

(Affiliated to the University of Kalyani)
VIII+P.Q-Muragachha, P.S-Nakashipara, Dist.-Nadia,
West Bengal, Pin-741154

A Certificate Course

on

## **APPLICATION OF SATISTICS IN EDUCATION**

Certificate

After Successful Completion of course

certificate will be given.

Attendance is compulsory for all

Speaker:

All Faculty of Education Department

from

10th May to 21st May 2022

Terget Group

All Students of Education
Department

Course Co-Ordinator

Mr. Ujjal Debnath

**Organize By** 

**Department of Education** 



# Department of Education MURAGACHHA, NADIA, PIN- 741154

Phone No.: 03474-268008 web: www.muragachhagovtcollege.org e-mail: mgcnadia2015@gmail.com

Ref. No...22/ADC/N1

Dated: 06.05.2022

'Application of Statistics in Education' in collaboration with the IQAC of this college for the students(2<sup>nd</sup> Semester, 4<sup>th</sup> Semester and 6the Semester) of Education Honours of this College from 10.05.2022 to 21.05.2022. Certificate will be provided to the participating students after successful completion of the said course. Students of the History department of this college are requested to meet the head of the department of History and enrol their name before commencement of the course.

Officer In-Charge

Government General Degree College, Muragachha

IOAC

Government General Degree College, Muragachha

Head, Dept. of Education

Government General Degree College, Muragachha

Officer-in-Charge Gov. General Degree College Nauragacha Muragacha Nakashipara Nacia



## Department of Education MURAGACHHA, NADIA, PIN- 741154

Phone No.: 03474-268008 web: www.muragachhagovtcollege.org e-mail: mgcnadia2015@gmail.com

Ref. No...22/ADC/N3

Dated: 21.05.2022

#### **NOTICE**

#### **ADD-ON COURSE EXAMINATION**

Department of Education would conduct Add-On Course Practical and Term – end Examination 2022 entitled – Application of Statistics in Education as per the following schedule: -

Date	Time	Exam Topic	Students
23.05.2022	11:00am -1:00 pm	Theory Term End ALL	
		Exam.	
24.05.2022	11:00am-1:00pm	Practical	Roll No. 21-22/ADC/001 to 035
24.05.2022	1:00pm-3:00pm	Practical	Roll No. 21-22/ADC/036 to 069

• For practical examination students must bring their practical book on statistical report

Course Coordinator

Sd/-Head

Department of Education Government General Degree College, Muragachha



Muragachha, Nakashipara, Nadia, 741154
Department of Education
COURSE DESIGN
FOR
ADD-ONCOURSE
ON

## **APPLICATION OF STATISTICS IN EDUCATION**

#### **SECTION-I:-COURSE DESIGN**

Sl.	Title	CONTENT
No.		001(121(1
1	Course Title	APPLICATION OF STATISTICS IN EDUCATION
2	Context	This course will help students to learn various statistical calculation and its application in educational context.
3	Prerequisite	Current under graduate students
4	Course objective	Objectives of this course are  To understand the meaning and concept of statistics and its use in education.  To understand the meaning of descriptive statistics and calculation.  To develop the meaning of measures of variability and calculation.  To understand the graphical representation of data.  To know the meaning, concept, use and application of Normal Probability Curve.  To understand the concept of linear correlation and its calculation.  To develop understanding about derived score and its application.  To develop skill of statistical analysis from raw data.
5	Program highlights and unique features	The course is very helpful for the students to learn various statistical techniques. After completion of the course students can understand the application of statistics in various areas and application of learned knowledge for further studies.
6	Career prospect	Enhance knowledge and skill of various statistical techniques, helps in higher studies, data analysis and interpretations.
7	Faculty requirement	Internal (Department of Education)
8	Modern pedagogy	Hybrid model of learning and practice, continuous and comprehensive evaluation
9	Course fee	Nil
10	Intake Capacity	All Education (Hons.) students for the academic session 2021-2022

