

CO-PO REPORT OF ZOOLOGY (AIDED)

Sl. No.	Course Code	Name of Course	Teacher- in- charge
1	CC19PZOL2C04	Physiology	Bijoy C., Abhilash Peter, Dr.Sr.Dilla Jose
2	CC19PZOL2C05	Molecular Biology and Cytogenetics	Bijoy C., Dr. Sr.Dilla Jose
3	CC19PZOL2C06	Systematics and Evolution	Abhilash Peter, Leyon Varghese
4	CC19PZOL2L01	Biochemistry, Biophysics, Bioinstrumentation and Biostatistics	Biochemistry, Biophysics, Bioinstrumentation and Biostatistics
5	CC19PZOL2L02	Physiology, Molecular Biology and Cytogenetics	Abhilash Peter, Leyon Varghese, Dr.Sr.Dilla Jose
6	CC19PZOL2L03	Ecology, Ethology, Systematics and Evolution	Leyon Varghese



CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA.Kerala-680125

Program(s) : PG - MSC - M.Sc. Zoology (Aided)	Department(s) : ZOOLOGY	Batch(s) : MSC ZOO 2022 - S2
Course Community : CC19PZOL2C04 MSC ZOO 2022 S2	Faculty(s) : Bijoy C.', 'Abhilash Peter', 'Dr.Sr.Dilla Jose', 'SUMESH N V	Course : Physiology

CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4	CO5
1	CCAWMZL001	ANITTA JOSE	36	87.2	36	93.6	88.71
2	CCAWMZL002	ANN TREENA SOJAN P	84	58.4	32.8	80.8	57.07
3	CCAWMZL003	ASHIKHA FARSANA P J	36	100	29.33	97.05	91.77
4	CCAWMZL004	ASWATHI HARIDAS	48.8	93.6	36	87.2	78.16
5	CCAWMZL005	BINCY BABU	87.2	80.8	36	87.2	97.16
6	CCAWMZL006	DIVYA JOSE	74.4	87.2	36	72.57	88.91
7	CCAWMZL007	KRISHNAPRIYA G S	54.93	80.8	29.33	93.6	65.87
8	CCAWMZL008	KRISHNAPRIYA K P	74.4	93.6	74.4	67.73	80.53
9	CCAWMZL009	MARIA SICO	36	87.2	87.2	87.2	83.79
10	CCAWMZL010	MITHU MANOJ C	87.2	87.2	87.2	87.2	90.15
11	CCAWMZL011	NEFLA MUHAMED	26.13	71.2	77.33	74.15	75.47

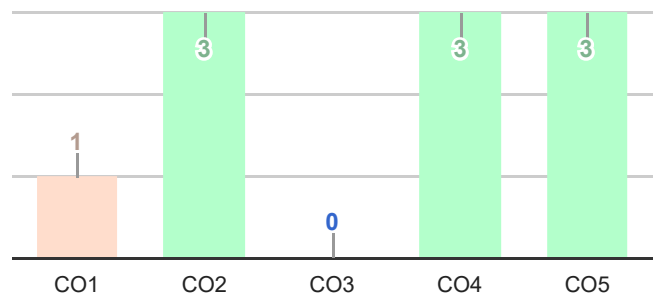
CO PO ATTAINMENT Report

Above Target Percentage : Below Target Percentage:

#	Reg No	Student Name	CO1	CO2	CO3	CO4	CO5
12	CCAWMZL012	SANDRA K N	36	80.53	29.33	82.08	78.67
13	CCAWMZL013	SOORAJ SIVADAS C	32.8	84	32.8	75.14	73.84
14	CCAWMZL015	SREYA KUMAR .K	93.33	74.13	29.33	80.53	74.51
15	CCAWMZL016	SWAPNA SUDHA T R	96.8	84	96.8	81.05	86.56
16	CCAWMZL014	SREESHMA ASOK K	84	32.8	84	70.49	85.6

