

16 SECURITY DOCUMENTS

Currency and passport/visa are the most important security documents that a country issues to its citizens. Other important and valuable security documents include educational documents, property documents, postal documents, employment related documents, bank documents, etc. Counterfeiting of bank notes and use of forged travel documents are most common crimes related to illegal immigration, work permits, fire arms, terrorism, drug trafficking, prostitution, etc. Similarly, other security documents like identity cards, judicial/ non-judicial stamp papers, postal and bank documents are also very frequently forged.

Security documents, including Indian passport and visa, are printed in India Security Press (ISP), Nasik and other security documents in Security Printing Press, Hyderabad. Indian bank notes are printed at Currency Note Press (CNP), Nasik; Bank Note Press (BNP), Dewas; New Note Presses under Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL) at Salboni and Mysore. The security paper is manufactured at Security Paper Mill (SPM), Hoshangabad.

16.1 Applicable IPC Sections:

In case of counterfeiting of currency, sections 489 (A–E) I.P.C are applicable. Currency also includes foreign currency.

1. Section 489 B in Indian Penal Code:

Whoever sells to, or buys or receives from, any other person, or otherwise traffics in or uses as genuine, any forged or counterfeit 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.

For fake passports and other security documents, usual sections of IPC are applicable.

2. As many as 2349 cases were reported, with 37.8 per cent conviction in cases relating to counterfeiting during 2013. There have been 1203 cases of counterfeiting in 2013 as per National Crime Records Bureau (NCRB) report booked under Sections 489 A-E IPC.

3. **Relevant para from** 'THE GAZETTE OF INDIA REGD.NO. D.L.- 33004/99 dated 27TH SEPT. 2013' (Part-II-Section 3-Sub Section(i)).

Investigation of High Quality Counterfeit Indian Currency Offences Rule

I. Short title and commencement:

- (a) These rules may be called the Investigation of High Quality Counterfeit Indian Currency Offences Rules 2013.
- (b) They shall come into force on the date of their publication in the official Gazette.

II. Notification of forensic authority: For the purpose of section 15, the following shall be authorized or notified forensic authorities, namely:

III.

- (a) Laboratories under the Bhartiya Reserve Bank Note Mudran Private Limited or Security Printing and Minting Corporation of India Limited.
- (b) Forensic Laboratories under the Government of India and the State Governments.
- (c) Any other establishments having necessary facilities and trained personnel so notified by the Central Government from time to time.

IV. Procedure for applying the provisions of sub-clause (iiia) of clause (a) of sub-section (1) of section 15 read with section 16: -

- (a) When a case has been registered upon seizure of currency suspected to be high quality counterfeit Indian currency, the Investigating Officer shall forthwith send the seized currency or sample thereof to the authorized or notified forensic authority and the said authority shall forward a preliminary report, as to whether the seized currency is 'high quality counterfeit Indian currency' or not within 15 days of receipt of such samples.
- (b) The IO shall forward the seized currency by the quickest means to the notified forensic authority, *not* later than 48 hrs. of the seizure, and the notified forensic authority shall communicate the results of the examination to the requisitioning officer by the quickest possible means including an e-mail or facsimilie:

Provided that the preliminary report may not contain a detailed forensic report but may restrict itself to the question of whether the key security features as specified in the III Schedule to the Act have been imitated or compromised in the seized counterfeit currency and the complete report for the purposes of prosecution shall be provided before completion of the investigation:

Provided that the procedure referred to in sub-rule 1 shall not preclude the continuation of investigation under any other law for the time being in force.

- V. As per clause 6.4(h) whether the high quality counterfeit Indian currency is mixed with genuine currency in currency chests, Automated Teller Machines.

16.2 Crime Scene Investigation (CSI)

Relevant legal provisions for search should be followed for CSI. The IO should conduct CSI at each such location to collect complete evidence.

A SOC can be investigated in more than one ways—depending on the circumstances of a case. However, the following basic guidelines for CSI should always be followed.

16.2.1 Basic Guidelines for CSI

- (i) Defining control boundaries of a SOC for protecting and securing it.
- (ii) Preserving a SOC with minimum possible contamination and disturbance of any physical evidence.
- (iii) Safety and security of all persons in and around a SOC.
- (iv) Limiting the number of persons accessing a SOC and recording their movement.
- (v) Controlling, identifying, verifying and removing persons from a SOC after proper recording of their details (name, address, etc., preferably in their own handwriting, signature and date).

16.2.2 Pre-Search Planning and Preparation to Examine Scene of Offence:

Make a clear assessment about the place where search is to be conducted for collection of physical evidence. It may be closed or open places.

16.3 Basic Integrated Kit Meant for Forged Document May be Used (refer to Chapter 15; para 15.2 for details)

16.4 General Guidelines for Carrying out Search at Scene of Crime

- (i) Collection of all possible, relevant and authentic information required for making assessment about the planning and preparation for search.
- (ii) Assessment of all available information for planning and preparing for the correct timing of search.

16.4.1 Constituting Following Teams Required for Handling the Crime Scene:

- (i) Outer cordon
- (ii) Inner cordon
- (iii) Search and seizure
- (iv) Handling of witness
- (v) Handling of suspects/accused

16.4.2 Role of Team Members:

- (i) Search should be led by a senior police officer.
- (ii) Role of an informant/source/identifier/decoy must be clearly identified for an operation.
- (iii) The roles and responsibilities of police and non-police personnel must be clearly defined.

16.4.3 Briefing Team Members

Members of a search team, including police and non-police personnel, should be briefed on the following points:

- (i) The purpose of search.
- (ii) The contours of the plan of action.
- (iii) The role and responsibilities of teams and individuals.

16.4.4 Protection and Security of a SOC

The scene of crime should be protected with utmost care and precautions such as cordoning of the area, restrict entry/exit and access to unauthorized persons, disallowing tempering of evidence, photography and videography of the crime scene.

All telephones and mobiles must be taken in charge by team members.

16.4.5 Search for Evidence

The search team should divide itself into sub-teams and systematically start searching the place from one end to another in each room/open space. Depending upon the nature of a case, three types of evidence may be found at a SOC, namely—documentary evidence, forensic evidence and material evidence.

1. Documentary Evidence

- (i) Registers carrying details such as money transaction, visitors, personal details of victims and suspect, tasks assigned to people connected with the case.
- (ii) Phone bills/electric bills /water bills/establishment bills.
- (iii) Contact diaries/business cards
- (iv) Business related registers
- (v) Account related registers
- (vi) Employment papers
- (vii) Identification documents
- (viii) Educational documents
- (ix) Bank documents
- (x) List of past records/registers of bank/financial documents
- (xi) Bank notes
- (xii) Passports
- (xiii) Visa stickers
- (xiv) Airline tickets, identity cards, boarding cards
- (xv) Judicial and non-judicial stamp papers of different denominations
- (xvi) Aadhaar card/voter identification card
- (xvii) Vehicle registration certificate and driving license
- (xviii) Plastic cards: credit cards, debit cards, smart cards, etc.

2. Material Evidence

- (i) Instruments used for work

- (ii) Raw material used for work
- (iii) Computers: desktop, laptop, palm top, floppies/CDs/pen drives
- (iv) RAM for volatile memory
- (v) Mobile phones
- (vi) Video or still cameras
- (vii) CCTV footage
- (viii) Colour photocopiers
- (ix) Scanners
- (x) Colour printers (inkjet/laser jet)
- (xi) Memory stored in photocopiers, colour printers, scanners and fax machines
- (xii) Rubber stamps, seals and inkpads
- (xiii) Printing inks
- (xiv) Bundles of paper
- (xv) Cutting and packaging material
- (xvi) Adhesives

16.5 Procedure for Collection/Preservation of Security Documents

All security documents should be collected and preserved carefully using water-proof celluloid or cloth-lined envelopes. Packaging and forwarding of all Questioned Security Documents is similar to other routine documents referred for examination to Forensic Science Laboratory.