11	Contact hours	30 hrs
12	Course Duration	10.05.2022-21.05.2022
13	Class duration	1 class – 1 hr. 3 hrs/day, 6 days/week (Except Sunday &Holidays)
14	Tutorial	If required, to be adjusted with lesson plan
15	Course Content	Detailed course content attached herewith in section II
16	Assessment process and	i. Attendance
	grading	ii. Internal and Final assessment
		iii. Practical
17	Student feedback	Unit Test and Final Assessment
18	Course Coordinators	Ujjal Debnath
		Assistant Professor, Department of Education
19	General Rules and	Details given in Section VIII
	Regulations	
20	Grade Card Format	Model given in Section IX
21	Course Certificate Format	Model given in Section X

#### **SECTION-II:- DETAILED SYLLABUS OF THR COURSE**

#### **Module-I** Meaning of Statistics and Frequency Distribution

- Meaning and Concept of Statistics.
- > Importance of Statistics in Education.
- > Drawing up a Frequency Distribution.
- > Graphic Representation of the Frequency Distribution.

#### **Module-II** Measures of Central Tendency

- ➤ Meaning and Concept of Central Tendency.
- ➤ Calculation, Properties and Application of Mean.
- Calculation, Properties and Application of Median.
- > Calculation, Properties and Application of Mode.

#### Module-III Measures of Variability

- ➤ Meaning and Concept of Measures of Variability.
- Calculation, Properties and Application of Average Deviation.
- Calculation, Properties and Application of Quartile Deviation.
- ➤ Calculation, Properties and Application Standard Deviation.

#### Module-IV Cumulative Distribution, Graphic Methods and Percentile

- > The Cumulative Frequency Graph.
- Percentiles and Percentile Rank.
- Cumulative Percentage Curve or Ogive.
- > Several Graphic Method i.e. Histogram, Polygon

#### Module-V The Normal Probability Distribution

- ➤ The Meaning and Importance of the Normal Distribution.
- Properties of the Normal Probability Distribution
- Measuring Divergence from Normality
- Application of the Normal Probability Curve

#### **Module-VI** Linear Correlation

- > The Meaning of Correlation.
- > The Coefficient of Correlation.
- ➤ The Calculation and Interpretation of the Coefficient of Correlation by the Product Moment Method.
- ➤ The Calculation and Interpretation of the Coefficient of Correlation by the Rank Difference Method.

#### **Module-VII** Derived Score

- > Concept of Derived Score.
- Use and Importance of Derived Score.
- Method of Transforming test Score into Sigma Score and Standard Score with Interpretation.
- Method of Transforming test Score into Z- Score and T-Score with Interpretation.

#### **Module-VIII** Inferential Statistics

- Meaning of Parametric and Non-Parametric Test.
- ➤ Concept of Parameter, statistics and sampling distributions.
- Concept of sampling error and standard error of statistics, degrees of freedom, confidence limits and confidence intervals.
- Calculation of Parametric and non-parametric test- chi-square tests, CR-test, F-test (one way), Median test, ANOVA (concept).

#### Module-IX Practical

- ➤ Collection of Data from Educational Institution
- Presentation of Data with Statistical Calculation .
- > Viva

#### **SECTION- III:-LESSON PLAN**

Module No.	Content	<b>Total Lectures</b>	Teacher Allotted
Module-I	Meaning of Statistics and Frequency	2 Lectures=2 Hrs.	Mrs. ParbatiMondal
	Distribution		
Module-II	Measures of Central Tendency	3 Lectures=3 Hrs.	Dr. BinayakChanda
Module-III	Measures of Variability	3 Lectures=3 Hrs.	Dr. UjjalDebnath
Module-IV	Cumulative Distribution, Graphic	3 Lectures=3 Hrs. Mrs. ParbatiMo	
	Methods and Percentile		
Module-V	The Normal Probability Distribution	3 Lectures=3 Hrs.	Dr. BinayakChanda
Module-VI	Linear Correlation	3 Lectures=3 Hrs.	Mrs. ParbatiMondal
Module-VII	Derived Score	3 Lectures=3 Hrs.	Dr. BinayakChanda
Module-VIII	Inferential Statistics	4 Lectures=4 Hrs.	Dr. UjjalDebnath
Module-IX	Practical	6 Lectures=6 Hrs.	Dr. UjjalDebnath
			Dr. BinayakChanda
			Mrs. ParbatiMondal

