



COVERT & OVERT SECURITY FEATURES IN GENUINE INDIAN BANK NOTES - IT'S LEGAL & FORENSIC PERSPECTIVE

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ABSTRACT:

Counterfeit currencies (Fake Indian Currency Notes) are those currencies which are produced and used without a permission of concerned legal authorities. To ensure that counterfeiting may not happen in a routine manner, Reserve Bank of India has incorporated many security features to differentiate a genuine bank note from the counterfeit one. Both sides, front side known as the 'Obverse Side' and back side known as the 'Reverse Side' of genuine bank note are printed simultaneously and having numerous i.e. 'Overt', level 1 security features and 'Covert', level 2 security features to check the genuineness of bank notes. The 'Overt' security features can be seen through naked eyes (visible rays) and 'Covert' security features can be seen through other light sources (UV or IR rays). After the implementation of 'Bhartiya Nyaya Sanhita' in year 2024, the legal provisions pertaining to the counterfeiting have incorporated under the BNS, section 178 to 182.

Keywords: BNS, Overt, Covert, Obverse, Reverse, VSC.

I. INTRODUCTION:

The new design of Mahatma Gandhi Series Indian bank notes are distinctly different from the Mahatma Gandhi Series of Indian bank notes in colour, size and theme. The theme of the new series notes is India's heritage sites. A few new other elements added in these notes are numerals in 'Devnagari' and the logo of 'Swachh Bharat'. The new notes also have design elements in myriad and intricate forms and shapes. While the security features in the current series of bank notes, such as water mark, security thread, latent image of denomination numeral, denomination numeral in colour shifting ink, number panels, see through register, electro-type, bleed lines, etc., continue to remain, and their relative positions have been changed in the new design notes.

The offences related to currency notes/ bank notes are now mentioned in the Bhartiya Nyaya Sanhita (BNS) after its implementation w.e.f. 1st July 2024. Section 178 to 182, Chapter X of BNS deals with the offences pertaining to both currency and bank notes, which are mentioned below;

178. [Counterfeiting coin, Government stamps, currency-notes or bank-notes]

Whoever counterfeits, or knowingly performs any part of the process of counterfeiting, any coin, stamp issued by Government for the purpose of revenue, currency-note or bank-note, shall be punished with imprisonment for life, or with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine.

Explanation- For the purposes of this Chapter- (1) the expression “bank-note” means a promissory note or engagement for the payment of money to bearer on demand issued by any person carrying on the business of banking in any part of the world, or issued by or under the authority of any State or Sovereign Power, and intended to be used as equivalent to, or as a substitute for money.

179. [Using as genuine, forged or counterfeit coin, Government stamp, currency-notes or bank-notes]

Whoever imports or exports, or sells or delivers to, or buys or receives from, any other person, or otherwise traffics or uses as genuine, any forged or counterfeit coin, stamp, currency-note or bank-note, knowing or having reason to believe the same to be forged or counterfeit, shall be punished with imprisonment for life, or with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine.

180. [Possession of forged or counterfeit coin, Government stamp, currency-notes or bank-notes]

Whoever has in his possession any forged or counterfeit coin, stamp, currency-note or bank-note, knowing or having reason to believe the same to be forged or counterfeit and intending to use the same as genuine or that it may be used as genuine, shall be punished with imprisonment of either description for a term which may extend to seven years, or with fine, or with both.

Explanation- If a person establishes the possession of the forged or counterfeit coin, stamp, currency-note or bank-note to be from a lawful source, it shall not constitute an offence under this section.

181. [Making or possessing instruments or materials for forging or counterfeiting coin, Government stamp, currency-notes or bank-notes]

Whoever makes or mends, or performs any part of the process of making or mending, or buys or sells or disposes of, or has in his possession, any machinery, die, or instrument or material for the purpose of being used, or knowing or having reason to believe that it is intended to be used, for forging or counterfeiting any coin, stamp issued by Government for the purpose of revenue, currency-note or bank-note, shall be punished with imprisonment for life, or with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine.

182. [Making or using documents resembling currency-notes or bank-notes]

(1) Whoever makes, or causes to be made, or uses for any purpose whatsoever, or delivers to any person, any document purporting to be, or in any way resembling, or so nearly resembling as to be calculated to deceive, any currency-note or bank-note shall be punished with fine which may extend to three hundred rupees.