Class Strength	16				
Course Outcomes addressed	CO1	CO2	CO3	CO4	CO5
Target of Course Outcome	60	60	60	60	60
No of students with CO value greater than or equal to 60	8	14	6	16	15
Percentage of students with CO value greater than 60	50	87.5	37.5	100	93.75
Average	61.75	80.17	52.12	82.35	81.05
Attainment Level	1.00	3.00	0	3.00	3.00
Attainment :High Medium Low 					

CO Attainment Levels



Attainment :High Medium Low

CO List	
CO Code	Description
CO1	Develop different concepts of nutrition and thermoregulation
CO2	Analyse excretory system and respiratory system and its types in animals
CO3	Examine various concepis on Neurophysiology
CO4	Examine various senses, distinguish tactile responses and illustrate vertebrate heart
CO5	Examine various aspects regarding cardiovascular system and identify lymphatic system, Distinguish various components of environmental physiology



CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA.Kerala-680125

Program(s) : PG - MSC - M.Sc. Zoology (Aided)	Department(s) : ZOOLOGY	Batch(s) : MSC ZOO 2022 - S2
Course Community : CC19PZOL2C05 MSC ZOO 2022 S2	Faculty(s) : Bijoy C., 'Dr.Sr.Dilla Jose', 'SUMESH N V	Course : Molecular Biology and Cytogenetics

CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4	CO5
1	CCAWMZL001	ANITTA JOSE	76.23	74.4	87.2	74.4	89.17
2	CCAWMZL002	ANNTREENA SOJAN P	65.26	36	74.4	87.2	67.73
3	CCAWMZL003	ASHIKHA FARSANA P J	100	87.2	87.2	36	97.44
4	CCAWMZL004	ASWATHI HARIDAS	85.92	100	74.4	100	100
5	CCAWMZL005	BINCY BABU	87.2	69.28	87.2	100	87.2
6	CCAWMZL006	DIVYA JOSE	68.91	36	74.4	36	66.52
7	CCAWMZL007	KRISHNAPRIYA G S	89.76	79.52	61.6	80.53	80.53
8	CCAWMZL008	KRISHNAPRIYA K P	91.04	36	74.4	82.4	79.52
9	CCAWMZL009	MARIA SICO	89.03	100	48.8	87.2	80.8
10	CCAWMZL010	MITHU MANOJ C	87.2	74.4	87.2	100	100
11	CCAWMZL011	NEFLA MUHAMED	89.49	84	90.4	84	87.2

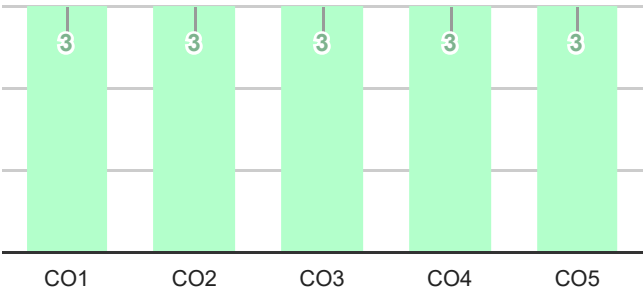
CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4	CO5
12	CCAWMZL012	SANDRA K N	75.41	36	54.93	74.4	79.73
13	CCAWMZL013	SOORAJ SIVADAS C	77.6	62.88	48.53	35.73	57.76
14	CCAWMZL015	SREYA KUMAR .K	54.29	87.2	74.4	87.2	87.2
15	CCAWMZL016	SWAPNA SUDHA T R	96.8	71.2	96.8	71.2	96.8
16	CCAWMZL014	SREESHMA ASOK K	86.56	66.08	71.2	71.2	88.8

Class Strength	16				
Course Outcomes addressed	CO1	CO2	CO3	CO4	CO5
Target of Course Outcome	60	60	60	60	60
No of students with CO value greater than or equal to 60	15	12	13	13	15
Percentage of students with CO value greater than 60	93.75	75	81.25	81.25	93.75
Average	82.54	68.76	74.57	75.47	84.15
Attainment Level	3.00	3.00	3.00	3.00	3.00
Attainment :High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>					

