

WELCOME TO LECTURE ON FORENSIC PHYSICS (PART-1)



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FORENSIC PHYSICS

- Counterfeit currency
- Glass
- Paint
- Soil
- Spurious Articles (Gold, Platinum, Automobile spares, zandu balm, etc.)
- Tool marks
- Track marks-Footprints, footwear marks & tyre marks
- Restoration of erased numbers of Vehicles.



100 RUPEES Note : Front

Multidirectional lines
(Anti Scan lines)

Micro-Text
(RBI & 100)

Window Security
Thread
With Clear Text

Latent Image
(100)

Watermark

See
Through

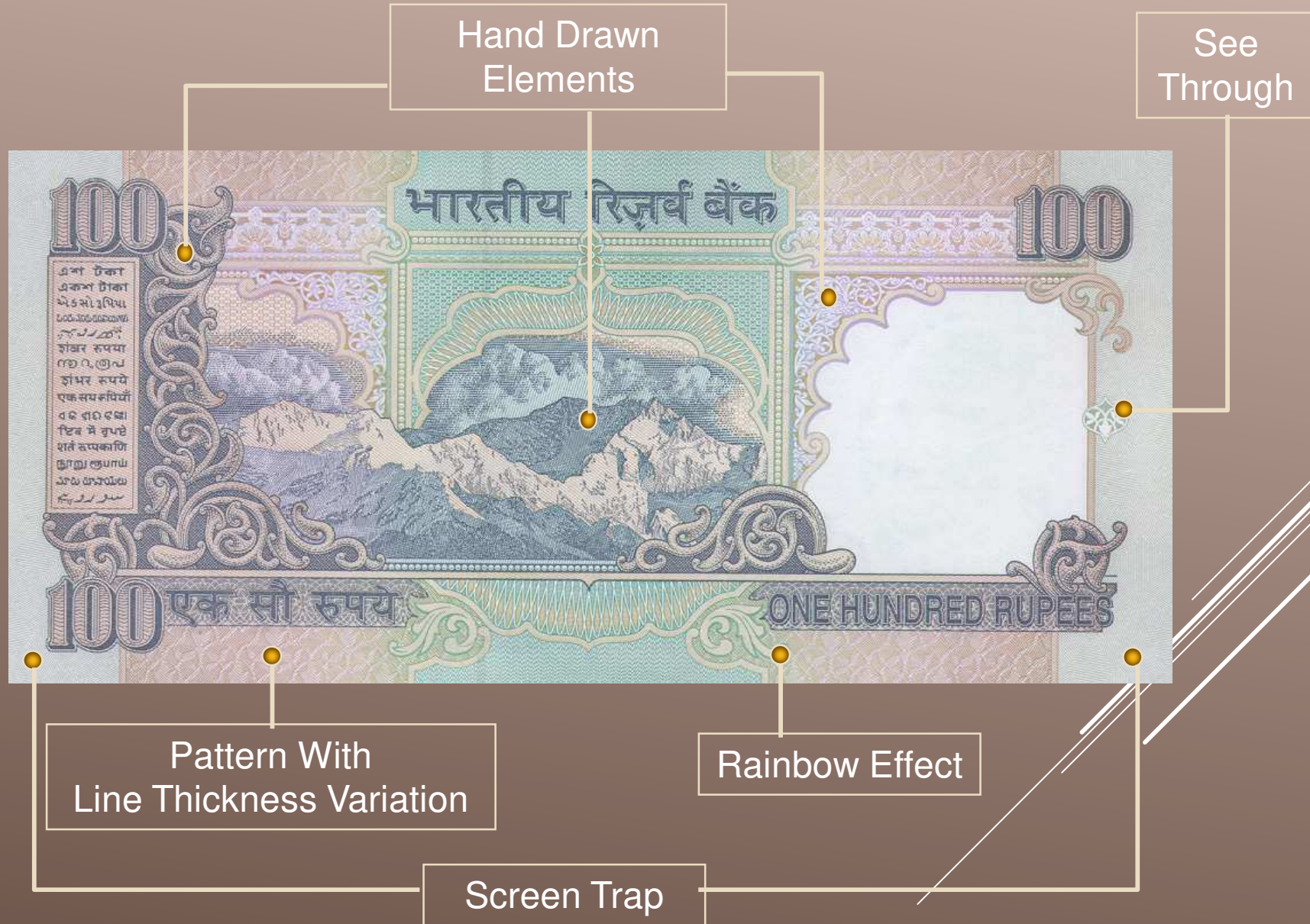
Id Mark
/ Blind
Mark

Fluorescent Ink
(Numbering)

Hand Engraved Portrait



100 RUPEES Note : Back



Security Thread



Rs. 100 notes contain a readable windowed security thread. It is partially exposed and partially embedded. When held against light, this thread looks as one continuous line.



