



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref. No:KGTM/GEOG/20/21-22

Date: 24/12/2021

To,

Dr. John Breakmas Turkey

IQAC Coordinator

Kalipada Ghosh Tarai Mahavidyalaya

Bagdogra-734014

**Sub: Prayer to start Add-On Course on "DATA ANALYSIS USING SPSS"**

Respected Sir,

I would like to inform you that the Department of Geography, KGT Mahavidyalaya would like to start an Add-On Course on "DATA ANALYSIS USING SPSS" from 01.04.2022 to 17.04.2022 for the students of our college and would help them with comprehensive knowledge in data analysis using SPSS.

Looking forward to your kind consideration for the said course.

Thanking you

Sincerely yours,

*Ranjita Roy Sarkar*      *Susmita Mandal*

Dr. Ranjita Roy Sarkar & Ms Susmita Mandal

Add-on Course Coordinators

Assistant Professor & SACT-II

Department of Geography

KGT Mahavidyalaya

**ADD-ON COURSE  
COORDINATOR, KGTM**



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: [prinkgtm@gmail.com](mailto:prinkgtm@gmail.com)

## DEPARTMENT OF GEOGRAPHY

Ref. No: KGTM/GEOG/24/21-22

Date: 08/03/2022

### NOTICE

It is hereby informed to all the students of Kalipada Ghosh Tarai Mahavidyalaya that an Add-on Course on "DATA ANALYSIS USING SPSS." will be conducted by the Department of Geography from 01.04.2022 to 17.04.2022 from 8:00 AM to 10:00 AM.

All interested students are advised to participate in the said add-on course.

*Chakraborty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

*Kanjika by Sarkar*  
*Submita Mandal*

Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.:KGTM/GEOG/Lecture 28/2021-22

Date: 29/03/2022

To  
MsBarnali Biswas  
Senior Research Scholar, Dept of Geography & Applied Geography  
NBU


Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Data Management in SPSS** for the students on 3<sup>rd</sup> April, 2022 from 8am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM  
PRINCIPAL  
Kalipada Ghosh Tarai,  
Mahavidyalaya,  
Bagdogra,

Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.:KGTM/GEOG/Lecture/29/2021-22

Date: 29/03/2022

To,  
Chinmoy Sarkar  
Assistant Professor  
Department of Sociology  
KGT Mahavidyalaya  
Bagodgra-734014

Sub: To deliver lectures in an Add-on course on "Data Management in SPSS"

Dear Sir,

I would like to inform you that an Add-on course on "Data Management in SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lecture on Exploratory Data Analysis for the students on 4th April, 2022 from 8am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra



Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM





# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.: KGTM/GEOG/Lecture/30./2021-22

Date: 29/03/2022

To,  
Mrs Deboshree Shil  
SACT -11, Dept of Sociology  
KGT Mahavidyalaya  
Bagodgra-734014

Sub: To deliver lectures in an Add-on course on "Exploratory Data Analysis"

Dear Madam,

I would like to inform you that an Add-on course on "Exploratory Data Analysis" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on Parametric and Non-parametric Test for the students on 5<sup>th</sup> April, 2022 from 8am to 10am.

Looking forward to your positive consent.

*Prakraborty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

*Ranjita by Senha*  
*Susmita*

Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



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ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.: KGTM/GEOG/Lecture/31/2021-22

Date: 29/04/2022

To  
Dr. Himika Mukhopadhyay  
Assistant Professor  
Dept of Geography  
KGT Mahavidyalaya  
Bagdogra-734014

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Exploratory Factor Analysis** for the students on 7<sup>th</sup> April, 2022 from 8am to 10am and another 01 lecture on **Testing of Hypothesis: Part III** for the students on 13<sup>th</sup> April, 2022 from 9am to 10am.

Looking forward to your positive consent.

*Chakraborty*  
Principal, KGTM

**PRINCIPAL**  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra

*Ranjita by Senker*

*Sumita Handal*

Course Coordinator

**ADD-ON COURSE  
COORDINATOR, KGTM**



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PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.: KGTM/GEOG/Lecture/31/2021-22

Date: 29/03/2022


To,  
Dr. John Breakmas Tirkey  
Associate Professor  
Department of Sociology  
KGT Mahavidyalaya  
Bagdogra-734014

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Sir,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Introducing to Data Analysis: Fundamentals** for the students on 1st April, 2022 from 8am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra



  
Course Coordinators  
ADD-ON COURSE  
COORDINATOR, KGTM



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ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.:KGTM/GEOG/Lecture/32/2021-22

Date: 29/03/2022

To,  
MrsMouBasu  
SACT -I, Dept of Sociology  
KGT Mahavidyalaya  
Bagdogra-734014

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Introduction of main features of SPSS** for the students on 2nd April, 2022 from 8am to 10am.