CO Attainment Levels



Attainment :High Medium Low

CO List	
CO Code	Description
CO1	Analysing the concepts of the mechanism of DNA replication, DNA damage, repair and transcription mechanism in prokaryotes and eukaryote
CO2	Analysing the concepts of post transcriptional modifications and genetic code and ribosome's in prokaryotes and eukaryotes
CO3	Apply the control and regulation of gene expression and recombination of DNA; explain eukaryotic genome and discuss the concept of interrupted genes, gene family
CO4	Create the concept of Cancer and gene therapy and Transposable genetic elements
CO5	Justify the basic ideas of the organization of chromosome, illustrate concepts of microbial genetics and review the cytogenetics of cancer



CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA.Kerala-680125

Program(s) : PG - MSC - M.Sc. Zoology (Aided)	Department(s) : ZOOLOGY	Batch(s) : MSC ZOO 2022 - S2
Course Community : CC19PZOL2C06 MSC ZOO 2022 S2	Faculty(s) : Abhilash Peter', Leyon Varghese	Course : Systematics and Evolution

CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4	CO5
1	CCAWMZL001	ANITTA JOSE	94.88	87.2	93.11	93.6	36
2	CCAWMZL002	ANN TREENA SOJAN P	71.2	58.4	78.18	38.93	96.8
3	CCAWMZL003	ASHIKHA FARSANA P J	80.53	100	87.2	93.6	89.68
4	CCAWMZL004	ASWATHI HARIDAS	100	87.2	82.28	80.8	82.08
5	CCAWMZL005	BINCY BABU	94.88	87.2	85.23	100	48.8
6	CCAWMZL006	DIVYA JOSE	92.32	95.73	69.6	100	36
7	CCAWMZL007	KRISHNAPRIYA G S	67.2	73.6	64	67.2	54.4
8	CCAWMZL008	KRISHNAPRIYA K P	100	80.8	80.8	100	87.2
9	CCAWMZL009	MARIA SICO	92.32	87.2	90.15	100	48.8
10	CCAWMZL010	MITHU MANOJ C	94.88	100	90.69	93.33	59.04
11	CCAWMZL011	NEFLA MUHAMED	71.2	90.13	76.32	70.93	67.73

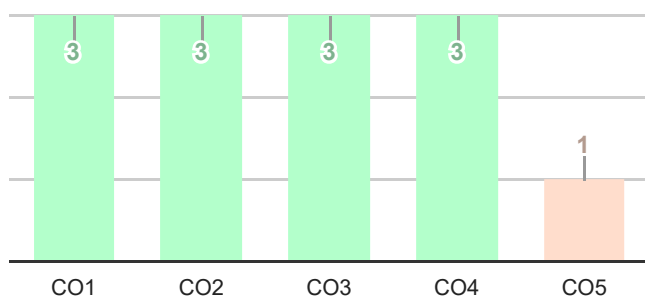
CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4	CO5
12	CCAWMZL012	SANDRA K N	34.45	80.53	93.33	93.6	86.22
13	CCAWMZL013	SOORAJ SIVADAS C	76.32	56.57	71.2	38.93	79.2
14	CCAWMZL015	SREYA KUMAR .K	59.52	62.93	54.4	41.6	54.4
15	CCAWMZL016	SWAPNA SUDHA T R	86.56	84	79.2	96.8	78.88
16	CCAWMZL014	SREESHMA ASOK K	84	64.53	84	96.8	69.65

Class Strength	16				
Course Outcomes addressed	CO1	CO2	CO3	CO4	CO5
Target of Course Outcome	60	60	60	60	60
No of students with CO value greater than or equal to 60	14	14	15	13	9
Percentage of students with CO value greater than 60	87.5	87.5	93.75	81.25	56.25
Average	81.27	81	79.98	81.63	67.18
Attainment Level	3.00	3.00	3.00	3.00	1.00
Attainment :High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>					