Note: All questioned Security Documents may be marked with 'X' or 'Y' series with blue pencil and should not be encircled.

16.6 Suspected Counterfeit Currency/ Bank Notes (FICN):

For Field Officers: Checking Genuine/Counterfeit Indian Bank Notes

- I. Genuine Security Document: All the security features are present in a Genuine Security Document.

- II. Counterfeit/Fake Security Document: Even if a single security feature is absent or improper in a security document, then it is a counterfeit/fake security document.

Security Features of Genuine Bank Notes

- i. The paper quality should be checked for its GSM and thickness. The ordinary paper gives fluorescence in UV light whereas genuine bank notes have UV dead paper.
- ii. Feel of the paper-crackling sound.
- iii. Presence/absence of all water marks: Three, 3-dimensional water marks upto Rs. 500 and four, 3-dimensional water marks in Rs.1,000 bank notes. Presence/absence of dual coloured security fibers giving fluorescence may be checked.
- iv. Security thread and printing on it-6 segments (Rs. 50 and onwards and 5 segments in below Rs.50 denominations) seen in front with RBI in English.
- v. See-through effect. By holding the bank note against light, the denomination can be seen in the left side above brail mark which otherwise looks as normal pattern of design and Bharat in Hindi printed on it. When held against light, a continuous thread is seen.
- vi. Presence of brail mark for different denominations above Ashoka Emblem.
- vii. Optical Variable Feature in the middle of front side of bank note of Rs.500 and 1000 denominations. The green colour changes on tilting of note.
- viii. Latent image of the denomination can be seen by holding the banknote at eye level in the front right side of coloured panel. This is due to Intaglio printing.
- ix. Microprinting of denomination and RBI printed on front right side near printed portrait of Mahatma Gandhi..
- x. UV printing of series and serial number, middle portion in the front side of bank note, Omron features and year of printing on back side etc. are required to be examined. RBI features may also be referred.
- xi. Presence/absence of Optical Variable Ink (OVI)-Figures of denomination in the central area change its colour from green to grey when tilted in Rs. 500 and Rs.1000 denomination.
- xii. Latent image of denominations-can be seen when front green panel at right hand side is held parallel to your eye or grazing angle.
- xiii. Presence/absence of UV features-security thread, security fibres, number panel, middle portions of bank notes are UV fluorescent whereas paper itself is UV dead.
- xiv. Intaglio printing in the middle of the obverse side.
- xv. See-through effect is seen in the denomination in the left portion of bank notes.
- xvi. Alphabets I, J, O, X, Y and Z are never allotted as series number.

Genuine Bank Note



High Quality Counterfeit Bank Note



Printing on security thread absent

Figure 16.1: Sample of Genuine and Counterfeit Indian Bank Notes (Rs.1000)

Examples of Genuine and Counterfeit Indian Bank Notes (Rs.500)

Genuine Bank Note



High Quality Counterfeit Bank Note



Printing on security thread absent

Figure 16.2: Sample of genuine and counterfeit Indian bank notes (Rs.500)

Genuine Bank Note



Counterfeit Bank Note



Security thread absent

Micro printing absent

Figure 16.3: Sample of genuine and counterfeit Indian bank notes (Rs.100)

