BSc. COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

ARTIFICIAL INTELLIGENCE (CSAI22304)

PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA):

Programme Outcomes – (B.Sc.)

- **PO1. Scientific Knowledge.** Apply the knowledge of Science, Mathematics, Engineering& Technology fundamentals to solve the complex problems**.**
- **PO2**. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO4.Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.
- **PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.
- **PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.
- **PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.
- **PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

PROGRAMME SPECIFIC OUTCOMES (DEPARTMENTAL):

Students will be able to:

PSO1: Ability to understand and adapt to the contemporary trends and best practices of industry and research standards.

PSO2: Ability to design and implement ethical sustainable solutions with a cutting -edge combination of Artificial intelligence ,Machine Learning , Natural Language processing etc.

PSO3: Ability to design smart machines.

PSO4: Ability to represent the knowledge and transform the real life information into a different representation.

PSO5: Implement problem solving skills in the broad area of programming concepts and manage different projects in interdisciplinary field.

	COURSE OUTCOMES	**BLOOM'S TAXONOMY LEVEL**
CO1	**Explain** types and Al applications.	II (Explain)
CO2	**Apply** search algorithms to solve AI problems	III (Apply)
CO3	**Infer** first order logic to represent knowledge	II (Infer)
CO4	**Explain** varicus reasoning in AI	II (Explain)
CO5	**Develop** Al problems using prolog.	III(Develop)

CO'S PO'S PSO Mapping :

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		H
C02	H		H	H			H	S		H		H
C03	H		H	H	H		H	S		H		H
C04	H		H	H	S		H	S		H		S
C05	H		H	H	S		S	H		H		H

H: Highly Supportive
S:
Supportive

MARKS LIST :

	Internal assessment						External Assessment
uid	mid exam 1	mid exam 2	group discussion	assignment	viva	Attendence	External Exam
	12.5	12.5	5	3	3	4	60
111721038001	48	44	5	3	3	8	55
111721038002	44	40	5	3	3	6	50
111721038003	38	23	4	3	3	4	43
111721038004	25	23	5	3	3	7	32
111721038005	39	20	4	3	3	3	43
111721038006	46	44	5	3	3	9	54
111721038007	41	30	4	3	3	2	53
111721038008	47	45	5	3	3	7	51
111721038009	37	21	4	3	3	2	34
111721038010	21	20	4	3	2	0	38
111721038011	20	18	4	3	3	3	35
111721038012	35	20	4	3	3	0	37
111721038013	34	16	4	3	3	7	28
111721038014	26	16	3	3	3	1	36
111721038015	39	32	4	3	3	3	49
111721038016	31	28	4	3	3	0	0
111721038017	31	23	4	3	3	5	45

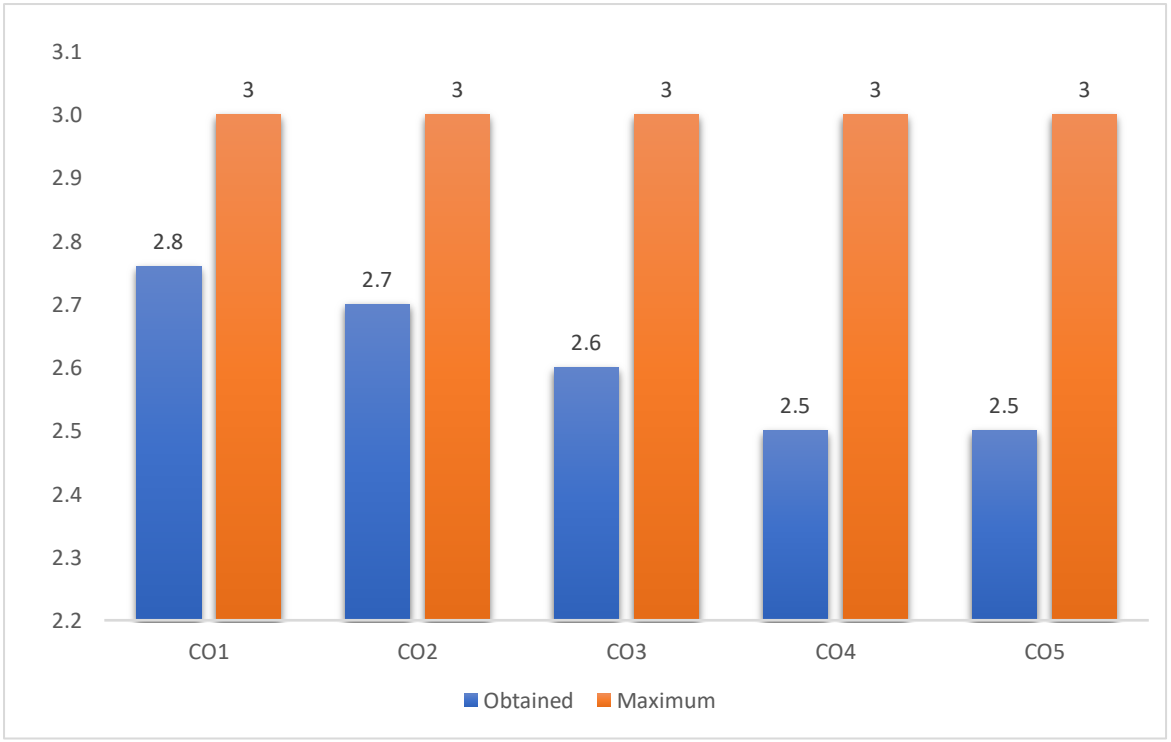
111721038018	25	0	3	3	3	1	43
111721038019	22	10	4	3	3	0	30
111721038020	45	42	5	3	3	3	47
111721038021	46	45	5	3	3	7	55
111721038022	20	10	5	3	3	4	33
111721038023	27	15	4	3	3	0	33
111721038024	20	13	5	3	3	0	35
111721038025	41	36	5	3	3	10	50
111721038026	28	26	4	3	3	0	34
111721038027	23	15	4	3	3	3	27
111721038028	27	15	4	3	3	0	36
111721038029	44	35	5	3	3	0	42
111721038030	38	16	4	3	3	2	30
111721038031	23	18	4	3	3	0	38
111721038032	38	38	5	3	3	0	49
111721038033	31	23	4	3	3	6	41
111721038034	39	30	5	3	3	1	36
111721038035	20	0	5	3	3	0	44
111721038036	15	20	4	3	3	0	46
111721038037	42	29	4	3	3	7	47
111721038038	20	15	4	3	3	0	23