(2) If any person, whose name appears on a document the making of which is an offence under sub-section (1), refuses, without lawful excuse, to disclose to a police officer on being so required the name and address of the person by whom it was printed or otherwise made, he shall be punished with fine which may extend to six hundred rupees.

(3) Where the name of any person appears on any document in respect of which any person is charged with an offence under sub-section (1) or on any other document used or distributed in connection with that document it may, until the contrary is proved, be presumed that the person caused the document to be made.

Counterfeiting of currency-notes, bank-notes comes under “economic offence”. **[Organized crime, 111, BNS]** Whoever does any act with the intent to threaten or likely to threaten the unity, integrity, sovereignty, security, or economic security of India or with the intent to strike terror or likely to strike terror in the people or any section of the people in India or in any foreign country,- damage to, the monetary stability of India by way of production or smuggling or circulation of counterfeit Indian paper currency, coin or of any other material. “Counterfeit Indian currency” means the counterfeit currency as may be declared after examination by an authorised or notified forensic authority that such currency imitates or compromises with the key security features of Indian currency. **[Terrorist Act, 113 (A) (iv), BNS]**

The other term used for counterfeit currency note is Fake Indian Currency Note (FICN). The Directorate of Revenue Intelligence (DRI), the local police and the Central Bureau of Investigation (CBI) register offences related to FICN, under sections 489A to 489E of the IPC (presently under 178 to 182 of the BNS) and the UA(P) Act, 1967, as amended, for investigation.

As per **Amendments, 2013 under the UA(P) Act, 1967**, pertaining to criminalising Terror Financing linked with High Quality Counterfeit Indian Currency Notes. “High quality counterfeit Indian currency” means the counterfeit currency as may be declared after examination by an authorised or notified forensic authority that such currency imitates or compromises with the key security features as specified in the Third Schedule (amended by the Central Govt. vide Notification GSR 231 (E), dated 18.03.2014). These ‘SECURITY FEATURES’ mentioned below define ‘HIGH QUALITY COUNTERFEIT INDIAN CURRENCY NOTES’.

Watermark(s), Security thread and any one of the following features:

- (a) Latent image;
- (b) See through registration;
- (c) Print quality sharpness;
- (d) Raised effect;
- (e) Fluorescent characteristics;
- (f) Substrate quality;
- (g) Paper taggant;
- (h) Colour shift effect in OVI;
- (i) Colour shift effect in security thread.

II. OVERT SECURITY FEATURES IN INDIAN BANK NOTES:

Overt security features are security measures that are easily recognizable by the public. Overt security features are used to authenticate bank-notes visually, without the need for special equipment or training. Overt security features are level 1 security features, while covert security features are level 2 security features.

- (I) OVERT SECURITY FEATURES OF RS. 500:** The new ₹500 notes in the Mahatma Gandhi (New) Series are different from the present series in colour, size, theme, location of security features and design elements. The size of the new note is 66mm x 150mm. The colour of the notes is stone grey and the predominant new theme is Indian heritage site - Red Fort.

Total 18 features of Rs. 500 denomination bank note are mentioned by RBI to check authenticity of its genuineness as mentioned below;

1. See Through Register in denominational numeral
2. Latent image of the denominational numeral
3. Denominational numeral in Devnagari on left
4. Orientation and relative position of Mahatma Gandhi portrait
5. Micro letters
6. Windowed security thread (in colour changing ink)
7. Guarantee clause with Governor Signature
8. Mahatma Gandhi portrait and Electrotpe (500) watermarks
9. Number panel in two locations
10. Denomination with numeral with rupees symbol (in colour changing ink)
11. Ashoka pillar emblem
12. Intaglio/ raised printing on various locations for visually impaired persons
13. 5 bleed lines on left and right in raised print
14. Year of printing of the note
15. Swachh Bharat logo with slogan
16. Language panel
17. Red Fort (an image of Indian heritage site)
18. Denominational numeral in Devnagari on right



