

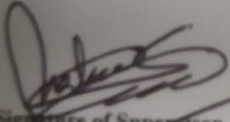
## Applied Geology


DEPARTMENT OF EARTH SCIENCES  
UNIVERSITY OF KASHMIR, SRINAGAR,  
JAMMU & KASHMIR  
2018

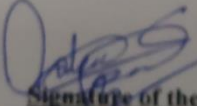


**CERTIFICATE**

This is to certify that “**Under The Dynamics of Zaskar Glaciers Using Multi-temporal Remotely Sensed Data**” is a bonafide work done by Mr. Bilal Ahmad Bhat during the year 2017-2018 in partial fulfillment of the requirements for the award of degree of Master of Science In Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar Jammu and Kashmir India .It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.

  
Signature of Supervisor  
Prof. Shafiq Ahmad Romshoo  
Designation: Professor and H.O.D.

  
Signature of External  
Expert/Evaluator  
Designation:

  
Signature of the HOD  
DEPARTMENT OF EARTH SCIENCES

DEPARTMENT OF EARTH SCIENCES  
UNIVERSITY OF KASHMIR, HAZRATBAL  
SRINAGAR- 190006



**CERTIFICATE**

It is certified that the dissertation entitled "Assessment of the Potential Source of Nitrate in Major Lakes of Kashmir" <sup>is</sup> carried out by Miss. GOWSIA RAHIM bearing ROLL NO. 16064120002 during the year 2016 – 2018 in partial fulfillment of the requirements for the award of degree of Master of Sciences in Applied Geology, department of Earth Sciences, University of Kashmir, Srinagar, J&K. It is further certified that this work has not been submitted to any University for the award of any degree.

Signature of Supervisor

**Dr. Gh. Jeelani**  
(Associate Professor)

Signature of Head

**Dr. Shakeel Ahmad Romshoo**  
(Professor)

**GPR Profiling along foot hills of Great Himalayan  
Range Kashmir Valley, N/W Himayas, , India**



**Submitted for the partial fulfillment of**

**MASTER OF SCIENCE**

**IN**

**APPLIED GEOLOGY**

**Submitted by**

**SAMEENA NABI PARRAY**

**Enrollment Number: 16064120003**

**Under the supervision**

**Of**

**Dr. Bikram Singh Bali**

**(Associate Professor)**

**DEPARTMENT OF EARTH SCIENCE**

**UNIVERSITY OF KASHMIR**

**HAZRATBAL, SRINAGAR-190006**

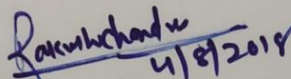
**Department of Earth Sciences**  
**University of Kashmir, Hazratbal, Srinagar-190006; J&K**



**CERTIFICATE**

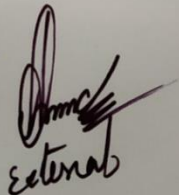
This is to certify that **Ms. SabreenaShaban, Roll No.: 16064120004, M. Sc. IVth Sem. Applied Geology**, worked under the supervision of Dr. Rakash Chandra, Sr Assistant Professor during the academic year 2017-18 for his dissertation project work on the topic "*Geological mapping and active tectonic study in and area around Handwara and Baramulla Towns, Kashmir Valley, J&K*" for the partial fulfillment of the requirements for the award of degree of M. Sc. Applied Geology in this department. The content of submitted dissertation is a proprietary document of the Library, Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar-190006 J&K, need prior permission from the undersigned for any correspondence and publication thereof.

Date: 4/8/2018

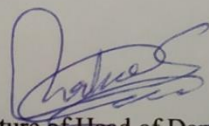
  
Signature of Supervisor

Dr Rakesh Chandra, Sr. Assist. Prof.

Countersigned by:

  
external

Date:

  
Signature of Head of Dept.