111721038039	29	24	4	3	3	4	39
111721038041	25	20	4	3	3	6	34
111721038042	20	15	4	3	3	0	10
111721038043	43	40	5	3	3	7	53
111721038044	20	10	4	3	2	0	22
111721038045	40	44	5	3	3	10	51
111721038046	35	34	5	3	3	7	43
111721038047	45	44	5	3	3	10	54
111721038048	20	15	4	3	3	0	34
111721038049	45	41	5	3	3	7	51
111721038050	26	20	4	3	3	2	27

CO Mapping :

co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendence			External Exam			
	pass %	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	98.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	40.8	0.0	2.4	91.8	3.0	3.0	2.8
CO2	98.0	3.0			100.0	3.0			100.0	3.0	40.8	0.0	2.3	91.8	3.0	3.0	2.7
CO3	98.0	3.0	65.3	1.0	100.0	3.0			100.0	3.0	40.8	0.0	2.0	91.8	3.0	3.0	2.6
CO4			65.3	1.0	100.0	3.0			100.0	3.0	40.8	0.0	1.8	91.8	3.0	3.0	2.5
CO5			65.3	1.0	100.0	3.0			100.0	3.0	40.8	0.0	1.8	91.8	3.0	3.0	2.5

AVERAGE	AVERAGE
3	2.612


3.1
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3
3
3
2.8
2.7
2.6
2.5
2.5
CO1
CO2
CO3
CO4
CO5
Obtained
Maximum

PO Mapping :

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.76		H 2.76					
CO2	H 2.7		H 2.7	H 2.7			H 2.7	
CO3	H 2.6		H 2.6	H 2.6	H 2.6		H 2.6	
CO4	H 2.5		H 2.5	H 2.5			H 2.5	
CO5	H 2.5		H 2.5	H 2.5				H 2.5
AVERAGE OF COS FOR POS	2.612		2.612	2.575	2.6		2.6	2.5
AVERAGE OF POS	2.5824		2.5824	2.575	2.6		2.6	2.5
AVERAGE	2.5733							

BSc. COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

DATABASE MANAGEMENT SYSTEMS (CSAI22302)

PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA):

Programme Outcomes – (B.Sc.)

- **PO1. Scientific Knowledge.** Apply the knowledge of Science, Mathematics, Engineering& Technology fundamentals to solve the complex problems**.**
- **PO2**. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
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- **PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

PROGRAMME SPECIFIC OUTCOMES (DEPARTMENTAL):

Students will be able to:

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PSO2: Ability to design and implement ethical sustainable solutions with a cutting -edge combination of Artificial intelligence ,Machine Learning , Natural Language processing etc.

PSO3: Ability to design smart machines.

PSO4: Ability to represent the knowledge and transform the real life information into a different representation.

PSO5: Implement problem solving skills in the broad area of programming concepts and manage different projects in interdisciplinary field.

	COURSE OUTCOMES	**BLOOM'S TAXONOMY LEVEL**
CO1	**Represent** logical databaseusing Entity Relationship and Enhanced ER model.	III (Represent)
CO2	**Formulate** database using relational algebra and organize relation using normalization.	V (Formulate)
CO3	**Design** SQL queries and implements PL/SQL.	VI (Design)
CO4	**Classify** the storage and file structure, storage access, indexing and hashing techniques of the database	II(Classify)
CO5	**Explain** the concept of Transactions, recovery system and concurrency control.	II(Explain)

CO's PO's PSO Mapping :

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		H
C02	H		H	H			H	S		H		H
C03	H		H	H	H		H	S		H		H
C04	H		H	H	S		H	S		H		S
C05	H		H	H	S		S	H		H		H

H: Highly Supportive
S:
Supportive

MARKS LIST :