Fig 1: Obverse side of Rs. 500 denomination Indian bank note

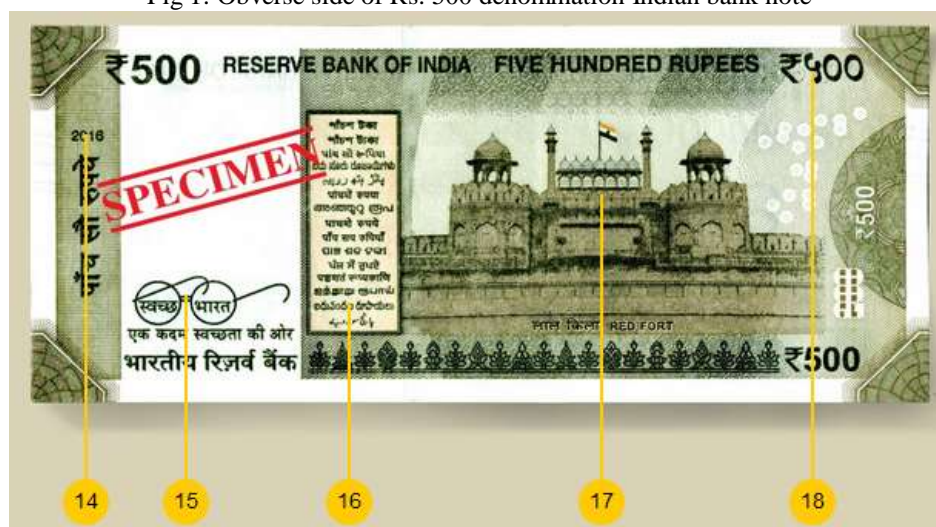


Fig 2: Reverse side of Rs. 500 denomination Indian bank note

- (II) **OVERT SECURITY FEATURES OF RS. 200:** The new ₹200 denomination banknotes in the Mahatma Gandhi (New) Series bear signature of the Governor, Reserve Bank of India. The note has motif of 'Sanchi Stupa' on the reverse, depicting the country's cultural heritage. The base colour of the note is bright yellow. The note has other designs, geometric patterns aligning with the overall colour scheme, both at sides. The size of the new note is 66mm x 146mm.

Total 17 features of Rs. 200 denomination bank note are mentioned by RBI to check authenticity of its genuineness as mentioned below;

1. See Through Register in denominational numeral
2. Latent image of the denominational numeral
3. Denominational numeral in Devnagari on left
4. Orientation and relative position of Mahatma Gandhi portrait
5. Micro letters
6. Windowed security thread (in colour changing ink)
7. Guarantee clause with Governor Signature
8. Mahatma Gandhi portrait and Electrotpe (200) watermarks
9. Number panel in two locations
10. Denomination with numeral with rupees symbol (in colour changing ink)
11. Ashoka pillar emblem
12. Intaglio/ raised printing on various locations such as identification mark and 4 bleed lines with two circles on left and right side for visually impaired persons
13. Year of printing of the note
14. Swachh Bharat logo with slogan
15. Language panel