Looking forward to your positive consent.

*Phakabarty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

*Kanjika by Sarker*

Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM

*Susmita Mondal*





# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.: KGTM/GEOG/Lecture/33/2021-22

Date: 29/03/2022

To  
Dr. Ranjita Roy Sarkar  
Assistant Professor  
Dept of Geography  
KGT Mahavidyalaya  
Bagdogra-734014

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Structural Equation Modeling** for the students on 9<sup>th</sup> April, 2022 from 8am to 10am and another 02 lectures on **Testing of Hypothesis: Part I** for the students on 11<sup>th</sup> April, 2022 from 8am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM  
PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra





Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.:KGTM/GEOG/Lecture/34/2021-22

Date: 29/03/2022

To,  
Dr. Snehasish Saha  
Associate Professor  
Dept of Geography & Applied Geography  
NBU

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Sir,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Logistic Regression: Part I** for the students on 14th April, 2022 from 8am to 10am.

Looking forward to your positive consent.

*Chakraborty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra

*Ranjita Py Senker*  
*Susmita Mandal*

Course Coordinators

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COORDINATOR, KGTM



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ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.:KGTM/GEOG/Lecture/35/2021-22

Date: 29/04/2022

To  
Dr. Suwendu Roy  
Assistant Professor  
Dept of Geography  
KGT Mahavidyalaya  
Bagdogra-734014

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Sir,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Cluster Analysis** for the students on 8<sup>th</sup> April, 2022 from 8am to 10am and another 02 lectures on **Exploratory Factor Analysis** for the students on 16<sup>th</sup> April, 2022 from 8am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM  
PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

  
Sumita Handa  
Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.: KGTM/GEOG/Lecture/36/2021-22

Date: 29/03/2022

To  
MsSurovi Lahiri  
Assistant Professor  
Department of Sociology  
Ghoshpukur college  
Ghoshpukur

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 02 lectures on **Correlation and Regression Analysis** for the students on 6<sup>th</sup> April, 2022 from 8am to 10am.

Looking forward to your positive consent.

*Chakraborty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

*Kanjita by Sat.*  
*Sumantra Mandal*

Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



## KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: prinkgtm@gmail.com

Ref No.: KGTM/GEOG/Lecture/37/2021-22

Date: 29/03/2022

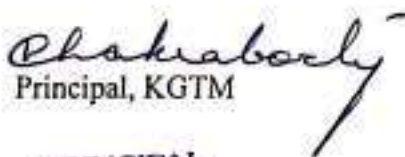
To  
Mrs Susmita Mondal  
SACT-II  
Dept of Geography  
KGT Mahavidyalaya  
Bagdogra-734014

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 01 lecture on **Graphical Visualization** for the students on 10<sup>th</sup> April, 2022 from 9am to 10am and another 02 lectures on **Testing of Hypothesis: Part II** for the students on 12<sup>th</sup> April, 2022 from 8am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

  
Susmita Mondal  
Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



# KALIPADA GHOSH TARAI MAHAVIDYALAYA

ESTD: 1988

PO: BAGDOGRA, DIST: DARJEELING, PIN 734014

E-mail: [prinkgtm@gmail.com](mailto:prinkgtm@gmail.com)

Ref No.: KGTM/GEOG/Lecture/38/2021-22

Date: 29/03/2022

To  
Mst. Tania Parveen  
Senior Research Scholar  
Dept of Geography & Applied Geography  
NBU

Sub: To deliver lectures in an Add-on course on "DATA ANALYSIS USING SPSS"

Dear Madam,

I would like to inform you that an Add-on course on "DATA ANALYSIS USING SPSS" will be conducted from 1.4.2022 to 17.04.2022 in the Department of Geography. You are requested to deliver 01 lecture on **Design of Experiments** for the students on 15th April, 2022 from 9am to 10am.