CO Attainment Levels



Attainment : High ■ Medium ■ Low ■

CO List	
CO Code	Description
CO1	Analyse the concept of systematics, taxonomy and various species concepts in Zoology, theories of classification, skills to collect and preserve specimens for identification using taxonomic keys
CO2	Examine taxonomic characters used in evolution and identification of specimens according to zoological nomenclature
CO3	Analyse newer trends in systematics, ethics to be followed while creating and publishing taxonomic publications and impediments to overcome
CO4	Distinguish natural selection as one of several evolutionary processes from other modern day theories including genetic drift, neutral theory and HW principle
CO5	Demonstrate the processes of microevolution, tempo, gene frequency, gene pool, bottle neck, founder population etc and explain molecular drive, molecular clocks and molecular divergence and Human evolution starting from a chimpanzee-human common ancestor.



CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA.Kerala-680125

Program(s) : PG - MSC - M.Sc. Zoology (Aided)	Department(s) : ZOOLOGY	Batch(s) : MSC ZOO 2022 - S2
Course Community : CC19PZOL2L01 MSC ZOO 2022 S2	Faculty(s) : SUMESH N V',JIJO FRANCIS	Course : Biochemistry, Biophysics, Bioinstrumentation and Biostatistics

CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3
1	CCAWMZL001	ANITTA JOSE	93.39	93.39	93.39
2	CCAWMZL002	ANNTREENA SOJAN P	96.15	96.15	96.15
3	CCAWMZL003	ASHIKHA FARSANA P J	95.71	95.71	95.71
4	CCAWMZL004	ASWATHI HARIDAS	82.91	82.91	82.91
5	CCAWMZL005	BINCY BABU	92.53	92.53	92.53
6	CCAWMZL006	DIVYA JOSE	91.23	91.23	91.23
7	CCAWMZL007	KRISHNAPRIYA G S	90.82	90.82	84.15
8	CCAWMZL008	KRISHNAPRIYA K P	90.83	90.83	90.83
9	CCAWMZL009	MARIA SICO	89.33	89.33	89.33
10	CCAWMZL010	MITHU MANOJ C	94.44	94.44	94.44
11	CCAWMZL011	NEFLA MUHAMED	95.09	88.43	88.43
12	CCAWMZL012	SANDRA K N	95.52	88.85	95.52

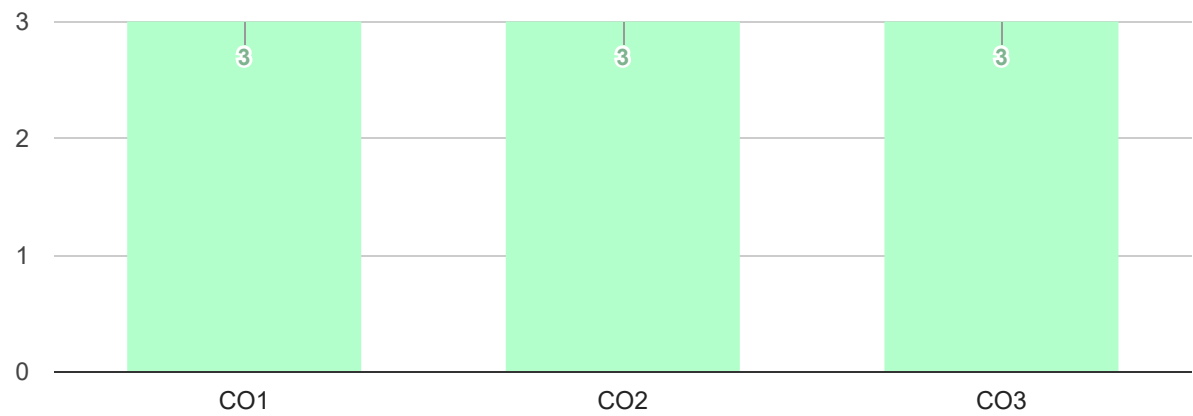
CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3
13	CCAWMZL013	SOORAJ SIVADAS C	84.62	84.62	84.62
14	CCAWMZL015	SREYA KUMAR .K	82.65	82.65	82.65
15	CCAWMZL016	SWAPNA SUDHA T R	92.11	92.11	92.11
16	CCAWMZL014	SREESHMA ASOK K	95.71	89.05	95.71

