VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belgaum – 590 018

PROJECT REPORT

ON

"FLOOD INUNDATION MAPPING ALONG THE UPPER REACHES OF NETRAVATI RIVER USING RS AND GIS TECHNIQUES"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

Submitted By

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2018-19

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CERTIFICATE

Certified that the project work entitled "Flood Inundation Mapping along the Upper Reaches of Netravati River Using RS and GIS Techniques" is a bonafide work carried out by

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Are bonafide students of Civil Department of Alva's Institute of Engineering and Technology in partial fulfillment for the award of BACHELOR OF ENGINEERING in **CIVIL ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2018–2019, it is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Flood, inundation of land by the rise and overflow of a body of water. Floods occur most commonly when water from heavy rainfall, from melting ice and snow, or from a combination of these exceeds the carrying capacity of the river system, lake, or the like into which it runs. Usually the combined flow of several water-swollen tributaries causes flooding along a river bank or shoreline. Accounts of floods that destroyed nearly all life are found in the mythology of many peoples. These hazards and losses can be prevented and reduced by providing reliable information to the public about the flood risk through flood inundation maps. Flood inundation maps are very essential for municipal planning, emergency action plans, flood insurance rates and ecological studies.

In this study Base map, Drainage Network map, Slope map, Aspect map, Contour map and Land Use Land Cover maps have been generated by using RS and GIS techniques, ArcGis Software.

Keywords: Flood inundation, Netravati River, RS and GIS, ArcGIS.