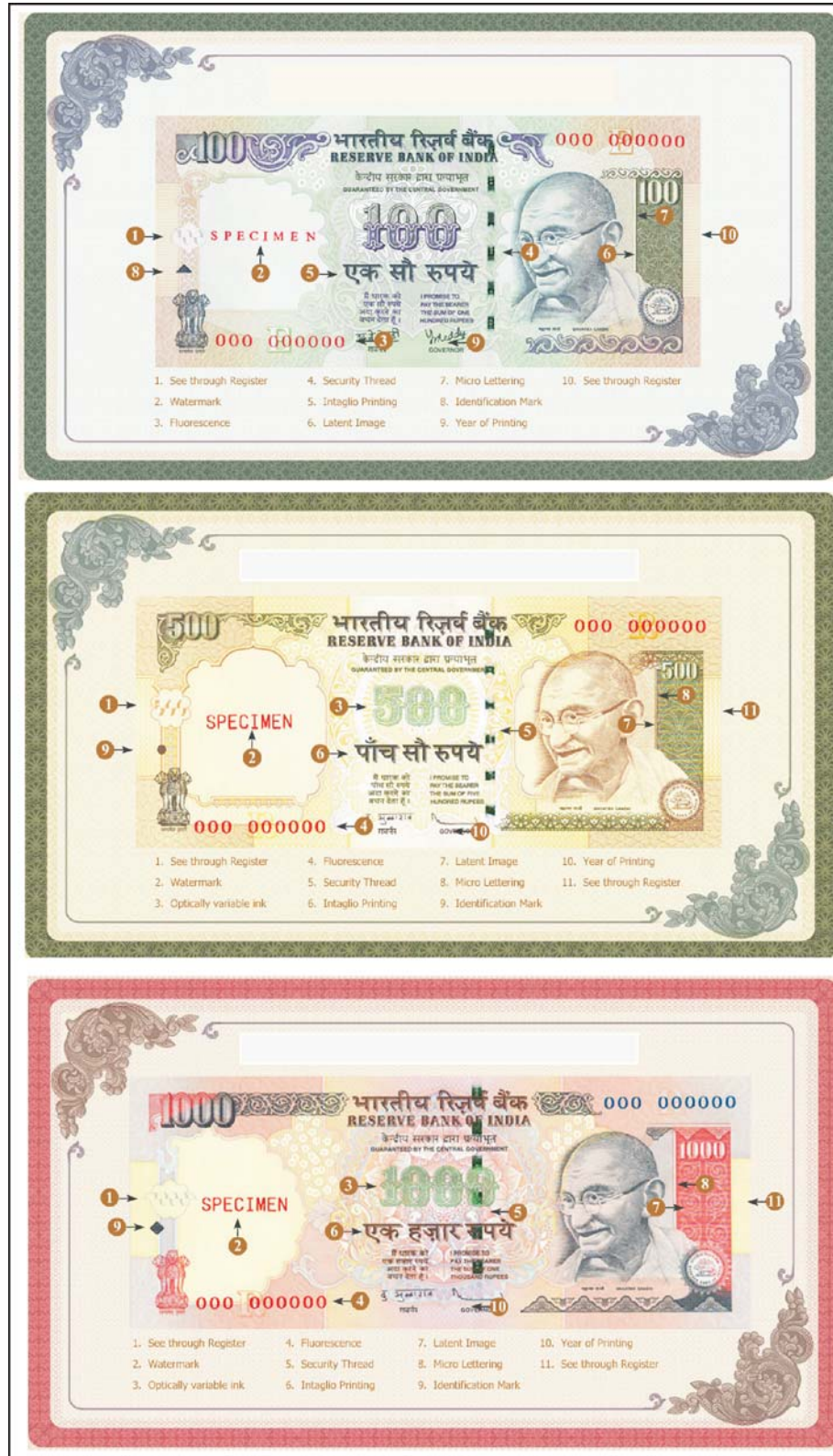


Figure 16.4: Genuine Indian Bank Notes

Courtesy: RBI



UV Dull paper

Fluorescent security thread

Optical fibres

Counterfeit Bank Note

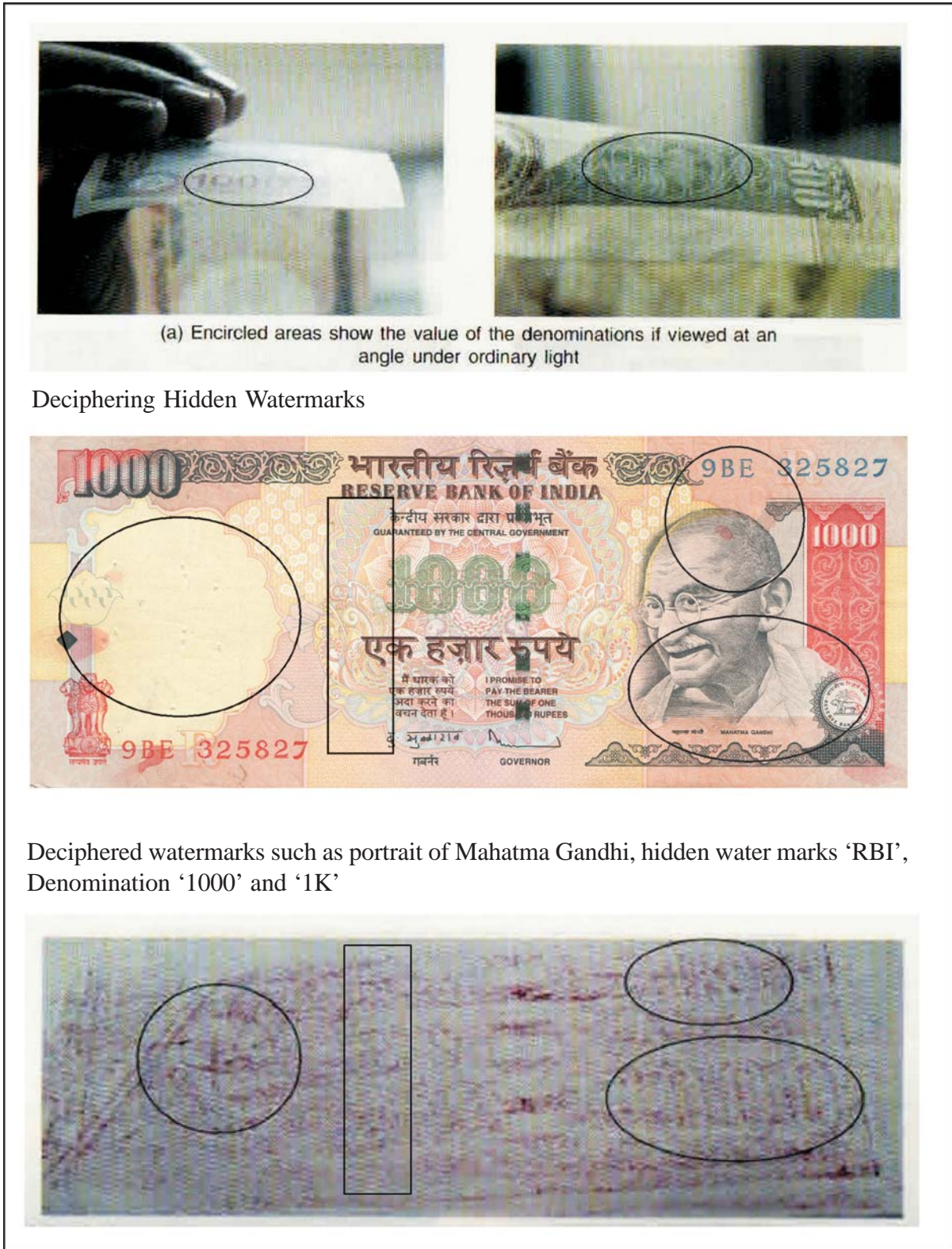


UV Fluorescent paper

UV dull security thread

Fake marks, looking like fibres introduced by fluorescent ink pen

Figure 16.5: UV features in bank notes



(a) Encircled areas show the value of the denominations if viewed at an angle under ordinary light

Deciphering Hidden Watermarks



Deciphered watermarks such as portrait of Mahatma Gandhi, hidden water marks 'RBI', Denomination '1000' and '1K'

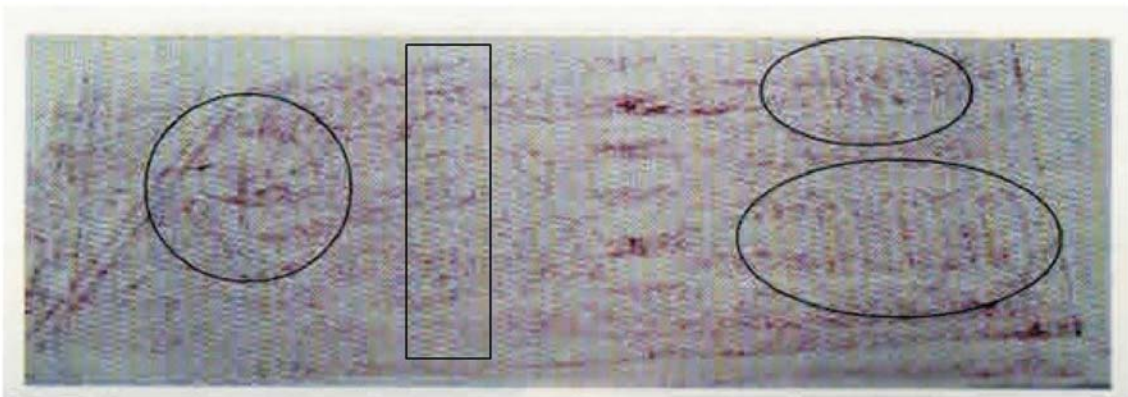


Figure 16.6: Latent image of denomination

Courtesy: A K Bapuly

Security Features of New 500 Rupee MG Series Bank Note

Note:

- (i) *For detailed examination of counterfeit currency, CNP Nashik or BNP Dewas/RBI/forensic laboratories under the Government of India and the state governments may be referred.*
- (ii) *These security features are not permanent but are changed from time to time as per RBI/Ministry of Finance Directions.*
- (iii) *All foreign currencies suspected to have been counterfeited should be sent to the respective embassies/high commissions/consulates for verification.*

Some of the equipments used for examination of security documents



Figure 16.7: UV Lamp for Observing Fluorescence in Security Documents



Figure 16.8: Stereo Zoom Microscope

Questionnaire: Some of the sample queries:

1. Whether the questioned bank note is genuine or counterfeit.
2. If the questioned bank note is counterfeit, what is the methodology of producing it?
3. Whether there are any alterations in the series and serial number of bank notes.
4. Whether the given bank notes are assembled and consist of portions of different genuine bank notes.

Note:

- (i) *Specific queries would depend upon nature of the crime and exhibit seized.*
- (ii) *IO should monitor that the preliminary report for all high denomination counterfeit bank notes (Rs.100, 500 and 1000) are verified for their fake nature by CNP Nashik, BNP, Dewas or state/central FSLs within 15 days.*

16.7 Forged Passport

Indian passports can be classified into three main categories:

- A. Diplomatic
- B. Official
- C. General Citizen Passports.

In addition, Jumbo and Hajj passports are also issued.



Figure 16.9: Indian Passports

The following are different types of Travel Documents:

- (i) Machine Readable Passport (MRP): Ordinary Passport of 36 pages (dark blue cover).
- (ii) Machine Readable Passport (MRP): Jumbo Ordinary Passport of 64 pages (dark blue cover).
- (iii) Machine Readable Passport (MRP): Official Passport (off white cover).
Machine Readable Passport (MRP): Diplomatic Passport (maroon cover).
- (iv) Machine Readable Passport (MRP): Indo-Bangladesh Passport (light blue cover).
- (v) Person of Indian Origin (PIO): Booklets (grey cover).
- (vi) Overseas Citizenship of India (OCI): Booklets (sky blue cover).
- (vii) Emergency Passport (white cover).
- (viii) Indo-China Trade Travel Passport (saffron cover).
- (ix) Certificate of Competency for shipping department (14 varieties).
- (x) Continuous Discharge Certificates for shipping Department.
- (xi) E-Passports.