	Internal assessment						External Assessment
uid	mid exam 1	mid exam 2	group discussion	assignment	viva	Attendence	External Exam
	12.5	12.5	5	3	3	4	60
111721038001	50	50	5	3	3	4	52
111721038002	49	50	5	3	3	4	51
111721038003	31	41	5	3	3	3	44
111721038004	34	41	5	3	3	3	36
111721038005	45	48	5	3	3	2	52
111721038006	45	49	5	3	3	10	51
111721038007	40	47	5	3	3	0	49
111721038008	47	49	5	3	3	6	48
111721038009	37	42	5	3	3	0	33
111721038010	22	40	5	3	3	3	34
111721038011	21	34	5	3	3	4	29
111721038012	41	41	5	3	3	0	35
111721038013	44	46	5	3	3	6	42
111721038014	29	31	5	3	3	0	39
111721038015	37	46	5	3	3	0	47
111721038016	23	44	5	3	3	0	34
111721038017	35	44	5	3	3	6	44

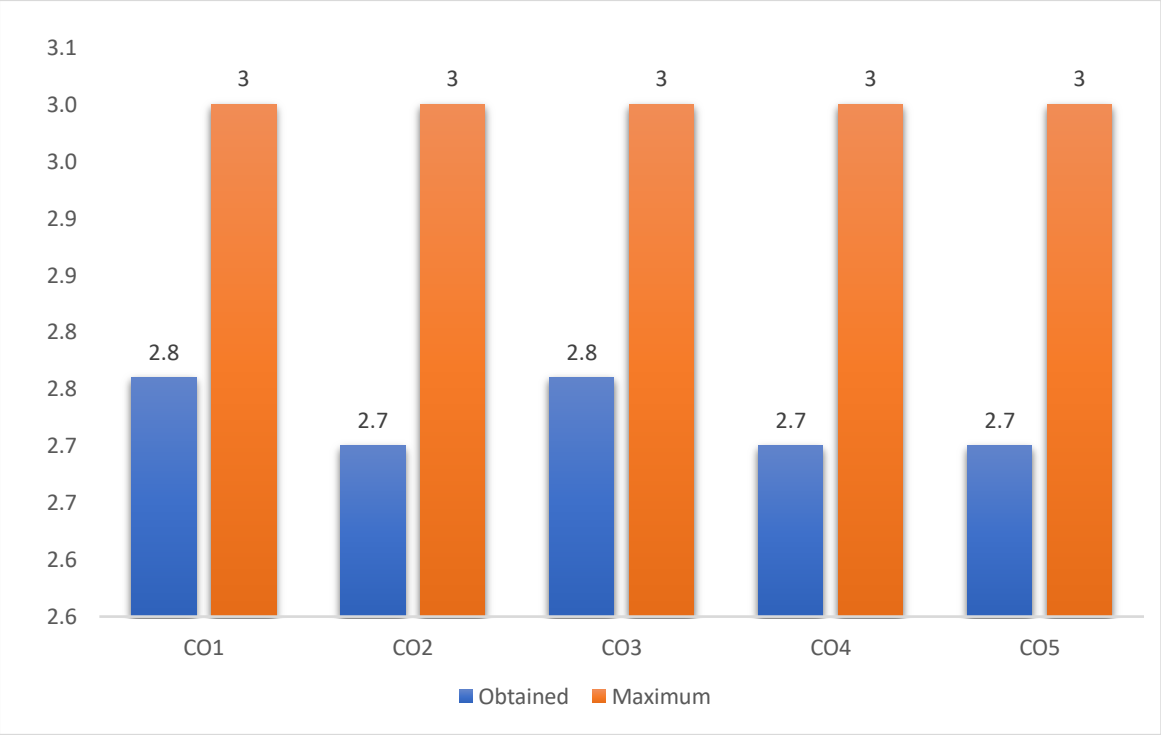
111721038018	30	42	5	3	3	2	49
111721038019	30	33	5	3	3	2	39
111721038020	41	49	5	3	3	0	46
111721038021	50	50	5	3	3	3	49
111721038022	21	28	5	3	3	0	31
111721038023	20	43	5	3	3	0	35
111721038024	20	25	5	3	3	0	42
111721038025	46	41	5	3	3	6	41
111721038026	26	32	5	3	3	0	43
111721038027	21	9	5	3	3	0	31
111721038028	20	27	5	3	3	1	33
111721038029	42	49	5	3	3	0	43
111721038030	21	39	5	3	3	0	43
111721038031	35	31	5	3	3	0	32
111721038032	41	46	5	3	3	0	47
111721038033	34	38	5	3	3	3	43
111721038034	41	48	5	3	3	1	47
111721038035	20	38	5	3	3	2	31
111721038036	23	31	5	3	3	0	45
111721038037	48	48	5	3	3	6	44
111721038038	20	20	5	3	3	1	28

111721038039	35	35	5	3	3	2	42
111721038041	22	24	5	3	3	2	35
111721038042	20	5	5	3	3	0	26
111721038043	47	48	5	3	3	5	53
111721038044	7	21	5	3	3	0	36
111721038045	43	46	5	3	3	10	51
111721038046	36	45	5	3	3	6	46
111721038047	46	50	5	3	3	10	51
111721038048	12	20	5	3	3	0	30
111721038049	45	49	5	3	3	6	50
111721038050	37	43	5	3	3	2	46