#### **SECTION-IV:- LEARNING RESOURCES**

- 1. S.K.Mangal-Statistics in Education and Psychology-PHI
- 2. A.K.Singh-Test, Measurement and Research Methodsin Behavioural Sciences-Bharti Bhawan.
- 3. H.E.Garret- Statistics in Education and Psychology-Paragon Publication.
- 4. R.A.Sharma-Mental Measurement and Evaluation-Surject Publication.
- 5. Sushil Roy-Mulyayan o Niti Koushal-Soma Book Agency
- 6. Debashish Pal and Debashish Dhar- Sikshay Porimap o Mulyayan-Rita Publication

#### **SECTION-V:- EVALUATION PROCEDURE**

ASSESMENT/EVALUATION	MARKS
INTERNAL ASSESMENT	10
FINAL ASSESMENT	50
PRACTICAL	35
ATTENDANCE	05
TOTAL	100

#### SECTION-VI:- MARKING PROCEDURE FOR THE ATTENDANCE COMPONENT

Attendance Percentage =

<u>Total number of lectures attendant by the student participant</u>
Total Number of Lectures Held

#### TOTAL MARKS IN ATTENDANCE COMPONENT = 5

ATTENDANCE PERCENTAGE (%)	MARKS ALLOTTED
ABOVE 90	5
80 - 89	4
75 - 79	3
70 - 74	2
60 - 69	1
BELOW 60	NOT ELIGIBLE FOR CERTIFICATE

#### **SECTIOIN-VII:- TABLE FOR QUALIFICATION**

TOTAL SCORE (OUT OF 100)	GRADE
90 – 100	O - OUTSTANDING
80 - 89	E - EXCELLENT
70 – 79	A – VERY GOOD
60 - 69	B - GOOD
50 -59	C - FAIR
BELOW 50	F - FAILED

#### **SECTION VIII:- GENERAL RULES AND REGULATIONS**

- 1. Students must attend and appear for all the Module-End Assessments / Assignments. If any student fails to submit any of the Module-End Assignments or fails to attend any of the Module-End Assessment examinations, the particular Student would NOT BE ELIGIBLE FOR CERTIFICATE.
- 2. Students must attend and appear for the Course-End Assessment Examination. If any student fails to submit the Course-End Assessment or fails to attend the Course-End Assessment Examination, the particular Student would NOT BE ELIGIBLE FOR CERTIFICATE.
- 3. Students must attend and appear for the Course-End Viva. If any student fails to fails to attend the Course-End Viva, the particular Student would NOT BE ELIGIBLE FOR CERTIFICATE.
- 4. Total Marks of Course Evaluation will be 100 Marks.
- 5. Minimum 50% Marks has to be scored to receive any Certificate. There will be only ONE Attempt allowed for each of the Module-End Assessments / Assignments and the Course-End Assessment.
- 6. There will be NO PROVISION for Backlog Clearance.
- 7. General Rules and Regulations of the College must be followed without any exception.

#### **SECTION-IX:- MODEL OF MARKSHEET**



# Government General Degree College, Muragachha (Affiliated to University of Kalyani) Department of Education 30 Hours Add-On Course

#### on

# **Application of Statistics in Education Grade Card**

Name of the participant	
Registration No.	
Course Name	
Course Roll No.	
Session	

ASSESMENT/EVALUATION	MARKS	ACHIEVED MARKS
INTERNAL ASSESMENT	10	
FINAL ASSESMENT	50	
PRACTICAL	35	
ATTENDANCE	05	
TOTAL	100	

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Date:-

Signature of the Course Coordinator

Head
Department of Education
Government General Degree College, Muragachha