Security features of Indian Passports:

- (i) Substrate: Ashok Pillar cylinder water marks.
- (ii) Cover page: Ashok Chakra printing (visible in 365 nm).
- (iii) First page-body printing: Black in visible light and green in Luminescence.
- (iv) Heat Activated Ultra Violet (HAUV) film: Printing visible in red and yellow in UV.
- (v) Data page: Micro line, text, tint, design (Emblem, Govt. of India), Passport printing, rainbow printing: Blue and orange printing, gothic numbering, bifluorescent invisible design, invisible fibers (green and blue).
- (vi) Page numbering: Micro lines on all pages visa visible and invisible.
- (vii) Passport number: 8 digit alphanumeric laser perforated conicals of passport booklet.

16.7.1 Forgery in Passport

I. Data-Pages: In case there is change in the data/cover pages.

Actionable steps to be taken by police:

1. Thorough interrogation of ticket issuing agent (travel agent) including sub-agent should be done by the police.
2. Thorough interrogation of the air staff who issued boarding card, duty manager of airline staff should be interrogated.
3. Real passport holder be interrogated, otherwise his/her LOC be opened.
4. Family members of the person holding the passport should also be interrogated.
5. Police Custody Remand of the person holding the passport must be obtained.
6. A passport having genuine data-page with genuine stamps and visa but not in use by the genuine holder of the passport.

II. Photo Substitute: In this case the original photo of the passport holder is replaced

Action to be taken by police:

1. Same process is to be followed as in the case of bio-data.
2. Actual identity of the passport holder who is using the fake passport is to be established.

III. Impersonation: In this case no forgery exists in travel document. Some passport holder uses passport, identity card, green card, resident permit of other person.

Action to be taken by police:

1. Police need to interrogate the real holder of the passport, in establishing facts, whether he lost his passport or sold his travel documents to the present bearer.

IV. Forged Immigration Stamp: This is done in order to get entry in countries abroad.

Action to be taken by police:

1. The forged stamp can be verified through specimen of stamp in records of immigration at the airport.
2. To establish the fact to whom the passport holder handed over his/her passport. Arrival/ departure to be confirmed through immigration records.

V. Managed Stamp: - It is different from forged stamp. In this case the genuine stamp is affixed on passport, but there is no record of Arrival/Departure of the passport holder in immigration.

Action to be taken by police:

1. Verifications need to be done from flight records from the airlines.
2. It is generally seen when there is only one arrival stamp in passport (in this case passport is issued from abroad).
3. Here travel agent plays an important role, whether the ticket is issued in India or return ticket (issued from abroad).
4. Managed stamp is generally seen when fax arrived after overstaying abroad. Fax arrived without knowledge of immigration. After that he could manage arrival stamp so that he can obtain another fresh visa from the embassy.

VI. Re-stitching of Passport or Changes of Pages in Passport: This case is generally seen when the passport holder tries to conceal material facts, e.g. some remarks passed in the passport.

Action to be taken by police:

1. Generally such cases are detected on arrival and pax must be thoroughly interrogated.

VII. No Departure Stamp: In these cases, only arrival is registered; there is no departure stamp in passport of the holder. This indicates, that the passport holder left India in the name of some other person on forged document and later on obtained his/her own passport either by poster carrying at the time of departure. Passports are generally blank, i.e. no visa and departure stamp in this case.

Actionable steps to be taken by police: -

1. Whether passport is issued before departure or later on.
2. Efforts to be made to confirm departure.
3. Identification of the agent who arranged journey.
4. Section 419 & 420 IPC must be added as burden of proof on passport holder to prove his/her departure as genuine.

VIII. Obtaining Passport by Fraudulent Means: Sometimes the passport holder obtains a passport from some other place where he is not residing. In this case more than one passport is in possession with the person. This is generally done by carrier. In this case there is no forgery in passport.

Action to be taken by police:

1. Local enquiry of the passport holder.
2. Photocopy of all the papers including passport to be obtained from the concerned R.P.O.
3. In case the passport holder has more than one passport, it should be seized.
4. LOC may be opened.
5. Verification is required in case the person holding the passport issued it from abroad while living in India. The arrival stamp as well as the ticket is to be deeply verified.

(Carrier—a person whose own document is genuine but facilitates other person's forged document).

IX. Obtaining Passport of Other Nationality: In this case person of other nationality obtained Indian passport, e.g. Sri Lankan, Nepali, Tibetan, Afghan national.

Action to be taken by police:

1. Joint interrogation.
2. Letter to their concerned embassy about the arrest.
3. Arrest report of foreigner to Ministry of Home Affairs (MHA).
4. After disposal of the case, the person holding the passport must be deported back to their respective country.
5. Role of C.I.D officer.

E-Passport



Figure 16.10: Diplomatic e-Passport

E- Passports have symbols as shown in Figure 16.10 with 32 kb chip.

16.8 Indian Visa

Security features of visa stickers:

- (i) Use of Optical Brightening Agent (OBA) free paper.
- (ii) Rainbow and Guilloche pattern printing.
- (iii) Presence of hexagonal shaped planchettes and invisible fibres (blue and red).
- (iv) Chemical sensitive paper.
- (v) Ashok Chakra in the background and Ashoka Pillar in the centre.
- (vi) Micro lettering of visa in bilingual.
- (vii) 2-D barcoding of ISP and date of printing.
- (viii) Printing with UV fluorescent ink.

Indian Visa



I. Forged Visa: Passport holder is having genuine passport but forged visa in passport.

Action to be taken by police:

1. Thorough interrogation with the ticket issuing agency to know the name of the agent.
2. Role of airline's staff who issued boarding card along with the Duty Manager on that day of airline.
3. Visa is to be identified by the embassy.
4. Thorough interrogation with the family members of the passport holder.

II. Chemical Wash Visa: In this case, visa is issued from the embassy to some other person. With the use of chemical, visa is washed and name, date of birth, passport number is changed.

Action to be taken by police:

1. Verification from the embassy by getting all the papers of visa application form.
2. Visa can be checked by smelling it.
3. Visa can be checked under UV light source for fluorescence.
4. Interrogation with genuine visa holder.

III. Stolen Visa: Generally blank visa is stolen from the embassy without issuing to anyone. The visa carries all security features.

Action to be taken by police:

1. Visa is to be verified from the embassy.
2. Interrogation with the airline staff.
3. Interrogation with the ticket issuing agency.

IV. Obtaining Visa from Abroad without Travelling to Abroad: It is an offence as the passport cannot be sent abroad by post.

Action to be taken by police:

1. Person is to be identified who arranged the journey.

V. Obtaining Visa from Embassy by Fraudulent Means : - In this case visa is genuine but travel agent arranges the visa by submitting managed/forged document of the passport holder like bank account, property paper, salary, etc.

VI. Change of Boarding Card

In such case, a person has domestic ticket and obtains a boarding card. Another person possesses an international ticket and thus has an international boarding card. After immigration clearance, they both exchange their boarding card in transit hall, e.g. sometimes in aircraft, if flight is going to Delhi-Bombay-London. Pax possessing international boarding card will drop at Bombay and domestic Pax will drop at London. The airline has full knowledge in this case.

VII. Material Evidence at SOC

- (i) The buckram material used for stiffening of the cover of the booklet, gold foils, booklet size paper, computer, scanner and colour laser/inkjet printers should be searched and seized.
- (ii) Rubber stamps, ink pad and physical photograph should be searched and sealed. Pen drive/storage media having digital photographs should also be searched.
- (iii) Heat activated UV film, laser plate and passport laminator should also be searched and sealed.
- (iv) Cutters, packing materials and envelopes should be searched and sealed separately.

- (v) Logo, embossing stamps, stitching threads, guilloches, etc., if found at crime scene should be sealed and preserved.
- (vi) Numbering machine and security fibre may also be searched and sealed.
- (vii) Look for mechanical or laser perforation machines and seize them, if found.
- (viii) The metallic plate having criss-cross lines and Ashoka Emblem embossed in it may be seized. This is used to create corresponding impressions on HAUV film during lamination.

