BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)
Thanjavur – 5.

Department of Computer Applications

PROGRAM OUTCOME
&
COURSE OUTCOME

2017-2018

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
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(Affiliated to Bharathidasan University, Tiruchirappalli-24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

Department of Computer Applications (2017-2018)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - PROGRAMMING IN C(16SCCCA1)

COURSE OUTCOME

CO1	Defines the concept of C programming and it's fundamental
CO2	Managing I/O operations , various control statements and looping statements.
CO3	Understanding Arrays , Strings and User defined Functions.
CO4	Differentiate Structures and unions. Defines Pointer concepts and File management
CO5	Explain the uses of pre-processors, memory allocation and Programming Guide lines.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	0
CO2	1	0	2	2	0
CO3	2	1	3	2	1
CO4	2	0	2	2	0
CO5	2	1	2	1	1
Average	2	0.6	0.6	0.6	0.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal (15)	Assignment (5)	Seminar (5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AATHISH.S	CB17S 249686	4	4	4	4	4	20	80
2	ABDUL RAHMAN. S	CB17S 249687	4	4	4	4	3	19	76
3	ABDULLA. A	CB17S 249688	3	3	3	2	2	13	52
4	AJITHKUMAR. A (12.09.2000)	CB17S 249689	2	2	2	3	3	12	48
5	AKASH. M	CB17S 249690	2	2	2	2	2	10	40
6	ALENRAFIN. D	CB17S 249691	4	4	4	4	4	20	80
7	AMALANATHAN. N	CB17S 249692	2	. 2	2	2	3	11	44
8	ANAND. R	CB17S 249693	2	2	2	3	3	12	48
9	ARAVINDH. M	CB17S 249694	2	2	2	2	3	11	44
10	ARAVINTH. R	CB17S 249695	2	2	2	2	2	10	40
11	ARAVINTH. S	CB17S 249696	5	5	5	5	3	23	92
12	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
13	ASWIN. K	CB17S 249698	5	5	5	5	4	24	96
14	BARATHVAJ. D	CB17S 249699	4	4	4	4	5	21	84
15	CHARLES .S	CB17S 249700	2	3	3	3	3	14	56
16	DHARMARAJ. N	CB17S 249701	3	3	3	3	3	15	60

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17	DINESH. M	CB17S 249702	3	3	3	3	2	14	56
18	ELAVARASAN. R	CB17S 249703	2	2	3	3	3	13	52
19	GAYATHREE. J	CB17S 249704	5	5	5	5	4	24	96
20	GOWTHAM. M	CB17S 249705	2	2	2	2	2	10	40
21	GUHAN. S	CB17S 249706	3	3	4	4	5	19	76
22	HARI KRISHNAN. P	CB17S 249707	3	3	2	2	2	12	48
23	HARIHARAN. M	CB17S 249708	3	3	4	4	5	19	76
24	JANAKIPARKAVI. S	CB17S 249709	3	5	5	5	5	23	92
25	JAYASURIYA. V	CB17S 249710	2	2	3	3	3	13	52
26	KALAIVANAN. S	CB17S 249711	2	2	2	2	2	10	40
27	KALAIYARASAN. K	CB17S 249712	2	2	2	3	3	12	48
28	KARTHICK. M	CB17S 249713	3	3	3	3	2	14	56
29	KISHORERAJ. S	CB17S 249714	5	5	5	5	4	24	96
30	LOKESH.V.	CB17S 249715	5	5	5	5	3	23	92
31	MADHANA GOPAL.K	CB17S 249716	5	5	5	5	4	24	96
32	MANIKANDAN .R	CB17S 249717	3	3	3	3	2	14	56
33	MANIKANDAN. P	CB17S 249718	2	2	2	2	3	11	44
34	MANIKANDAN. V	CB17S 249719	2	2	2	3	3	12	48

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35	MANIKANDAPRABU. M	CB17S 249720	4	4	4	4	3	19	76
36	MANOJ. M	CB17S 249721	2	2	3	3	3	13	52
37	MOHAN KUMAR .M	CB17S 249722	2	2	3	3	3	13	52
38	MUTHURAMAN. K	CB17S 249723	3	3	3	3	3	15	60
39	PRAMATHI. K	CB17S 249724	5	5	5	5	5	25	100
40	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	3	23	92
41	VINITHA. J	CB17S 249726	3	3	3	3	3	15	60
42	KANNADHASAN.G	CB17S 249727	3	3	3	3	3	15	60
43	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100
44	MAHESHWARI. A	CB17S 249729	4	4	4	3	3	18	72
45	NAGULAN.P	CB17S 249730	2	2	3	3	3	13	52
46	NANTHAKUMAR .M	CB17S 249731	2	2	2	3	3	12	48
47	NITHIYANAND. S	CB17S 249732	4	4	4	4	4	20	80
48	PADMESH. M	CB17S 249733	4	4	4	5	5	22	88
49	PARAMESWARAN. K	CB17S 249734	2	2	2	2	2	10	40
50	PETER. H	CB17S 249735	4	4	4	5	5	22	88
51	PRADHEESH.P	CB17S 249736	4	4	4	5	5	22	88
52	PRAGADEESH. D	CB17S 249737	4	4	4	4	5	17	68

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53	PRAGADEESH. P	CB17S 249738	4	4	4	4	5	17	68
54	PRAKASH .G	CB17S 249739	4	5	5	4	4	22	88
55	PRAVIN. R	CB17S 249740	5	5	5	5	5	25	100
56	PRIYANGA. S	CB17S 249741	5	5	5	5	4	24	96
57	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	3	23	92
58	RAJESH. R	CB17S 249743	2	2	2	3	3	12	48
59	RAM. A.V	CB17S 249744	5	5	5	5	5	25	100
60	RAMANI .S	CB17S 249745	4	4	4	4	4	20	80
61	RANJITHKUMAR .M	CB17S 249746	3	3	3	3	2	14	56
62	RUBINIKOLASH G	CB17S 249747	5	5	5	5	5	25	100
63	SABARIVASAN. S	CB17S 249748	3	3	3	3	4	16	64
64	SANJIVI. S	CB17S 249749	4	4	4	3	3	18	72
65	SANTHOSHI .M	CB17S 249750	3	3	3	3	3	15	60
66	SANTHOSHKUMAR. P	CB17S 249751	3	3	3	3	3	15	60
67	SARAN. R	CB17S 249752	4	4	4	3	3	18	72
68	SARAVANAN .N	CB17S 249753	4	4	4	3	3	18	72
69	SURESH. A	CB17S 249754	5	5	5	5	3	23	92
70	SURIYA. B	CB17S 249755	3	3	3	3	3	15	60

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71	TAMILSELVAN. T	CB17S 249756	3	3	3	3	2	14	56
72	VASANTH .A	CB17S 249757	4	4	3	3	2	16	64
73	VEERAMANI. R	CB17S 249758	3	3	3	3	2	14	56
74	VEERARAJ. K	CB17S 249759	4	4	3	3	2	16	64
75	VENKATESWARAN. S	CB17S 249760	4	4	3	4	2	17	68
76	VIDHYA .S	CB17S 249761	5	5	5	5	4	24	96
77	VIGNESH. J	CB17S 249762	2	2	2	3	3	12	48
78	VIJAY. M	CB17S 249763	4	4	3	4	2	17	68
79	VIJAYAKANTH. P	CB17S 249764	3	4	3	3	3	16	64
80	VIKRAM. M	CB17S 249765	2	2	2	3	3	12	48
81	YOGANANDAN.R	CB17S 249766	2	3	2	3	3	13	52
82	YOGESHRAM .B	CB17S 249767	3	3	3	4	4	17	68
83	YUVARAJ. P	CB17S 249768	3	3	3	3	3	15	60
		Average	3.385542169	3.457831325	3.457831325	3.56626506	3.313253012		

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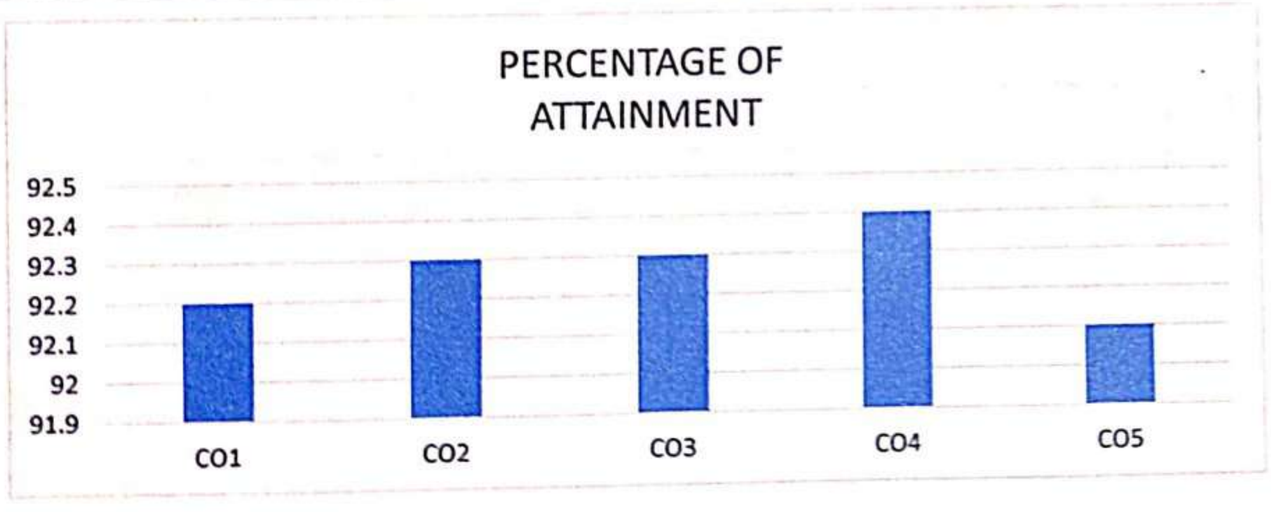
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	3.39	75	78.39	92.2
CO2	3.46	75	78.46	92.3
CO3	3.46	75	78.46	92.3
CO4	3.57	75	78.57	92.4
CO5	3.31	75	78.31	92.1

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C
SUBJECT CODE : 16SCCCA1
NO.OF STUDENTS : 83

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	92.2
CO2	92.3
CO3	92.3
CO4	92.4
CO5	92.1



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
91-100	1	OUTSTANDING
80-89	3	EXCELLENT
70-79	6	DISTINCTION
60-69	14	VERY GOOD
50-59	16	GOOD
40-49	15	AVERAGE
0-39	28	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
91-100	1.24%	OUTSTANDING
80-89	3.61%	EXCELLENT
70-79	7.23%	DISTINCTION
60-69	16.87%	VERY GOOD
50-59	19.28%	GOOD
40-49	18.07%	AVERAGE
0-39	33.73%	REAPPEAR

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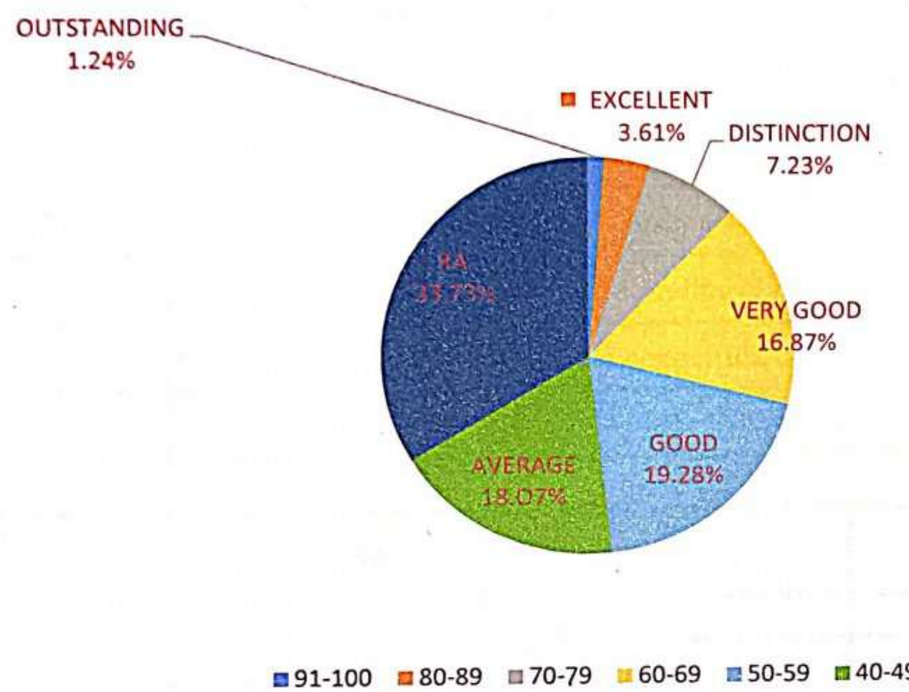
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - COMPUTER NETWORKS(RCCS10CA9)

COURSE OUTCOME

CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference models
CO2	Defines Datalink layer services , Error detection and Error correction methods
CO3	Explain Network layer basics and routing algorithms
CO4	Understanding TCP features and congestion control
CO5	Enable to work with Application layer www, e-mail and DNS

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	2	1
CO2	2	2	2	2	2
CO3	3	2	2	1	2
CO4	3	2	2	2	1
CO5	3	1	2	2	2
Average	2.8	1.8	1.8	1.8	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	PRAVEEN. L	CB15S 239386	4	4	3	4	3	18	72
2	ABBAS MANDHIRI. S	CB15S 240462	4	3	3	4	4	18	72
3	ABIRAMI D	CB15S 240463	5	5	5	5	4	24	96
4	AJMALKHAN. A	CB15S 240465	4	4	3	4	3	18	72
5	AKILA. R	CB15S 240466	3	4	4	4	4	19	76
6	AKILARASAN. K	CB15S 240467	4	4	4	4	4	20	80
7	AMEER HAMJA. M	CB15S 240469	5	5	5	5	5	25	100
8	ANANDARAJ. P	CB15S 240470	4	4	4	4	4	20	80
9	ANAS MOHAMED. M	CB15S 240471	4	4	4	4	4	20	80
10	ANWARDEEN. S	CB15S 240472	4	4	4	4	3	19	76
11	ARAVINDAN. E	CB15S 240473	4	4	4	4	4	20	80
12	ARAVINTH. P	CB15S 240474	4	4	3	4	3	18	72
13	ARUL VIGNESH. A.L	CB15S 240476	4	4	3	3	4	18	72
14	ARUN. R	CB15S 240477	3	4	3	4	4	18	72
15	ASHIK AZARUDEEN. G	CB15S 240478	4	4	4	4	4	20	80
16	ASLAMKADER. I	CB15S 240479	4	4	4	4	3	19	76
17	BALAMBIGAI. R	CB15S 240480	5	5	5	5	5	25	100