**CERTIFICATE**

This is to certify that it is a bonafide work done by Mr. **Manzoor Ahmad Dar** during the year 2017-2018 in partial fulfillment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, Jammu & Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree

Signature of Supervisor

Name,

Designation:

*Manzoor*  
**Reyaz A. Dar**  
**Asstt. Professor**

Signature of External Expert/Evaluator

Name,

Designation:

*Manzoor*

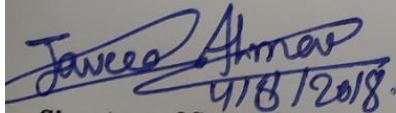
*Manzoor*  
**Signature of the**

**Head of the department**

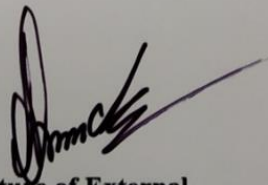


### CERTIFICATE

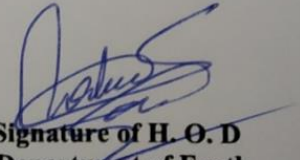
This is to certify that **“Petrographic and geochemical study of the Syringothyris limestones of Mamal village, Phalgam region, Tethys Himalaya Kashmir; implications for its classification and terrigenous input”** is a bonafide work done by **Pirzada Mohammad Haris** during the year 2016-2018 for partial fulfillment of the credentials for the award of degree of **Master of science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Srinagar. It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.

Handwritten signature of Dr. Javid Ahmad in blue ink, with the date 9/8/2018 written below it.

Signature of Supervisor  
Name: Dr. Javid Ahmad  
Designation: Young Scientist

Handwritten signature of the External Expert/Evaluator in blue ink.

Signature of External  
Expert/Evaluator  
Designation:

Handwritten signature of the Head of Department in blue ink.

Signature of H. O. D  
Department of Earth  
Sciences.

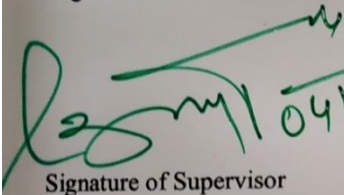
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MI DUAL CAMERA

CERTIFICATE

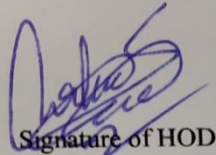


This is certify that **Mr. Subzar Ahmad Mir**, Roll no. **16064120010** worked under the supervision of Dr. Bikram Singh Bali, Associate professor during the academic year 2016-2018 for his dissertation project work entitled "**tectonic geomorphological study of river Indus from Ch to Alchi**" for the partial fulfillment of the requirements for the award of degree of **M.Sc. Applied Geology, Department of Earth Sciences, University of Kashmir.**

The content of submitted dissertation is the proprietary document of Department of Earth Sciences, University of Kashmir and proper permission from the undersigned is required/mandatory for publishing or correspondence with respect to content of the dissertation. It is further certified that this work has not been submitted to any University for the award of any degree.

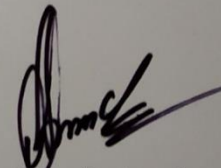
  
Signature of Supervisor

Dr. Bikram Singh Bali  
Associate professor

  
Signature of HOD

Department of Earthsciences

Subzar Ahmad Mir  
Roll no 16064120010

  
Signature of external  
Evaluator/Examiner



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## DEPARTMENT OF EARTH SCIENCES

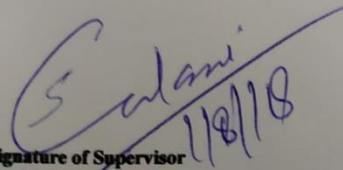
University of Kashmir, Hazratbal

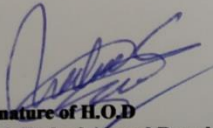
Srinagar-190006

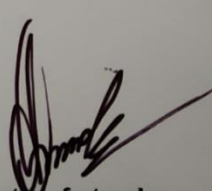


### CERTIFICATE

This is certified that the dissertation entitled "Isotopic evolution of Seasonal Snowpack in Kousar Nag Catachment, Jammu and Kashmir, India"<sup>ly</sup> carried out by **Mr. PIR GULAM JAMI**, bearing Roll No. **16064120009** under the supervision of **Dr. Ghulam Jeelani** during the year 2016-2018 in partial fulfillment of the requirements for the award of degree of **Master of Science in Applied Geology, Department of Earth Sciences, Kashmir University, Srinagar, Jammu & Kashmir, India**. It is further certified that this work has not been submitted to any University for the award of any Degree.

