



## Isolation and Identification of Microorganisms on Indian Currency Notes

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**Abstract :** Most of the things we use in our everyday life work as a potential carrier for microorganisms. One such medium is Paper Currency Notes. Paper Currencies are widely used in the exchange of goods and services and are handled by people of all strata with different hygiene and life style which makes the Paper Currency contaminated. This study seeks to determine the microbial contamination on Indian Old and New Paper Currency. Eight notes both old and new of denomination ₹ 10, ₹ 20, ₹ 50 and ₹ 100, as they are used widely, were collected for the isolation of microbes. Gram's Staining and Biochemical tests were performed to identify the Bacterial species and Cotton Blue Test to identify fungal colonies. This research

concludes that not only old but new notes are also contaminated with bacterial and fungal colonies.

**Keywords:** Microorganisms, Currency Notes, Contamination, Gram's Staining, Biochemical Tests.

### Introduction :

Most of the things we use in our everyday life work as the potential carrier for microorganisms. One such medium is our Paper Currency Notes.

Paper Currency is made up of 75% of cotton and 25% of linen, and offers surface area for bacteria and micro organisms to reside on both sides. Currency Notes are used as the medium of exchange of goods and services. During the process of exchange, notes are handled by person with different health background and lifestyle. Microorganisms are known to spread via air, water, and food. Paper Currency can get contaminated by droplets during coughing, sneezing and touching with contaminated hands or other materials and placement on dirty surface (Subhashini et al., 2016). Most pathogens are able to survive on currency surfaces and these surfaces can act as a source of pathogen transmission, if no disinfection is performed.

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