Class Strength	16		
Course Outcomes addressed	CO1	CO2	CO3
Target of Course Outcome	60	60	60
No of students with CO value greater than or equal to 60	16	16	16
Percentage of students with CO value greater than 60	100	100	100
Average	91.44	90.19	90.61
Attainment Level	3.00	3.00	3.00
Attainment :High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>			

CO Attainment Levels



Attainment :HighMediumLow

CO List	
CO Code	Description
CO1	Develop skills to perform various qualitative and quantitative tests to identify and distinguish carbohydrates, proteins and lipids
CO2	Develop skills to perform various biophysical and bio instrumentation tools such as pH meter, chromatography, electrophoresis, spectrophotometer, etc
CO3	Calculate measures of dispersion, central tendency, and its application in data analysis and interpret statistical values using ANOVA, correlation and regression based on the collected data



CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA.Kerala-680125

Program(s) : PG - MSC - M.Sc. Zoology (Aided)	Department(s) : ZOOLOGY	Batch(s) : MSC ZOO 2022 - S2
Course Community : CC19PZOL2L02 MSC ZOO 2022 S2	Faculty(s) : Abhilash Peter', 'Dr.Sr.Dilla Jose', 'Leyon Varghese	Course : Physiology, Molecular Biology and Cytogenetics

CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3
1	CCAWMZL001	ANITTA JOSE	89.1	89.1	89.1
2	CCAWMZL002	ANN TREENA SOJAN P	82.86	82.86	89.53
3	CCAWMZL003	ASHIKHA FARSANA P J	95.08	95.08	88.42
4	CCAWMZL004	ASWATHI HARIDAS	92.31	92.31	92.31
5	CCAWMZL005	BINCY BABU	96.14	89.47	96.14
6	CCAWMZL006	DIVYA JOSE	84.63	84.63	84.63
7	CCAWMZL007	KRISHNAPRIYA G S	81.65	74.99	74.99
8	CCAWMZL008	KRISHNAPRIYA K P	87.39	87.39	87.39
9	CCAWMZL009	MARIA SICO	86.76	86.76	86.76
10	CCAWMZL010	MITHU MANOJ C	87.84	87.84	87.84
11	CCAWMZL011	NEFLA MUHAMED	86.55	86.55	86.55

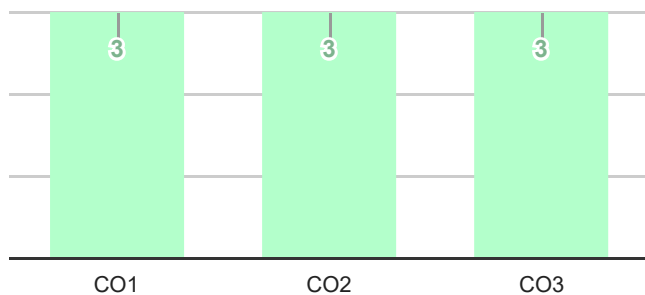
CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3
12	CCAWMZL012	SANDRA K N	79.47	79.47	86.13
13	CCAWMZL013	SOORAJ SIVADAS C	56.11	56.11	56.11
14	CCAWMZL015	SREYA KUMAR .K	78.86	78.86	78.86
15	CCAWMZL016	SWAPNA SUDHA T R	85.91	85.91	85.91
16	CCAWMZL014	SREESHMA ASOK K	86.54	86.54	86.54

Class Strength	16		
Course Outcomes addressed	CO1	CO2	CO3
Target of Course Outcome	60	60	60
No of students with CO value greater than or equal to 60	15	15	15
Percentage of students with CO value greater than 60	93.75	93.75	93.75
Average	84.83	83.99	84.83
Attainment Level	3.00	3.00	3.00
Attainment :High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>			