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18	BATHERNISHA. M	CB15S 240481	5	5	5	5	4	24	96
19	DEVI. M	CB15S 240483	4	4	3	4	3	18	72
20	DHAMODHARAN. D	CB15S 240484	4	3	3	3	3	16	64
21	DHEENADHAYALAN. B	CB15S 240485	5	4	4	4	4	21	84
22	EDWIN CHRISTOBER. Y	CB15S 240486	5	5	5	5	5	25	100
23	GABRIELRAJADURAI. T	CB15S 240487	4	4	4	4	3	19	76
24	GIRIDHARAN. D	CB15S 240488	5	5	5	5	5	25	100
25	GOKUL. K	CB15S 240489	3	3	3	3	3	15	60
26	GOPINATH. G	CB15S 240490	4	3	3	3	3	16	64
27	GUNASEKARAN. R	CB15S 240491	4	4	4	4	4	20	80
28	HARIHARAN. S	CB15S 240492	4	4	3	4	2	18	72
29	INDUMATHI.M	CB15S 240493	4	4	3	4	2	18	72
30	ISMATHBASHA. S	CB15S 240494	5	5	5	5	4	24	96
31	JABAR SADIQ.M	CB15S 240495	4	4	4	4	4	20	80
32	JAYAKUMAR. S	CB15S 240496	3	3	3	3	4	16	64
33	JAYARANI. S	CB15S 240497	3	5	5	5	5	23	92
34	JAYASRI. S	CB15S 240498	5	5	5	5	3	24	96
35	JEEVANANTHAM. S	CB15S 240499	5	5	5	5	5	25	100
36	KARTHICKRAJA. M	CB15S 240500	5	5	5	5	5	25	100

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37	NIGIL M	CB15S 240501	4	4	3	4	2	18	72
38	SANTHOSH.R	CB15S 240503	3	3	3	3	3	15	60
39	SATHIYARAJ. M	CB15S 240504	4	4	4	4	5	21	84
40	SHAKITHYA. R	CB15S 240505	4	4	3	4	3	18	72
41	SOWNDARYA. S	CB15S 240506	4	4	4	4	4	20	80
42	THIRUMANI.S	CB15S 240507	4	5	5	5	5	19	76
43	VIGNESH. P 09.11.95	CB15S 240508	5	5	5	5	5	25	100
44	KOWSALYA.G 16.04.98	CB15S 240509	4	4	3	4	2	18	72
45	KARTHIKEYAN.K	CB15S 240510	4	4	4	4	4	20	80
46	KATHAIYAN. N	CB15S 240511	4	4	3	4	4	19	76
47	KATHIRVEL. K	CB15S 240512	5	5	5	5	3	23	92
48	KESAVALAL. V.J	CB15S 240513	4	4	4	4	4	20	80
49	KOUSALYA. G 06.06.98	CB15S 240514	4	4	4	4	4	20	80
50	KRISHNAKUMAR. N	CB15S 240515	4	4	4	4	3	19	76
51	MADHAN. M	CB15S 240516	5	5	5	5	5	25	100
52	MAHESWARI. E	CB15S 240517	4	4	4	4	3	19	76
53	MANIMEGALA. T	CB15S 240518	5	5	5	5	3	23	92
54	MANIVANNAN. U	CB15S 240519	3	3	3	3	2	14	56
55	MANOJKUMAR. S	CB15S 240520	5	5	5	5	5	25	100

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56	MOHAMED HAJA MYDEEN. J	CB15S 240521	5	5	5	5	5	25	100
57	MOHAMED SUHAIL.MI	CB15S 240522	4	4	3	4	2	18	72
58	MOHAMEDNASEEMFAZIL. A	CB15S 240523	5	5	5	5	5	25	100
59	MUTHUKUMAR. C	CB15S 240524	3	3	3	3	3	15	60
60	NILOFER THAJ NISHA. R	CB15S 240525	4	4	4	4	4	16	64
61	NISHANTH.S	CB15S 240526	3	4	4	4	3	18	72
62	PANDIYAN. K	CB15S 240527	3	3	3	3	3	15	60
63	PAUL ZAHERIA.G	CB15S 240528	4	4	4	4	4	20	80
64	PORCHEZHIYAN. M	CB15S 240529	4	4	4	4	3	19	76
65	POTHIRAJAN. G	CB15S 240530	4	4	4	4	3	19	76
66	PRAGADHY SUSAIN. S	CB15S 240531	5	5	5	5	5	25	100
67	PRAKASAM. S	CB15S 240532	3	3	3	3	3	15	60
68	PRAKASH RAJ. G	CB15S 240533	4	4	3	3	3	17	68
69	PRATHEEP. M	CB15S 240534	4	4	4	4	3	19	76
70	PRAVEEN KUMAR. M 28.05.98	CB15S 240535	5	5	5	5	3	23	92
71	PRAVEENA.R	CB15S 240536	5	5	5	5	3	23	92
72	PRAVEENKUMAR. M 08.07.98	CB15S 240537	5	5	5	5	3	23	92
73	PRITHIVIRAJAN. J	CB15S 240538	3	4	4	4	3	18	72
74	PRIYADHARSHINI. P	CB15S 240539	4	4	4	4	5	21	84

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75	PRIYANKA. P	CB15S 240540	5	5	5	5	5	25	100
76	RAJA. N	CB15S 240541	3	3	3	3	3	15	60
77	RAJA VENKATESAN.K	CB15S 240542	4	4	4	4	4	20	80
78	RAJAPPA RICHARD. B	CB15S 240543	4	4	4	4	3	19	76
79	RANJITH. R	CB15S 240544	3	3	3	3	4	16	64
80	RAMBALAJI. M	CB15S 240547	5	5	5	5	5	25	100
81	RAMKUMAR. P	CB15S 240548	4	4	4	4	4	20	80
82	SABARINATHAN.T	CB15S 240549	3	3	3	4	4	17	68
83	SABARIVASAN. B	CB15S 240550	5	5	5	5	5	25	100
84	SAGAYAMERCY. A	CB15S 240551	3	4	4	4	3	18	72
85	SAKTHIKANNAN. M	CB15S 240552	4	4	4	4	3	19	76
86	SANKARA NARAYANAN. M	CB15S 240553	5	5	5	5	3	23	92
87	SANTHOSHRAO. G	CB15S 240555	4	4	4	4	3	19	76
88	SARGUNAM. S	CB15S 240556	4	4	4	4	2	18	72
89	SATHISHKUMAR. N	CB15S 240557	5	5	5	5	3	23	92
90	SATHIYASEKAR. S	CB15S 240558	5	5	5	5	4	24	96
91	SELVAPRIYA.S	CB15S 240559	5	5	5	5	5	25	100
92	SIVA PRASANNA. E	CB15S 240560	5	5	5	5	3	23	92
93	SIVASUBRAMANIAN. N	CB15S 240561	4	4	4	4	4	20	80

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94	SIVAKUMAR. G	CB15S 240562	5	5	5	5	5	25	100
95	SOUNDARYA. A	CB15S 240563	5	5	5	5	4	24	96
96	SOWMIYA. S	CB15S 240564	5	5	5	4	3	22	88
97	SUGAPRIYA. R	CB15S 240565	4	4	4	4	4	20	80
98	SUHAIL. S.A	CB15S 240566	3	4	4	4	3	18	72
99	SUVATHI. E	CB15S 240567	5	5	5	5	5	25	100
100	SYED UMAR KADAR. R M	CB15S 240568	4	4	4	4	3	19	76
101	THASNEEM. M	CB15S 240569	4	4	4	4	4	20	80
102	VEERAKUMAR. P	CB15S 240570	4	4	4	5	5	22	88
103	VEERAMAHESWARI. L	CB15S 240571	4	4	4	4	3	19	76
104	VIGNESH. P 03.03.98	CB15S 240572	5	5	5	5	5	25	100
105	VIGNESH RAO. A	CB15S 240573	4	4	4	4	4	20	80
106	VIJAY. A	CB15S 240574	4	4	4	4	3	19	76
107	VIJAYARAGAVAN.S	CB15S 240575	5	5	5	5	5	25	100
108	VIVEK. I	CB15S 240576	4	4	4	4	3	19	76
		Average	4.175925926	4.222222222	4.092592593	4.222222222	3.7037037		

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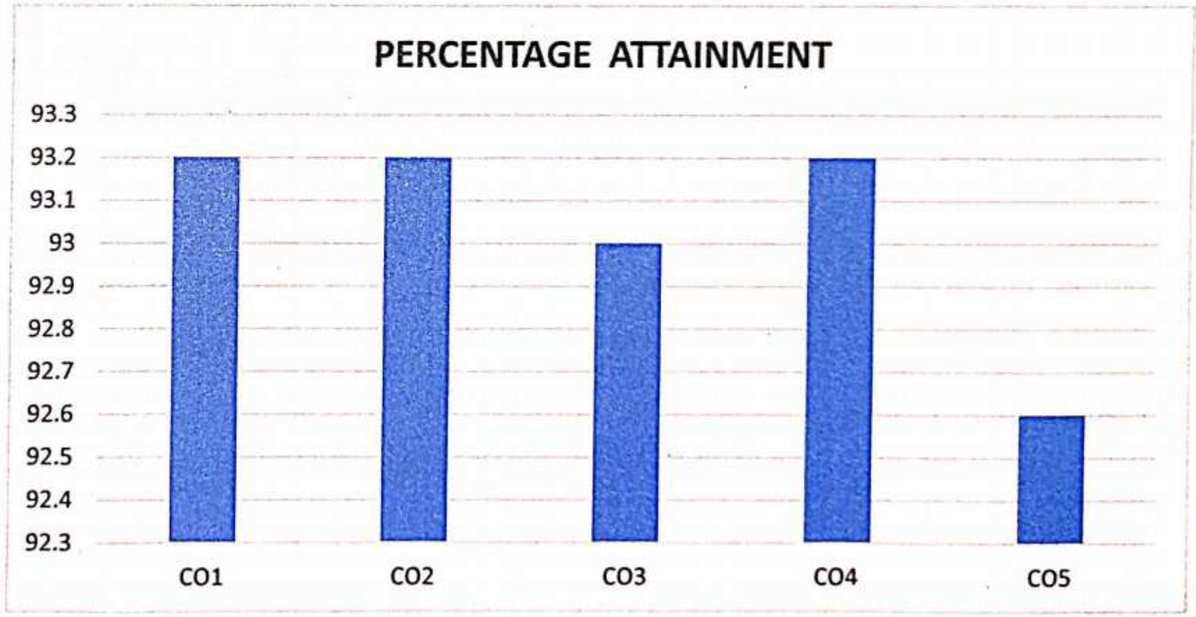
Expected Attainment in each CO - 85%

	Int. Exam + Assignment	End Sem	Total	%
CO1	4.18	75	79.18	93.2
CO2	4.22	75	79.22	93.2
CO3	4.09	75	79.09	93.0
CO4	4.22	75	79.22	93.2
CO5	3.7	75	78.7	92.6

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS
SUBJECT CODE : RCCS10CA9
NO.OF STUDENTS : 108

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.2
CO2	93.2
CO3	93
CO4	93.2
CO5	92.6



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COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	3	EXCELLENT
70-79	13	DISTINCTION
60-69	22	VERY GOOD
50-59	50	GOOD
40-49	13	AVERAGE
0-39	7	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	2.78%	EXCELLENT
70-79	12.04%	DISTINCTION
60-69	20.37%	VERY GOOD
50-59	46.30%	GOOD
40-49	12.04%	AVERAGE
0-39	6.48%	REAPPEAR

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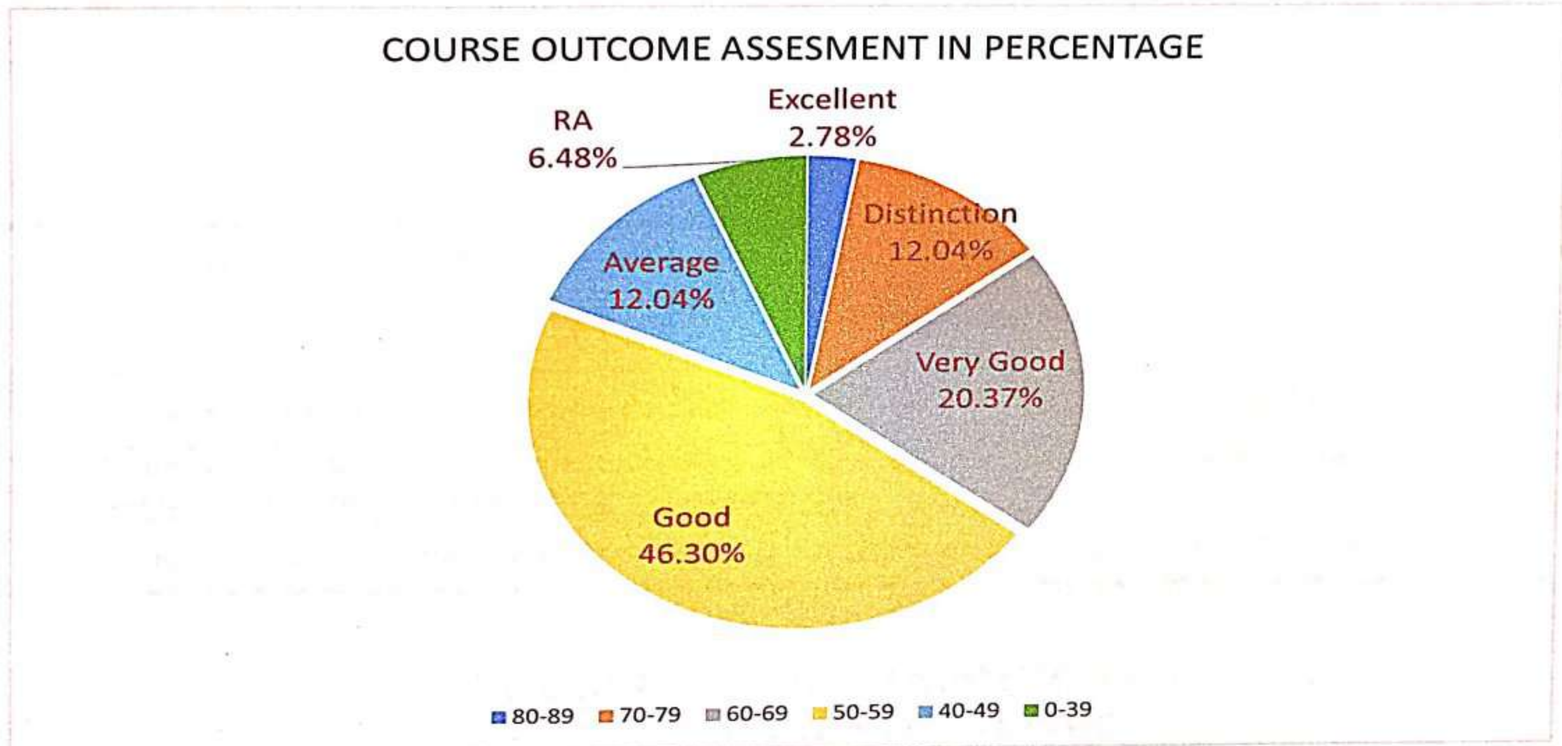

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, Near New Bus Stand, THANJAVUR-5.

Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - PROGRAMMING IN JAVA(16SCCCA3)

COURSE OUTCOME

CO1	To acquire the programming skills with java.
CO2	To implement the object oriented concepts with java language
CO3	To understand the concepts of multithreading.
CO4	To learn the art of GUI programming with Applet.
CO5	To learn about Database connectivity.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	1
CO2	3	0	2	2	0
CO3	2	1	3	2	2
CO4	2	0	2	2	0
CO5	3	0	2	1	1
Average	2.4	0.6	2.2	2	0.8

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AASHA.B	CB16S 244981	4	4	4	4	4	21	84
2	ABDUL MAJEED. H	CB16S 244982	4	4	4	4	4	17	68
3	ADITHYAN. B	CB16S 244983	4	4	4	4	4	20	80
4	AJAY YADAV. J	CB16S 244984	4	4	4	4	4	19	76
5	AJITHKUMAR .V	CB16S 244985	4	4	4	4	4	18	72
6	AKASH. M	CB16S 244986	4	4	4	4	4	18	72
7	AKASHSELVAM. A	CB16S 244987	4	4	4	4	4	20	80
8	ARUN SABARI BALAJI. C	CB16S 244989	4	4	4	4	4	22	88
9	AYYAPPAN.M	CB16S 244990	4	4	4	4	4	17	68
10	BALAMURUGAN. T	CB16S 244991	4	4	4	4	4	15	60
11	DHIVAKARAN. P	CB16S 244992	4	4	4	4	4	15	60
12	DINESHKUMAR. S	CB16S 244993	4	4	4	4	4	16	64
13	EMANUVEL.G	CB16S 244994	4	4	4	4	4	15	60
14	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	4	4	4	4	4	20	80
15	GAYATHRI. S	CB16S 244996	5	5	5	5	5	25	100
16	GIRITHARAM.P	CB16S 244997	3	3	3	3	3	15	60
17	GNANASEKAR. M	CB16S 244998	5	4	5	4	5	23	92
18	GOWSALYA. L	CB16S 244999	5	4	5	4	5	23	92

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19	HAZAN.A	CB16S 245000	4	3	4	3	4	18	72
20	HEMASHREE. V	CB16S 245001	4	4	4	4	4	20	80
21	IMRAN. N	CB16S 245002	4	4	3	4	3	18	72
22	JABARALI. A	CB16S 245003	5	4	4	4	4	21	84
23	JAGAN NATH. G	CB16S 245004	5	5	4	4	4	22	88
24	JEEVA .A	CB16S 245005	4	3	4	3	4	18	72
25	JEEVA. M	CB16S 245006	4	4	3	4	3	18	72
26	JOELRICHARD. R	CB16S 245007	4	3	4	3	3	17	68
27	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	4	24	96
28	KIRUBAKARAN. G	CB16S 245009	4	4	4	3	4	19	76
29	LAKSHMANAN. S	CB16S 245010	4	3	4	3	3	17	68
30	MADHUMITHA. S	CB16S 245011	5	4	5	4	4	22	88
31	MAKIZHVANAN. D	CB16S 245012	4	3	4	4	4	19	76
32	MALAIYARASAN. G	CB16S 245013	4	4	3	4	4	19	76
33	MANIKANDAN M	CB16S 245014	4	4	4	3	3	18	72
34	MOHAMED AZARUDEEN. S	CB16S 245015	4	3	3	3	3	16	64
35	MOHAMED THAHA. A	CB16S 245016	3	3	3	3	3	15	60
36	MOHAMMED THARIQUE. M	CB16S 245017	4	3	3	3	3	16	64
37	MOHAMMEDABDULKHADER. A	CB16S 245018	4	3	4	4	4	19	76

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38	MONISHA. R	CB16S 245019	5	4	5	4	5	23	92
39	MURUGANANDHAM. R	CB16S 245020	5	4	5	5	5	24	96
40	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
41	MUTHUVEL. V	CB16S 245022	5	4	5	5	5	24	96
42	NAVIN KUMAR. R	CB16S 245023	5	4	5	5	5	24	96
43	NAVINKUMAR. T	CB16S 245024	4	4	4	4	4	20	80
44	NIVETHA. N	CB16S 245025	5	4	5	5	5	24	96
45	PRABAKARAN. K	CB16S 245026	4	3	4	3	4	18	72
46	PRABHAKARAN. S	CB16S 245027	4	4	3	4	4	19	76
47	RAJKUMAR. K	CB16S 245029	4	3	4	3	3	17	68
48	RAMANATHAN. T S B	CB16S 245030	5	4	4	4	4	21	84
49	RASHIKA. G	CB16S 245032	5	4	5	4	5	23	92
50	SANTHOSHKUMAR. R	CB16S 245033	3	3	3	3	3	15	60
51	SATHISH. R	CB16S 245034	4	3	3	3	3	16	64
52	SELVAKUMAR .K	CB16S 245035	5	4	5	4	4	22	88
53	SIVANANDAM. P	CB16S 245037	5	4	5	4	4	22	88
54	SOWMYA. A A	CB16S 245038	5	5	5	5	5	25	100
55	SRIRAM. G	CB16S 245039	3	3	3	3	2	14	56
56	SUBASH K	CB16S 245040	3	3	3	3	3	15	60

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57	SUDARSON. S.P	CB16S 245041	4	4	4	4	4	20	80
58	SWETHA. T.S	CB16S 245042	5	4	4	4	4	24	96
59	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	5	5	5	5	5	25	100
60	THARANI. M	CB16S 245044	5	4	5	4	5	23	92
61	UMAR .S	CB16S 245045	5	5	5	5	5	25	100
62	AJAY. S	CB16S 245046	4	3	4	3	3	17	68
63	AJITHKUMAR. R	CB16S 245047	4	3	4	3	3	17	68
64	JARALDINPREETHI. J	CB16S 245048	5	4	5	5	5	24	96
65	KARTHIKEYAN. R	CB16S 245049	4	3	3	3	3	16	64
66	KISMATH BATCHA. S	CB16S 245050	4	4	3	4	4	19	76
67	MOHAMED SHAREEF. J	CB16S 245051	4	3	4	3	3	17	68
68	MOHAMED BAYAS. U	CB16S 245052	4	3	3	3	3	16	64
69	PREMKUMAR. M	CB16S 245053	5	4	4	4	4	21	84
70	RAJARATHINAM. G	CB16S 245054	4	4	4	3	4	19	76
71	SIVA. R	CB16S 245055	4	3	4	3	3	17	68
72	SOWMIYASHREE. S	CB16S 245056	4	3	4	4	3	18	72
73	SWETHA. S	CB16S 245057	5	4	4	4	4	21	84
74	THIRUMALAIVASAN. S	CB16S 245058	4	3	3	3	3	16	64
75	THIRUPPATHI. S	CB16S 245059	3	3	3	3	3	15	60

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76	UMAPATHI. G	CB16S 245060	4	4	4	3	4	19	*76
77	VAIRAPPAN .R	CB16S 245061	4	3	3	3	3	16	64
78	VEERA MANI. M	CB16S 245062	3	3	2	2	2	12	48
79	VEERARAGAVAN. K	CB16S 245064	5	5	5	5	5	25	100
80	VEERASARAVANAN. E	CB16S 245065	4	4	4	3	4	19	76
81	VENKATESH. D	CB16S 245066	4	4	4	4	4	20	80
82	VIGNESH. G	CB16S 245067	3	3	2	2	2	12	48
83	VIGNESH. K	CB16S 245068	4	3	3	3	3	16	64
84	VIGNESH .R	CB16S 245069	3	3	3	3	3	15	60
85	VIGNESH. S	CB16S 245070	4	3	3	3	3	16	64
86	VIGNESHWARAN .N	CB16S 245071	4	4	4	3	4	19	76
87	VIJAY .B	CB16S 245072	5	4	5	4	4	22	88
88	WILLIAMS RUBAN. M	CB16S 245073	5	4	5	4	4	22	88
89	ZAFFAR ALI. M	CB16S 245074	5	4	4	4	4	21	84
90	VIGNESHWARAN. G	CB16S 245075	5	5	5	5	4	24	96
91	RATHIKA.S	CB15S 240864	4	3	3	3	3	16	64
Average			4.230769231	3.747252747	3.967032967	3.736263736	3.813186813		

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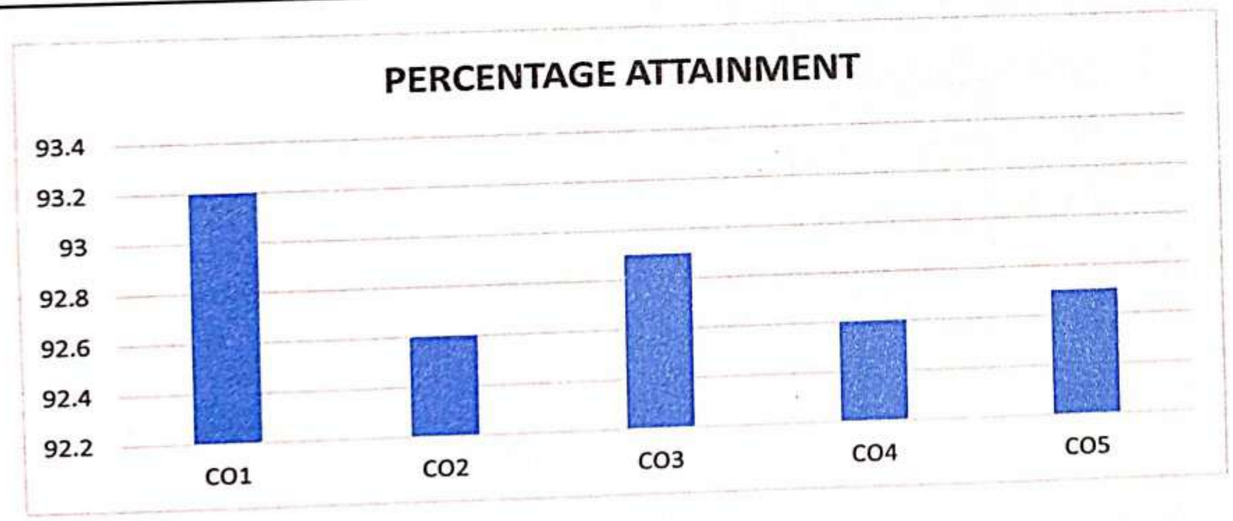
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.23	75	79.23	93.2
CO2	3.75	75	78.75	92.6
CO3	3.97	75	78.97	92.9
CO4	3.74	75	78.74	92.6
CO5	3.81	75	78.81	92.7

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN JAVA
SUBJECT CODE : 16SCCCA3
NO.OF STUDENTS : 91

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.20
CO2	92.6
CO3	92.90
CO4	92.60
CO5	92.7



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	4	EXCELLENT
70-79	8	DISTINCTION
60-69	25	VERY GOOD
50-59	32	GOOD
40-49	11	AVERAGE
0-39	11	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	4.40%	EXCELLENT
70-79	8.80%	DISTINCTION
60-69	27.47%	VERY GOOD
50-59	35.16%	GOOD
40-49	12.10%	AVERAGE
0-39	12.10%	REAPPEAR

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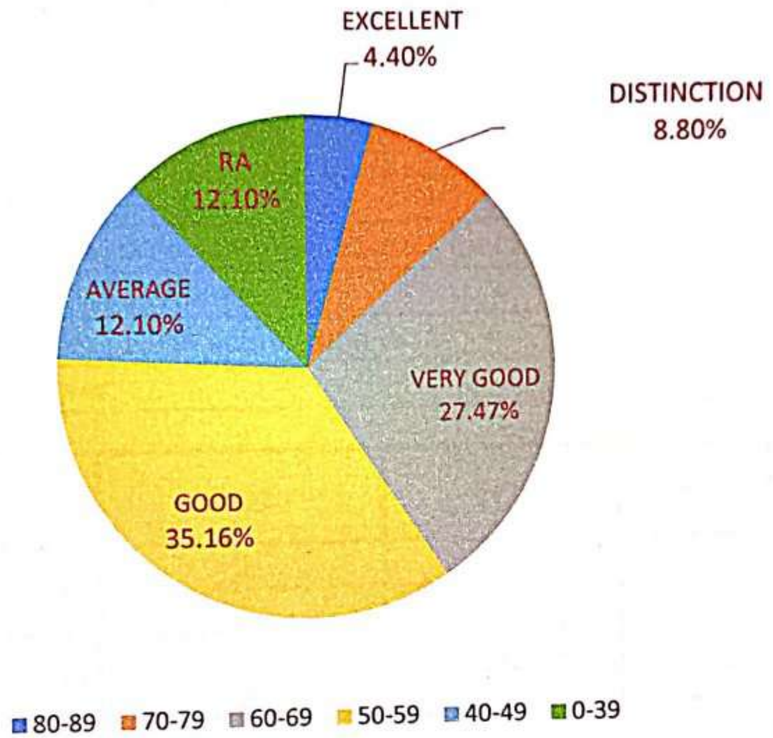
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - PROGRAMMING IN PHP(RCCS10CA8)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Using PHP build-in functions and creating custom functions
CO3	To create a database in PhpMyAdmin
CO4	How to receive and process Form submission data
CO5	To create images on Server.