CO Mapping :

co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendence			External Exam			
	pass %	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	95.9	3.0			100.0	3.0	100.0	3.0	100.0	3.0	28.6	0.0	2.4	100.0	3.0	3.0	2.8
CO2	95.9	3.0			100.0	3.0			100.0	3.0	28.6	0.0	2.3	100.0	3.0	3.0	2.7
CO3	95.9	3.0	95.9	3.0	100.0	3.0			100.0	3.0	28.6	0.0	2.4	100.0	3.0	3.0	2.8
CO4			95.9	3.0	100.0	3.0			100.0	3.0	28.6	0.0	2.3	100.0	3.0	3.0	2.7
CO5			95.9	3.0	100.0	3.0			100.0	3.0	28.6	0.0	2.3	100.0	3.0	3.0	2.7

AVERAGE	AVERAGE
3	2.724


3.1
3.0
3.0
2.9
2.9
2.8
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2.6
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3
3
3
3
3
2.8
2.7
2.8
2.7
2.7
CO1
CO2
CO3
CO4
CO5
Obtained
Maximum

PO Mapping :

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.76		H 2.76					
CO2	H 2.7		H 2.7	H 2.7			H 2.7	
CO3	H 2.76		H 2.76	H 2.76	H 2.76		H 2.76	
CO4	H 2.7		H 2.7	H 2.7			H 2.7	
CO5	H 2.7		H 2.7	H 2.7				H 2.7
AVERAGE OF COS FOR POS	2.724		2.724	2.715	2.76		2.72	2.7
AVERAGE OF POS	2.7168		2.7168	2.715	2.76		2.72	2.7
AVERAGE	2.721433333							

BSc. COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

DISTRIBUTED SYSTEMS (CSAI22301)

PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA):

Programme Outcomes – (B.Sc.)

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PSO3: Ability to design smart machines.

PSO4: Ability to represent the knowledge and transform the real life information into a different representation.

PSO5: Implement problem solving skills in the broad area of programming concepts and manage different projects in interdisciplinary field.

	COURSE OUTCOMES	**BLOOM'S TAXONOMY LEVEL**
CO1	To **inculcate** knowledge on Hardware requirement of distributed systems and communications.	(Inculcate)
CO2	To **demonstrate** the concepts of naming, synchronization issues and Consistency and replication.	II (Demonstrate)
CO3	To **inculcate** knowledge on Distributed Object based Systems, replication consistency, fault tolerance	(Inculcate)
CO4	To **illustrate** the concepts of Distributed File Systems and Distributed Web-based Systems.	III (Illustrate)
CO5	To **illustrate** the concepts of Distributed Coordination-Based Systems and Map-Reduce	III(Illustrate)

CO's PO's PSO Mapping :

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		H
C02	H		H	H			H	S		H		H
C03	H		H	H	H		H	S		H		H
C04	H		H	H	S		H	S		H		S
C05	H		H	H	S		S	H		H		H

H: Highly Supportive
S:
Supportive

MARKS LIST :

	Internal assessment						External Assessment
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111721038002	49	50	5	3	3	7	41
111721038003	40	41	5	3	3	8	32
111721038004	40	45	5	3	3	7	23
111721038005	50	50	5	3	3	6	29
111721038006	49	50	5	3	3	9	30
111721038007	48	50	5	3	3	8	39
111721038008	50	50	5	3	3	10	38
111721038009	48	50	5	3	3	5	26
111721038010	30	46	5	3	3	7	29
111721038011	35	41	5	3	3	6	33
111721038012	48	45	5	3	3	2	30
111721038013	40	48	5	3	3	9	26
111721038014	35	36	5	3	3	3	26
111721038015	47	49	5	3	3	5	27
111721038016	40	48	5	3	3	2	31
111721038017	30	44	5	3	3	4	31