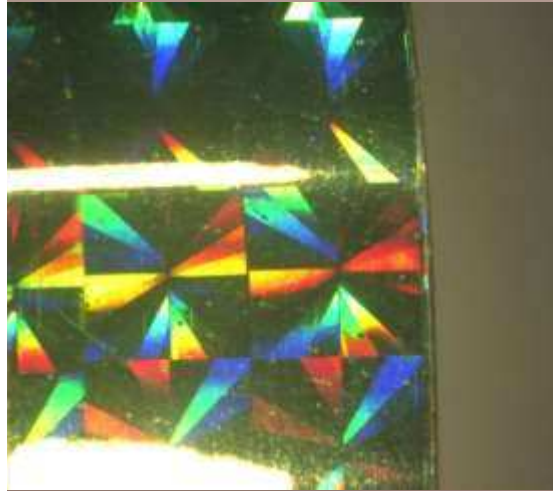
SCREEN PRINTING FRAME



SILVER COLOUR FOIL ROLL



Green colour foil roll



Intaglio Printing



- The portrait of Mahatma Gandhi, Reserve Bank Seal, guarantee and promise clause, Ashoka pillar emblems on the left, RBI Governor's signature are printed in intaglio i.e., in raised prints



WATER MARK

Genuine



Fake



Addl Water Mark

watermark



Micro-letterings



- Micro-lettering provides additional security to the notes against counterfeiting.
- It appears between the Mahatma Gandhi portrait and vertical band
- Micro-printing “RBI 100” is printed that can be seen using magnifying glass.



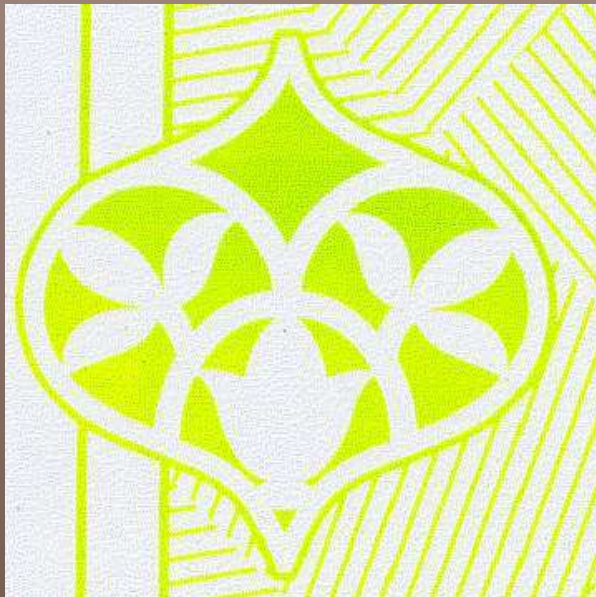
LATENT IMAGE



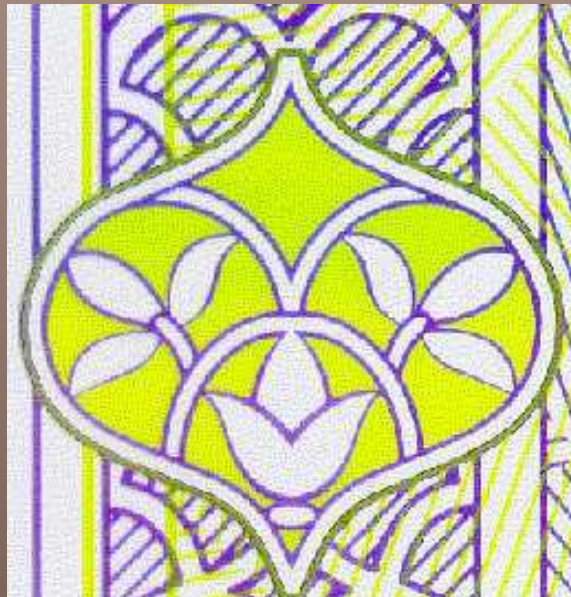
- Denomination “100” which is hidden in the vertical band is the **latent image**.
- The **latent image** “100” cannot be replicated by photocopiers.