  
Signature of Supervisor  
Dr. Ghulam Jeelani  
(Associate Professor)

  
Signature of H.O.D  
Prof. Shakeel Ahmad Ramshoo  
Department of Earth sciences

  
Signature of external  
Evaluator/Examiner



**Department of Earth Sciences**  
**University of Kashmir, Hazratbal, Srinagar-190 006; J&K**



**CERTIFICATE**

This is to certify that Eshan Bashir Reshi .Roll No 16064120011 worked under the supervision of Dr Rakesh Chandra, Sr. Assistant Professor during the academic year 2016-2018 for his dissertation project work entitled "*Geological mapping and active tectonic of the area in and around Baramulla under toposheet 43J/4 and 43J/8*" for the partial fulfillment of the requirements for the award of degree of **M.Sc. Applied Geology** at Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar, J&K.

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**Supervisor**

Dr Rakesh Chandra  
Dept. of Earth Sciences  
University of Kashmir

*Rakesh Chandra*  
4/9/2018

**Countersigned by:**

Date: 4-9-18

A handwritten signature in blue ink, likely belonging to the Head of Department.

**Head of Department**

Prop. Shakeel Ahmad Ramshoo  
Dept. of Earth Sciences  
University of Kashmir

A handwritten signature in blue ink, belonging to Prop. Shakeel Ahmad Ramshoo.



### CERTIFICATE

Certified that the dissertation entitled “ Micromorphological studies of Loess paleosol at Ningli Basin”, submitted by **Jasarat ASHRAF** , Roll No **16064120012** required as partial fulfillment for the award of *Masters Degree in Applied Geology through the Department of Geology and Geophysics ,University of Kashmir*, is record of her own work carried under my supervision and guidance. This research work has not been produced elsewhere for the award of any other degree.

Signature of Supervisor

Name:

Designation:

Signature of External Expert/Evaluator

Name:

Designation:

Signature of HOD

Department of Earth Science



## CERTIFICATE

This is to certify that **Mr. SAJAD AHMAD MIR**, Roll No. **16064120013** worked under the supervision of **Dr. Sarah Qazi, Inspire faculty** during the academic year 2016-2017 for his dissertation project work entitled **“ANALYSSIS OF DIFFERENT BASEFLOW METHODOLOGIES FOR THE NON- GLACIATED MOUNTAINOUS WATERSHEDS”** for the partial fulfillment of the requirements for the award of degree of **Masters of Science in Applied Geology, Department of Earth Sciences, University of Kashmir. J&K**

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Signature of the supervisor

**Dr. Sarah Qazi**

**Inspire faculty**

Signature of H.O.D

**Department of earth**

**sciences.**

Signature of External

**Expert/Evaluator**

**Designation.**

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**DEPARTMENT OF EARTH SCIENCES**

**UNIVERSITY OF KASHMIR**

**SRINAGAR 190006**



**CERTIFICATE**

It is certified that the dissertation entitled "PETROGRAPHIC STUDY OF CARBONIFEROUS SANDSTONE AROUND BANIHAL TOWN, N-W HIMALAYAS IMPLICATIONS FOR ITS PROVENANCE AND TECTONIC SETTING "carried out by Ms.Qurat-ul-ain bearing roll no 16064120014 during the year 2016-2018 in partial fulfillment of the requirements for the award of Master of sciences in Applied geology, Department of Earth sciences, University of Kashmir, Srinagar, Jammu and Kashmir. It is further certified that this work has not been submitted to any University for the award of any degree.