111721038018	33	49	5	3	3	4	35
111721038019	45	49	5	3	3	2	26
111721038020	50	50	5	3	3	8	38
111721038021	50	50	5	3	3	9	39
111721038022	26	44	5	3	3	5	37
111721038023	44	32	5	3	3	2	12
111721038024	25	27	5	3	3	1	31
111721038025	45	49	5	3	3	10	39
111721038026	39	40	5	3	3	3	25
111721038027	23	29	5	3	3	4	18
111721038028	32	35	5	3	3	2	24
111721038029	49	47	5	3	3	4	33
111721038030	38	42	5	3	3	2	32
111721038031	32	40	5	3	3	5	29
111721038032	40	36	5	3	3	0	37
111721038033	43	45	5	3	3	7	29
111721038034	37	40	5	3	3	3	43
111721038035	28	36	5	3	3	2	25
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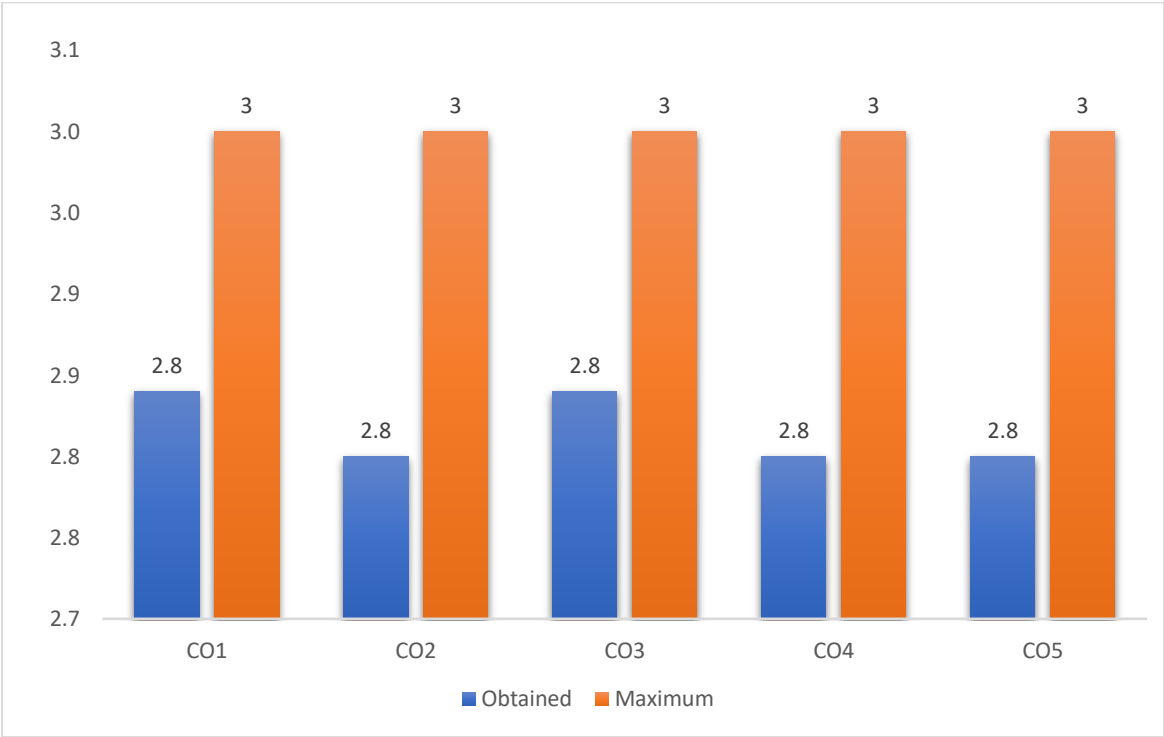
111721038038	32	39	5	3	3	4	17
111721038039	46	43	5	3	3	7	29

111721038041	26	41	5	3	3	7	26
111721038042	28	31	5	3	3	0	9
111721038043	50	50	5	3	3	9	43
111721038044	24	38	5	3	3	4	23
111721038045	49	50	5	3	3	10	40
111721038046	45	49	5	3	3	7	29
111721038047	50	50	5	3	3	10	42
111721038048	22	25	5	3	3	2	29
111721038049	50	50	5	3	3	9	42
111721038050	47	49	5	3	3	7	33

CO Mapping :

co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendence			External Exam			
	pass %	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	69.4	1.0	2.6	87.8	3.0	3.0	2.8
CO2	100.0	3.0			100.0	3.0			100.0	3.0	69.4	1.0	2.5	87.8	3.0	3.0	2.8
CO3	100.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	69.4	1.0	2.6	87.8	3.0	3.0	2.8
CO4			100.0	3.0	100.0	3.0			100.0	3.0	69.4	1.0	2.5	87.8	3.0	3.0	2.8
CO5			100.0	3.0	100.0	3.0			100.0	3.0	69.4	1.0	2.5	87.8	3.0	3.0	2.8

AVERAGE	AVERAGE
3	2.816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CO1
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CO3
CO4
CO5
Obtained
Maximum

PO Mapping :

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.84		H 2.84					
CO2	H 2.8		H 2.8	H 2.8			H 2.8	
CO3	H 2.84		H 2.84	H 2.84	H 2.84		H 2.84	
CO4	H 2.8		H 2.8	H 2.8			H 2.8	
CO5	H 2.8		H 2.8	H 2.8				H 2.8
AVERAGE OF COS FOR POS	2.816		2.816	2.81	2.84		2.813333333	2.8
AVERAGE OF POS	2.8112		2.8112	2.81	2.84		2.813333	2.8
AVERAGE	2.814288889							

BSc. COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

ENVIRONMENTAL SCIENCE AND GENDER SENSITIZATION(ES18101)

PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA):

Programme Outcomes – (B.Sc.)

- **PO1. Scientific Knowledge.** Apply the knowledge of Science, Mathematics, Engineering& Technology fundamentals to solve the complex problems**.**
- **PO2**. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO4.Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.
- **PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.
- **PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.
- **PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.
- **PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

PROGRAMME SPECIFIC OUTCOMES (DEPARTMENTAL):

Students will be able to:

PSO1: Ability to understand and adapt to the contemporary trends and best practices of industry and research standards.

PSO2: Ability to design and implement ethical sustainable solutions with a cutting -edge combination of Artificial intelligence ,Machine Learning , Natural Language processing etc.

PSO3: Ability to design smart machines.

PSO4: Ability to represent the knowledge and transform the real life information into a different representation.

PSO5: Implement problem solving skills in the broad area of programming concepts and manage different projects in interdisciplinary field.