The printing of both front and back is done in a single pass and designs are printed in front & back with perfect registration which renders the note a “see-through” effect.

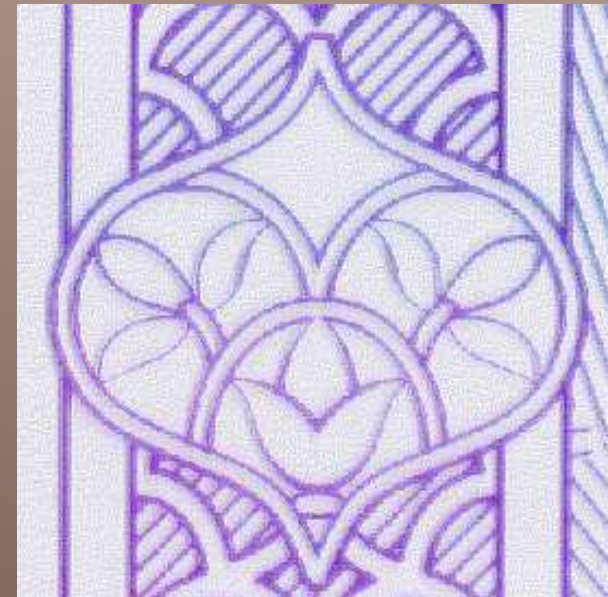
FRONT
Design



SEE – THROUGH
Design



BACK
Design

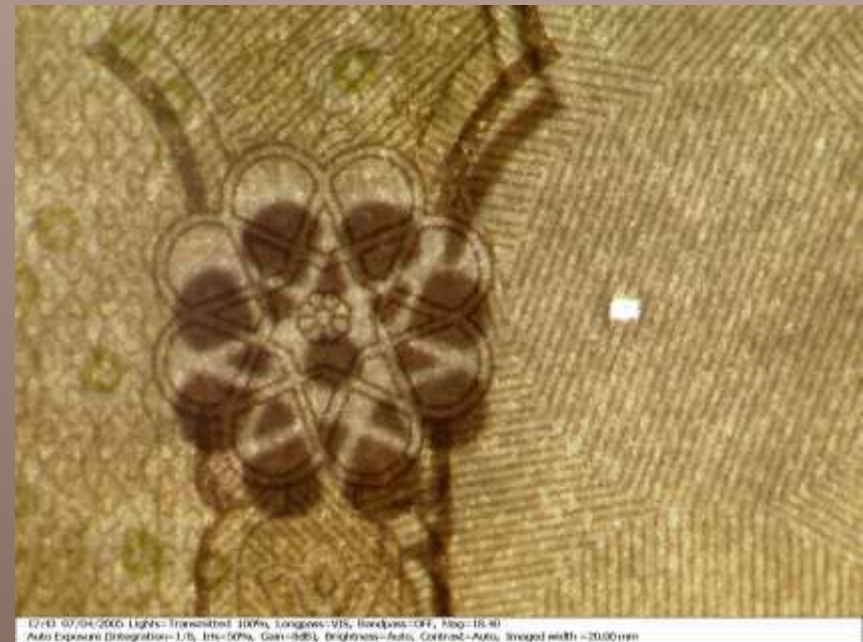


SEE THROUGH REGISTER

Genuine



Fake



Blind/ Identification Mark



An identification mark has been introduced in the note for visually impaired people.

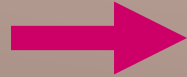
This mark is in intaglio printing and it is in different geometrical shapes for various denomination.

For Rs. 100—denomination, we have triangle '△' as the identification mark.