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	2	1
CO2	3	1	2	2	2
CO3	2	2	1	2	2
CO4	3	2	2	2	1
CO5	2	1	2	2	2
Average	2.6	1.6	1.6	2	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	PRAVEEN. L	CB15S 239386	4	3	4	4	4	19	76
2	ABBAS MANDHIRI. S	CB15S 240462	4	4	3	4	4	19	76
3	ABIRAMI D	CB15S 240463	5	5	5	5	5	25	100
4	AJMALKHAN. A	CB15S 240465	4	4	4	4	4	20	80
5	AKILA. R	CB15S 240466	4	3	4	3	3	17	68
6	AKILARASAN. K	CB15S 240467	4	4	4	4	4	20	80
7	AMEER HAMJA. M	CB15S 240469	5	5	5	5	5	25	100
8	ANANDARAJ. P	CB15S 240470	5	4	4	4	4	21	84
9	ANAS MOHAMED. M	CB15S 240471	5	4	4	4	4	21	84
10	ANWARDEEN. S	CB15S 240472	4	4	4	4	4	20	80
11	ARAVINDAN. E	CB15S 240473	5	4	5	4	5	23	92
12	ARAVINTH. P	CB15S 240474	5	4	4	4	4	21	84
13	ARUL VIGNESH. A.L	CB15S 240476	4	4	4	4	4	20	80
14	ARUN. R	CB15S 240477	4	4	4	4	4	20	80
15	ASHIK AZARUDEEN. G	CB15S 240478	4	3	4	4	4	19	76
16	ASLAMKADER. I	CB15S 240479	4	4	4	4	4	20	80

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17	BALAMBIGAI. R	CB15S 240480	5	5	5	5	5	25	100
18	BATHERNISHA. M	CB15S 240481	5	5	4	5	4	23	92
19	DEVI. M	CB15S 240483	4	4	4	4	4	20	80
20	DHAMODHARAN. D	CB15S 240484	4	3	4	3	4	18	72
21	DHEENADHAYALAN. B	CB15S 240485	4	4	4	4	4	20	80
22	EDWIN CHRISTOBER. Y	CB15S 240486	5	5	5	5	5	25	100
23	GABRIELRAJADURAI. T	CB15S 240487	4	3	4	3	4	18	72
24	GIRIDHARAN. D	CB15S 240488	5	5	5	5	5	25	100
25	GOKUL. K	CB15S 240489	4	3	3	3	3	16	64
26	GOPINATH. G	CB15S 240490	4	4	3	4	3	18	72
27	GUNASEKARAN. R	CB15S 240491	5	4	5	4	5	23	92
28	HARIHARAN. S	CB15S 240492	4	4	4	4	4	20	80
29	INDUMATHI.M	CB15S 240493	4	3	4	4	4	19	76
30	ISMATHBASHA. S	CB15S 240494	5	5	5	5	5	25	100
31	JABAR SADIQ.M	CB15S 240495	5	4	4	4	4	21	84
32	JAYAKUMAR. S	CB15S 240496	4	3	4	3	4	18	72
33	JAYARANI. S	CB15S 240497	5	5	4	5	5	24	96
34	JAYASRI. S	CB15S 240498	5	5	5	5	5	25	100
35	JEEVANANTHAM. S	CB15S 240499	5	5	5	5	5	25	100

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36	KARTHICKRAJA. M	CB15S 240500	5	5	5	5	5	25	100
37	NIGIL M	CB15S 240501	5	4	5	4	5	23	92
38	SANTHOSH.R	CB15S 240503	4	3	4	4	4	19	76
39	SATHIYARAJ. M	CB15S 240504	4	4	4	4	4	20	80
40	SHAKITHYA. R	CB15S 240505	4	4	3	4	4	19	76
41	SOWNDARYA. S	CB15S 240506	4	3	4	3	4	18	72
42	THIRUMANI.S	CB15S 240507	4	4	4	4	4	20	80
43	VIGNESH. P 09.11.95	CB15S 240508	5	5	5	5	5	25	100
44	KOWSALYA.G 16.04.98	CB15S 240509	4	3	4	4	4	19	76
45	KARTHIKEYAN.K	CB15S 240510	5	4	5	4	4	22	88
46	KATHAIYAN. N	CB15S 240511	5	5	4	4	4	22	88
47	KATHIRVEL. K	CB15S 240512	5	4	5	4	5	23	92
48	KESAVALAL. V.J	CB15S 240513	4	3	4	3	4	18	72
49	KOUSALYA. G 06.06.98	CB15S 240514	4	4	3	4	3	18	72
50	KRISHNAKUMAR. N	CB15S 240515	4	4	4	4	4	20	80
51	MADHAN. M	CB15S 240516	5	5	5	5	5	25	100
52	MAHESWARI. E	CB15S 240517	4	3	4	4	4	19	76
53	MANIMEGALA. T	CB15S 240518	5	4	5	5	5	24	96
54	MANIVANNAN. U	CB15S 240519	4	3	4	4	4	19	76

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55	MANOJKUMAR. S	CB15S 240520	5	5	5	5	5	25	100
56	MOHAMED HAJA MYDEEN. J	CB15S 240521	5	5	5	5	5	25	100
57	MOHAMED SUHAIL.MI	CB15S 240522	4	3	4	4	4	19	76
58	MOHAMEDNASEEMFAZIL. A	CB15S 240523	5	5	5	5	5	25	100
59	MUTHUKUMAR. C	CB15S 240524	3	3	3	3	3	15	60
60	NILOFER THAJ NISHA. R	CB15S 240525	4	3	4	4	4	19	76
61	NISHANTH.S	CB15S 240526	4	3	4	3	4	18	72
62	PANDIYAN. K	CB15S 240527	3	3	3	3	3	15	60
63	PAUL ZAHERIA.G	CB15S 240528	5	5	4	5	4	23	92
64	PORCHEZHIYAN. M	CB15S 240529	4	4	4	4	4	20	80
65	POTHIRAJAN. G	CB15S 240530	5	5	4	5	4	23	92
66	PRAGADHY SUSAIN. S	CB15S 240531	5	5	5	5	5	25	100
67	PRAKASAM. S	CB15S 240532	4	3	4	3	4	18	72
68	PRAKASH RAJ. G	CB15S 240533	4	3	4	4	4	19	76
69	PRATHEEP. M	CB15S 240534	4	4	4	4	4	20	80
70	PRAVEEN KUMAR. M 28.05.98	CB15S 240535	5	4	4	4	4	21	84
71	PRAVEENA.R	CB15S 240536	5	5	5	4	5	24	96
72	PRAVEENKUMAR. M 08.07.98	CB15S 240537	4	4	4	4	4	20	80
73	PRITHIVIRAJAN. J	CB15S 240538	4	3	4	4	4	19	76

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74	PRIYADHARSHINI. P	CB15S 240539	5	5	4	5	5	24	96
75	PRIYANKA. P	CB15S 240540	5	5	5	5	5	25	100
76	RAJA. N	CB15S 240541	4	3	4	4	4	19	76
77	RAJA VENKATESAN.K	CB15S 240542	4	4	4	4	4	20	80
78	RAJAPPA RICHARD. B	CB15S 240543	4	4	4	4	4	20	80
79	RANJITH. R	CB15S 240544	4	3	4	4	4	19	76
80	RAMBALAJI. M	CB15S 240547	5	5	5	5	5	25	100
81	RAMKUMAR. P	CB15S 240548	5	4	4	4	4	21	84
82	SABARINATHAN.T	CB15S 240549	4	3	4	4	4	19	76
83	SABARIVASAN. B	CB15S 240550	5	5	5	5	4	24	96
84	SAGAYAMERCY. A	CB15S 240551	4	3	4	4	4	19	76
85	SAKTHIKANNAN. M	CB15S 240552	4	4	4	4	4	20	80
86	SANKARA NARAYANAN. M	CB15S 240553	5	4	4	4	4	21	84
87	SANTHOSHRAO. G	CB15S 240555	4	4	4	4	4	20	80
88	SARGUNAM. S	CB15S 240556	4	4	4	4	4	20	80
89	SATHISHKUMAR. N	CB15S 240557	4	4	4	4	4	20	80
90	SATHIYASEKAR. S	CB15S 240558	4	4	4	4	4	23	92
91	SELVAPRIYA.S	CB15S 240559	5	5	5	5	5	25	100
92	SIVA PRASANNA. E	CB15S 240560	5	5	4	4	4	22	88

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93	SIVASUBRAMANIAN. N	CB15S 240561	5	4	5	4	5	23	92
94	SIVAKUMAR. G	CB15S 240562	5	5	5	5	5	20	80
95	SOUNDARYA. A	CB15S 240563	5	4	5	4	5	23	92
96	SOWMIYA. S	CB15S 240564	5	5	4	5	4	23	92
97	SUGAPRIYA. R	CB15S 240565	5	4	5	4	4	22	88
98	SUHAIL. S.A	CB15S 240566	4	4	4	4	3	19	76
99	SUVATHI. E	CB15S 240567	5	5	5	5	5	25	100
100	SYED UMAR KADAR. R M	CB15S 240568	4	3	4	4	4	19	76
101	THASNEEM. M	CB15S 240569	4	4	4	4	4	20	80
102	VEERAKUMAR. P	CB15S 240570	5	4	4	4	4	21	84
103	VEERAMAHESWARI. L	CB15S 240571	5	4	5	4	4	22	88
104	VIGNESH. P 03.03.98	CB15S 240572	5	5	5	5	5	25	100
105	VIGNESH RAO. A	CB15S 240573	4	4	4	4	4	20	80
106	VIJAY. A	CB15S 240574	4	4	4	4	4	20	80
107	VIJAYARAGAVAN.S	CB15S 240575	5	5	5	5	5	25	100
108	VIVEK. I	CB15S 240576	4	3	4	3	4	18	72
Average			4.44	4.04	4.25	4.17	4.23		

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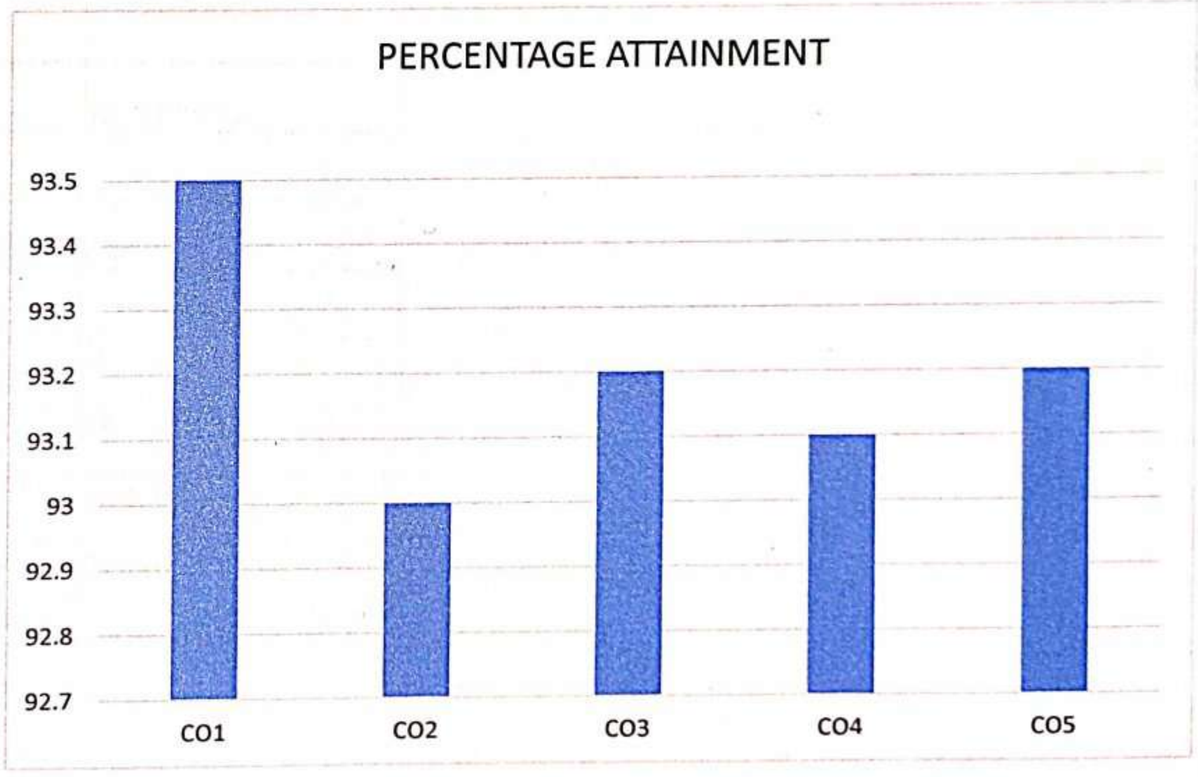
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.44	75	79.44	93.5
CO2	4.04	75	79.04	93.0
CO3	4.25	75	79.25	93.2
CO4	4.17	75	79.17	93.1
CO5	4.23	75	79.23	93.2

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN PHP
SUBJECT CODE : RCCS10CA8
NO.OF STUDENTS : 108

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.50
CO2	93
CO3	93.20
CO4	93.10
CO5	93.2



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
91-100	0	OUTSTANDING
80-89	3	EXCELLENT
70-79	24	DISTINCTION
60-69	42	VERY GOOD
50-59	30	GOOD
40-49	2	AVERAGE
0-39	7	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	2.78%	EXCELLENT
70-79	22.22%	DISTINCTION
60-69	38.89%	VERY GOOD
50-59	27.78%	GOOD
40-49	1.85%	AVERAGE
0-39	6.48%	REAPPEAR