Looking forward to your positive consent.

  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra



Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



(0353) 2004707 (Principal)  
**KALIPADA GHOSH TARAIMAHAVIDYALAYA**  
ESTD: 1988  
**DEPARTMENT OF GEOGRAPHY**  
PO: BAGDOGRA, DIST: DARJEELING, PIN 734014  
E-mail: prinkgtm@gmail.com

Ref. No. :KGTM/GEOG/25/21-22

Date : 08/03/2022

DEPARTMENT OF GEOGRAPHY, K.G.T.M, BAGDOGRA

SESSION: 2021-2022

Programme Schedule for Add on Course on DATA ANALYSIS USING SPSS in April 2022

DAY	DATE	TIME	TOPIC	RESOURCE PERSON
1	1/4/22	8am-10am	Introducing to Data Analysis: Fundamentals	Dr. John Breakmas Tirkey, Associate Professor, Dept of Sociology, KGTM
2	2/4/22	8am-10am	Introduction of main features of SPSS	MouBasu, SACT -I, Dept of Sociology, KGTM
3	3/4/22	8am-10am	Data Management in SPSS	Barnali Biswas, Research Scholar, Dept of Geography & Applied Geography, NBU
4	4/4/22	8am-10am	Exploratory Data Analysis	Chinmoy Sarkar: Assistant Professor, Dept of Sociology, KGTM
5	5/4/22	8am-10am	Parametric and Non-parametric Test	Deboshree Sill, SACT- II, Dept of Sociology, KGTM
6	6/4/22	8am-10am	Correlation and Regression Analysis	Surovi Lahiri, Assistant Professor, Dept of Sociology, Ghoshpukur college
7	7/4/22	8am-10am	Exploratory Factor Analysis	Dr.Himika Mukhopadhyay, Assistant Professor, Dept of Geography, KGTM
8	8/4/22	8am-10am	Cluster Analysis	Dr. Suwendu Roy, Assistant Professor, Dept of Geography, KGTM
9	9/4/22	8am-10am	Structural Equation Modeling	Dr.Ranjita Roy Sarkar, Assistant Professor, Dept of Geography, KGTM
10	10/4/22	9am-10am	Graphical Visualization	Mrs Susmita Mondal, SACT-II, Dept of Geography, KGTM
11	11/4/22	8am-10am	Testing of Hypothesis: Part I	Dr.Ranjita Roy Sarkar, Assistant Professor, Dept of Geography, KGTM

*Chakraborty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Tarai  
Mahavidyalaya  
Bagdogra

*Ranjita Roy Sarkar*

*Susmita Mondal*

Course Coordinators  
ADD-ON COURSE  
COORDINATOR, KGTM



(0353) 2004707 (Principal)  
**KALIPADA GHOSH TERAI MAHAVIDYALAYA**  
ESTD: 1988  
**DEPARTMENT OF GEOGRAPHY**  
PO: BAGDOGRA, DIST: DARJEELING, PIN 734014  
E-mail: prinkgtm@gmail.com

Day	Date	Time	Topic	Resource person
12	12/4/22	8am-10am	Testing of Hypothesis: Part II	Mrs Susmita Mondal, SACT-II, Dept of Geography, KGTM
13	13/4/22	9am-10am	Testing of Hypothesis: Part III	Dr. Himika Mukhopadhyay, Assistant Professor, Dept of Geography, KGTM
14	14/4/22	8am-10am	Logistic Regression: Part I	Dr. Snchashish Saha, Associate Professor, Dept of Geography & Applied Geography, NBU
15	15/4/22	9am-10am	Design of Experiments	Mst. Tania Parveen, Senior Research Scholar, Dept of Geography & Applied Geography, NBU
16	16/4/22	8 am-10 noon	Exploratory Factor Analysis	Dr. Suvendu Roy, Assistant Professor, Dept of Geography, KGTM
17	17/4/22	9am-10am	Examination, Feedback and Awarding Certificate	All Faculties, Dept of Geography, KGTM