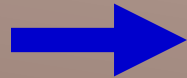
IDENTIFICATION MARK

Rs.20



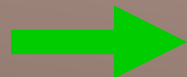
RECTANGLE

Rs.50



SQUARE

Rs.100



TRIANGLE

Rs.500



CIRCLE

Rs.1000



DIAMOND

Ultra violet fluorescence

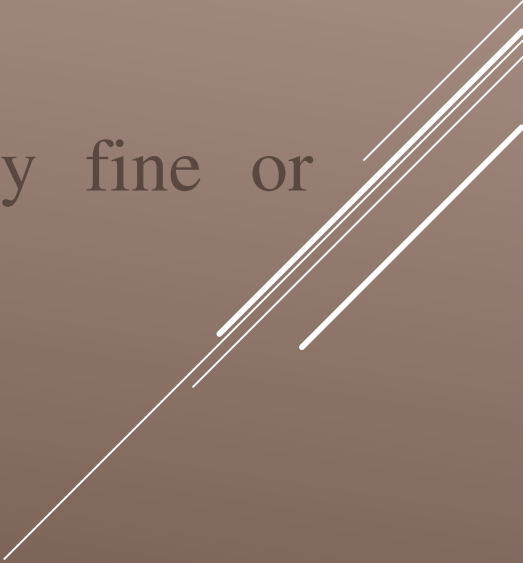
Genuine



fake



LEGAL PROVISIONS

- ▶ Printing and circulation of forged notes offences under Sections 489 A to 489 E of the Indian Penal Code
 - ▶ It is punishable in the court of law by fine or imprisonment or both
- 
- A series of four parallel white diagonal lines in the bottom right corner of the slide, slanting upwards from left to right.