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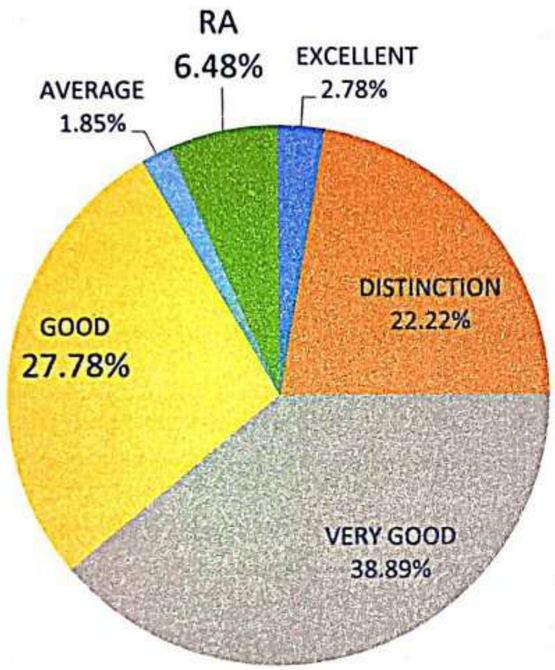
COURSE OUTCOME ASSESMENT IN PERCENTAGE



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Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - SOFTWARE ENGINEERING(MBECA1:1/10)

COURSE OUTCOME

CO1	Plan a software engineering process life cycle .
CO2	Able to elicit, analyze and specify software requirements with various stakeholders of the project.
CO3	Analyze and translate a specification into a design using an appropriate software engineering methodology.
CO4	Know how to develop the code from the design.
CO5	Able to use modern engineering tools necessary for software project management, time management and software reuse.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	1
CO3	3	1	3	2	0
CO4	2	0	2	2	0
CO5	3	0	2	1	0
Average	2	0.6	2.2	2	0.2

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	PRAVEEN. L	CB15S 239386	4	3	3	3	3	16	64
2	ABBAS MANDHIRI. S	CB15S 240462	4	3	4	4	4	19	76
3	ABIRAMI D	CB15S 240463	5	5	5	5	4	24	96
4	AJMALKHAN. A	CB15S 240465	4	3	4	3	4	18	72
5	AKILA. R	CB15S 240466	4	4	3	4	3	18	72
6	AKILARASAN. K	CB15S 240467	4	3	3	3	3	16	64
7	AMEER HAMJA. M	CB15S 240469	5	4	5	5	4	23	92
8	ANANDARAJ. P	CB15S 240470	3	3	3	3	3	15	60
9	ANAS MOHAMED. M	CB15S 240471	4	3	4	4	3	18	72
10	ANWARDEEN. S	CB15S 240472	4	3	3	3	3	16	64
11	ARAVINDAN. E	CB15S 240473	4	4	4	4	4	20	80
12	ARAVINTH. P	CB15S 240474	3	3	3	3	3	15	60
13	ARUL VIGNESH. A.L	CB15S 240476	4	4	4	4	4	20	80
14	ARUN. R	CB15S 240477	4	3	3	3	3	16	64
15	ASHIK AZARUDEEN. G	CB15S 240478	3	4	3	4	3	17	68
16	ASLAMKADER. I	CB15S 240479	4	3	4	3	4	18	72
17	BALAMBIGAI. R	CB15S 240480	4	5	4	5	5	23	92
18	BATHERNISHA. M	CB15S 240481	4	3	4	4	4	19	76

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19	DEVI. M	CB15S 240483	3	3	2	3	3	14	56
20	DHAMODHARAN. D	CB15S 240484	3	2	3	3	3	14	56
21	DHEENADHAYALAN. B	CB15S 240485	3	3	3	3	3	15	60
22	EDWIN CHRISTOBER. Y	CB15S 240486	4	3	4	3	4	18	72
23	GABRIELRAJADURAI. T	CB15S 240487	3	2	3	2	3	13	52
24	GIRIDHARAN. D	CB15S 240488	5	5	5	5	5	25	100
25	GOKUL. K	CB15S 240489	3	3	2	2	2	12	48
26	GOPINATH. G	CB15S 240490	2	3	3	2	2	12	48
27	GUNASEKARAN. R	CB15S 240491	5	5	5	4	5	24	96
28	HARIHARAN. S	CB15S 240492	3	2	3	2	2	12	48
29	INDUMATHI.M	CB15S 240493	3	3	3	3	3	15	60
30	ISMATHBASHA. S	CB15S 240494	3	3	3	3	3	15	60
31	JABAR SADIQ.M	CB15S 240495	5	4	5	4	4	22	88
32	JAYAKUMAR. S	CB15S 240496	4	3	3	3	3	16	64
33	JAYARANI. S	CB15S 240497	4	4	4	4	4	20	80
34	JAYASRI. S	CB15S 240498	5	4	4	4	4	21	84
35	JEEVANANTHAM. S	CB15S 240499	5	5	5	5	5	25	100
36	KARTHICKRAJA. M	CB15S 240500	4	3	4	3	4	18	72
37	NIGIL M	CB15S 240501	4	4	4	4	3	19	76

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38	SANTHOSH.R	CB15S 240503	3	3	3	3	4	16	64
39	SATHIYARAJ. M	CB15S 240504	5	5	5	5	5	25	100
40	SHAKITHYA. R	CB15S 240505	4	3	3	4	3	17	68
41	SOWNDARYA. S	CB15S 240506	3	3	3	3	4	16	64
42	THIRUMANI.S	CB15S 240507	4	4	4	4	3	19	76
43	VIGNESH. P 09.11.95	CB15S 240508	5	5	5	5	5	25	100
44	KOWSALYA.G 16.04.98	CB15S 240509	4	3	3	3	3	16	64
45	KARTHIKEYAN.K	CB15S 240510	3	4	3	4	3	17	68
46	KATHAIYAN. N	CB15S 240511	4	3	4	3	4	18	72
47	KATHIRVEL. K	CB15S 240512	3	2	3	3	3	14	56
48	KESAVALAL. V.J	CB15S 240513	5	4	4	4	4	21	84
49	KOUSALYA. G 06.06.98	CB15S 240514	4	3	4	4	3	18	72
50	KRISHNAKUMAR. N	CB15S 240515	3	2	3	2	3	13	52
51	MADHAN. M	CB15S 240516	5	5	5	5	5	25	100
52	MAHESWARI. E	CB15S 240517	4	4	4	4	4	20	80
53	MANIMEGALA. T	CB15S 240518	4	3	4	4	4	19	76
54	MANIVANNAN. U	CB15S 240519	3	3	3	3	3	15	60
55	MANOJKUMAR. S	CB15S 240520	5	5	5	5	5	25	100
56	MOHAMED HAJA MYDEEN. J	CB15S 240521	4	4	3	4	4	19	76

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57	MOHAMED SUHAIL.MI	CB15S 240522	4	3	4	4	3	18	72
58	MOHAMEDNASEEMFAZIL. A	CB15S 240523	5	5	5	5	5	25	100
59	MUTHUKUMAR. C	CB15S 240524	4	3	3	3	3	16	64
60	NILOFER THAJ NISHA. R	CB15S 240525	4	3	4	3	3	17	68
61	NISHANTH.S	CB15S 240526	3	3	3	3	4	16	64
62	PANDIYAN. K	CB15S 240527	4	4	4	4	4	20	80
63	PAUL ZAHERIA.G	CB15S 240528	4	4	4	4	4	20	80
64	PORCHEZHIYAN. M	CB15S 240529	4	3	4	4	4	19	76
65	POTHIRAJAN. G	CB15S 240530	4	4	4	4	4	20	80
66	PRAGADHY SUSAIN. S	CB15S 240531	5	5	5	5	5	25	100
67	PRAKASAM. S	CB15S 240532	3	3	2	2	2	12	48
68	PRAKASH RAJ. G	CB15S 240533	3	3	3	3	3	15	60
69	PRATHEEP. M	CB15S 240534	3	2	3	3	3	14	56
70	PRAVEEN KUMAR. M 28.05.98	CB15S 240535	3	3	2	2	2	12	48
71	PRAVEENA.R	CB15S 240536	4	3	4	3	3	17	68
72	PRAVEENKUMAR. M 08.07.98	CB15S 240537	4	4	3	4	4	19	76
73	PRITHIVIRAJAN. J	CB15S 240538	4	3	3	3	3	16	64
74	PRIYADHARSHINI. P	CB15S 240539	3	4	4	4	4	19	76
75	PRIYANKA. P	CB15S 240540	5	5	5	5	5	25	100

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76	RAJA. N	CB15S 240541	4	3	3	3	3	16	64
77	RAJA VENKATESAN.K	CB15S 240542	3	3	3	3	4	16	64
78	RAJAPPA RICHARD. B	CB15S 240543	4	4	3	4	4	19	76
79	RANJITH. R	CB15S 240544	3	3	3	3	4	16	64
80	RAMBALAJI. M	CB15S 240547	5	5	5	5	5	25	100
81	RAMKUMAR. P	CB15S 240548	4	4	3	4	4	19	76
82	SABARINATHAN.T	CB15S 240549	3	3	2	2	2	12	48
83	SABARIVASAN. B	CB15S 240550	5	5	5	5	5	25	100
84	SAGAYAMERCY. A	CB15S 240551	2	2	2	2	2	10	40
85	SAKTHIKANNAN. M	CB15S 240552	3	2	3	2	3	13	52
86	SANKARA NARAYANAN. M	CB15S 240553	4	3	4	3	4	18	72
87	SANTHOSHRAO. G	CB15S 240555	3	2	3	2	3	13	52
88	SARGUNAM. S	CB15S 240556	5	4	4	4	4	21	84
89	SATHISHKUMAR. N	CB15S 240557	4	3	3	4	4	18	72
90	SATHIYASEKAR. S	CB15S 240558	5	5	5	5	5	25	100
91	SELVAPRIYA.S	CB15S 240559	5	5	5	5	4	24	96
92	SIVA PRASANNA. E	CB15S 240560	5	4	5	5	5	24	96
93	SIVASUBRAMANIAN. N	CB15S 240561	3	3	3	3	3	15	60
94	SIVAKUMAR. G	CB15S 240562	5	5	5	5	5	25	100

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95	SOUNDARYA. A	CB15S 240563	4	3	4	3	4	18	72
96	SOWMIYA. S	CB15S 240564	4	4	3	4	4	19	76
97	SUGAPRIYA. R	CB15S 240565	4	4	4	4	3	19	76
98	SUHAIL. S.A	CB15S 240566	3	4	4	4	4	19	76
99	SUVATHI. E	CB15S 240567	5	5	5	5	4	24	96
100	SYED UMAR KADAR. R M	CB15S 240568	4	3	4	4	3	18	72
101	THASNEEM. M	CB15S 240569	4	3	3	3	3	16	64
102	VEERAKUMAR. P	CB15S 240570	4	3	4	4	3	18	72
103	VEERAMAHESWARI. L	CB15S 240571	4	4	3	4	4	19	76
104	VIGNESH. P 03.03.98	CB15S 240572	5	5	5	5	5	25	100
105	VIGNESH RAO. A	CB15S 240573	5	5	5	5	4	24	96
106	VIJAY. A	CB15S 240574	4	3	3	4	3	17	68
107	VIJAYARAGAVAN.S	CB15S 240575	5	5	5	5	5	25	100
108	VIVEK. I	CB15S 240576	2	2	2	2	2	10	40
109	YUSSUFDEEN.J	CB15S 240577	3	4	3	4	3	17	68
110	ARAVINTH.M	CB15S 242465	4	3	3	3	3	16	64
111	BOSCOPRABHU.A	CB15S 242476	4	3	4	3	4	18	72
112	VIVIN RAJ.S	CB15S 242531	3	3	3	3	3	15	60
Average			3.892857143	3.535714286	3.660714286	3.633928571	3.625		

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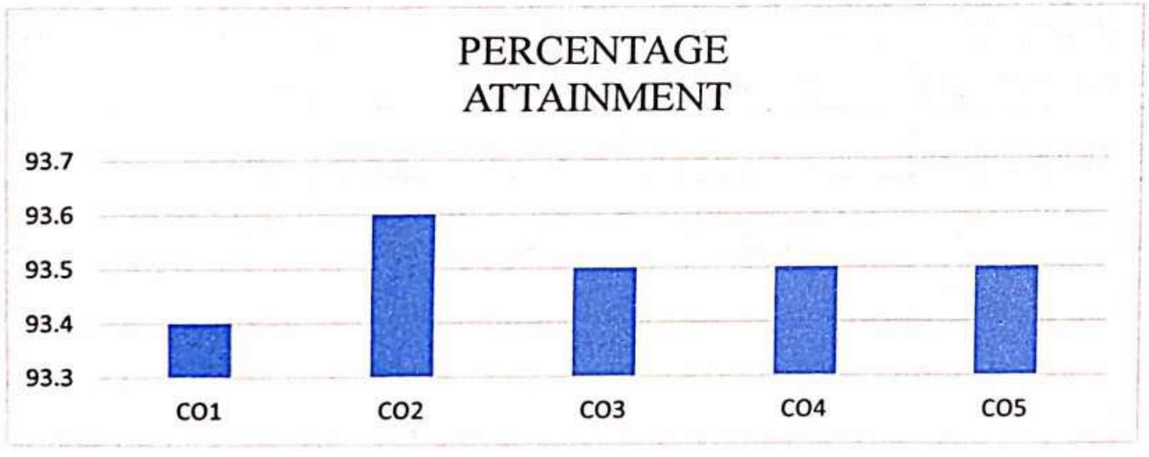
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	3.89	75	78.89	92.8
CO2	3.54	75	78.54	92.4
CO3	3.66	75	78.66	92.5
CO4	3.63	75	78.63	92.5
CO5	3.63	75	78.63	92.5

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : SOFTWARE ENGINEERING
SUBJECT CODE : MBECA1:1/10
NO.OF STUDENTS : 112

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.4
CO2	93.6
CO3	93.5
CO4	93.5
CO5	93.5



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
91-100	1	OUTSTANDING
80-89	4	EXCELLENT
70-79	15	DISTINCTION
60-69	26	VERY GOOD
50-59	37	GOOD
40-49	28	AVERAGE
0-39	1	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
91-100	0.89%	OUTSTANDING
80-89	3.57%	EXCELLENT
70-79	13.40%	DISTINCTION
60-69	23.21%	VERY GOOD
50-59	33.04%	GOOD
40-49	25%	AVERAGE
0-39	0.89%	REAPPEAR