*Chakraborty*  
Principal, KGTM

PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

*Ranjita Roy*

*Susmita Mondal*

Course Coordinators

ADD-ON COURSE  
COORDINATOR, KGTM



DEPARTMENT OF GEOGRAPHY, K.G.T.M,  
BAGDOGRA

SESSION: 2021-2022

Add on Course

on

DATA ANALYSIS USING SPSS

Course Structure

Module 1	Introducing to Data Analysis: Fundamentals	2 hours
Module 2:	Introduction of main features of SPSS	2 hours
Module 3	Data Management in SPSS	2 hours
Module 4	Exploratory Data Analysis	2 hours
Module 5	Parametric and Non-parametric Test	2 hours
Module 6	Correlation and Regression Analysis	2 hours
Module 7	Exploratory Factor Analysis	2 hours
Module 8	Cluster Analysis	2 hours
Module 9	Structural Equation Modeling	2 hours
Module 10	Graphical Visualization	1 hours
Module 11	Testing of Hypothesis: Part I	2 hours
Module 12	Testing of Hypothesis: Part II	2 hours
Module 13	Testing of Hypothesis: Part III	2 hours
Module 14	Logistic Regression: Part I	2 hours
Module 15	Design of Experiments	1 hours
Module 16	Exploratory Factor Analysis	2 hours

*Chakraborty*  
PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

*Kanjita Roy Saha*

*Submita Mondal*  
ADD-ON COURSE  
COORDINATOR, KGTM

## Introduction to the course

SPSS (Statistical Package for the Social Sciences) is a software program used by researchers in various disciplines for quantitative analysis of complex data. Participants of this programme will learn about the different techniques of data collection and cleansing, data management and visualization, and will also receive training needed to apply these tools to humanistic questions.

In this course, the participants will be trained as per the following themes:

- Data Analysis: Fundamentals
- Introduction of main features of SPSS
- Data Management in SPSS
- Diagrammatic Representation with SPSS
- Parametric and non - parametric tests
- Correlation and Regression Analysis
- ANOVA

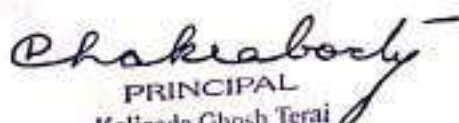
The lectures are self-paced in nature and will be uploaded every weekend. The rest of the days are dedicated to complete the assignment and task given to you all by the resource person(s). We also have a dedicated discussion forum for this course, which can be used amongst the participants to discuss, engage, and share their learning and ideas.

On this note, we welcome you all once again and we hope that this course will facilitate you in honing your research skills.

## Objectives

This certificate course/ executive development programme has been curated for the participants who want to polish their skills in analysis data from different standpoints. There are several data analytics tools, and choosing the right one may be challenging for new users. SPSS, which stands for Statistical Package for Social Sciences, is a beginner-friendly and user-friendly computer application for entering, analysing and visualising categorical and numerical data. It helps filter and model data into useful information.

## Course outcome

  
PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Bagdogra

  
Submita Mandal  
ADD-ON COURSE  
COORDINATOR, KGTM

Students will learn about population and sample, types of variables, scales of measurement, shapes of data, and the selection of sample sizes. In addition, students will be introduced to SPSS software and learn how to make data entries and to distinguish between the data view, variable view, and fields in it. Students will also know how to scrutinise the features of a dataset via summary statistics. Students will also know to examine measures of tendency, measures of location, measures of dispersion and more.

### Evaluation

The registered students will be evaluated through Assignment (20 Marks). At the end of the course an examination (MCQ) of one hour duration which will carry 30 marks.

**Feedback:** All the registered students will require to give feedback on the course, each relevant and experience. It will be evaluated through structured feedback form.

**Awarding certificate:** Registration for Add-On course is not mandatory. All courses are offered without any additional fee. After successful completion of the course all the qualified students will be provided with certificates.

- I. Classes for an Add-On Course are conducted during the Reserved Time Slot in week days or beyond the regular class hours.
- II. Students of any stream will be permitted to register in the Add-On Course

### Grading:

The Grades will be awarded to the students depending on the percentage of marks obtained by a candidate in a course as below.

Grade	Percentage of Marks
A+	90& Above
A	80 - 90
B+	70 - 79
C	50-69

**Course Duration:** 30 Hours

**Eligibility :** This course is open to college students from all three disciplines- BA/B.Com & B.Sc.

**Date & Time:** It will be organised from 1.04.2022 to 17.04.2022 from 8:00 AM to 10:00 AM

**Faculty:** Faculty from the Department of Geography, Professionals and Domain Experts will be teaching this course to the students.