Original



Spurious



Original

Original



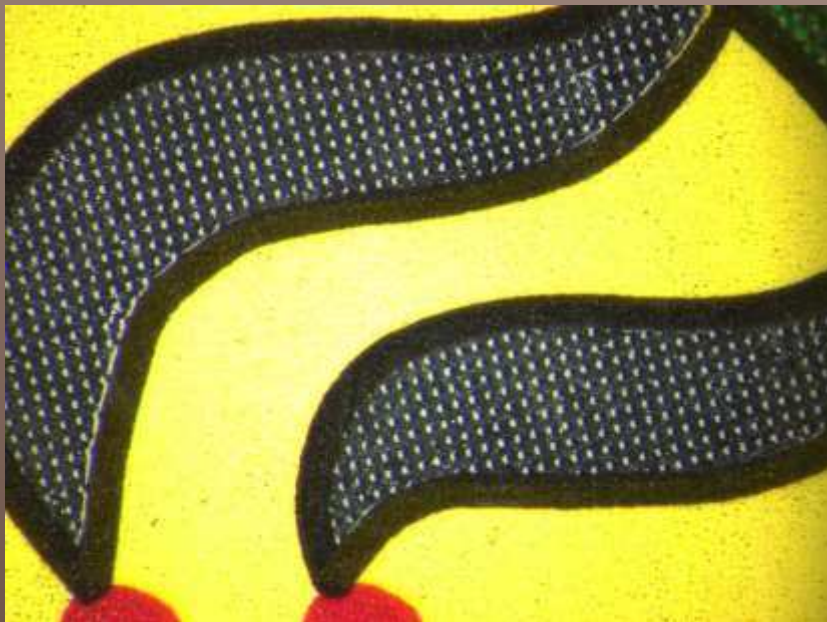
Duplicate



Original



Duplicate



SPURIOUS

ORIGINAL



SPURIOUS

ORIGINAL



SPURIOUS



ORIGINAL









The Rx mentioned on every Remdesivir vial is missing

FAKE



Capitalisation error

Alignment error

Capitalisation error

Capitalisation error

BOOM
FACT CHECK



**For Use in India Only
Not for Export**

For use in Hospital/ Institutional set up only

Duplicate



Original

Duplicate