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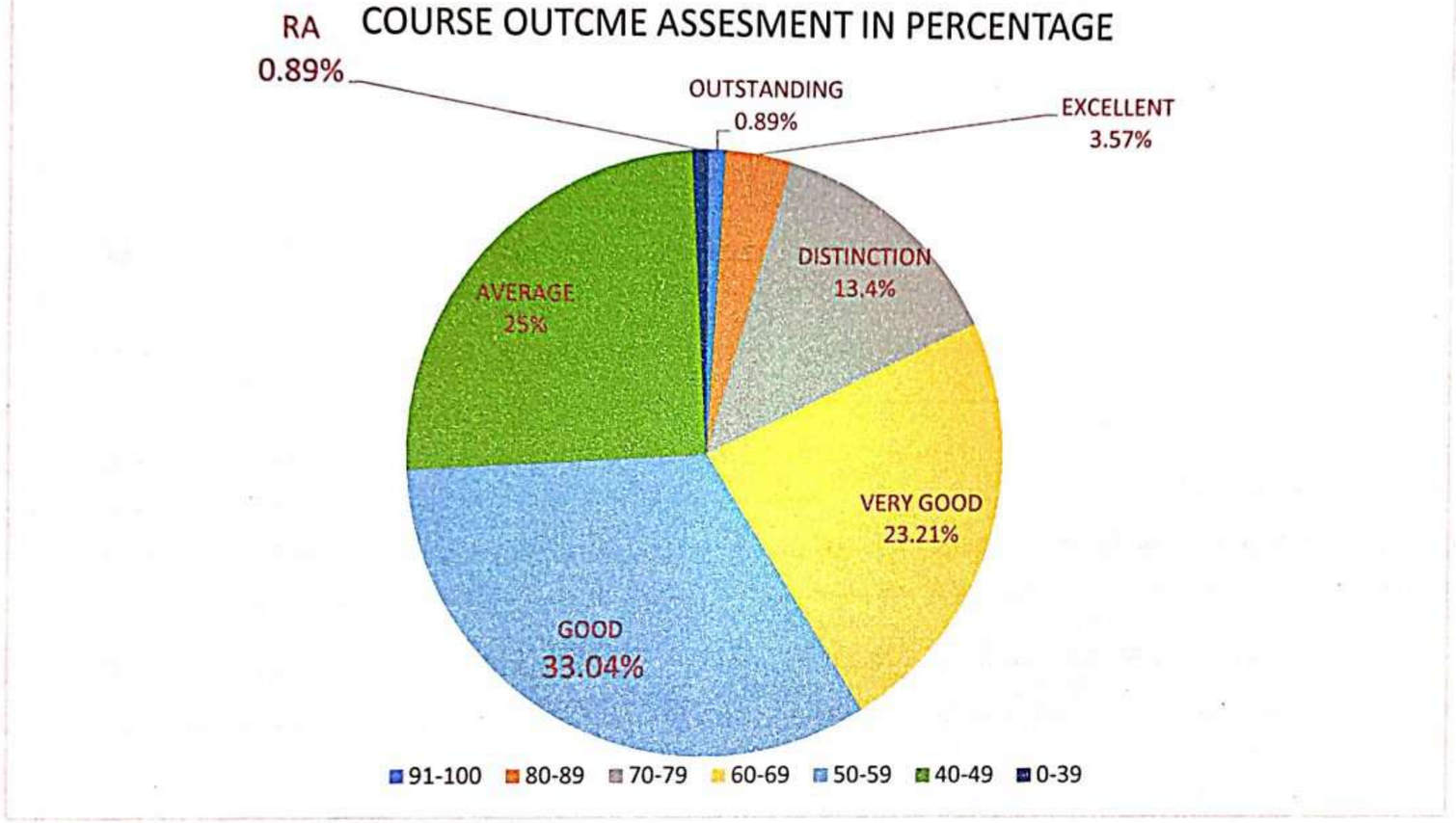

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COURSE - MANAGEMENT INFORMATION SYSTEM(MBECA3:3/10)

COURSE OUTCOME

CO1	Describes the Definition , Objectives , Uses and Limitations of MIS
CO2	Understanding Computer Softwares , Types and Trends.
CO3	Describes Management System in Business, Marketing , Human Resource.
CO4	Describes the Application of IT in Business , E-Commerce, Mobile Commerce, E-Governance, E-enterprises, etc.
CO5	Understanding Information security, Types of Breaches, Challenges , Cyber Laws and IT Act 2000 etc.

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PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	2	1
CO2	3	2	2	2	2
CO3	3	2	2	2	2
CO4	3	2	2	2	1
CO5	3	1	2	2	2
Average	3	1.8	1.8	2	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	PRAVEEN. L	CB15S 239386	4	3	4	3	4	18	72
2	ABBAS MANDHIRI. S	CB15S 240462	4	4	3	4	3	18	72
3	ABIRAMI D	CB15S 240463	5	5	5	5	4	24	96
4	AJMALKHAN. A	CB15S 240465	4	3	4	4	3	18	72
5	AKILA. R	CB15S 240466	4	4	3	4	4	19	76
6	AKILARASAN. K	CB15S 240467	4	4	4	4	4	20	80
7	AMEER HAMJA. M	CB15S 240469	5	5	5	5	5	25	100
8	ANANDARAJ. P	CB15S 240470	4	4	4	4	4	20	80
9	ANAS MOHAMED. M	CB15S 240471	4	4	4	4	4	20	80
10	ANWARDEEN. S	CB15S 240472	4	3	4	4	4	19	76
11	ARAVINDAN. E	CB15S 240473	4	4	4	4	4	20	80
12	ARAVINTH. P	CB15S 240474	4	3	4	3	4	18	72
13	ARUL VIGNESH. A.L	CB15S 240476	4	4	3	4	3	18	72
14	ARUN. R	CB15S 240477	3	4	3	4	4	18	72
15	ASHIK AZARUDEEN. G	CB15S 240478	4	4	4	4	4	20	80
16	ASLAMKADER. I	CB15S 240479	4	4	4	3	4	19	76
17	BALAMBIGAI. R	CB15S 240480	5	5	5	5	5	25	100

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18	BATHERNISHA. M	CB15S 240481	5	5	5	5	4	24	96
19	DEVI. M	CB15S 240483	4	3	4	3	4	18	72
20	DHAMODHARAN. D	CB15S 240484	4	3	3	3	3	16	64
21	DHEENADHAYALAN. B	CB15S 240485	5	4	4	4	4	21	84
22	EDWIN CHRISTOBER. Y	CB15S 240486	5	5	5	5	5	25	100
23	GABRIELRAJADURAI. T	CB15S 240487	4	3	4	4	4	19	76
24	GIRIDHARAN. D	CB15S 240488	5	5	5	5	5	25	100
25	GOKUL. K	CB15S 240489	3	3	3	3	3	15	60
26	GOPINATH. G	CB15S 240490	4	3	3	3	3	16	64
27	GUNASEKARAN. R	CB15S 240491	4	4	4	4	4	20	80
28	HARIHARAN. S	CB15S 240492	4	3	4	3	4	18	72
29	INDUMATHI.M	CB15S 240493	4	4	3	4	3	18	72
30	ISMATHBASHA. S	CB15S 240494	5	5	5	5	4	24	96
31	JABAR SADIQ.M	CB15S 240495	5	4	5	4	4	22	88
32	JAYAKUMAR. S	CB15S 240496	4	3	3	3	3	16	64
33	JAYARANI. S	CB15S 240497	5	4	5	4	5	23	92
34	JAYASRI. S	CB15S 240498	5	5	5	5	4	24	96
35	JEEVANANTHAM. S	CB15S 240499	5	5	5	5	5	25	100
36	KARTHICKRAJA. M	CB15S 240500	5	5	5	5	5	25	100

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37	NIGIL M	CB15S 240501	4	3	4	3	4	18	72
38	SANTHOSH.R	CB15S 240503	3	3	3	3	3	15	60
39	SATHIYARAJ. M	CB15S 240504	5	4	4	4	4	21	84
40	SHAKITHYA. R	CB15S 240505	4	3	4	3	4	18	72
41	SOWNDARYA. S	CB15S 240506	4	4	4	4	4	20	80
42	THIRUMANI.S	CB15S 240507	4	3	4	4	4	19	76
43	VIGNESH. P 09.11.95	CB15S 240508	5	5	5	5	5	25	100
44	KOWSALYA.G 16.04.98	CB15S 240509	4	4	3	4	3	18	72
45	KARTHIKEYAN.K	CB15S 240510	4	4	4	4	4	20	80
46	KATHAIYAN. N	CB15S 240511	4	3	4	4	4	19	76
47	KATHIRVEL. K	CB15S 240512	5	4	5	4	5	23	92
48	KESAVALAL. V.J	CB15S 240513	4	4	4	4	4	20	80
49	KOUSALYA. G 06.06.98	CB15S 240514	4	4	4	4	4	20	80
50	KRISHNAKUMAR. N	CB15S 240515	4	3	4	4	4	19	76
51	MADHAN. M	CB15S 240516	5	5	5	5	5	25	100
52	MAHESWARI. E	CB15S 240517	4	4	3	4	4	19	76
53	MANIMEGALA. T	CB15S 240518	5	4	5	5	4	23	92
54	MANIVANNAN. U	CB15S 240519	3	3	2	3	3	14	56
55	MANOJKUMAR. S	CB15S 240520	5	5	5	5	5	25	100

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56	MOHAMED HAJA MYDEEN. J	CB15S 240521	5	5	5	5	5	25	100
57	MOHAMED SUHAIL.MI	CB15S 240522	4	3	4	3	4	18	72
58	MOHAMEDNASEEMFAZIL. A	CB15S 240523	5	5	5	5	5	25	100
59	MUTHUKUMAR. C	CB15S 240524	3	3	3	3	3	15	60
60	NILOFER THAJ NISHA. R	CB15S 240525	4	3	3	3	3	16	64
61	NISHANTH.S	CB15S 240526	4	4	3	3	4	18	72
62	PANDIYAN. K	CB15S 240527	4	3	3	3	3	16	64
63	PAUL ZAHERIA.G	CB15S 240528	4	4	4	4	4	20	80
64	PORCHEZHIYAN. M	CB15S 240529	3	4	4	4	4	19	76
65	POTHIRAJAN. G	CB15S 240530	4	3	4	4	4	19	76
66	PRAGADHY SUSAIN. S	CB15S 240531	5	5	5	5	5	25	100
67	PRAKASAM. S	CB15S 240532	3	3	3	3	3	15	60
68	PRAKASH RAJ. G	CB15S 240533	4	3	4	3	3	17	68
69	PRATHEEP. M	CB15S 240534	4	4	3	4	4	19	76
70	PRAVEEN KUMAR. M 28.05.98	CB15S 240535	4	4	4	4	4	20	80
71	PRAVEENA.R	CB15S 240536	5	4	5	4	5	23	92
72	PRAVEENKUMAR. M 08.07.98	CB15S 240537	4	5	4	5	4	22	88
73	PRITHIVIRAJAN. J	CB15S 240538	4	3	4	3	4	18	72
74	PRIYADHARSHINI. P	CB15S 240539	5	4	4	4	4	21	84

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75	PRIYANKA. P	CB15S 240540	5	5	5	5	5	25	100
76	RAJA. N	CB15S 240541	3	3	3	3	3	15	60
77	RAJA VENKATESAN.K	CB15S 240542	4	4	4	4	4	20	80
78	RAJAPPA RICHARD. B	CB15S 240543	4	4	3	4	4	19	76
79	RANJITH. R	CB15S 240544	3	3	3	3	4	16	64
80	RAMBALAJI. M	CB15S 240547	5	5	5	5	5	25	100
81	RAMKUMAR. P	CB15S 240548	4	4	4	4	4	20	80
82	SABARINATHAN.T	CB15S 240549	4	3	4	3	3	17	68
83	SABARIVASAN. B	CB15S 240550	5	5	5	5	4	24	96
84	SAGAYAMERCY. A	CB15S 240551	4	3	4	3	4	18	72
85	SAKTHIKANNAN. M	CB15S 240552	4	4	4	4	3	19	76
86	SANKARA NARAYANAN. M	CB15S 240553	5	4	5	5	4	23	92
87	SANTHOSHRAO. G	CB15S 240555	3	4	4	4	4	19	76
88	SARGUNAM. S	CB15S 240556	4	4	3	4	3	18	72
89	SATHISHKUMAR. N	CB15S 240557	5	4	5	4	5	23	92
90	SATHIYASEKAR. S	CB15S 240558	5	5	5	5	4	24	96
91	SELVAPRIYA.S	CB15S 240559	5	5	5	5	5	25	100
92	SIVA PRASANNA. E	CB15S 240560	4	5	4	5	5	23	92
93	SIVASUBRAMANIAN. N	CB15S 240561	4	4	4	4	4	20	80

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94	SIVAKUMAR. G	CB15S 240562	5	5	5	5	4	24	96
95	SOUNDARYA. A	CB15S 240563	4	5	5	5	5	24	96
96	SOWMIYA. S	CB15S 240564	5	4	5	4	4	22	88
97	SUGAPRIYA. R	CB15S 240565	4	4	4	4	4	20	80
98	SUHAIL. S.A	CB15S 240566	4	3	4	4	3	18	72
99	SUVATHI. E	CB15S 240567	5	5	5	5	5	25	100
100	SYED UMAR KADAR. R M	CB15S 240568	4	4	3	4	4	19	76
101	THASNEEM. M	CB15S 240569	4	4	4	4	4	20	80
102	VEERAKUMAR. P	CB15S 240570	5	5	4	4	4	22	88
103	VEERAMAHESWARI. L	CB15S 240571	4	3	4	4	4	19	76
104	VIGNESH. P 03.03.98	CB15S 240572	5	5	5	5	5	25	100
105	VIGNESH RAO. A	CB15S 240573	4	4	4	4	4	20	80
106	VIJAY. A	CB15S 240574	4	4	3	4	4	19	76
107	VIJAYARAGAVAN.S	CB15S 240575	5	5	5	5	5	25	100
108	VIVEK. I	CB15S 240576	4	4	4	3	4	19	76
Average			4.25	3.972222222	4.074074074	4.037037037	4.027777778		