**No of Seats:** 130

**Course code:** SPSS

**Resource Persons:**

*Signature of Submita Mondal*

Submita Mondal

ADD-ON COURSE  
COORDINATOR, KGTM

*Signature of Kalipada Ghosh*  
PRINCIPAL  
Kalipada Ghosh Terai  
Mahavidyalaya  
Kamardogra

1. Dr. John Breakmas Tirkey, Associate Professor , Dept of Sociology, KGTM
2. Dr. Snehasish Saha, Associate Professor, Dept of Geography & Applied Geography,NBU
3. Mst.Tania Parveen, Senior Research Scholar, Dept of Geography & Applied Geography,NBU
4. Barnali Biswas, Research Scholar, Dept of Geography & Applied Geography,NBU
5. Mou Basu, SACT -1, Dept of Sociology, KGTM
6. Chinmoy Sarkar: Assistant Professor, Dept of Sociology, KGTM
7. Deboshree Sill, SACT- II. Dept of Sociology, KGTM
8. Dr.Ranjita Roy Sarkar, Assistant Professor, Dept of Geography, KGTM
9. Surovi Lahiri, Assistant Professor, Dept of Sociology, Ghoshpukur college
10. Dr. Himika Mukhopadhyay, Assistant Professor, Dept of Geography, KGTM
11. Mrs Susmita Mondal, SACT-II, Dept of Geography, KGTM
12. Dr. Suwendu Roy, Assistant Professor, Dept of Geography, KGTM

**Course co-ordinators:**

1. Chairperson: Dr Minakshi Chakrabarty, Principal, KGTM  
Contact no: 9064283511  
Email: [prinkgtm@gmail.com](mailto:prinkgtm@gmail.com)
2. Coordinator: Dr.Ranjita Roy Sarkar, Assistant Professor , Head, Dept of Geography, KGTM  
Contact no: 9474876446  
Email : [ranjitaroysarkargeo@gmail.com](mailto:ranjitaroysarkargeo@gmail.com)
3. Coordinator : Ms Susmita Mondal, SACT-II, Dept of Geography, KGTM  
Contact no: 8509355499  
Email : [smondalkgtm@gmail.com](mailto:smondalkgtm@gmail.com)
4. Co-Coordinator: Dr. Himika Mukhopadhyay, Assistant Professor, Dept of Geography, KGTM  
Contact no: 9832570752  
Email : [mukherjee.himika@gmail.com](mailto:mukherjee.himika@gmail.com)

*Chakrabarty*  
Principal, KGTM

PRINCIPAL  
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Mahavidyalaya  
Burdwan

*Ranjita Roy Sarkar*  
*Susmita Mondal*

Course Coordinators

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FINAL EXAMINATION  
ON  
DATA ANALYSIS USING SPSS

TIME-1 HOUR

FM-30

I. Answer all MCQ questions( 1\*30=30)

1. Which of the following is not the part of the exploratory factor analysis process?

- Extracting factors
- Determining the number of factors before the analysis
- Rotating the factors
- Refining and interpreting the factors

unanswered

2. Which of the following statements is true?

The correlation matrix will have 1s in the diagonals in PCA and less than 1s in EFA

The correlation matrix will have 1s in the diagonals both in PCA and EFA

The correlation matrix will have less than 1s in the diagonals both in PCA and EFA

The correlation matrix will have 1s in the diagonals in EFA and less than 1 in PCA

unanswered

3. Which of the following criteria cannot be used to determine the number of factors in an EFA?

Asking a group of researchers before the analysis

Eigenvalue rule

Scree test

Parallel analysis

unanswered

4. Which of the following is not an oblique rotation technique?

Promax

Oblimax

Varimax

Quartimin

unanswered

5. What will a factor loading in an orthogonal solution represent?

Correlation

Partial correlation

Multiple correlation

Eigenvalue

unanswered

6. If the mean and median of a distribution are almost same, then the distribution is symmetrical.

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*Sumita Karol*  
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TRUE

FALSE

unanswered

7. Calculation of a mean is affected by extreme values of data.

YES

NO

unanswered

8. Lower quartile have \_\_\_\_% observation below it and \_\_\_\_% observation above it.

30, 70

25, 75

50, 50

75, 25

unanswered

9. Your gender Male/female is

Nonmetric

Metric

Quantitative

Continuous

unanswered

10. Your height is

Metric

Nonmetric

Qualitative

Discrete

unanswered

11. In hypothesis testing, we assume that some population parameter takes on a particular value before we sample. This assumption to be tested is called an alternative hypothesis.