16. Sanchi Stupa (an image of Indian heritage site)

17. Denominational numeral in Devnagari on right



Fig 3: Obverse side of Rs. 200 denomination Indian bank note

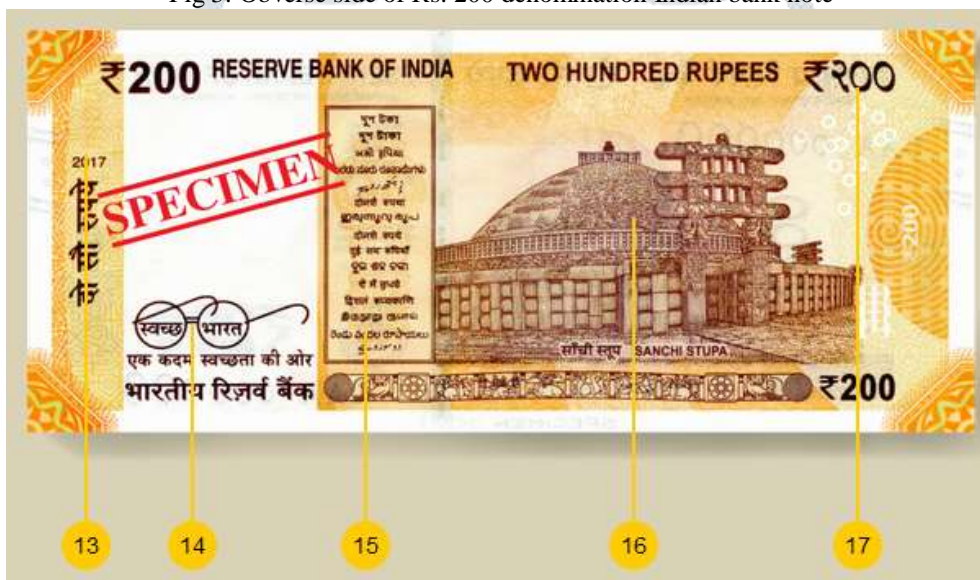


Fig 4: Reverse side of Rs. 200 denomination Indian bank note

(III) OVERT SECURITY FEATURES OF RS. 100: The new ₹100 denomination banknotes in the Mahatma Gandhi (New) Series bear signature of the Governor, Reserve Bank of India. The note has motif of 'Rani ki Vav' on the reverse, depicting the country's cultural heritage. The base colour of the note is lavender. The note has other designs, geometric patterns aligning with the overall colour scheme on both sides. The size of the new note is 66mm x 142mm.

Total 17 features of Rs. 200 denomination bank note are mentioned by RBI to check authenticity of its genuineness as mentioned below;

1. See Through Register in denominational numeral
2. Latent image of the denominational numeral
3. Denominational numeral in Devnagari on left
4. Orientation and relative position of Mahatma Gandhi portrait
5. Micro letters
6. Windowed security thread (in colour changing ink)
7. Guarantee clause with Governor Signature
8. Mahatma Gandhi portrait and Electrotpe (100) watermarks
9. Number panel in two locations
10. Ashoka pillar emblem

11. Intaglio/ raised printing on various locations such as identification mark and 4 bleed lines with two circles on left and right side for visually impaired persons
12. 4 bleed lines on left and right side in raised print
13. Year of printing of the note
14. Swachh Bharat logo with slogan
15. Language panel
16. Rani ki Vov (an image of Indian heritage site)
17. Denominational numeral in Devnagari on right