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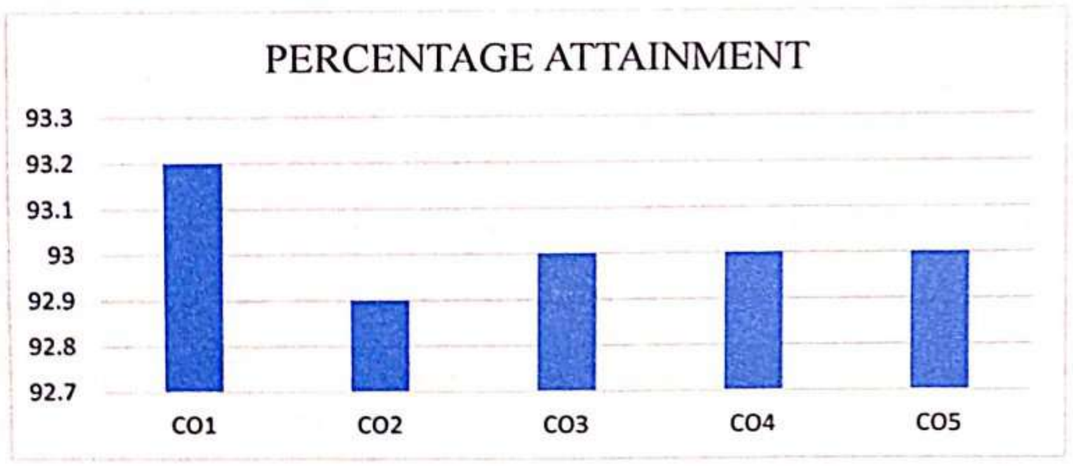
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.25	75	79.25	93.2
CO2	3.97	75	78.97	92.9
CO3	4.07	75	79.07	93.0
CO4	4.03	75	79.03	93.0
CO5	4.03	75	79.03	93.0

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : MANAGEMENT INFORMATION SYSTEM
SUBJECT CODE : MBECA3:3/10
NO.OF STUDENTS : 108

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.2
CO2	92.9
CO3	93
CO4	93
CO5	93



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
91-100	0	OUTSTANDING
80-89	12	EXCELLENT
70-79	23	DISTINCTION
60-69	33	VERY GOOD
50-59	31	GOOD
40-49	9	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	11.11%	EXCELLENT
70-79	21.30%	DISTINCTION
60-69	30.56%	VERY GOOD
50-59	28.70%	GOOD
40-49	8.33%	AVERAGE

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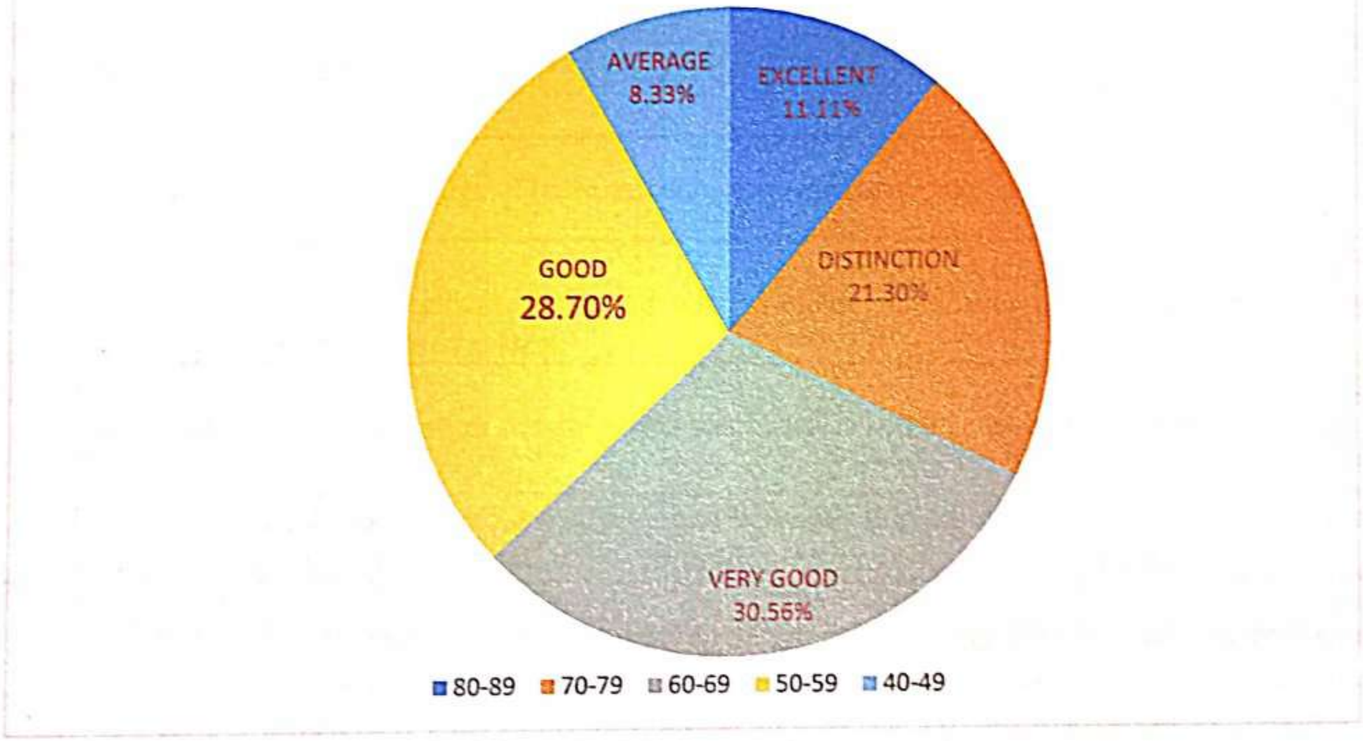
THANJAVUR-5



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THANJAVUR - 613005.

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Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

Attainment of program outcomes and course outcomes

PROGRAM OUTCOME FOR PRACTICAL

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems.
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

PROGRAMMIMG IN C (16SCCCA1P)
COURSE OUTCOME

CO1	Develop programming skills using the fundamentals and basics of C Language
CO2	Develop programs using the basic elements like control statements, Arrays and Strings
CO3	Enable effective usage of arrays, structures and unions
CO4	Understanding the concepts of functions and pointers
CO5	Implement files and understanding various file modes.

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PROGRAMMING IN C++ (16SCCCA2P)
COURSE OUTCOME

CO1	Creating simple programs using classes and objects in C++ and implement the concepts of object oriented programming
CO2	Understanding the concept of constructors and Apply string functions to perform operator overloading
CO3	To be able to program using C++ features such as composition of objects and function overloading
CO4	Demonstrate Virtual functions, Inheritance & Polymorphism
CO5	Implement Object Oriented Programs using templates and exceptional handling concepts.

PROGRAMMING IN JAVA LAB(16SCCCA3P)
COURSE OUTCOME

CO1	Using Graphics, Animations and Multithreading for designing Simulation and Game based applications.
CO2	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
CO3	Design and develop Web applications.
CO4	Designing Enterprise based applications by encapsulating an application's business logic.
CO5	Designing applications using pre-built frameworks.

DATABASE SYSTEMS LAB(16SCCCA4P)
COURSE OUTCOME

CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

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DATABASE SYSTEMS LAB(RCCS10CA5P)

COURSE OUTCOME

CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

PROGRAMMING IN PHP LAB(RCCS10CA6P)

COURSE OUTCOME

CO1	Use PHP to create a data driven website.
CO2	Use PHP to read a file and add records to the database.
CO3	Create a form on a webpage and use PHP to check the validity of the form.
CO4	Use built-in features of PHP such as data and string manipulation.
CO5	Test and debug PHP scripts while working with live data.

MINI PROJECT (MBE10CAPW)

COURSE OUTCOME

CO1	Understand the basics of programming and able to interpret real world problems into software solutions
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills
CO5	Understanding to Implement, evaluate and generate reports.

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Thanjavur – 5.

Department of Computer Applications

PROGRAM OUTCOME
&
COURSE OUTCOME

2018-2019

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

Department of Computer Applications (2018-2019)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - PROGRAMMING IN C(16SCCCA1)

COURSE OUTCOME

CO1	Defines the concept of C programming and it's fundamental
CO2	Managing I/O operations , various control statements and looping statements.
CO3	Understanding Arrays , Strings and User defined Functions.
CO4	Differentiate Structures and unions. Defines Pointer concepts and File management
CO5	Explain the uses of pre-processors, memory allocation and Programming Guide lines.

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PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	2	3	2
CO2	1	0	2	2	0
CO3	2	1	3	2	1
CO4	2	0	2	2	0
CO5	1	1	2	1	1
Average	1.8	0.6	0.6	0.6	0.8

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	4	4	3	4	3	18	72
2	AJITH. G	CB18S 254292	3	4	4	3	4	18	72
3	AKASH. R (26.02.2001)	CB18S 254293	4	3	3	4	4	18	72
4	AKASH. R (02.10.1998)	CB18S 254294	4	3	4	3	4	18	72
5	AKILAN. V	CB18S 254295	5	4	5	4	4	22	88
6	ANANTH. M	CB18S 254296	4	4	4	4	4	20	80
7	ARULARASAN. S	CB18S 254297	3	4	4	3	4	18	72
8	ARUNKUMAR. K.C	CB18S 254298	4	4	3	4	3	18	72
9	BASKAR. P	CB18S 254299	4	4	4	4	4	20	80
10	BHARATHKUMAR. B	CB18S 254300	4	4	3	4	4	19	76
11	BOOMINDHRA. R.N	CB18S 254301	4	3	4	4	4	19	76
12	CHANDRU. S	CB18S 254302	4	4	4	4	4	20	80
13	DANIEL. S	CB18S 254303	4	3	4	4	4	19	76
14	DEVENDHIRAN. P	CB18S 254304	4	4	3	4	4	19	76
15	DEVKANTH RAO. L	CB18S 254305	4	4	3	4	3	18	72
16	DHANUSIYA. D	CB18S 254306	5	5	5	5	5	25	100
17	DHIVAKAR. B	CB18S 254307	4	4	3	4	3	18	72
18	DINESHKUMAR. K	CB18S 254308	4	3	4	4	4	19	76

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19	DIVYESH. S	CB18S 254309	4	4	3	4	4	19	76
20	EZHIL. M	CB18S 254310	4	4	4	4	4	20	80
21	GOKUL. K	CB18S 254311	4	4	3	4	3	18	72
22	GOWTHAMAN. M	CB18S 254312	5	5	5	5	5	25	100
23	HARIHARASUTHAN. R	CB18S 254313	4	4	4	4	4	20	80
24	ISWARYA. A	CB18S 254314	5	5	4	5	5	24	96
25	JAMUNA. V	CB18S 254315	5	4	4	4	4	21	84
26	JANAKIRAMAN. V	CB18S 254316	4	3	4	4	4	19	76
27	JANANI. S	CB18S 254317	5	4	5	4	4	22	88
28	JAYA SUDHAN. S	CB18S 254318	4	4	3	4	4	19	76
29	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	4	5	24	96
30	KAMALESH. S	CB18S 254320	4	4	3	4	3	18	72
31	KARIKALAN. S	CB18S 254321	4	3	3	3	3	16	64
32	KARMUKILAN. R.R	CB18S 254322	4	3	4	3	3	17	68
33	KISHORE KUMAR. T	CB18S 254323	4	4	3	4	3	18	72
34	KRISHNAMOORTHY. P	CB18S 254324	4	4	4	4	4	20	80
35	KRITHIKA. R.S	CB18S 254325	5	5	5	5	5	25	100
36	KUZHANTHAIVEL. M	CB18S 254326	4	4	3	4	3	18	72
37	LOGESWAR. S	CB18S 254327	4	3	4	4	4	19	76
38	LOHA PRIYA. C	CB18S 254328	5	4	5	5	5	24	96

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39	LORDSON JEEVAPRIYAN. E	CB18S 254329	4	4	4	4	4	20	80
40	MAHALAKSHMI. M	CB18S 254330	5	5	5	4	5	24	96
41	MANIBHARATHI. R	CB18S 254331	3	4	4	3	4	18	72
42	MANIKANDAN..R	CB18S 254332	4	4	3	4	3	18	72
43	MANOJ .K	CB18S 254333	4	4	4	4	4	20	80
44	MATHESH. T	CB18S 254334	4	3	4	3	3	17	68
45	MOHAMED RIYAS. J	CB18S 254335	5	5	5	5	5	25	100
46	MOHAMED RIYASKHAN. S	CB18S 254336	5	4	5	5	5	24	96
47	MOSES PRABAKARAN. M	CB18S 254337	5	5	5	5	5	25	100
48	MUBARAK ALI. J	CB18S 254338	5	4	5	4	5	23	92
49	MUKILAN. S	CB18S 254339	4	4	3	4	3	18	72
50	ARNALD. S	CB18S 254340	4	4	3	4	4	19	76
51	BALAJI. K	CB18S 254341	4	3	4	4	4	19	76
52	KALIYARASAN. M	CB18S 254342	4	4	4	4	4	20	80
53	NITHISH KUMAR. A	CB18S 254343	4	4	3	4	4	19	76
54	OLI MOHAMED. A	CB18S 254344	3	4	3	4	4	18	72
55	PANDIYARAJAN. R	CB18S 254345	3	4	4	3	4	18	72
56	POOVARASAN. S	CB18S 254346	4	3	4	4	4	19	76
57	PRAGADEESH. G	CB18S 254347	4	4	3	4	3	18	72
58	PRAGATHESWARAN. G	CB18S 254348	3	4	4	3	4	18	72