	COURSE OUTCOMES	**BLOOM'S TAXONOMY LEVEL**
CO1	**Understand** the importanceof Environmental education, conservation of natural resources &Understand the importance ofecosystems and biodiversity	II (Understand)
CO2	**Understand** the pollution problems and Apply the environmental science knowledge on solid waste management, disaster management	II (Understand)
CO3	**Apply** the environmental science knowledge to Improve the resources and Evaluate and understand the sustainable environmental conditions and control methods	III (Apply)
CO4	**Identify** the interactions and intersections of identities (e.g.; gender, race, ethnicity, class, sexuality, and so on) and assess the ways in which they contribute to instances of privilege and power dynamics across cultures, space, and time And their problems	I(Identify)
CO5	**Understand** the gender problems and ways of addressing them, including interactions across local to global scales in communities and overcome inequalities with legislations	II(Understand)

CO's PO's PSO Mapping :

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		H
C02	H		H	H			H	S		H		H
C03	H		H	H	H		H	S		H		H
C04	H		H	H	S		H	S		H		S
C05	H		H	H	S		S	H		H		H

H: Highly Supportive
S:
Supportive

MARKS LIST :

	Internal assessment						External Assessment
uid	mid exam 1	mid exam 2	group discussion	assignment	viva	Attendence	External Exam
	12.5	12.5	5	3	3	4	60
111721038001	43	47	5	3	3	7	52
111721038002	42	46	4	3	3	0	55
111721038003	42	40	4	3	3	4	53
111721038004	38	41	5	3	3	7	40
111721038005	34	46	4	3	3	0	57
111721038006	41	45	5	3	3	8	60
111721038007	40	46	4	3	3	0	57
111721038008	41	46	5	3	3	6	60
111721038009	29	40	4	3	3	0	54
111721038010	29	34	5	3	3	2	45
111721038011	24	36	5	3	3	5	52
111721038012	37	37	5	3	3	0	46
111721038013	27	35	5	3	3	7	55
111721038014	30	35	4	3	3	0	51
111721038015	34	37	5	3	3	0	49
111721038016	25	40	4	3	3	0	46
111721038017	32	37	4	3	3	2	48

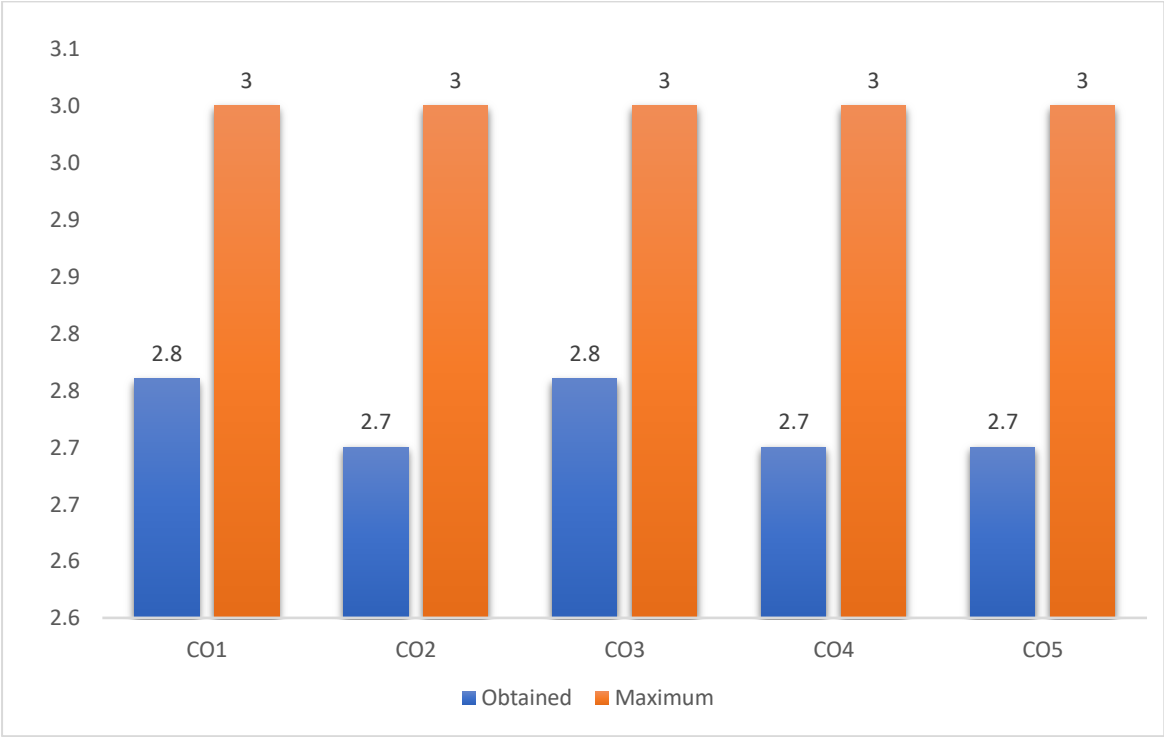
111721038018	32	40	4	3	3	0	55
111721038019	35	39	4	3	3	0	50
111721038020	39	42	4	3	3	3	58
111721038021	42	46	5	3	3	7	57
111721038022	23	27	4	3	3	0	51
111721038023	25	39	5	3	3	0	45
111721038024	27	33	4	3	3	0	50
111721038025	39	40	5	3	3	8	56
111721038026	33	28	5	3	3	0	49
111721038027	20	38	4	3	3	1	30
111721038028	24	20	5	3	3	1	47
111721038029	36	41	4	3	3	0	50
111721038030	36	39	5	3	3	1	54
111721038031	34	27	4	3	3	0	48
111721038032	34	40	4	3	3	0	55
111721038033	34	43	5	3	3	5	47
111721038034	37	41	4	3	3	0	57
111721038035	30	0	4	3	3	0	49
111721038036	25	37	4	3	3	0	57
111721038037	40	44	5	3	3	5	60
111721038038	20	25	4	3	3	3	33
111721038039	37	41	5	3	3	4	53