Original

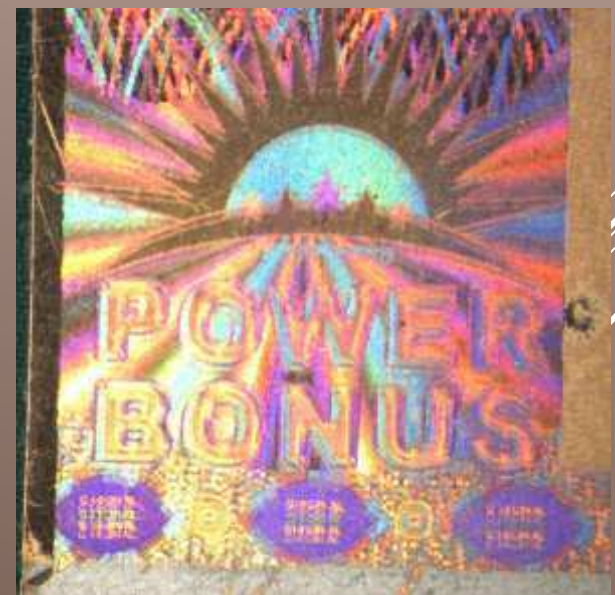
Original



Magnified view



Spurious



Magnified view

Original



Spurious



Original



Spurious



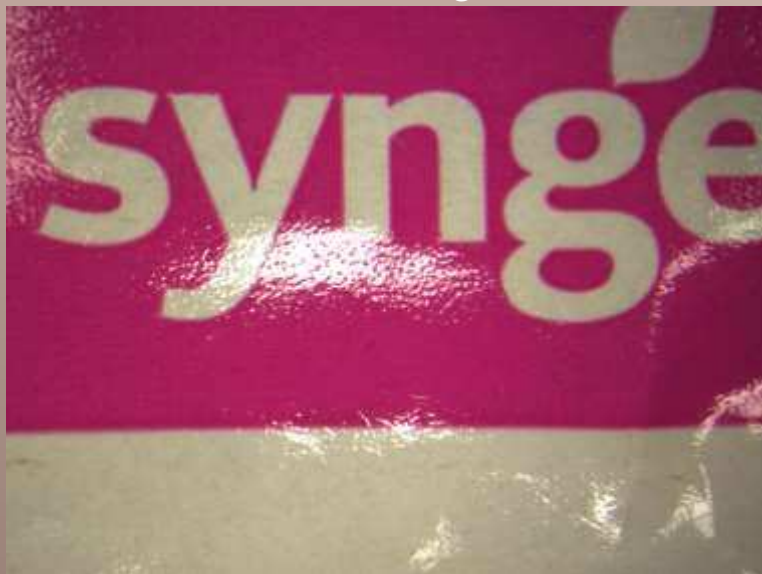
Original



Spurious



Original



Original



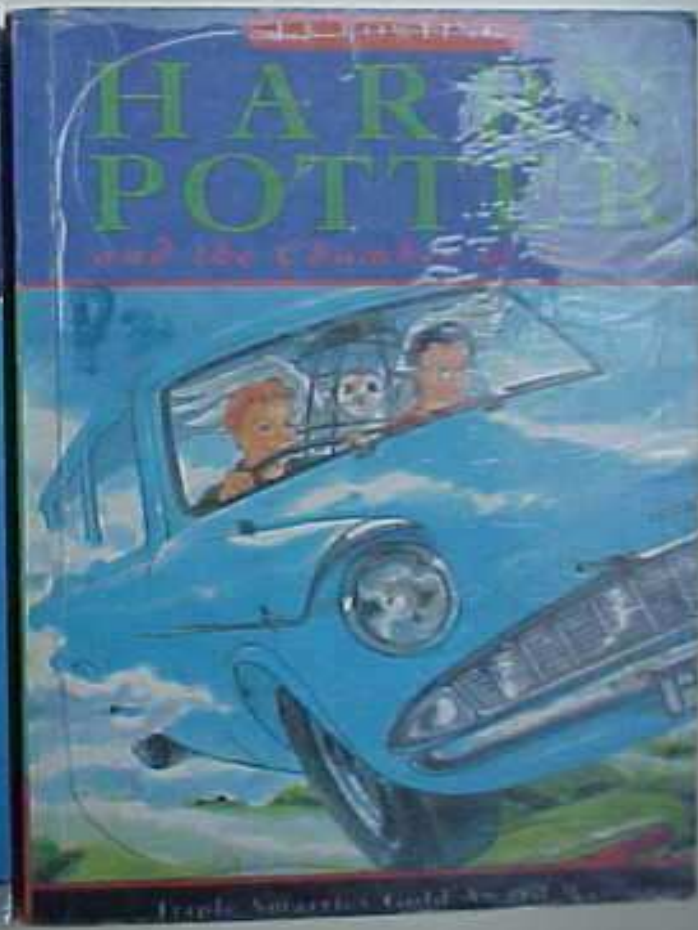
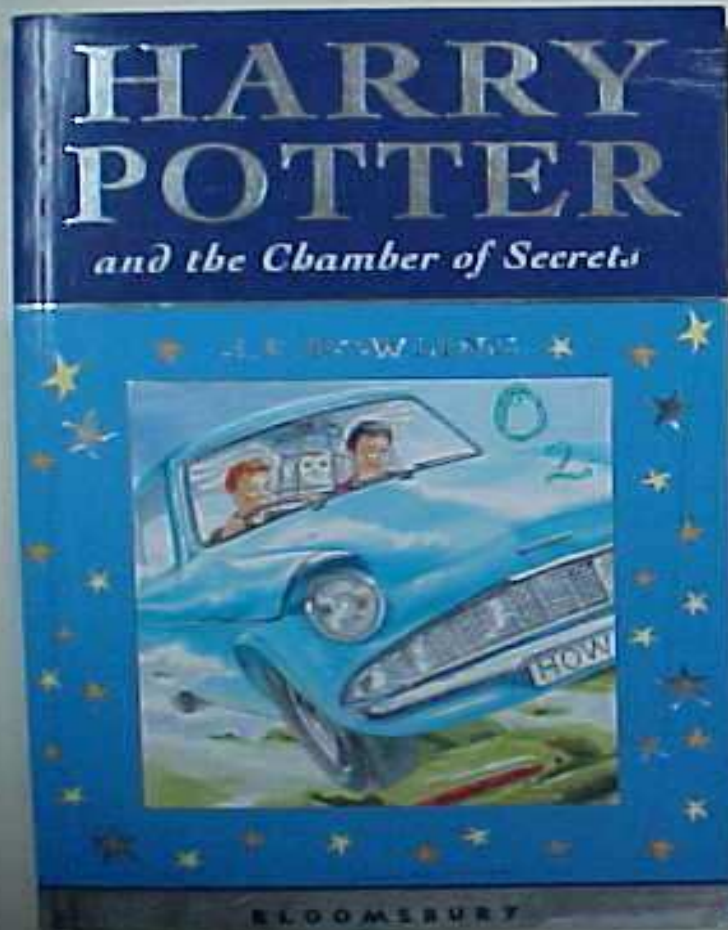
Spurious



Spurious

ORIGINAL

PIRATED



ERASURE MARK OBSERVED
BEFORE NUMERAL "8"

8

A SHEET OF PASSPORT REMOVED AND
PASTED WITH ANOTHER SHEET
(UNDER U-V LIGHT)