CO Attainment Levels



Attainment :High ■ Medium ■ Low ■

CO List	
CO Code	Description
CO1	Analyze the effect of enzymatic activity at different pH, temperature, concentration and demonstrate hematological disorders by analyzing the formed elements in blood
CO2	Develop hands on training skill in quantification of DNA, RNA and proteins by colourimetric methods
CO3	Evaluate karyotypes and abnormalities in humans, gain hands on training in preparing chromosomes to study meiotic stages using grasshopper testis and to visualize polytene chromosome



CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA.Kerala-680125

Program(s) : PG - MSC - M.Sc. Zoology (Aided)	Department(s) : ZOOLOGY	Batch(s) : MSC ZOO 2022 - S2
Course Community : CC19PZOL2L03 MSC ZOO 2022 S2	Faculty(s) : Leyon Varghese', 'SUMESH N V	Course : Ecology, Ethology, Systematics and Evolution

CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4
1	CCAWMZL001	ANITTA JOSE	100	100	100	100
2	CCAWMZL002	ANNTREENA SOJAN P	95	95	95	88.33
3	CCAWMZL003	ASHIKHA FARSANA P J	97.64	97.64	97.64	97.64
4	CCAWMZL004	ASWATHI HARIDAS	100	100	100	100
5	CCAWMZL005	BINCY BABU	99.15	99.15	99.15	99.15
6	CCAWMZL006	DIVYA JOSE	96.6	96.6	96.6	96.6
7	CCAWMZL007	KRISHNAPRIYA G S	74.44	74.44	74.44	74.44
8	CCAWMZL008	KRISHNAPRIYA K P	91.8	91.8	91.8	91.8
9	CCAWMZL009	MARIA SICO	97.12	90.45	97.12	90.45
10	CCAWMZL010	MITHU MANOJ C	99.15	99.15	99.15	99.15
11	CCAWMZL011	NEFLA MUHAMED	100	93.33	100	100

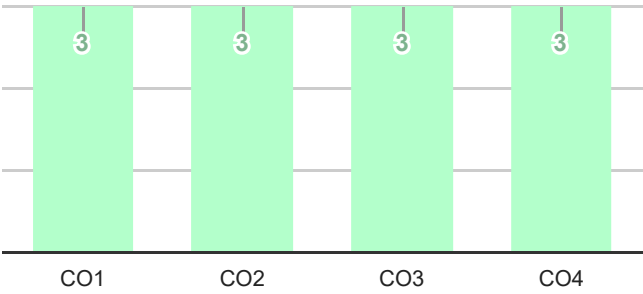
CO PO ATTAINMENT Report

Above Target Percentage : ☐ Below Target Percentage: ☐

#	Reg No	Student Name	CO1	CO2	CO3	CO4
12	CCAWMZL012	SANDRA K N	99.15	92.48	92.48	99.15
13	CCAWMZL013	SOORAJ SIVADAS C	95.52	95.52	95.52	95.52
14	CCAWMZL015	SREYA KUMAR .K	95	95	95	95
15	CCAWMZL016	SWAPNA SUDHA T R	98.72	98.72	98.72	98.72
16	CCAWMZL014	SREESHMA ASOK K	95.52	95.52	95.52	95.52

Class Strength	16			
Course Outcomes addressed	CO1	CO2	CO3	CO4
Target of Course Outcome	60	60	60	60
No of students with CO value greater than or equal to 60	16	16	16	16
Percentage of students with CO value greater than 60	100	100	100	100
Average	95.93	94.68	95.51	95.09
Attainment Level	3.00	3.00	3.00	3.00
Attainment :High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>				

CO Attainment Levels



Attainment :High Medium Low

CO List	
CO Code	Description
CO1	Carry out collection, preservation and identification of specimens using taxonomic keys.
CO2	Calculate gene/genotype frequency of populations to interpret their evolutionary status.
CO3	Perform experiments to analyse the different ecological parameters like oxygen, CO2, salinity, nitrate etc in soil/water samples
CO4	Make systematic observation of different behavioural patterns of animal to make scientific conclusions