**Signature of Supervisor**

**Dr.Javid Ahmad Ganai**  
**Young Scientist**

**Signature of Head of the department**  
**Prof. Shakil Ahmad Romshoo**

**Counter signed by**

**Date**

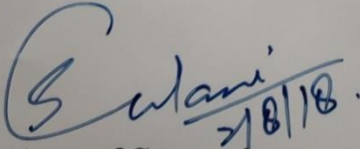


**Department of Earth Sciences**  
**University of Kashmir, Hazratbal, Srinagar-190006; J&K**

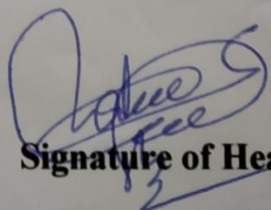


**CERTIFICATE**

This is to certify that **Ms. Ulfat Mustafa, Roll No.: 16064120015, M. Sc.** <sup>has</sup> **IVth Sem. Applied Geology**, worked under the supervision of Dr. Ghulam Jeelani, Associate Professor during the academic year 2017-18 for her dissertation project work on the topic "*Assessment of the potential sources of Phosphorous in fresh water lakes of the Kashmir Valley, J&K*" for the partial fulfillment of the requirements for the award of degree of M. Sc. Applied Geology in this department. The content of submitted dissertation is a proprietary document of the Library, Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar-190006 J&K, need prior permission from the undersigned for any correspondence and publication thereof.

  
**Signature of Supervisor**

**Dr. Gh. Jeelani**  
**(Associate Professor)**

  
**Signature of Head:**





## CERTIFICATE

This is to certify that **SYED BADRUDUHA ANDRABI**, Roll No. 16064120016 worked under supervision of Dr. BIKRAM SINGH BALI during the academic year 2016-18 for his dissertation project work on the topic "**Neo-Tectonics features of section from Anantanag town to Mattan Area Kashmir Valley J&K**" for the partial fulfillment of the requirement for the award of degree of **MASTER OF SCIENCE IN APPLIED GEOLOGY** in this department. The Content of submitted dissertation is a proprietary document of the Library, Department of Earth Science, University of Kashmir, Hazratbal, Srinagar-190006, J&K need prior permission from the undersigned of any correspondence and publications thereof.

Date:

Name: Dr. Bikram Singh Bali

Signature of Supervisor

Countersigned by:

Date:

Name:

Signature of Head of Dept.

**Department of Earth Science**  
**University of Kashmir, Hazratbal, Srinagar-190006; J&K**



**CERTIFICATE**

This is to certify that **Bilqies Fatima** worked under the supervision of **Dr Rakesh Chandra, Sr. Assistant Professor** during the academic year **2016-2018** for his dissertation project work on the topic **Geomorphological and geological mapping in and around areas of Shopian & Pulwama** for the partial fulfilment of the requirements for the award of degree of **M. Sc. Applied Geology** in this department. The content of submitted dissertation is a proprietary document of the Library, Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar-190006 J&K, need prior permission from the undersigned for any correspondence and publication thereof.

Date: **4/8/2018**

**Rakesh Chandra**  
**4/8/2018**  
Signature of Supervisor  
Name: Dr Rakesh Chandra  
Sr. Assistant Professor

Countersigned by:

Date:

**External**

**[Signature]**  
Signature of Head of Dept.  
Name:



## CERTIFICATE

This is to certify that it is the bonafide work done by **AIJAZ AHMAD PALLA** bearing Roll no: **16064120018** for the year **2016-2018** in the partial fulfillment of the requirement for the award of degree of Masters in Science Applied Geology, *Department of Earth Science, Kashmir University, Srinagar J&K*. It is further certified that this work has not been submitted to any other university or institute for the award of such a degree.

A handwritten signature in black ink, likely of Dr. Reyaz Ahmad Dar.

Signature of Supervisor

**Dr. Reyaz Ahmad Dar**

**Assistant Professor**

A handwritten signature in black ink, likely of an external expert or evaluator.

Signature of External Expert/Evaluator

A handwritten signature in blue ink, likely of the Head of Department.