TRUE

FALSE

unanswered

12. For a two-tailed test of hypotheses at  $\alpha = 0.10$ , the acceptance region is the entire region:

To the right of the negative critical value.

Between the two critical values.

Outside of the two critical values.

To the left of the positive critical value.

unanswered

13. The assumption about a population parameter that we wish to test is the \_\_\_\_ hypothesis. The conclusion we accept when the data fail to support this assumption is the hypothesis.

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*Gayatri K. Saha*

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- Null.
- Alternative.
- Both Null and Alternative.

unanswered

14. If parent population is not following Normal Distribution, we should use following test of hypothesis:

- Parametric Tests
- Non-Parametric Tests
- Z-Test
- T-Test

unanswered

15. Prob. Value (p-value) of one tail test is \_\_\_\_\_ of that (p-value) of two tail test:

- Half
- Double
- Equal
- No relation

unanswered

16. \_\_\_\_\_ is a state of very high intercorrelations among independent variables.

- Hypercollinearity
- Partial collinearity
- Multicollinearity
- Variable collinearity

unanswered

17. In multiple regression, if the overall null hypothesis is rejected, \_\_\_\_\_

- The mean value of the dependent variable will be different for different categories of the independent variable
- The means of the independent variables are not equal
- There is an association between the independent variables
- One or more population regression coefficients must be significant (non-zero)

unanswered

18. \_\_\_\_\_ is a statistical technique that simultaneously develops a mathematical relationship between two or more independent variables and an interval-scaled dependent variable.

- Chi-square
- The least-squares procedure
- Multiple regression
- Bivariate regression

unanswered

19. R-square measures \_\_\_\_\_

- the proportion of variation in one variable that is explained by the other.

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- the proportion of error variation .
- the proportion of variation in Y related to the variation of the categories of X.
- the proportion of variation in Y due to the variation within each of the categories of X.

unanswered

20. A residual is the difference between the observed value of  $Y_i$  and the value predicted by the regression equation,  $\hat{Y}_i$ .

TRUE

FALSE

unanswered

21. For clustering, we do not require-

Labeled data

Unlabeled data

Numerical data

Categorical data

unanswered

22. Which version of the clustering algorithm is most sensitive to outliers?

K-means clustering algorithm

K-modes clustering algorithm

K-medians clustering algorithm

None

unanswered

23. The goal of clustering is to-

Divide the data points into groups

Classify the data point into different classes

Predict the output values of input data points

All of the above

unanswered

24. Which software available for estimating Structural Model

SPSS

AMOS

Eviews

Excel

unanswered

25. The other name of structural model is

Measurement model

Confirmatory factor analysis

Path model

Independent t-test

unanswered

26. Confirmatory factor analysis also known as

*Pradyumn*  
Pradyumn  
Kulipada Ghosh Terai  
Mahavidyalaya

*Ranjita Singh*  
Ranjita Singh  
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- Cluster analysis
- Measurement model
- Conjoint analysis
- SERVQUAL model

unanswered

27. In hypothesis testing, we assume that some population parameter takes on a particular value before we sample. This assumption to be tested is called an alternative hypothesis.

- TRUE
- FALSE

unanswered

28. For a two-tailed test of hypotheses at  $\alpha = 0.10$ , the acceptance region is the entire region:

- To the right of the negative critical value.
- Between the two critical values.
- Outside of the two critical values.
- To the left of the positive critical value.

unanswered

29. The assumption about a population parameter that we wish to test is the \_\_\_ hypothesis. The conclusion we accept when the data fail to support this assumption is the hypothesis.