Note:

The above security features are not permanent but are changed from time to time as per Ministry of External Affairs (MEA) directions. The updates can be obtained from MEA/ISP (in case of passports) and CNP/BNP/ RBI (in case of Indian bank notes).

Note:

- (i) *For detail examination of fake passports/visa and other security documents, ISP Nashik/MEA may be referred.*
- (ii) *All foreign passports/visa suspected to have been forged should be sent to the respective embassies/high commissions/consulates for verification.*

Questionnaire: Some of the sample queries:

1. Whether the passport is original or fraudulently prepared.
2. If it is fraudulent, what features have been tampered with? This information would be useful to the IO for linking with the crime, modus operandi, etc., for detailed investigation.
3. Whether any alterations have been done in the visa and data page of the passport and in visa sticker.

Note: *Specific queries would depend upon the nature of the crime and exhibit seized.*

16.9 Judicial/Non-Judicial Stamp Papers:

1. The quality of UV inactive paper, windowed security UV fluorescent thread and cylinder mould water marks of Mahatma Gandhi in the stamp paper may be checked. Absence of these features will indicate fake document which should be seized.

2. Presence of dual coloured security fibers (red-yellow and blue-green).
3. The base paper of Judicial/Non-Judicial stamp paper is sensitive to 14 different types of commonly known ink-eradicators. Application of any one of such ink-erasicator on paper will immediately detect alterations in these security documents.
4. Quality of printing (Rainbow and Guilloche pattern), presence of serial number, micro perforation of high value and name of the state for which such non-judicial stamp papers are being used should be verified and checked. The denomination of stamp papers should be checked for any alterations.
5. Symbol for year of printing may be seen.
6. Look for mechanical/laser perforation machines and seize, if found in higher denominations.

16.9.1 Fake Judicial/Non-Judicial Stamp Papers:

1. The quality of UV inactive paper, windowed security UV fluorescent thread and cylinder mould water marks of Mahatma Gandhi in the stamp paper may be checked. Absence of any of these features indicates its counterfeit nature.
2. Absence of dual coloured security fibres (red-yellow and blue-green).
3. Chemically non-sensitive to ink-eradicates.
4. Absence of printing (Rainbow and Guilloche pattern), absent or duplicate serial number, absence of micro perforation of high value.

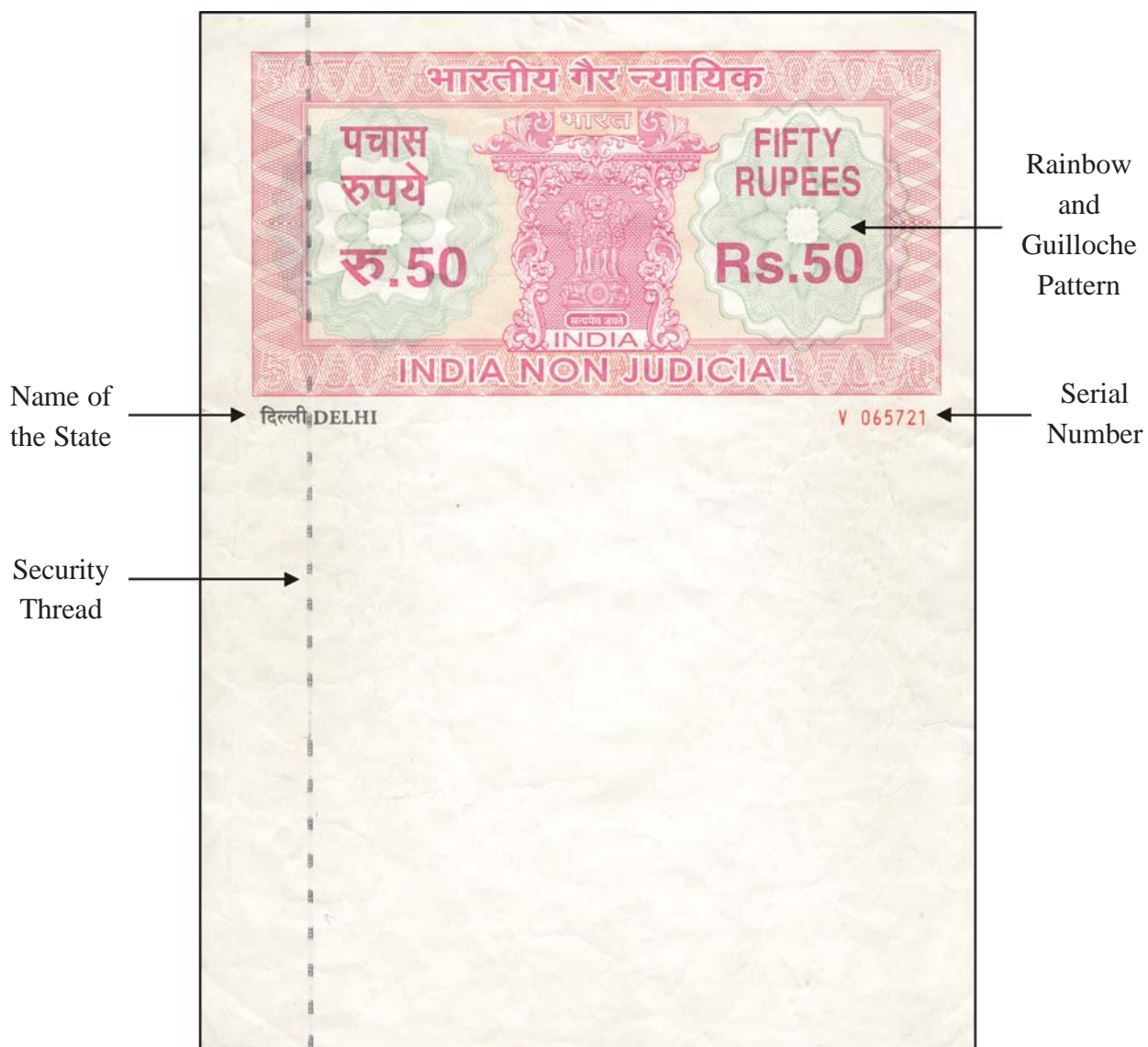


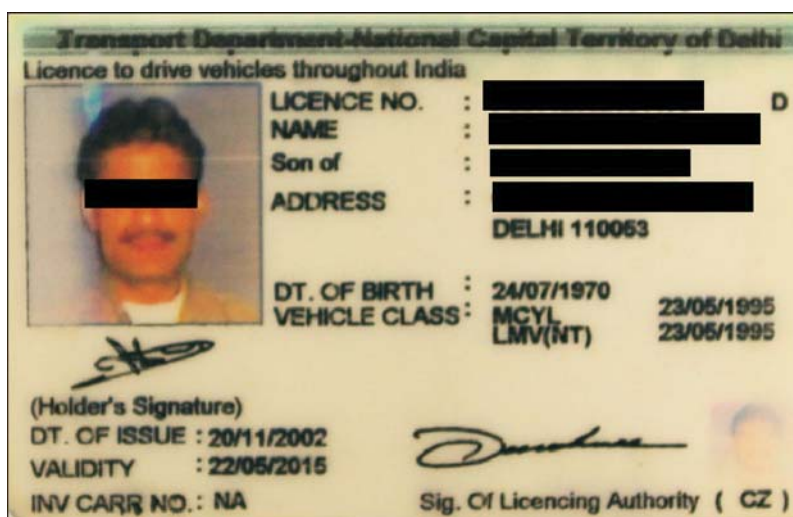
Figure 16.11: Genuine non-judicial stamp paper

Questionnaire: Some of the sample queries

1. Whether the non judicial stamp paper is genuine or fake.
2. Whether there are any alterations in the non judicial stamp paper.
3. What type of printing process has been used?

Note: Specific queries would depend upon the nature of the crime and exhibit seized.

