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## DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION 2021-22

**PROJECT TITLE:** 7-Segment Display for Bangla, English and Other Indian Numerals.

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Abstract: - Over the past few years many research works have been done with Bangla language which result many proposals to display Bangla numerals. However we found very few significant works in displaying the numerals of other Indian languages. Also in the proposed devices for displaying Bangla numerals we found the number of segments are 16, 11, 10, 9, 8, 14 (dual 7 segments) etc. In this paper we are proposing a unified seven segment display device which is capable of displaying Bangla, English and most of the Indian languages' numerals that include Assamese, Manipuri, Hindi, Nepali, Marathi, Gujarati, Punjabi, Kannada, Telugu, Sikkim and Bhutan etc. Our proposed display device has the same simplicity that of English with an acceptable level of accuracy and uniformity.

## Advantages:-

- The seven segment display model that we proposed is a novel one as this is the first of its kind to display the numerals of Bangla, English and many other Indian languages using as few as seven segments.
- Also in the display model there is no curved segment and no segment overlapping that makes the
  device easy to manufacture.
- The proposed decoder of our model is also efficient since the language can be easily selected with help of 3 bit selectors.

## Future Scope: -

- 1. The people who have education background from their mother language and if they are not able to understand numbers from English language. This device will be best useful for such conditions.
- 2. This device will be useful to promote Indian Language.
- 3. It could be used as normal 7-segment display.