- Null.
- Alternative.
- Both Null and Alternative.


unanswered

30. If parent population is not following Normal Distribution, we should use following test of hypothesis:

- Parametric Tests
- Non-Parametric Tests
- Z-Test
- T-Test

unanswered

  
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# ADD-ON COURSE ON DATA ANALYSIS USING SPSS

## ASSIGNMENT

FM-10

Time-2hrs

1. Obtain Karl Pearson correlation coefficient for the data given below .

X	65	69	67	64	68	62	70	66	68	67	69	71
Y	68	66	68	65	69	69	68	68	71	67	68	70

2. Obtain both the regression lines for the following data.

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*Sanjita Singh*  
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# ADD-ON COURSE ON DATA ANALYSIS USING SPSS

## ASSIGNMENT

Time- 2 hours

FM-10

1. Case: Ventura Sales Reporting:

- \* A sales promotion program was also launched in the beginning of the 4th quarter. Examine whether the Sales Promotion Program was a success.
- \* Examine whether there exists significant difference in average sales (for Q2, Q3 & Q4) with respect to 'Type of outlets (Urban/Rural)'
- \* Examine whether there exists significant difference in average sales (for Q2, Q3 & Q4) with respect to 'Location of outlets (Northern/Eastern/Western/Southern)'
- \* Develop a sales report based on earlier analysis.

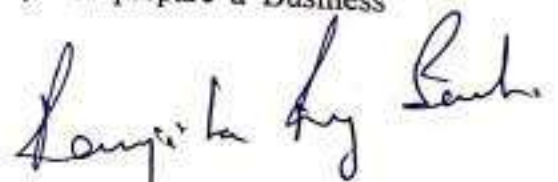
2. Case: Mutual Funds:

- \* Examine whether there exists a significant difference among the position of executives in the company (Executives/ Line Managers/ Functional Heads) with respect to executives' willingness to purchase Company X's Mutual Funds

3. Case: Rebranding of Police Department

- \* Perform Regression Analysis to establish associative dependence relationship between 'Liking for the Rebranded (Y)' and 'four perceptual variables (Departmental Identity, Improved Visuals, Emotional Connect & Image Transformation) and prepare a Business Report on that.

  
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Sumita Mondal

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**KALIPADA GHOSH TARAI MAHAVIDYALAYA**

# *Certificate*

THE FOLLOWING AWARD IS GIVEN TO

**Krisanu Shil**

For the completion of Add-On Course on 'DATA ANALYSIS USING SPSS' organised by the **Department of Geography** from 01/04/2022 to 17/04/2022. He/She was placed in Grade A.

*Ranjita Roy Sarkar* *Susmita Mandal*

**Dr.Ranjita Roy Sarkar & Ms Susmita Mandal**  
Course Coordinators

**ADD-ON COURSE  
COORDINATOR, KGTM**

*Minakshi Chakraborty*

**Dr.Minakshi Chakraborty**

**Principal**  
**Kalipada Ghosh Tarai**  
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KALIPADA GHOSH TERAI MAHAVIDYALAYA

*Certificate*

THE FOLLOWING AWARD IS GIVEN TO

SURAJIT GHOSH

For the completion of Add-On Course on 'DATA ANALYSIS USING SPSS' organised by the *Department of Geography* from 01/04/2022 to 17/04/2022. He/She was placed in Grade A.

*Ranjita Roy Sarkar*

Dr. Ranjita Roy Sarkar & Ms Susmita Mandal

Course Coordinators

*Susmita Mandal*

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*Minakshi Chakraborty*

Dr. Minakshi Chakraborty

Principal  
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# KALIPADA GHOSH TARAI MAHAVIDYALAYA

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Ref: KGTM/GEOG/42/21-22

Date: 20/04/2022

## DEPARTMENT OF GEOGRAPHY

### Report on Add- On Course on "DATA ANALYSIS USING SPSS "

Department of Geography successfully concluded an Add-On course on DATA ANALYSIS USING SPSS from 1<sup>st</sup> April, 2022 to 17<sup>th</sup> April, 2022 from 8am to 10am in Room no 16. Dr. Ranjita Roy Sarkar apprised the students about the objectives, course structure, schedule, resource person, multiple choice question test, attendance, feedback system, certificate and the course outcome. In total 130 students enrolled in the course while 126 students completed the course. All the resource person delivered their lecture as per the schedule. Dr. Minakshi Chakraborty, Principal, Dr John Breakmas Tirkey, IQAC Coordinator and HOD Geography addressed the students during the valedictory session of the add-on course on 17<sup>th</sup> April, 2022. Students also share their feedback during the session.