Signature of HOD

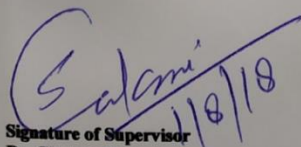
**Department of Earth Science**

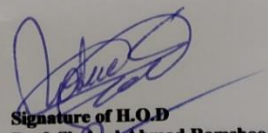
**DEPARTMENT OF EARTH SCIENCES**  
**University of Kashmir, Hazratbal**  
**Srinagar-190006**




**CERTIFICATE**

This is certified that the dissertation entitled "Isotopic evolution of Seasonal Snowpack in Kolahai Glacier West Lidder, India"<sup>h</sup> carried out by **Mr. Syed Basharat Ahmad Shah**, bearing Roll No. **16064120019** under the supervision of **Dr. Ghulam Jeelani** during the year 2016-2018 in partial fulfillment of the requirements for the award of degree of **Master of Science in Applied Geology, Department of Earth Sciences, Kashmir University, Srinagar, Jammu & Kashmir, India**. It is further certified that this work has not been submitted to any University for the award of any Degree.

  
Signature of Supervisor  
Dr. Ghulam Jeelani  
(Associate Professor)

  
Signature of H.O.D  
Prof. Shakeel Ahmad Ramshoo  
Department of Earth sciences

  
Signature of external  
Evaluator/Examiner



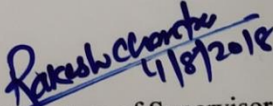
**Department of Earth Sciences**  
**University of Kashmir, Hazratbal, Srinagar-190006; J&K**

**CERTIFICATE**

This is to certify that **Mohd Imran Khan** Roll No. **16064120021** worked under the supervision of **Dr Rakesh Chandra, Sr. Assistant Professor** during the academic year **2016/2018** for his dissertation project work entitled "**Geological mapping and study of Active tectonics**" for the partial fulfillment of the requirements for the award of degree of **Masters in Geology** at Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar, J&K.

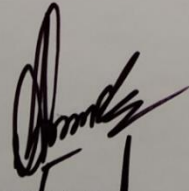
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Date: **4/8/2018**


  
Signature of Supervisor

Name:

Countersigned by:

  
External

Date:

  
Signature of Head of Department

Name:



## Certificate



This is to certify that it is the bona fide work done by **Asrar Ahmad Rather** bearing Roll no: **16064120022** for the year **2016-2018** in the partial fulfillment of the requirement for the award of degree of Masters in Science Applied Geology, *Department of Earth Science, Kashmir University, Srinagar J&K*. It is also certified that this work has not been submitted to any other university for the award of such a degree.

A handwritten signature in blue ink, appearing to be "Reyaz A. Astar", written over the printed text "Signature of Supervisor".

Signature of Supervisor

Expert/Evaluator

Name, **Reyaz A. Astar**  
Designation: **Asst. Professor**

A handwritten signature in blue ink, appearing to be "Reyaz A. Astar", written over the printed text "Signature of HOD".

Signature of HOD,

Department of Earth Science

A handwritten signature in blue ink, appearing to be "Asrar Ahmad Rather", written over the printed text "Signature of External Evaluator".

Signature of External Evaluator

Name,

Designation:

DEPARTMENT OF EARTH SCIENCES  
UNIVERSITY OF KASHMIR, HAZRATBAL  
SRINAGAR- 190006



**CERTIFICATE**

It is certified that the dissertation entitled "Assessment of Potential Source of SULPHATE in Major Lakes of Kashmir" carried out by Miss .HUMAIRA NAZIR bearing ROLL NO. 16064120023 during the year 2016 – 2018 in partial fulfillment of the requirements for the award of degree of Master of Sciences in Applied Geology, department of Earth Sciences, University of Kashmir, Srinagar, J&K. It is further certified that this work has not been submitted to any University for the award of any degree.

Signature of Supervisor

Dr. Gh. Jeelani  
Associate professor

Signature of Head of Department

Dr. Shakeel Ahmad Romshoo  
Professor



## CERTIFICATE

This is to certify that it is a bonafide work done by Ms Shabnam Ayoub during the year 2016 - 2018 in partial fulfilment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, Kashmir University, Srinagar, and Jammu & Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree / Diploma.