FAKE REVENUE STAMPS

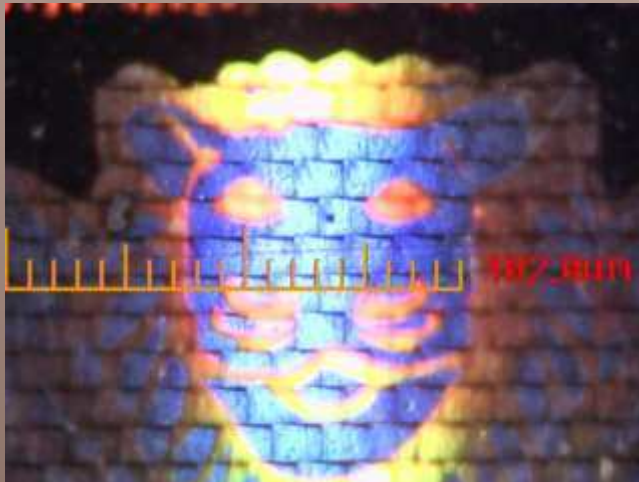


GENUINE REVENUE STAMPS

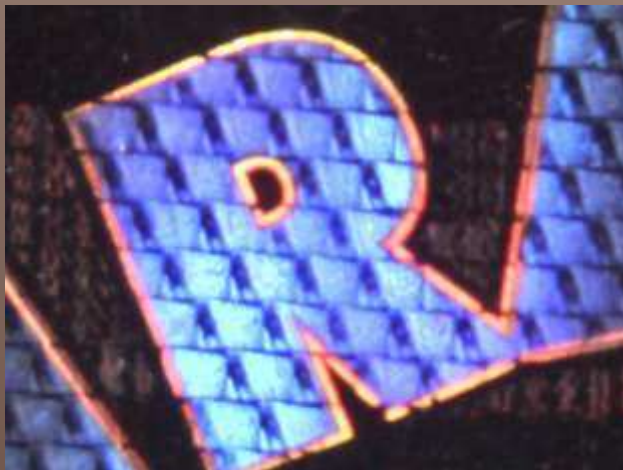
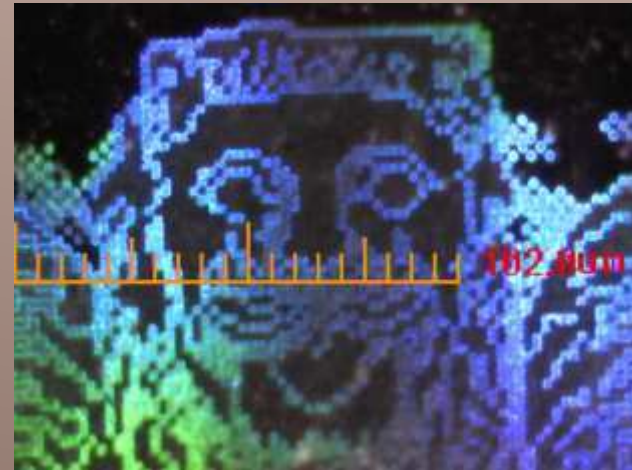


VOTER ID HOLOGRAM ANALYSIS

Genuine



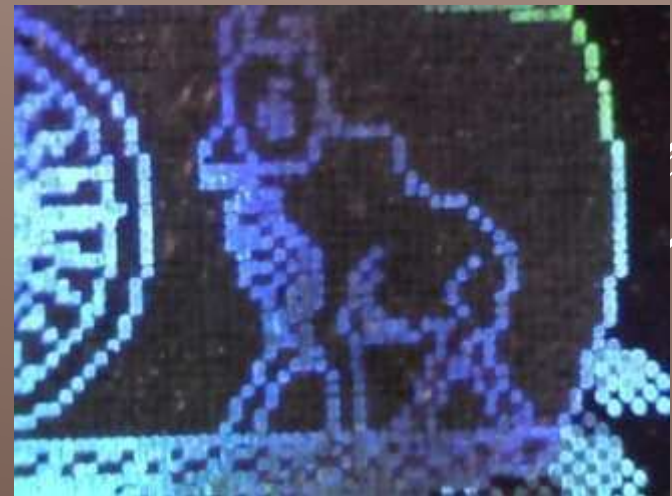
Fake



Voter ID Hologram analysis

Genuine

Fake



AP
PH



OF







Ash Analysis



जी पी 12/ संशो
GP 12/Rev

एस सी SC/
इ. म. रे. S.C.R.

999096

प्रथम श्रेणी मुफ्त पास
FIRST CLASS FREE PASS

विमान Dept T.P. दिनांक Date 01.7.03
पास Pass Mr. H. A. A. B. B.
along with wife
only

पदनाम Designation Goods Dr. (Metd)
कार्यालय Office SSIN2B
From SC से
To CSTM तक
Via N2B MMR होकर
Over SC, C. रेलों पर Rlys.
बीर वापसी में AND RETURN
Via Same होकर
To SC तक
Over C, SC रेलों पर Rlys.
Available upto वर्ष 31.10.03 तक
यात्रा विराम की अनुमति
Permission to B/J at
बहिर्यात्रा Outward Journey N2B, J
वापसी यात्रा Return Journey A, B, M, N
क्यों दिया गया Why Granted C

हस्ताक्षर Signature
पदनाम Designation

स्टेशन सुपरिन्टेन्डेंट
S. C. RV. NIZAMABAD
Station Superintendent
S. C. RV. NIZAMABAD





Thank You
Thank You
Thank You!!!!