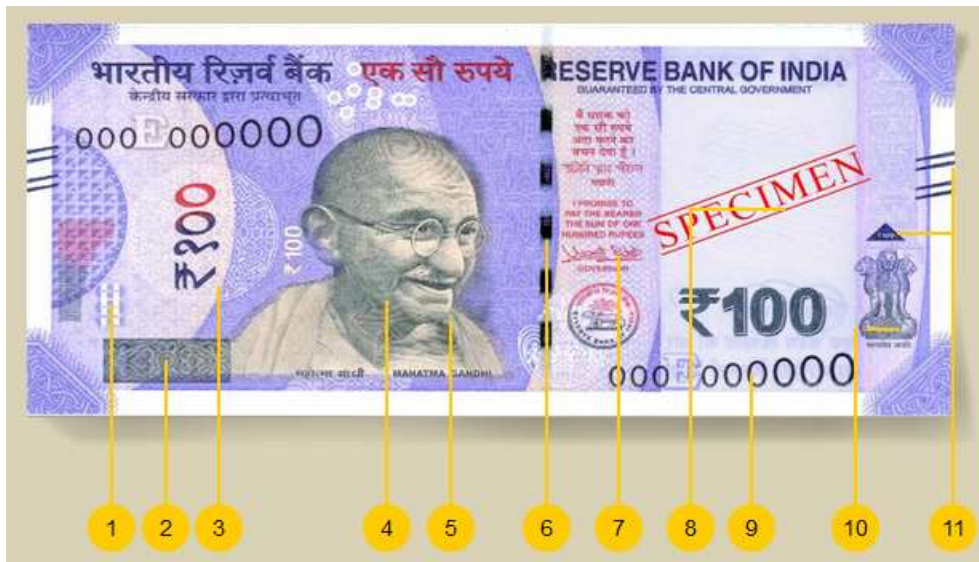


Fig 5: Obverse side of Rs. 100 denomination Indian bank note

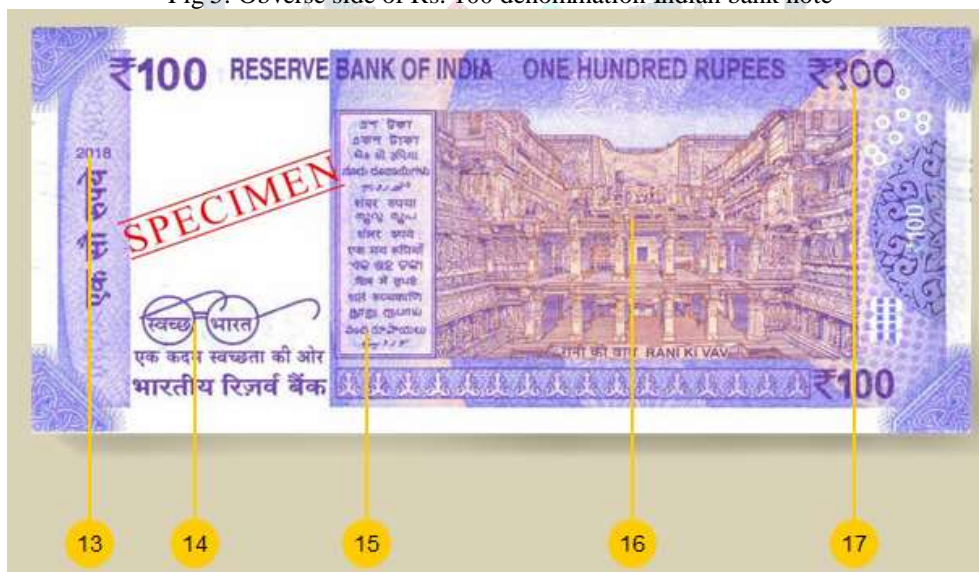


Fig 6: Reverse side of Rs. 100 denomination Indian bank note

III. COVERT SECURITY FEATURES IN INDIAN BANK NOTES:

Covert security features are not easily apparent to the general public and require a tool to verify the validity of a document. Covert security features are level 2 security features and examined under Ultra-Violet (UV) light or Infra-Red (IR) light etc. These security features can be better deciphered by High Resolution Spectral Comparator (HRSC) i.e. Video Spectral Comparator (VSC) or Docucenter Nirvis.

Mainly following four security features are present as covert security features in Indian bank notes and these features can be deciphered under UV light:

- (1) Security Thread (also visible in Visible light)
- (2) Number Panel (also visible in Visible light)
- (3) Optical Fibre (randomly distributed)
- (4) UV Pattern (on both obverse and reverse side)

Additionally, IR Pattern (on both obverse and reverse side) can be deciphered under IR light.

COVERT SECURITY FEATURES OF RS. 500:



Fig 7: Obverse side of Rs. 500 denomination Indian bank note under UV light

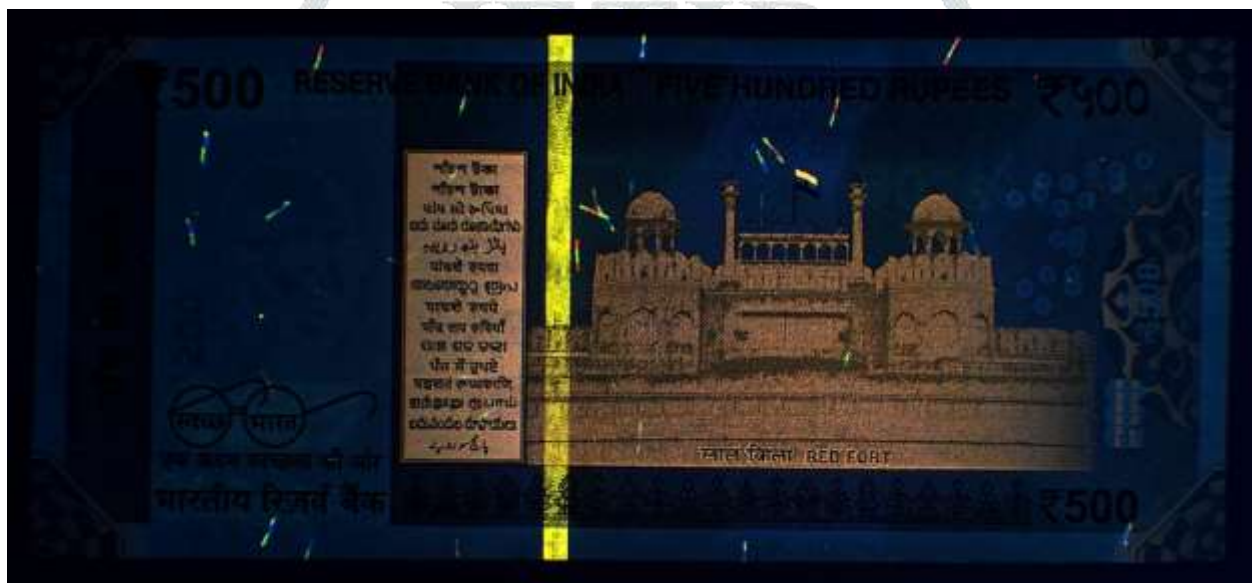
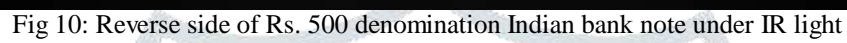