16.10 Driving License



16.12: Driving license card

Security Features of Driving License

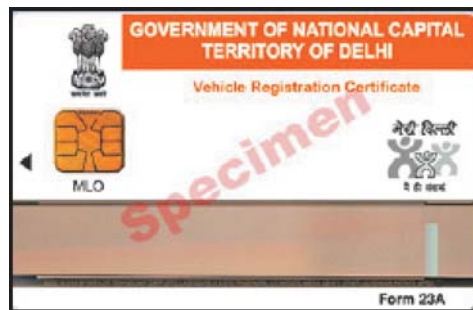
- Each card is the size and shape of a standard credit card but is more flexible and has a somewhat different texture.
- On the front of the card, a virtual image of a loon appears to float above or sink below the surface of the card as the viewing angle changes.
- A digital image of the cardholder is fused with heat into the card plastic. Fine line printing over the image reveals tampering attempts. The image always appears on the left.
- A holographic state seal that appears on the front of the card is visible only under ultraviolet light.
- If the cardholder is under 18, the date of 18th birthday appears in red.
- The new cards have a rainbow print pattern.

Questionnaire: Some of the sample queries

- Whether the questioned security document is genuine or fake.
- Whether there are any alterations in the questioned security document.

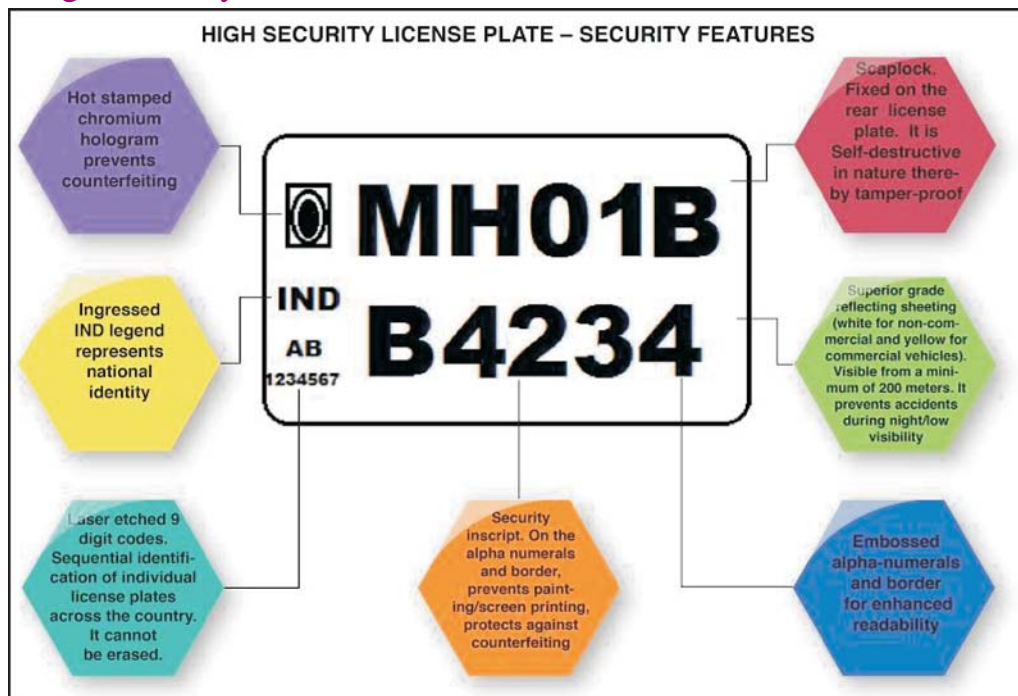
Note: *Specific queries would depend upon the nature of the crime and exhibit seized.*

16.11 Registration Certificate



1. The vehicle can be driven or allowed to be driven in public place only after registration by the registering authority under the provision of section 39 of the Motor Vehicles Act 1988.
2. Since September 2001, Delhi and Maharashtra have instituted new cards known as 'Registration Certificate (RC) Books' for all existing and new motor vehicles.
3. The 'RC Book' vehicle registration document is a multi-technology, advanced card incorporating optical media with a data capacity of 1MB and a 4KB IC chip. The optical media digitally stores the vehicle owner's portrait, demographics and fingerprint image plus scanned images of certification and taxation documents, etc. This information cannot be erased or altered.

16.11.1 High Security License Plate



16.13: High security license plate: Security Features

Questionnaire: Some of the sample queries

1. Whether the questioned security document is genuine or forged. If so, what features have been tampered with?
2. Whether there are any alterations in the questioned security document.
3. Whether there is any physical tampering of data in the security document.
4. Whether the chip, if any has been tampered with or replaced.

Note: *Specific queries would depend upon the nature of the crime and exhibit seized.*

16.12 Plastic Cards-Master Cards

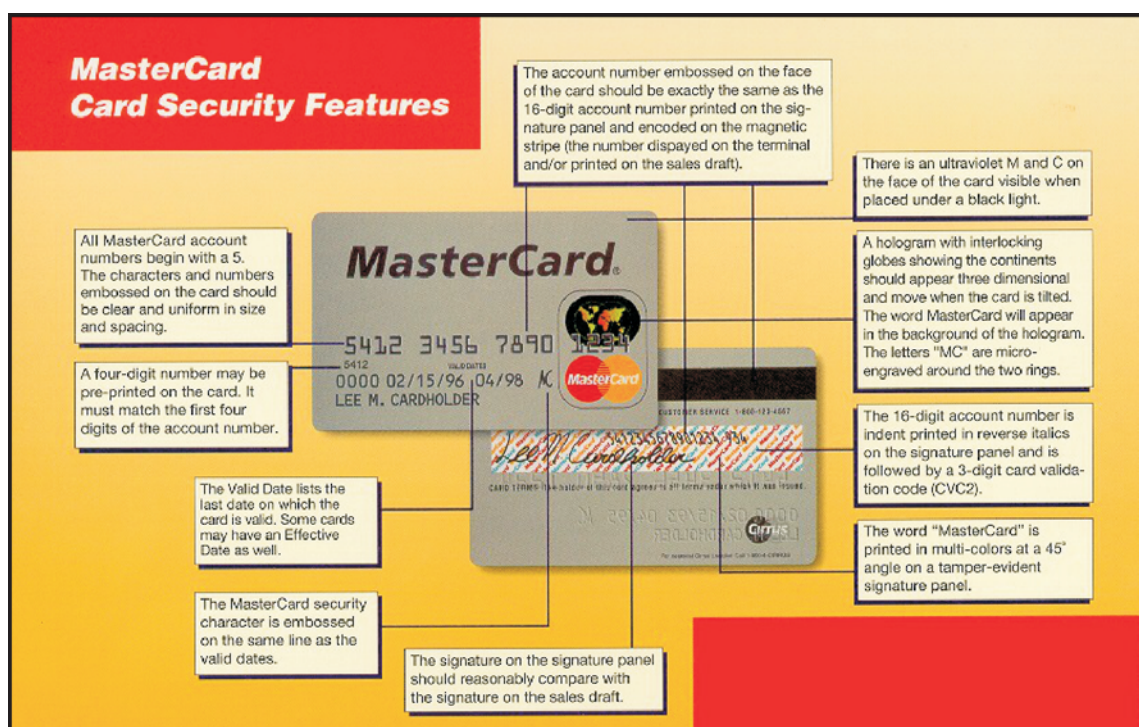


Figure 16.14: Master card

Courtesy: Master Card

Security Features on a Credit Card (Master Card)

- (a) Account numbers begin with figure '5'.
- (b) The pre-printed Bank Identification Number (BIN) must match the first four digits of the embossed account number.
- (c) The valid date lists the last day on which the card is valid.

- (d) Master Cards have a stylized 'MC' security character embossed on the right of the valid dates.
- (e) The back side of the card must bear signatures.
- (f) A three dimensional hologram of interlocking globes should reflect light and seem to change as you rotate the card.
- (g) The magnetic stripe on the back of the card should appear smooth and straight with no signs of tampering.
- (h) The word 'Master Card' is printed repeatedly in multi-colours when viewed at an angle on a tamper-evident signature panel.