### Few snapshots of Add-on course



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Course Coordinators

Dept of Geography

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**ATTENDANCE SHEET FOR ADD-ON COURSE 2021-22(DATA ANALYSIS USING SPSS In April 2022)**

S.No	Enrollme nt no	Name of Participants	1.A.	2.4.2	3.4.	4.4.	5.A.	6.4.2	7.4.	8.4.2	9.4.	10.4	11.4	2.4.	12.4.	13.4	14.4	15.4.	16.4.22	17.4.22
1	202201	Surajit Ghosh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	202202	Priyanka Das	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3	202203	Jui Singha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	202204	Ankita Ghosh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
5	202205	Priyanka Dey	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	202206	Naina Nagesia	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
7	202207	Barsha Paul	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
8	202208	Ankita Singha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	202209	Moumita Basak	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
10	202210	Anup Sarkar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
11	202211	Sonal Ghosh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
12	202212	Sumanta Pratap Majumder	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
13	202213	Srikanta Mandal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
14	202214	Subhasish Sarkar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
15	202215	Nenshi Ekka	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
16	202216	Lal Mohan Das	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	202217	Dibash Singha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
18	202218	Nandini Mardi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
19	202219	Priya Paul	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	202220	Mun Sarkar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	202221	Priyanka Shil	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	202222	Samridhi Bhowmik	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
23	202223	Sancharyeeta Das	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
24	202224	Suchismita Ghosh	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
25	202225	Dipika Singha	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

*Gueswita Dasal.*  
*Konjick by her.*  
**ADD-ON COURSE**  
**COORDINATOR, KGTM**

*D Kalpana Ghosh*  
*Konjick by her*  
**ADD-ON COURSE**  
**COORDINATOR, KGTM**







83	202283	I MADHU SINGHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
84	202284	I ASHOK SINGHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
85	202285	I PAPRI SINGHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
86	202286	I JAHED ALI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
87	202287	I SAIF RAHAMAN SARKAR	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
88	202288	I SABIR ALI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
89	202289	I ASIT BARMAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
90	202290	I BAPI SINGHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
91	202291	I AKASH SAHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
92	202292	I MAMANI MAJHI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
93	202293	I SNEHA SAMANTA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
94	202294	I HITANGSHU GHOSH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
95	202295	I SOURAV BISWAS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
96	202296	I JIBITESH SINGHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
97	202297	I BIKRAM CHOUDHURY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
98	202298	I SAJAL SINGHA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
99	202299	Shruti Pal	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
100	202300	Ayush Chhetri	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
101	202301	Gyant Sah	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
102	202302	Arnila Mirji	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
103	202303	Karandeep Rajak	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
104	202304	Rohit Sarkar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
105	202305	Dhatri Barman	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
106	202306	Raj Mahato	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
107	202307	Raghav Raphupathi	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

ADD-ON COURSE  
COORDINATOR, KGTM

Savitri Mondal  
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# KALIPADA GHOSH TARAI MAHAVIDYALAYA

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Ref. No:KGTM/GEOG/19/21-22

Date: 24/12/2021

To,

The Principal

Kalipada Ghosh Tarai Mahavidyalaya

Bagdogra-734014

**Sub: Prayer to start Add-On Course on "DATA ANALYSIS USING SPSS"**

Respected Madam,

With due respect, I would like to inform you that the Department of Geography, KGT Mahavidyalaya would like to start an Add-On Course on "DATA ANALYSIS USING SPSS" from 01.04.2022 to 17.04.2022 for the students of our college and would help them with comprehensive knowledge in data analysis using SPSS.

Looking forward to your kind consideration for the said course.

Thanking you

Sincerely yours,

*Ranjita Roy Sarkar*

*Susmita Mandal*

Dr. Ranjita Roy Sarkar & Ms Susmita Mandal  
Add-on Course Coordinators  
Assistant Professor & SACT-II  
Department of Geography  
KGT Mahavidyalaya

**ADD-ON COURSE  
COORDINATOR, KGTM**

**ADD ON  
COURSE ON  
DATA  
ANALYSIS  
USING SPSS**

**SPSS<sup>®</sup>**

**VENUE- GEOGRAPHY DEPARTMENT, KALIPADA,  
GHOSH TARAI MAHAVIDYALAYA**

**DATE- 1ST APRIL -  
17TH APRIL, 2022**

**Course coordinators:**

**DR RANJITA ROY SARKAR &  
MRS SUSMITA MANDAL**