Fig 8: Reverse side of Rs. 500 denomination Indian bank note under UV light



Fig 9: Obverse side of Rs. 500 denomination Indian bank note under IR light



A photograph of a 200 Indian Rupee banknote, featuring Mahatma Gandhi. The note is green and yellow, with the Reserve Bank of India logo and text in Hindi and English. The serial number 5FL 878810 is visible on both sides. The note is shown from a slightly angled perspective, highlighting its texture and the portrait of Gandhi.

Fig 11: Obverse side of Rs. 200 denomination Indian bank note under UV light

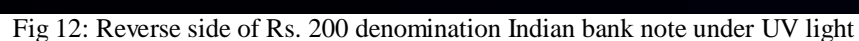




Fig 13: Obverse side of Rs. 200 denomination Indian bank note under IR light

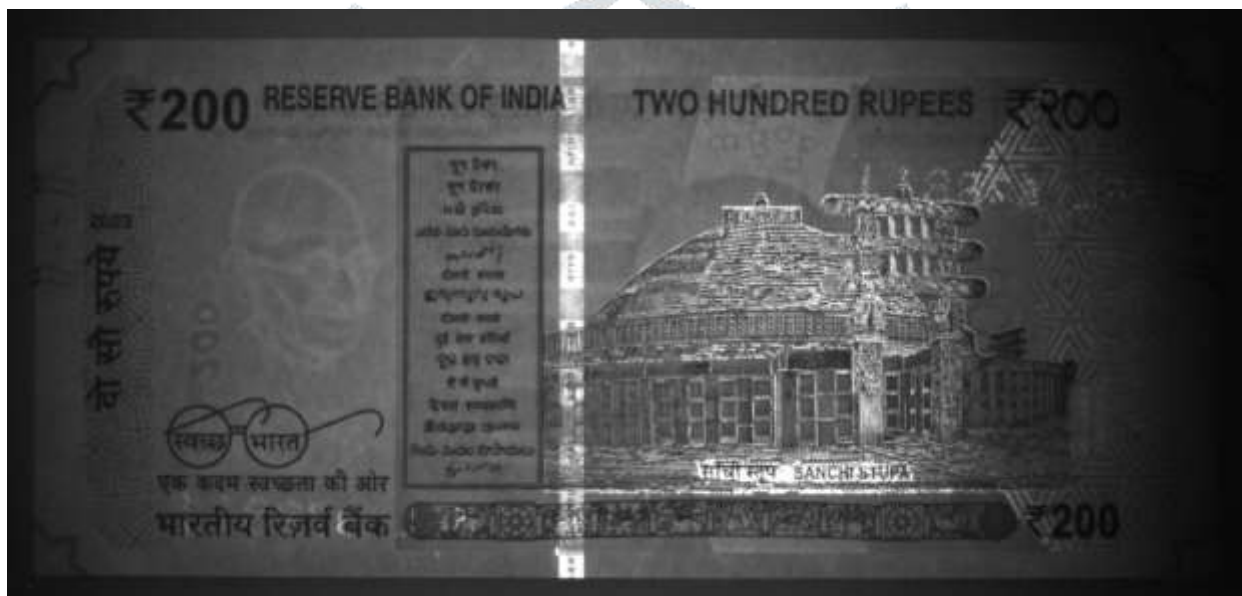


Fig 14: Reverse side of Rs. 200 denomination Indian bank note under IR light

COVERT SECURITY FEATURES OF RS. 100:



Fig 15: Obverse side of Rs. 100 denomination Indian bank note under UV light

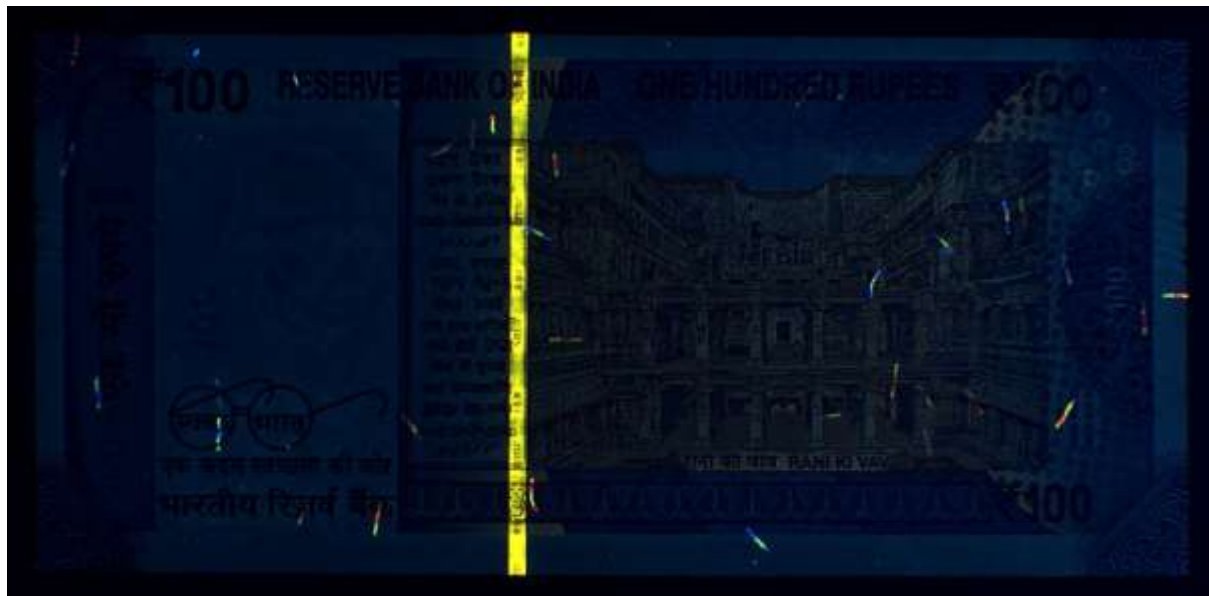


Fig 16: Reverse side of Rs. 100 denomination Indian bank note under UV light



Fig 17: Obverse side of Rs. 100 denomination Indian bank note under IR light



Fig 18: Reverse side of Rs. 100 denomination Indian bank note under IR light

IV. CONCLUSION:

With the advancement of reproduced and printing technology, the counterfeiting of Indian bank notes especially of denomination i.e. Rs. 500, Rs. 200 & Rs. 100 are increasing day by day. The data related to Denomination-wise Counterfeit Notes Detected/Reported in the Banking System from 2018-19 to 2023-24 (Open Government Data, OGD, Platform India) are mentioned below;

Denomination	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Rs. 500	21865	30054	39453	79669	91110	85711
Rs. 200	12728	31969	24245	27074	27258	28672
Rs. 100	221218	168739	110736	92237	78699	66130

It is very important for every citizen to know the basic security features of genuine notes and its legal provision related to Counterfeiting of currency/ bank notes. The layman should know all the overt security features mentioned in this paper. The bank officials and other persons should also be acquainted with the covert security features along with overt features to distinguish genuine bank notes from the counterfeit bank notes.

V. ACKNOWLEDGEMENT:

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URL: https://paisaboltahai.rbi.org.in/pdf/100295-1001%20Rs%20200%20note-Eng_7-1-19-01.pdf

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