Signature of Supervisor  
Dr. Bikram Singh Bali  
Associate Professor

Signature of External Expert/Evaluator  
Name,  
Designation:

Signature of the HOD  
Professor Shakeel Ahmad Ramshoo  
DEPARTMENT OF EARTH SCIENCES



### CERTIFICATE

Certified that the dissertation entitled "Lithostratigraphy and the Micromorphological studies of Loess paleosol at Ningli Basin", submitted by **Rafeeda Mumtaz**, Roll No **16064120025** required as partial fulfillment for the award of *Masters Degree in Applied Geology* through the *Department of Geology and Geophysics*, University of Kashmir, is record of her own work carried under my supervision and guidance. This research work has not been produced elsewhere for the award of any other degree.

Signature of Supervisor

Name:

Designation:

Signature of External Expert/Evaluator

Name:

Designation:

Signature of HOD

Department of Earth Science



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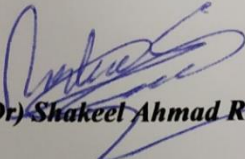


# University of Kashmir

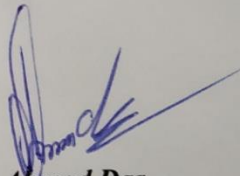
## Department of Earth Science

### Certificate

This is to certify that it is the bona fide work done by **Asma Feroz Shah** bearing Roll no: **16064120026** for the year 2016-2018 in the partial fulfillment of the requirement for the award of degree of Masters in Science Applied Geology, Department of Earth Science, University of Kashmir, Srinagar J&K. It is certified that this work has not been submitted to any other university for the award of such a degree.

  
**Prof. (Dr.) Shakeel Ahmad Ramshoo**  
(Head of Department)

Department of Earth Science  
University of Kashmir

  
**Dr. Riyaz Ahmad Dar**  
Assistant Prof (supervisor)  
Department of Earth Science  
University of Kashmir





## CERTIFICATE

This is to certify that **Mr. MUZAMIL AHMAD LONE** ROLL NO. **16064120027** worked under the supervision of **Dr Sara Qazi, Inspire Faculty** during the academic year 2017- 2018 for his dissertation project work entitled **“Analysis of different baseflow methodologies for the glaciated mountainous watersheds”** for the partial fulfillment of the requirements for the award of degree of **Master Of Science in Applied Geology, Department Of Earth sciences, University Of Kashmir, J & K.**

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Signature of supervisor

Dr. Sara Qazi

Inspire Faculty

Muzamil Ahmad Lone

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DEPARTMENT OF EARTH SCIENCES  
UNIVERSITY OF KASHMIR,  
SRINAGAR 190006



CERTIFICATE

It is certified that the dissertation entitled "**Petrographic study of carboniferous sandstone of Phalgam region north-western Himalayas; implications for its classification**" is carried out by Mr. Mohammad Hanif bearing roll no 16064120028 during the year 2016-2018 for partial fulfillment of the requirements for the award of Master of sciences in Applied geology, Department of Earth sciences, University of Kashmir, Srinagar, Jammu and Kashmir. It is further certified that this work has not been submitted to any University for the award of any degree.

A handwritten signature in blue ink, appearing to read 'Javid Ahmad Ganie'.

Signature of supervisor  
Dr. Javid Ahmad Ganie  
(Young scientist)

A handwritten signature in blue ink, appearing to read 'Shakil Ahmad Romshoo'.

Signature of the head of department  
Prof. Shakil Ahmad Romshoo

A handwritten signature in blue ink, appearing to read 'Shakil Ahmad Romshoo'.

Signature of Evaluator/ Investigator

**Department of Earth Sciences,  
University of Kashmir, Hazratbal Srinagar**



**CERTIFICATE**

This is to certify that dissertation titled *Assessing the glacier dynamics over Pangong Region from 1980-2017 using high resolution remote sensing data* is an original contribution by **Ms. Nafeeza Gull**, Roll No. **16064420601**, and Batch **2016** for the partial fulfillment of the requirements for the award of degree of Masters of Applied Geology, Department of Earth Sciences, Kashmir University, Srinagar, Jammu & Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree or Diploma.