Note :

- (i) *The visa card number starts with figure '4' and American Express Card with '37'.*
- (ii) *The visa and Master Cards have a total of 16 figures whereas American Express card has 15 figures.*

Questionnaire:

A. Some of the sample queries for the Issuing Bank/Card Provider:

1. Whether the given credit/debit card is original or fabricated/cloned.
2. If so, provide the information about the original card holder along with transaction/location of the card used for the relevant period.

B. Some of the sample queries for the Forensic Science Laboratory:

1. Whether the signature on the signature panel of the card belongs to the card holder or not.
2. Whether there are any alterations in the given security document.

Note: *Specific queries would depend upon the nature of the crime and exhibit seized.*

16.13 ATM Card

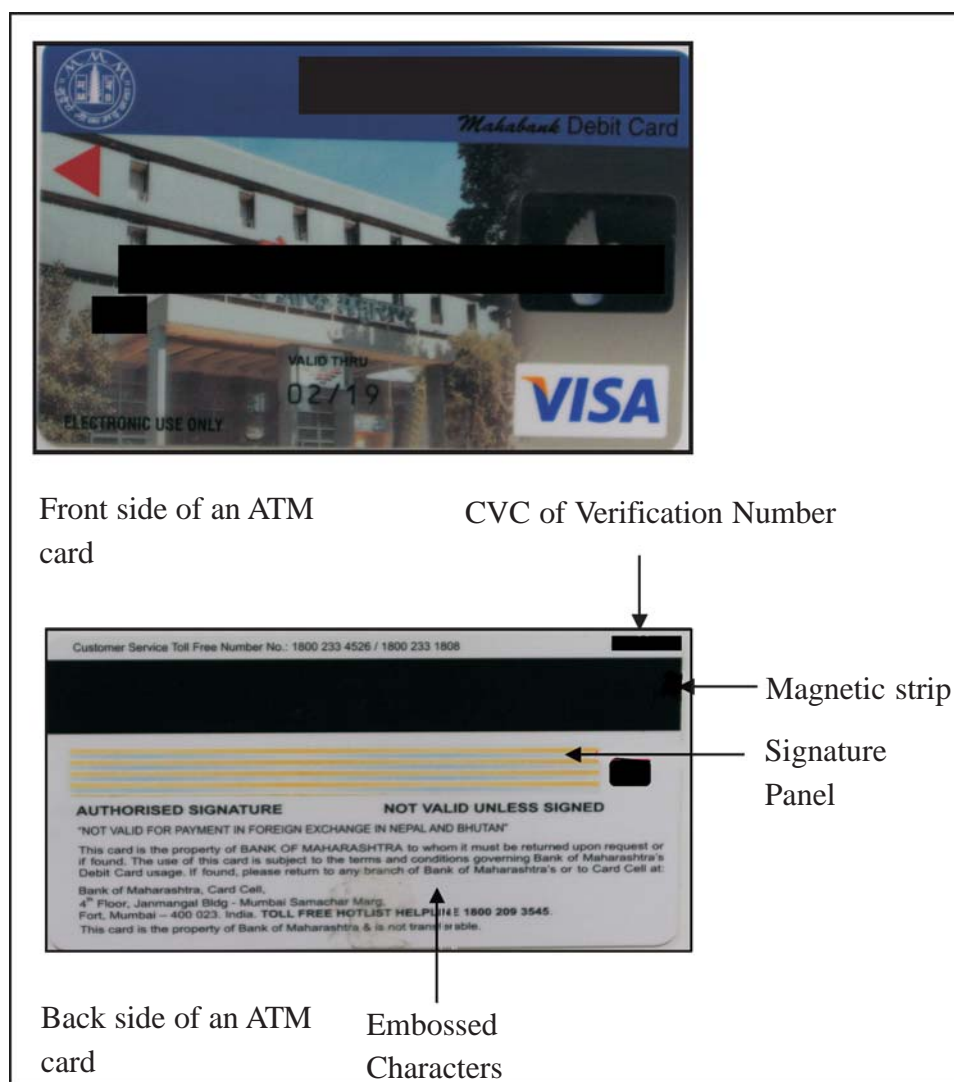


Figure 16.15: Sample of an ATM card

Security Features of ATM Cards:

- (a) **Card Design:** The actual design of the card is upto the card issuer. It may have features like flexibility, flammability, toxicity. It can be as unusual as they like.
- (b) **Chip:** The microchip present in a debit or credit card provides highly secure processing capabilities. This includes verification that the correct PIN has been used. The personal data, i.e. cardholder's name, card number and expiry date as found on the magnetic stripe, provides additional security features to safeguard against counterfeiting. The four digit PIN (Personal Identification Number) are not held as a set of numbers on the chip.

- (c) **Card Number:** Generally 16 digits (but can be upto 19 on certain cards) – this identifies the account, with the first six digits comprising what is known as the BIN (Bank Identification Number) and this identifies your card issuer and the card scheme.
- (d) **Card Scheme Logo:** This indicates which of the card scheme will be applicable for clearing payments and that which retailers will accept your card.
- (e) **Hologram:** An additional security feature to identify that the card is genuine.
- (f) **Expiry Date:** The card number and the card's expiry date are essential for processing card payment.
- (g) **Name:** The cardholder's name is displayed at the bottom of the card.
- (h) **Magnetic Stripe:** The magnetic stripe holds some of the same information as the chip.
- (i) **Card Security Code (CSC):** This three digit number on the signature panel gives the retailer indications that you actually have the physical card in your possession. In case of an American Express Card, this code will be four digits on the front of the card.

16.14 Identity Card

The design and security features of I-cards of different organizations vary considerably. There is no standard format of I-cards like passport and visa.



Figure 16.16: Sample of a fake card

Source : FSL, Delhi.

16.15 Aadhaar Card

- (a) It has 12 digit unique number.
- (b) Biometric feature consisting of thumb impression, photograph and iris.

Questionnaire: Some of the sample queries for UIDAI in cases of impersonation/misuse:

1. Whether the given document/Aadhaar card belongs to the user or not.
2. If not, who is the original allottee of this Aadhaar number?
3. Details of the bank account/other utility account linked with this Aadhaar card may be provided.

Note: *Specific queries would depend upon the nature of the crime and exhibit seized.*

16.16 Handling of Security Documents

After seizure of the security documents, they must be handled with care without disturbing their original condition.

- I. Photography or photocopying of the security documents should be done to know their physical condition at the time of seizure.
- II. They must be kept in celluloid envelopes and preserved properly.
- III. The series and serial numbers of the security documents should be noted before wax sealing in a proper envelope.

16.17 Do's and Don'ts

Do's	Don'ts
Check the quality of paper and printing in a disputed document.	Do not ignore the inferior quality of paper of bank notes/travel documents.
Look for abnormality in printing, text of the security documents and micro printing.	Do not ignore inferior printing and security features and inks in security documents.
Buckram substrate and gold foil stamping in passports be checked.	The qualities are generally inferior and should not be ignored.
Look for any alterations in data pages.	Do not ignore tampering of data and visa pages.
Verify if HAUV film has been properly laminated and printing in it is transferred to the data sheet below.	Any irregular or missing UV printing over photograph & data page may indicate a fraudulent passport.
Micro printing of page number in vertical and horizontal lines and UV page number in visa pages are to be seen carefully.	Absence of micro printing and UV page numbers will indicate change of visa pages in Indian passports.
Look for the UV features and printed image in an Indian visa.	Absence of UV features indicate fake visa.
Examine if the thread, serial number and state name are indicated in the non-judicial stamp papers.	Absence of these features indicates fraudulent nature of the present judicial, non-judicial stamp papers.

16.18 Seizure List

- I. The seizure list and memo must be prepared on the spot itself in the presence of two independent witnesses.
- II. The witnesses should sign (with date) the lists and memos giving their full details including temporary and permanent addresses in their own handwriting.

