battery Energy Content35 Watt Hours Lithium battery Weight0.85 Grams Number of Lithium Ion Cells2Included Components Laptop, Adapter and User Guide

Additional Information

ASIN: B07H2DY5HS

Customer Reviews: 3.4 out of 5 stars 6Reviews

Best Sellers Rank: 43268

Date First Available: 3 Sep 2018

Warranty & Support

Warranty Details: 1 year manufacturer warranty on the device and 6 months manufacturer warranty on included accessories from the date of purchase

Features and Performance-

Get Unprecedented Power and Responsiveness

Now everyday computer tasks can happen faster. Edit photos and videos seamlessly. Move between programs and windows quickly. Multitask easily. Better still, all that performance comes with up to 10 hours of battery life1 2, so you can take your computer wherever you go without worrying about cords and plug points.

Make Your Computer an Entertainment Center

Get an amazing entertainment hub—stream 4K UHD videos, power virtual reality, and play the most demanding games. With 4x more pixels on screen than traditional HD, you can enjoy sharp, lifelike visuals, complex shading, and fast frame rates—all with virtually no stuttering, buffering, or lags. And be ready for revolutionary immersive experiences yet to come.

Easy to Use, Hard to Break Into

Built-in security3 adds a critical layer of protection to make password logons, browsing, and online payments safe3 and simple. You can log on with a look, your voice, or your fingerprint for rock-solid security3 that’s fast and hassle free. Store passwords, personal information, and auto-fill information with one master password. Plus touch screen, voice commands, and stylus options offer natural and intuitive interactions.

Technical Specifications-

Essentials

Vertical Segment

Mobile

Processor Number

i5-8250U

Status

Launched

Launch Date

Q3'17

Lithography

14 nm

Performance

# of Cores

4

# of Threads

8

Processor Base Frequency

1.60 GHz

Max Turbo Frequency

3.40 GHz

Cache

6 MB Intel® Smart Cache

Bus Speed

4 GT/s OPI

TDP

15 W

Configurable TDP-up Frequency

1.80 GHz

Configurable TDP-up

25 W

Configurable TDP-down Frequency

800 MHz

Configurable TDP-down

10 W

Supplemental Information

Embedded Options Available

No

Memory Specifications

Max Memory Size (dependent on memory type)

32 GB

Memory Types

DDR4-2400, LPDDR3-2133

Max # of Memory Channels 2

Max Memory Bandwidth

37.5 GB/s

ECC Memory Supported ‡

No

Graphics Specifications

Processor Graphics ‡

Intel® UHD Graphics 620

Graphics Base Frequency

300 MHz

Graphics Max Dynamic Frequency

1.10 GHz

Graphics Video Max Memory

32 GB

Graphics Output

eDP/DP/HDMI/DVI

4K Support

Yes, at 60Hz

Max Resolution (HDMI 1.4)‡

4096x2304@24Hz

Max Resolution (DP)‡

4096x2304@60Hz

Max Resolution (eDP - Integrated Flat Panel)‡

4096x2304@60Hz

DirectX\* Support

12

OpenGL\* Support

4.4

Intel® Quick Sync Video

Yes

Intel® Clear Video HD Technology

Yes

Intel® Clear Video Technology

Yes

# of Displays Supported ‡

3

Device ID

0x5917

Expansion Options

PCI Express Revision

3.0

PCI Express Configurations ‡

1x4, 2x2, 1x2+2x1 and 4x1

Max # of PCI Express Lanes

12

Package Specifications

Sockets Supported

FC-BGA1356

Max CPU Configuration

1

TJUNCTION

100°C

Package Size

42mm X 24mm

Low Halogen Options Available

See MDDS

Advanced Technologies

Intel® Optane™ Memory Supported ‡

Yes

Intel® Speed Shift Technology

Yes

Intel® Turbo Boost Technology ‡

2.0

Intel® vPro™ Platform Eligibility ‡

No

Intel® Hyper-Threading Technology ‡

Yes

Intel® Virtualization Technology (VT-x) ‡

Yes

Intel® Virtualization Technology for Directed I/O (VT-d) ‡

Yes

Intel® VT-x with Extended Page Tables (EPT) ‡

Yes

Intel® TSX-NI

No

Intel® 64 ‡

Yes

Instruction Set

64-bit

Instruction Set Extensions

Intel® SSE4.1, Intel® SSE4.2, Intel® AVX2

Intel® My WiFi Technology

Yes

Idle States

Yes

Enhanced Intel SpeedStep® Technology

Yes

Thermal Monitoring Technologies

Yes

Intel® Flex Memory Access

Yes

Intel® Identity Protection Technology ‡

Yes

Intel® Stable Image Platform Program (SIPP)

No

Intel® Smart Response Technology

Yes

Security & Reliability

Intel® AES New Instructions

Yes

Secure Key

Yes

Intel® Software Guard Extensions (Intel® SGX)

Yes with Intel® ME

Intel® OS Guard

Yes

Intel® Trusted Execution Technology ‡

No

Execute Disable Bit ‡

Yes