111721038041	31	31	5	3	3	4	44
111721038042	22	30	4	3	3	0	34
111721038043	40	45	5	3	3	7	59
111721038044	23	31	4	3	3	0	56
111721038045	41	43	5	3	3	10	51
111721038046	27	41	5	3	3	6	58
111721038047	40	43	5	3	3	10	57
111721038048	27	38	5	3	3	0	52
111721038049	41	44	5	3	3	5	60
111721038050	38	42	5	3	3	1	54

CO Mapping :

co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendence			External Exam			
	pass %	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	36.7	0.0	2.4	100.0	3.0	3.0	2.8
CO2	100.0	3.0			100.0	3.0			100.0	3.0	36.7	0.0	2.3	100.0	3.0	3.0	2.7
CO3	100.0	3.0	98.0	3.0	100.0	3.0			100.0	3.0	36.7	0.0	2.4	100.0	3.0	3.0	2.8
CO4			98.0	3.0	100.0	3.0			100.0	3.0	36.7	0.0	2.3	100.0	3.0	3.0	2.7
CO5			98.0	3.0	100.0	3.0			100.0	3.0	36.7	0.0	2.3	100.0	3.0	3.0	2.7

AVERAGE	AVERAGE
3	2.724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CO1
CO2
CO3
CO4
CO5
Obtained
Maximum

PO Mapping :

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.76		H 2.76					
CO2	H 2.7		H 2.7	H 2.7			H 2.7	
CO3	H 2.76		H 2.76	H 2.76	H 2.76		H 2.76	
CO4	H 2.7		H 2.7	H 2.7			H 2.7	
CO5	H 2.7		H 2.7	H 2.7				H 2.7
AVERAGE OF COS FOR POS	2.724		2.724	2.715	2.76		2.72	2.7
AVERAGE OF POS	2.7168		2.7168	2.715	2.76		2.72	2.7
AVERAGE	2.721433333							

BSc. COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

PYTHON PROGRAMMING (CSAI22303)

PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA):

Programme Outcomes – (B.Sc.)

- **PO1. Scientific Knowledge.** Apply the knowledge of Science, Mathematics, Engineering& Technology fundamentals to solve the complex problems**.**
- **PO2**. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
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- **PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.
- **PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

PROGRAMME SPECIFIC OUTCOMES (DEPARTMENTAL):

Students will be able to:

PSO1: Ability to understand and adapt to the contemporary trends and best practices of industry and research standards.

PSO2: Ability to design and implement ethical sustainable solutions with a cutting -edge combination of Artificial intelligence ,Machine Learning , Natural Language processing etc.

PSO3: Ability to design smart machines.

PSO4: Ability to represent the knowledge and transform the real life information into a different representation.

PSO5: Implement problem solving skills in the broad area of programming concepts and manage different projects in interdisciplinary field.

	COURSE OUTCOMES	**BLOOM'S TAXONOMY LEVEL**
CO1	**Explain** the basics of Python Programming constructs.	II (Explain)
CO2	Sub **divides** larger problems into smaller ones using functions	IV (Divides)
CO3	**Apply** variousdata structures problem-solving	III (Apply)
CO4	**Construc**t Python programs as a set o iobjects.	III (Construct)
CO5	**Select** an appropriate exception handling depending on application and design file operations and concurrent programming using Python standard library	I(Select)

CO's PO's PSO Mapping:

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		H
C02	H		H	H			H	S		H		H
C03	H		H	H	H		H	S		H		H
C04	H		H	H	S		H	S		H		S
C05	H		H	H	S		S	H		H		H

H: Highly Supportive
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Supportive

MARKS LIST :

	Internal assessment						External Assessment
uid	mid exam 1	mid exam 2	group discussion	assignment	viva	Attendence	External Exam
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111721038004	35	36	5	3	2	9	29
111721038005	49	45	5	3	2	2	32
111721038006	48	48	5	3	3	9	43
111721038007	50	44	5	3	2	1	44
111721038008	50	49	5	3	3	6	53
111721038009	44	41	4	3	3	4	35
111721038010	35	40	4	3	2	2	38
111721038011	35	20	4	3	2	6	24
111721038012	45	47	4	3	3	0	46
111721038013	50	49	5	3	3	9	35
111721038014	49	41	5	3	3	3	40
111721038015	49	46	5	3	2	0	33

