Maths Department conducted the inaguration of Fundamental of Statistics (certificate course) held, onwards 25/11/19 at VGDC(w), Visakhapatnam.

Certificate course : Fundemental of Statistics

Duration of the period : 30 days

classes taken by : Gandhi, Lec in Statistics, AVN college.

Timings : 9AM-10AM

P. Maing

(Course Coordinator)

Course objectives :

- To develop the students ability to deal with numerical & quantitative issues in business.
- To enable the use of statistical, graphical and algebraic techniques wherever relevant.
- To have a proper understanding of statistics applications in Economics & Management

Course outcomes :-

On completion of this course, the students will be able to :

- Describe & discuss the key terminology, concepts tools & techniques used in business statistical analysis.

- critically evaluate the underlying assumptions of analysis tools.

- understand & critical discuss the issues surrounding sampling and significance

- Discuss critically the uses & limitations of statistical analysis

- Solve a range of problems using the techniques covered.

- Conduct basic statistical analyses of data.

The basic aim of statistics in this sense of a subject of study is to provide methods of organising and simplifying data so that their significance is comprehensible.

FUNDAMANTALS OF STATISTICS

1 Sampling and Data
1. Introduction
2. 1.1 Definitions of Statistics, Probability, and Key Terms
3. 1.2 Data, Sampling, and Variation in Data and Sampling
4. 1.3 Frequency, Frequency Tables, and Levels of Measurement
5. 1.4 Experimental Design and Ethics
6. 1.5 Data Collection Experiment
7. 1.6 Sampling Experiment

2 Descriptive Statistics
8. Introduction
9. 2.1 Stem-and-Leaf Graphs (Stemplots), Line Graphs, and Bar Graphs
10. 2.2 Histograms, Frequency Polygons, and Time Series Graphs
11. 2.3 Measures of the Location of the Data
12. 2.4 Box Plots
13. 2.5 Measures of the Center of the Data
14. 2.6 Skewness and the Mean, Median, and Mode

3. Probability Topics
1. Introduction
2. 3.1 Terminology
3. 3.2 Independent and Mutually Exclusive Events
4. 3.3 Two Basic Rules of Probability
5. 3.4 Contingency Tables

4. Discrete Random Variables
14. Introduction
15. 4.1 Probability Distribution Function (PDF) for a Discrete Random Variable
16. 4.2 Mean or Expected Value and Standard Deviation
17. 4.3 Binomial Distribution
18. 4.4 Geometric Distribution
19. 4.5 Hypergeometric Distribution
20. 4.6 Poisson Distribution

5. 5 Continuous Random Variables
14. Introduction
15. 5.1 Continuous Probability Functions
16. 5.2 The Uniform Distribution
17. 5.3 The Exponential Distribution
18. 5.4 Continuous Distribution

6. The Normal Distribution
14. Introduction
15. 6.1 The Standard Normal Distribution
16. 6.2 Using the Normal Distribution

7. Confidence Intervals
14. Introduction
15. 8.1 A Single Population Mean using the Normal Distribution
16. 8.2 A Single Population Mean using the Student t Distribution

8. Hypothesis Testing with One Sample
14. Introduction
15. 9.1 Null and Alternative Hypotheses
16. 9.2 Outcomes and the Type I and Type II Errors

No.	Name
1	A Hema Latha
2	A. Thanssi Kumari
3	B. Sirisha
4	B Divya
5	B Navya Sree
6	B Eswari Eekshitha
7	CH Lavanya
8	D. Prasanna Kumari
9	D. Swathi
10	D. Vasantha Kumari
11	K. Lakshmi Bhavani
12	K. Vajram
13	K. Lalitha
14	K. Leela Vathi
15	K. Mani
16	K. Sravani
17	K. Meenakshi
18	K. Bhanu
19	K. Bhagya Laxmi
20	M. Apoorva
21	M. Sandhya
22	M. Rama
23	M. Sri devi
24	M. Yamuna
25	M. Pushpa
26	M. Keerthi

