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**ABSTRACT**

Various security features of Indian 500 rupee note are discussed in this paper. Common man, who is using currency and having lack of knowledge about security features, can be cheated easily by forgers. There are more than 7 security features in 500 rupee note which are easy to identify. Due to lack of knowledge, it's easy to cheat common man by fake currency notes. So this paper gives detail information about security features and how to identify them by naked eyes.

**KEYWORDS:** security features, 500 rupee note, watermark, currency.

**INTRODUCTION**

Security features are used in various things like currency notes, passports, receipts, educational certificates, stamps, government documents and many more. It's not easy to copy security features but attempts are made continuously and somehow forgers find their ways to copy security features. To deal with them and to avoid being cheated one should have knowledge about security features in various things. In this paper, security features in Indian 500 rupee note are discussed. Various currency notes used in India are shown in figure 1.



*Figure 1 Indian Currency Notes*

There are more than 7 security features embedded in front and back of Indian 500 rupee note which are easy to identify. Front and back side of note are shown in figure 2.



*Figure 2 Front and Back side of 500 rupee note*

Currency notes are manufactured by various printing processes so as to make it difficult for forgers to forge them. Design of a currency note is also complicated to make it difficult to design by common man. Various security features are discussed as follows:

### **WATERMARK**

It is a design created in note during manufacturing process by varying the distribution of fibers in given space. There are 3 watermarks present in an Indian 500 rupee note. One is embedded image of Mahatma Gandhi as shown in figure 3, another is numeral 500 embedded at just left side of Mahatma Gandhi watermark as shown in figure 4 both at front lower left of note. Third watermark is embedded at back side of the note written RBI in bold letters which is difficult to view. All watermarks are visible against light.



*Figure 3 Mahatma Gandhi watermark*



*Figure 4 Numeral 500 watermark*

### **SECURITY THREAD**

It is a 3mm wide strip with Bharat RBI written on it alternatively, this strip is visible partially and added in the note during manufacturing process. Colour of this strip shifts from green to blue and writings also glow when viewed under UV light as shown in figure 5.



*Figure 5 Security Thread under normal and UV light respectively*

### **MICROLETTERING**

These are words written so small that they appear like a small line at front right side of the note near Mahatma Gandhi image. This micro-letting is visible under watch glass only as shown in figure 6.



*Figure 6 Micro-letting*

### **LATENT IMAGE**

This is the text which is over printed and can be visible at an angle only as shown in figure 7.



*Figure 7 Latent Image*

### **IDENTIFICATION MARK**

This is a circular intaglio printed mark felt easily by fingers generally printed for blind people at the front left side of the note as shown in figure 8.



*Figure 8 Identification Mark*

### OPTICALLY VARIABLE INK

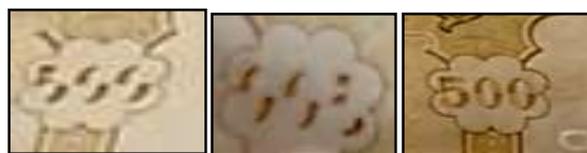
This ink has the specialty of changing colour under different light sources. In 500 rupee note numeral 500 at front centre which looks green in colour changes colour under UV light source to blue as shown in figure 9.



*Figure 9 Numeral 500 under normal light and UV light*

### SEE THROUGH REGISTER MARK

This is a floral design printed front left and back right side of the note. This looks like a design but when held against light shows a denomination of 500 as shown in figure 10.



*Figure 10 See Through Register Mark*

### CONCLUSION

There are various security features embedded in Indian 500 rupee note which are easy to identify. One must have knowledge about them to avoid being cheated by anyone. An attempt is made to conclude the various security features in Indian 500 rupee note which will help common man from being cheated by anyone.

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