*Irfan Rashid*

Signature of Supervisor  
Name: Dr. Irfan Rashid  
Designation: Assistant Professor  
Department of Earth Sciences  
University of Kashmir

*Raimi Chandra*

Signature of External Expert  
Name:  
Designation:

*[Signature]*

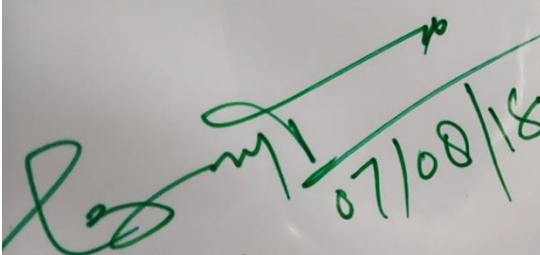
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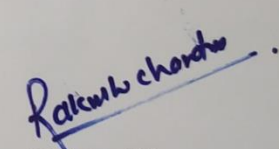
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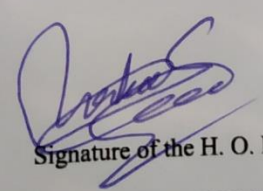
  
Signature of Supervisor

Dr. Bikram Singh Bali

Associate Professor

  
Signature Of

External Evaluator/Examiner

  
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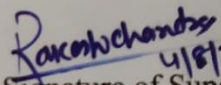
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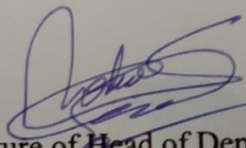
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Name: Dr. Reyaz Dar

Designation: Assistant Professor

Signature of External Expert/Evaluator

Name:

Designation:

Signature of HOD

Department of Earth Sciences

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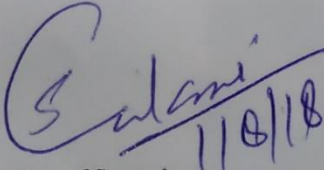
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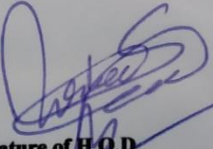
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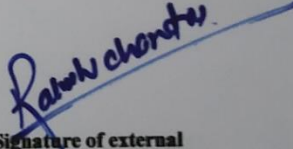


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Signature of Supervisor  
Dr. Ghulam Jeelani  
(Associate Professor)

  
Signature of H.O.D  
Prof. Shakeel Ahmad Ramshoo  
Department of Earth sciences

  
Signature of external  
Evaluator/Examiner

**Department of the Earth Sciences  
University Of Kashmir**



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This is to certify that **Mudasir Ahmad Bhat** worked under the supervision of **Dr Rakesh Chandra** (Sr. Assistant Professor) during the academic year 2016-2018 for his dissertation project work on the topic "*Geological mapping & Neotectonic study of area around Budgam & Kulgam towns of Kashmir Valley, J&K*". for the partial fulfillment of the requirements for the award of degree of M. Sc. Applied Geology at Department of the Earth Sciences, University of Kashmir.

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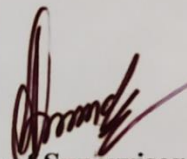
**Supervisor**

Dr. Rakesh Chandra  
Department of Earth Sciences  
University of Kashmir, Hazratbal  
Srinagar 190006.

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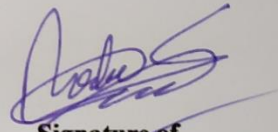
  
Signature of Supervisor

Expert/Evaluator

Name,

Designation:

**Reyaz A. Dar**  
**Asst. Professor**

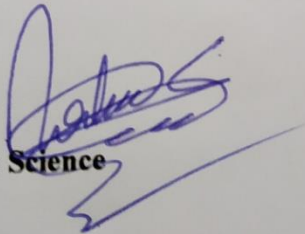
  
Signature of  
External Evaluator

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Srinagar-190006



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This is certified that the dissertation entitled "Isotopic evolution of Seasonal Snowpack in Apharwat (Gulmarg) Catchment, Jammu and Kashmir, India" is carried out by Mr. ARSHEED HUSSAIN YATOO, bearing Roll No.16064420609 under the supervision of Dr. Ghulam Jeelani during the year 2016-2018 in partial fulfillment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, Kashmir University, Srinagar, Jammu & Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree.