#	Name																																					
27	O. Kumari	P	P	a	P	P	P	P	P	P	P		P	P	P	P	P	P	P	a	P	P	P	a	a	P	P	P	P	P									
28	P. Sai prasanna	a	p	P	P	P	P	P	P	P	P	a	p	a	P	a	P	P	a	a	P	a	P	P	a	P	P	P	a	P	P								
29	P. Siva Kumari	a	P	P	P	P	P	P	P	P	P	P	a	P	P	a	P	P	P	P	P	P	P	P	P	P	P	a	P	a	a								
30	P. Prasanna	a	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	a	P									
31	P. Mercy	a	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	a	P	P	o	a	P	P	P	P	P	P									
32	S. Neeraja	P	P	P	P	a	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	P									
33	S. Chellayyamma	P	P	P	P	a	P	P	P	P	P	P	P	a	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P									
34	S. Lavanya	P	P	a	P	P	P	P	P	P	P	P	a	P	a	P	a	a	P	P	P	P	P	P	P	P	P	P	P	P									
35	T. Sai Supraja	P	P	a	P	P	P	P	P	P	P	P	P	P	P	a	P	a	P	P	P	P	P	P	P	P	P	P	P	P									
36	V. Sowjanya	P	P	P	a	P	P	P	P	P	P	P	a	P	P	P	a	a	P	P	a	P	P	P	P	P	P	P	P	P									
37	V. Ravalika	P	P	P	a	P	P	P	P	P	P	P	P	a	P	a	a	P	P	a	P	P	a	P	P	P	P	P	P	P									
38	V. Suneetha	a	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	a	P	P	a	P	P	P	P	P	P	P	P	P									
39	V. Hema latha	a	P	P	P	a	P	P	P	P	P	P	P	P	P	P	a	P	P	a	P	P	P	P	P	P	P	P	P	P									
40	A. Swathi	P	P	P	P	a	P	P	P	P	P	P	a	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
41	B. Satya Santhoshi	P	P	P	P	P	P	P	P	a	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
42	B. Bujji	P	a	a	P	P	P	P	P	P	P	P	a	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P									
43	B. Mounika	P	a	a	P	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P									
44	B. Dhana lakshmi	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
45	B. Santhoshi	P	P	P	P	P	P	P	P	a	P	P	a	a	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P									
46	CH. Ramya Sri	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P									
47	CH. Gowthami	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
48	CH. Bhavitha	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
49	CH. Jayalaxmi	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
50	CH. Vasundara	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
51	CH. Jahnavi	P	P	P	P	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									
52	D. Gayathri	P	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P									

No.	Name
53	G. Malathi
54	G. Vasundhara
55	G. Lavanya
56	I. Tejaswari
57	I. Ramya
58	J. Mounika
59	J. Satya Sri
60	K. Monika
61	K. Yashodha Rani
62	K. Komali
63	K. Renuka
64	K. Pavani
65	K. Sravani
66	K. Divya
67	M. Geethanjali
68	M. Bhavani
69	M. Pallavi
70	M. Hema Latha
71	M. Rama
72	M. Kalpana
73	M. Sushma Sai
74	M. Komala
75	O. Lalitha Kumari
76	P. Jai Shree
77	P. Jyoshna
78	P. Nandini
79	P. Aswini
80	R. Supriya

#	Name	25/11	26/11	27/11	28/11	29/11	30/11	2/12	3/12	4/12	5/12	6/12	9/12	10/12	11/12	13/12	16/12	17/12	18/12	19/12	20/12	21/12	22/12	27/12	28/12	30/12	31/12	1/1	2/1
81	R. Jyothi	a	p	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
82	S. Hyma	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	P	P	P	P
83	S. Yeshodha	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	a	P	P	P	P	P	P	P
84	T. Bharathi	a	p	a	P	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	V. Mounika	a	P	P	P	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	V. Rajya lakshmi	a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	a	P	P	P	P	P	a	P	P	P	a	
87	K. Priya archana	P	P	a	P	P	P	P	P	P	P	P																	