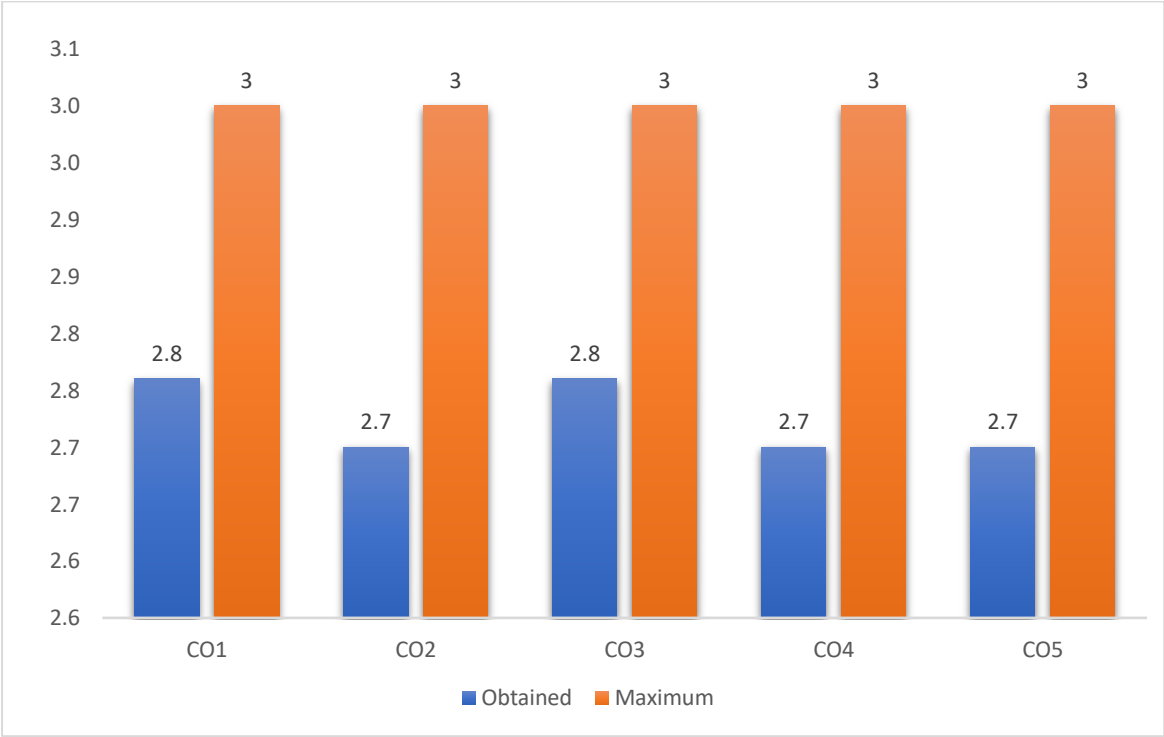
111721038016	48	44	4	3	2	0	48
111721038017	47	46	4	3	2	3	31
111721038018	45	43	5	3	2	3	39
111721038019	37	39	4	3	2	2	28
111721038020	50	50	5	3	3	6	45
111721038021	50	50	5	3	3	6	49
111721038022	20	34	4	3	2	2	48
111721038023	23	33	5	3	2	0	41
111721038024	34	28	4	3	2	0	36
111721038025	50	49	5	3	3	9	49
111721038026	45	42	5	3	2	2	37
111721038027	20	20	4	3	2	6	24
111721038028	41	43	5	3	2	3	32
111721038029	50	49	5	3	2	0	46
111721038030	38	34	4	3	2	2	26
111721038031	37	36	4	3	2	3	28
111721038032	48	48	4	3	2	0	39
111721038033	43	42	4	3	2	3	39
111721038034	48	48	5	3	2	0	36
111721038035	39	37	4	3	2	1	34
111721038036	20	28	4	3	2	0	25

111721038037	50	49	5	3	3	6	50
111721038038	22	25	5	3	2	3	34
111721038039	44	38	5	3	3	6	39
111721038041	49	29	5	3	2	6	36
111721038042	20	20	4	3	2	0	19
111721038043	50	49	5	3	3	10	50
111721038044	20	22	4	3	2	0	26
111721038045	47	49	5	3	3	10	48
111721038046	46	47	5	3	3	6	47
111721038047	50	49	5	3	3	10	44
111721038048	21	0	5	3	2	0	19
111721038049	50	49	5	3	3	9	49
111721038050	46	49	4	3	2	5	43

CO Mapping :

co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendence			External Exam			
	pass %	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	42.9	0.0	2.4	95.9	3.0	3.0	2.8
CO2	100.0	3.0			100.0	3.0			100.0	3.0	42.9	0.0	2.3	95.9	3.0	3.0	2.7
CO3	100.0	3.0	98.0	3.0	100.0	3.0			100.0	3.0	42.9	0.0	2.4	95.9	3.0	3.0	2.8
CO4			98.0	3.0	100.0	3.0			100.0	3.0	42.9	0.0	2.3	95.9	3.0	3.0	2.7
CO5			98.0	3.0	100.0	3.0			100.0	3.0	42.9	0.0	2.3	95.9	3.0	3.0	2.7

AVERAGE	AVERAGE
3	2.724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CO1
CO2
CO3
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CO5
Obtained
Maximum

PO Mapping :

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.76		H 2.76					
CO2	H 2.7		H 2.7	H 2.7			H 2.7	
CO3	H 2.76		H 2.76	H 2.76	H 2.76		H 2.76	
CO4	H 2.7		H 2.7	H 2.7			H 2.7	
CO5	H 2.7		H 2.7	H 2.7				H 2.7
AVERAGE OF COS FOR POS	2.724		2.724	2.715	2.76		2.72	2.7
AVERAGE OF POS	2.7168		2.7168	2.715	2.76		2.72	2.7
AVERAGE	2.721433333							