Signature of Supervisor  
Dr. Ghulam Jeelani  
(Associate Professor)

Signature of H.O.D  
Prof. Shakeel Ahmad Ranshoo  
Department of Earth sciences

Head & PG Department of Earth Sciences  
University of Kashmir

Signature of external  
Evaluator/Examiner



**Department of Earth Science**

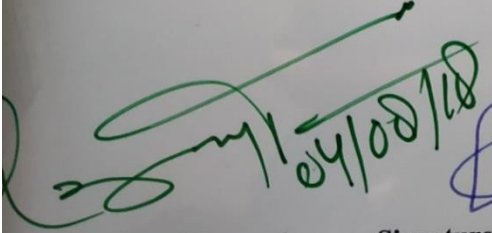
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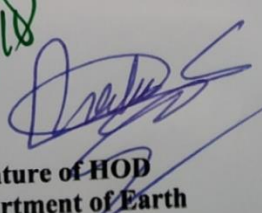
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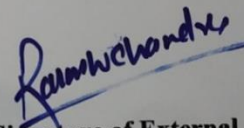


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**Dr. Bikram Singh Bali**  
(Associate Professor)

  
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**Department of Earth sciences  
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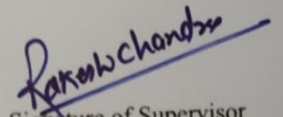
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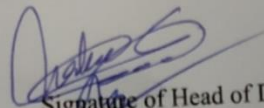
This is to certify that **Mohammad Bilal Khan**, Roll No. 16064420611, M. Sc. IV Sem. **Applied Geology** worked under supervision of Dr. Rakesh Chandra, Sr. Assistant Professor during the academic year 2016-18 for his dissertation project work on the topic "*Geological mapping and active tectonics study of the area around Bandipora and Pattan, Kashmir, Valley, J&K*" for the partial fulfillment of the requirement for the award of degree of Master of Science in Applied Geology in this department.

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Signature of Supervisor  
Name: Dr Rakesh Chandra

  
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**MASTER OF SCIENCE IN APPLIED GEOLOGY**



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Signature of Supervisor

Name,

Designation:

Signature of External Expert/Evaluator

Name,

Designation:

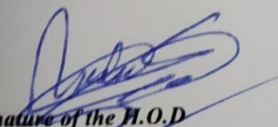
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PG Department Earth Sciences  
University of Kashmir

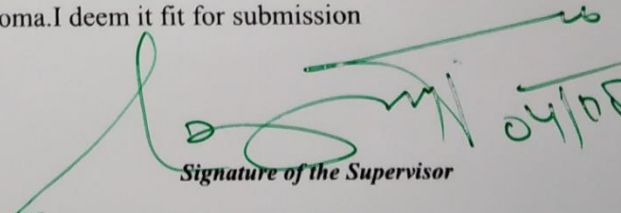
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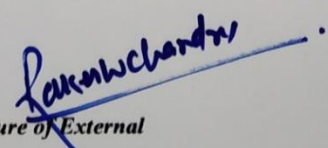


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Signature of the H.O.D.  
Department of Earth Sciences,  
University of Kashmir.

  
Signature of the Supervisor

  
Signature of External  
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Department of Earth Sciences  
University of Kashmir, Hazratbal, Srinagar-190 006; J&K



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Signature of Supervisor  
Name: Dr Rakesh Chandra  
Sr. Assistant Professor

Countersigned by:

Date:

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Signature of Head of Dept.  
Name:



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Signature of Supervisor  
Dr. Ghulam Jeelani  
(Associate Professor)

Signature of H.O.D  
Prof. Shakeel Ahmad Ramshoo  
Department of Earth sciences

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