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CERTIFICATE

This is to certify that the dissertation entitled *"Single-path and Multi-path Routing over Multi-hop Cognitive Radio Ad-Hoc Networks : A comparative Study"* submitted by **Jyoti Prakash Mohanta** bearing **Roll No: CSI12003** is an authentic research work carried out by him under my personal supervision and guidance for partial fulfilment of the requirements and the regulations for the award of the degree of *Master of Technology* with specialization *Information Technology* during the session 2012-14 at Tezpur University, Tezpur.

To the best of my knowledge, the matter embodied in the thesis has not been reproduced elsewhere or submitted to any other university/institute for the award of any Degree or Diploma.

26/05/2014

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CERTIFICATE

This is to certify that **Jyoti Prakash Mohanta** bearing **Roll No: CSI12003** has prepared the dissertation entitled *"Single-path and Multi-path Routing over Multi-hop Cognitive Radio Ad-Hoc Networks : A comparative Study"*.

The dissertation is the result of his effort and endeavour. He has worked under the supervision and guidance of **Dr. Nityananda Sarma**, Professor, Department of Computer Science & Engineering, Tezpur University. The dissertation is found worthy of acceptance for the award of the degree of *Master of Technology* with specialization *Information Technology* during the session 2012-14 at Tezpur University.

Signature of HOD
(Dr. Shyamanta M Hazarika)
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CERTIFICATE

The dissertation entitled *"Single-path and Multi-path Routing over Multi-hop Cognitive Radio Ad-Hoc Networks : A comparative Study"* submitted by**Jyoti Prakash Mohanta** bearing **Roll No: CSI12003** for partial fulfilment of the requirements for the degree of *Master of Technology* with specialization *Information Technology* at Tezpur University has been examined.

Internal Examiner

Date: 26/05/2014

Professor
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External Examiner

Date: 26-05-14

DECLARATION

I hereby declare that the dissertation entitled *"Single-path and Multi-path Routing over Multi-hop Cognitive Radio Ad-Hoc Networks : A comparative Study"* submitted for partial fulfilment of the requirements and the regulations for the award of the degree of *Master of Technology* with specialization *Information Technology* at Tezpur University.

The dissertation is prepared by me and has not been submitted to any other university/institute for the award of any Degree or Diploma.

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Jyoti Prakash Mohanta