16.19 Sealing of Security Documents

All security documents should be wax sealed in a cloth lined or celluloid envelope using special metallic seal of the officer concerned. The metallic seal sample impressions should also be sent in a clean wet cloth or coarse paper separately to the laboratory.

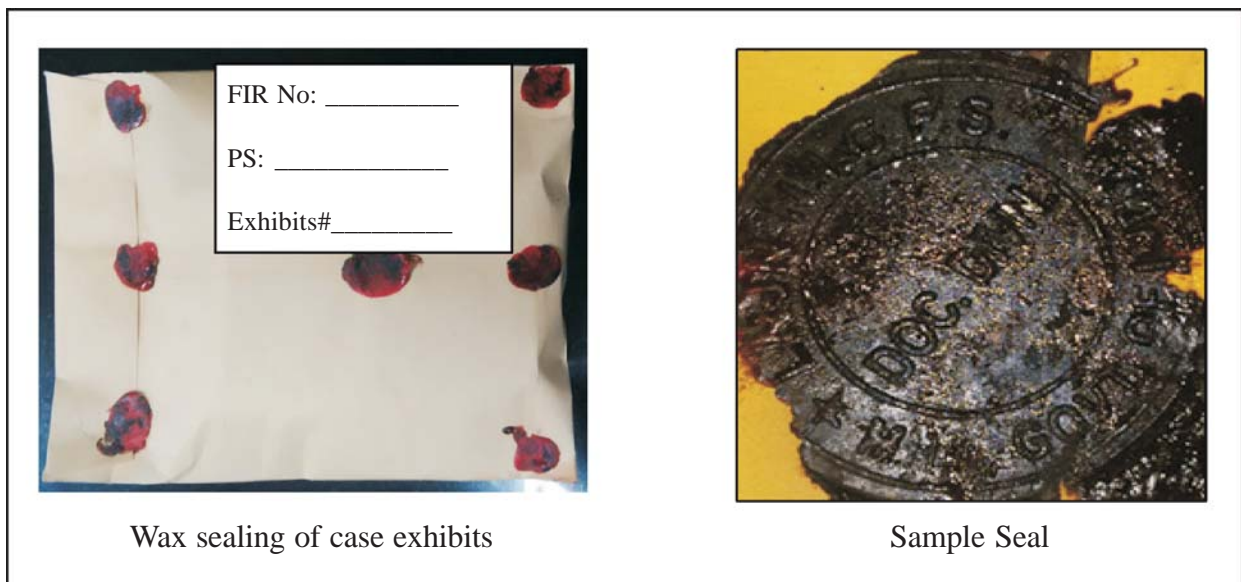


Figure 16.17: Seals impressions

16.20 End of Search

Before announcing formal termination of a search operation, the officer-in-charge must ensure that:

- I. Every potential witness is safely escorted to a police station with an officer deputed for the task.
- II. All evidence collected at a SOC is properly packed, sealed and marked.
- III. All memos are duly filled in and all other formalities in respect of procedures mandated by the law are completed.

16.21 Scrutiny of Evidence Collected from SOC

A thorough evaluation of the evidence collected from a SOC provides highly relevant and useful information for the purpose of investigation including crucial information about:

16.21.1 Accused

- I. Identity of accused (photo, documentary record, testimony).
- II. Information and/or details about other members (photo, documentary record, testimony).

16.21.2 Crime

- I. Items and/or description of items used for commission of crime (documents, instruments, etc.).
- II. Nature of exploitation (record, testimony).
- III. Modus operandi.

16.22 Plan of Investigation

A thorough scrutiny of the evidence collected from a SOC provides highly relevant and useful information for the purpose of investigation including crucial information about:

- I. The process of re-construction of a scene of crime.
- II. Developing understanding about the sequence of events.
- III. Collection of relevant evidence in a systematic manner.

16.23 Submission of Charge Sheet/Complaint

Depending on the nature of offences, either a charge sheet or a complaint should be filed at the end. A legal review of the charge sheet or complaint should be obtained from the concerned public prosecutor.

The IO must adhere to the timeline stipulated in CrPC for investigation and submit a charge sheet against an absconder only after completion of the entire process of proclamation by a court. A complaint should include details about all the offences made out in a case including the ones under IPC, and must only be filed after securing authority from a competent authority as identified or appointed under the relevant Act.

16.24 Case Studies on Passports and Visa

Case Study 1

New Delhi: The stolen passports and the possibility of a passenger or some passengers using fake passports on the missing Malaysian airlines MH370 had triggered an alarm all over the world. Security and intelligence agencies fear that the flight may have been hijacked or bombed by the terrorists. No trace of the plane after days has increased the fear across the globe.

Two passengers on the flight MH370 were found travelling on stolen passports as confirmed by the Malaysian officials. The passengers — travelling with Italian and Austrian passports that had been stolen in Thailand—purchased their plane tickets at the same time, and were both booked on the same onward flight from Beijing to Europe on Saturday.

Source: www.ibnlive.in.com

Case Study 2

New Delhi: Air India plane from Dubai crashed at Mangalore airport on 22 May, 2010 with the loss of 158 lives; as many as 10 fraudulent passports were recovered.

Local media had reported that two

‘dead’ passengers were actually found alive in a village in neighbouring Kerala. Later, it was revealed that their identities were stolen to create fake passports.

Source: Indiakanon.org

Case Study 3

Case related to use of fake passport and Visa stickers: Gujarat High Court Dhiren Shivabhai Patel vs State Of Gujarat on 30 June 2006

JUDGMENT A.L. Dave, J.

The applicant is facing charges for offences punishable under Sections 417, 420, 465, 467, 468, 471 and 120-B of the Indian Penal Code. The allegations against the applicant are that several passport and visa stamps (stickers) were seized from the room occupied by the applicant in the hotel, at Rajkot. Out of the seizure, the visa stickers were found to be counterfeit or spurious. Even from the office of the applicant, seven

passports and one bogus visa sticker have been seized. During investigation, it was found that Dinesh alias Shetty Patel produced two bags which, according to him, were given to him by the applicant. Those bags contained several passports, leaving certificates, visa stickers, etc. One of the bags also contained a receipt issued by Ahmedabad Municipal Corporation in the name of the applicant, which, prima facie, can be considered to be sufficient to connect the bags with the applicant. In short, the applicant's involvement is, prima facie, found in a serious offence.

Source: Indiakanon.org

Case Study 4**Case related to forged non-judicial stamp paper and signatures thereon.**

Delhi High Court

Prahlad vs State on 19 December, 2013

The FSL report clearly establishes that the documents prepared by the accused are forged one and signatures of the Sub-Registrar was also found to be forged and fake. As per the information provided by the Treasury Officer, Delhi Treasury to EOW, the non-judicial stamp papers which were used for

forging the sale deeds of the complainant's property were also found to be fake..The applicant is one of the signatories and has witnessed the agreement to sell the complainant's property through forgery and fabrication of documents dated 12 July 2011, executed between the accused Gurmeet Singh, Narender Pal Singh and Pritpal Singh for a value of Rs. 5,50,00,000 and Rs. 1,00,00,000 were received by the accused persons as advance money.

Source: Indiantanoon.org

Case Study 5

New Delhi: Most IT professional in India aspire for US jobs and dollar salaries. However, working in the US requires one to clear the stringent visa requirements, one of which is to find an employer first, who is ready to take your case to the US Consulate.

However, finding an employer in the United States who is willing to hire an individual Indian IT worker and get into the legal work of obtaining a work

permit for him is not an easy task. So, there are numerous visa agents and consultants in India that help these H1B visa seekers get the work permit/H1B visa through fraudulent means.

Once these fake employers get an H1B visa with a work permit, he/she will give you a NOC saying you can work with any other employer. Your job of landing up in the US with a work permit is done as promised by the agent.

Source: www.ibnlive.in.com

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