	Name of the student	Max marks (25)
1.	A. Hemalatha	21
2.	A. Jhansi kumari	18
3.	B. Sirisha	20
4.	B. Divya	19
5.	B. Navya Sree	21
6.	B. Eswari Ekshitha	18
7.	Ch. Lavanya	21
8.	D. Prasannakumari	21
9.	D. Swathi	22
10.	D. Vasanthakumari	18
11.	K. Lakshmi Bhavani	19
12.	K. Vajram	22
13.	K. Lalitha	21
14.	K. leelavathi	20
15.	K. Mani	21
16.	K. Sravani	23
17.	K. Meenakshi	23
18.	K. Bhanu	22
19.	K. Bhagyalakshmi	19
20.	M. Apoorva	21
21.	M. Sandhya	20
22.	M. Rama	18
23.	M. Sridevi	21
24.	M. Yamuna	20
25.	M. Pushpa	18
26.	M. Keerthi	19
27.	O. Kumari	21
28.	P. Sai Prasanna	22
29.	P. Siva kumari	20
30.	P. Prasanna	21
31.	P. Mercy	19
32.	S. Neeraja	18
33.	S. Chellayyamma	22
34.	S. Lavanya	21
35.	T. Sai Supraja	21
36.	V. Sowjanya	20
37.	V. Ravalika	18
38.	V. Suneetha	19
39.	V. Hemalatha	21
40.	A. Swathi	23
41.	B. Satya Santhoshi	20
42.	B. Bujji	21
43.	B. Mounika	22
44.	B. Dhanalakshmi	19
45.	B. Santhoshi	18
46.	Ch. Ramya Sri	21
47.	Ch. Gowthami	22
48.	Ch. Bhavitha	18
49.	Ch. Jayalexmi	21
50	CH. Vasundara	20
51	CH. Jahnavi	19
52.	D. Gayathri	18

No.	Name	Age
53.	G. Malathi	21
54.	G. Vasundhara	22
55.	G. Lavanya	19
56	I. Teswari	23
57.	J. Ramya	22
58.	J. Mounika	21
59.	J. Satya Sri	21
60.	K. Monika	19
61	K. Yashodha Rani	18
62	K. Komali	20
63.	K. Renuka	22
64.	K. Pavani	22
65	K. Sravani	21
66	K. Divya	20
67.	M. Geetanjali	22
68.	M. Bhavani	19
69	M. Pallavi	21
70	M. Hemalatha	22
71.	M. Rama	18
72.	M. Kalpana	21
73.	M. Sushmala	18
74	M. Komala	22
75	O. Lalitha Kumari	21
76	P. Jaya Shree	19
77.	P. Jyoshne	21

No.	Name	Age
78.	P. Nandini	22
79.	P. Aswini	23
80.	R. Supriya	18
81.	R. Jyothi	21
82.	S. Hyma	19
83.	S. Yeshodha	21
84.	T. Bharathi	22
85.	V. Mounika	20
86.	V. Rajya Lakshmi	23
87.	K. Priyaanchana	21

Summary Report

Report

A Certificate course on fundamental statistics has been conducted by Department of Mathematics, Visakha Government Degree College for women from 25/11/19 to 2/1/2020. with duration of 30 hours for B.Sc Students.

The objectives of the course are to develop the following.

Skills

- Able to collect relevant data by using their statistical skills

- It helps in the proper and efficient planning of a statistical inquiry in any field of study.

Employability opportunities:

Students may get job opportunities in finance and investment analyst and advisor business and related associate professionals.

An external faculty Mr. Gandhi, lec. in Statistics, AVN Degree College has been imparted the course and 87 students attended the course

The course content mainly focused on.
- Data, Sampling, Variation in Data Sampling

- Skewness and the mean, Median, Mode.

- Basic rules of probability

Written Exam for 25 marks has been conducted at the end of the course to assess the outcomes where in all students attempted the assessment and completed the course successfully.