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59	PRAKASH. J	CB18S 254349	3	4	4	3	4	18	72
60	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	4	4	3	4	3	18	72
61	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	4	4	3	4	4	19	76
62	PREMNATH. S	CB18S 254352	4	3	4	4	4	19	76
63	RAGU. R	CB18S 254353	4	4	4	4	4	20	80
64	RAJASANKARI. A	CB18S 254354	5	5	5	4	5	24	96
65	RAJASRIRAM. K	CB18S 254355	5	4	4	4	4	21	84
66	RAMJI. H	CB18S 254356	5	4	5	4	4	22	88
67	RENGARAJ. M	CB18S 254357	4	5	4	4	4	21	84
68	SANGEETHA. G	CB18S 254358	5	5	5	4	5	24	96
69	SARAVANAN. A	CB18S 254359	4	4	3	4	4	19	76
70	SARAVANAN. P	CB18S 254360	4	4	3	4	3	18	72
71	SARAVASHREE. K	CB18S 254361	5	5	5	5	5	25	100
72	SATCHINKUMAR. G	CB18S 254362	5	5	5	5	5	25	100
73	SATHEESH KUMAR. M	CB18S 254363	5	4	4	4	4	21	84
74	SATHISH KUMAR. M	CB18S 254364	3	4	4	3	4	18	72
75	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	4	5	4	4	22	88
76	SIVA SANKARI. S	CB18S 254366	4	4	3	4	4	19	76
77	SIVA. S	CB18S 254367	5	4	5	4	5	23	92
78	SRI GAYATHRI .N	CB18S 254368	5	5	5	5	5	25	100

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79	SRINIVASAN. S	CB18S 254369	4	4	3	4	3	18	72
80	SUGANTHI. S	CB18S 254370	5	5	5	5	5	25	100
81	SUGUNESH. M	CB18S 254371	5	4	5	4	4	22	88
82	SUNDHAR. R	CB18S 254372	4	3	3	3	3	16	64
83	SURENDHAR. S	CB18S 254373	4	4	3	4	4	19	76
84	SURENTHIRANATH. N	CB18S 254374	4	4	4	4	4	20	80
85	SWATHI. G	CB18S 254375	5	4	5	5	4	23	92
86	VAIRAMUTHU. M	CB18S 254376	5	5	5	5	5	25	100
87	VASANTH. K	CB18S 254377	5	4	4	4	4	21	84
88	VENKATESAN. M	CB18S 254378	4	4	4	4	5	21	84
89	VIGNESH . S (03.05.2001)	CB18S 254379	4	4	4	4	3	19	76
90	VIGNESH. V	CB18S 254380	5	4	4	4	4	21	84
91	VIGNESH. R	CB18S 254381	4	5	5	5	5	24	96
92	VIGNESH.S (21.01.2001)	CB18S 254382	4	4	3	4	3	18	72
93	VIJAYAKUMAR. K	CB18S 254383	4	3	3	4	3	17	68
94	VISHALI. T	CB18S 254384	5	4	5	5	5	24	96
95	YOGESWARAN. C	CB18S 254385	4	4	3	4	4	19	76
96	YOKESH. S	CB18S 254386	4	4	4	4	4	20	80
		Average	4.239583333	4.020833333	3.947916667	4.041666667	4.010416667		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.23	75	79.23	93.2
CO2	4.02	75	79.02	93.0
CO3	3.95	75	78.95	92.9
CO4	4.04	75	79.04	93.0
CO5	4.01	75	79.01	93.0

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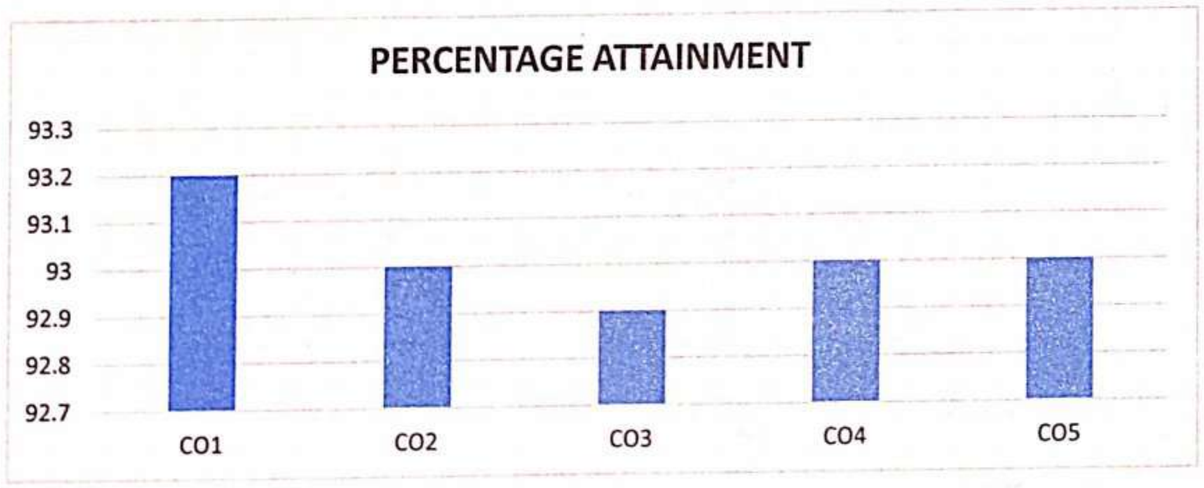
THANJAVUR-5

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C
SUBJECT CODE : 16SCCCA1
NO.OF STUDENTS : 96

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.2
CO2	93
CO3	92.9
CO4	93
CO5	93



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COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	5	EXCELLENT
70-79	10	DISTINCTION
60-69	22	VERY GOOD
50-59	23	GOOD
40-49	14	AVERAGE
0-39	22	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	5.38%	EXCELLENT
70-79	10.75%	DISTINCTION
60-69	23.66%	VERY GOOD
50-59	24.73%	GOOD
40-49	15.05%	AVERAGE
0-39	22.91%	REAPPEAR

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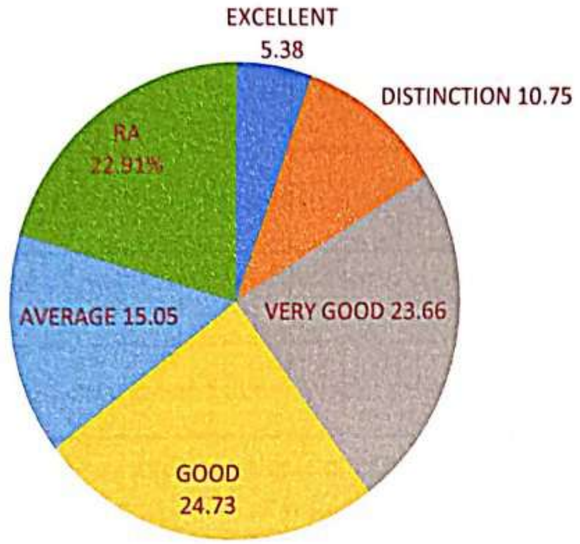
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need.

COURSE - Computer Networks(16SCCCA8)

COURSE OUTCOME

CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference models
CO2	Defines Datalink layer services , Error detection and Error correction methods
CO3	Explain Network layer basics and routing algorithms
CO4	Understanding TCP features and congestion control
CO5	Enable to work with Application layer www, e-mail and DNS

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	1	3	1
CO2	3	1	2	2	2
CO3	2	2	2	2	2
CO4	3	2	2	1	1
CO5	1	1	2	2	2
Average	2.4	1.6	2.25	2	1.6

Thanjavur

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABDUL MAJEED. H	CB16S 244982	4	3	4	3	4	18	72
2	ADITHYAN. B	CB16S 244983	4	4	3	4	4	19	76
3	AJAY. S	CB16S 244984	3	4	4	4	4	19	76
4	AJITHKUMAR .V	CB16S 244985	4	4	4	4	3	19	76
5	AKASH. M	CB16S 244986	4	3	3	4	4	18	72
6	AKASHSELVAM. A	CB16S 244987	3	4	4	4	4	19	76
7	ARUN SABARI BALAJI. C	CB16S 244989	4	4	4	4	4	20	80
8	BALAMURUGAN. T	CB16S 244991	4	3	4	4	4	19	76
9	DHIVAKARAN. P	CB16S 244992	4	4	4	4	4	20	80
10	DINESHKUMAR. S	CB16S 244993	4	3	4	3	4	18	72
11	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	4	4	4	4	4	20	80
12	GAYATHRI. S	CB16S 244996	5	4	5	5	5	24	96
13	GNANASEKAR. M	CB16S 244998	5	4	5	4	5	23	92
14	GOWSALYA. L	CB16S 244999	4	4	4	4	4	20	80
15	HAZAN.A	CB16S 245000	4	4	4	4	4	20	80
16	HEMASHREE. V	CB16S 245001	4	4	4	4	4	20	80
17	IMRAN. N	CB16S 245002	4	4	4	4	4	20	80
18	JABARALI. A	CB16S 245003	5	4	4	4	4	21	84
19	JAGAN NATH. G	CB16S 245004	4	4	5	4	4	21	84
20	JEEVA .A	CB16S 245005	5	4	5	4	5	23	92
21	JEEVA. M	CB16S 245006	4	5	5	5	4	23	92

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22	JOELRICHARD. R	CB16S 245007	4	4	4	4	4	20	80
23	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	4	24	96
24	KIRUBAKARAN. G	CB16S 245009	4	4	4	4	4	20	80
25	LAKSHMANAN. S	CB16S 245010	4	4	4	4	4	20	80
26	MADHUMITHA. S	CB16S 245011	4	4	4	4	4	20	80
27	MAKIZHVANAN. D	CB16S 245012	4	4	4	4	4	20	80
28	MALAIYARASAN. G	CB16S 245013	5	5	4	4	4	22	88
29	MANIKANDAN M	CB16S 245014	5	4	5	4	4	22	88
30	MOHAMED AZARUDEEN. S	CB16S 245015	5	4	4	4	4	21	84
31	MOHAMED THAHA. A	CB16S 245016	4	4	4	4	4	20	80
32	MOHAMMED THARIQUE. M	CB16S 245017	4	4	4	4	4	20	80
33	MOHAMMEDABDULKHADER. A	CB16S 245018	4	5	4	4	4	21	84
34	MONISHA. R	CB16S 245019	4	4	4	4	4	20	80
35	MURUGANANDHAM. R	CB16S 245020	5	4	4	4	4	21	84
36	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
37	MUTHUVEL. V	CB16S 245022	5	5	5	5	5	25	100
38	NAVIN KUMAR. R	CB16S 245023	5	5	5	4	4	23	92
39	NAVINKUMAR. T	CB16S 245024	5	4	4	4	4	21	84
40	NIVETHA. N	CB16S 245025	4	4	4	4	4	20	80
41	PRABAKARAN. K	CB16S 245026	4	4	4	4	4	20	80
42	RAJKUMAR. K	CB16S 245029	4	4	4	4	4	20	80
43	RAMANATHAN. T S B	CB16S 245030	5	5	5	5	5	25	100

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44	RASHIKA. G	CB16S 245032	4	4	4	4	4	20	80
45	SANTHOSHKUMAR. R	CB16S 245033	4	4	4	4	4	20	80
46	SATHISH. R	CB16S 245034	4	4	4	4	4	20	80
47	SELVAKUMAR .K	CB16S 245035	5	4	5	4	4	22	88
48	SIVANANDAM. P	CB16S 245037	5	5	5	5	5	25	100
49	SOWMYA. A A	CB16S 245038	5	5	5	4	4	23	92
50	SRIRAM. G	CB16S 245039	5	4	4	4	4	21	84
51	SUBASH K	CB16S 245040	4	4	4	4	4	20	80
52	SUDARSON. S.P	CB16S 245041	5	5	5	5	4	24	96
53	SWETHA. T.S	CB16S 245042	4	4	4	4	4	20	80
54	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	5	5	5	5	5	25	100
55	THARANI. M	CB16S 245044	4	4	4	4	4	20	80
56	UMAR .S	CB16S 245045	5	5	5	4	4	23	92
57	AJAY. S	CB16S 245046	5	4	5	5	4	23	92
58	AJITHKUMAR. R	CB16S 245047	5	4	4	5	5	23	92
59	JARALDINPREETHI. J	CB16S 245048	5	5	5	5	5	25	100
60	KARTHIKEYAN. R	CB16S 245049	5	5	4	4	4	22	88
61	KISMATH BATCHA. S	CB16S 245050	4	4	4	4	4	20	80
62	MOHAMED SHAREEF. J	CB16S 245051	4	5	4	4	4	21	84
63	MOHAMED BAYAS. U	CB16S 245052	5	4	4	4	4	21	84
64	PREMKUMAR. M	CB16S 245053	4	4	4	4	4	20	80
65	RAJARATHINAM. G	CB16S 245054	4	4	4	4	4	20	80

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66	SIVA. R	CB16S 245055	4	4	4	4	4	20	80
67	SOWMIYASHREE. S	CB16S 245056	4	4	4	4	4	20	80
68	SWETHA. S	CB16S 245057	5	5	5	5	5	25	100
69	THIRUMALAIVASAN. S	CB16S 245058	5	5	5	5	4	24	96
70	THIRUPPATHI. S	CB16S 245059	5	4	4	4	4	21	84
71	UMAPATHI. G	CB16S 245060	5	5	4	4	4	22	88
72	VAIRAPPAN .R	CB16S 245061	4	4	4	4	4	20	80
73	VEERA MANI. M	CB16S 245062	4	4	4	4	4	20	80
74	VEERARAGAVAN. K	CB16S 245064	5	5	5	5	5	25	100
75	VEERASARAVANAN. E	CB16S 245065	5	5	5	4	4	23	92
76	VENKATESH. D	CB16S 245066	4	4	4	4	4	20	80
77	VIGNESH. G	CB16S 245067	4	4	4	4	4	20	80
78	VIGNESH .R	CB16S 245069	4	4	4	4	4	20	80
79	VIGNESH. S	CB16S 245070	4	4	4	4	4	20	80
80	VIGNESHWARAN .N	CB16S 245071	5	4	5	5	4	23	92
81	VIJAY .B	CB16S 245072	5	5	5	5	4	24	96
82	WILLIAMS RUBAN. M	CB16S 245073	5	5	5	5	5	25	100
83	ZAFFAR ALI. M	CB16S 245074	5	5	5	5	5	25	100
84	VIGNESHWARAN. G	CB16S 245075	5	5	4	5	5	24	96
85	RATHIKA. S	CB15S 240864	5	4	4	4	4	21	84
		Average	4.423529412	4.247058824	4.294117647	4.211764706	4.164705882		

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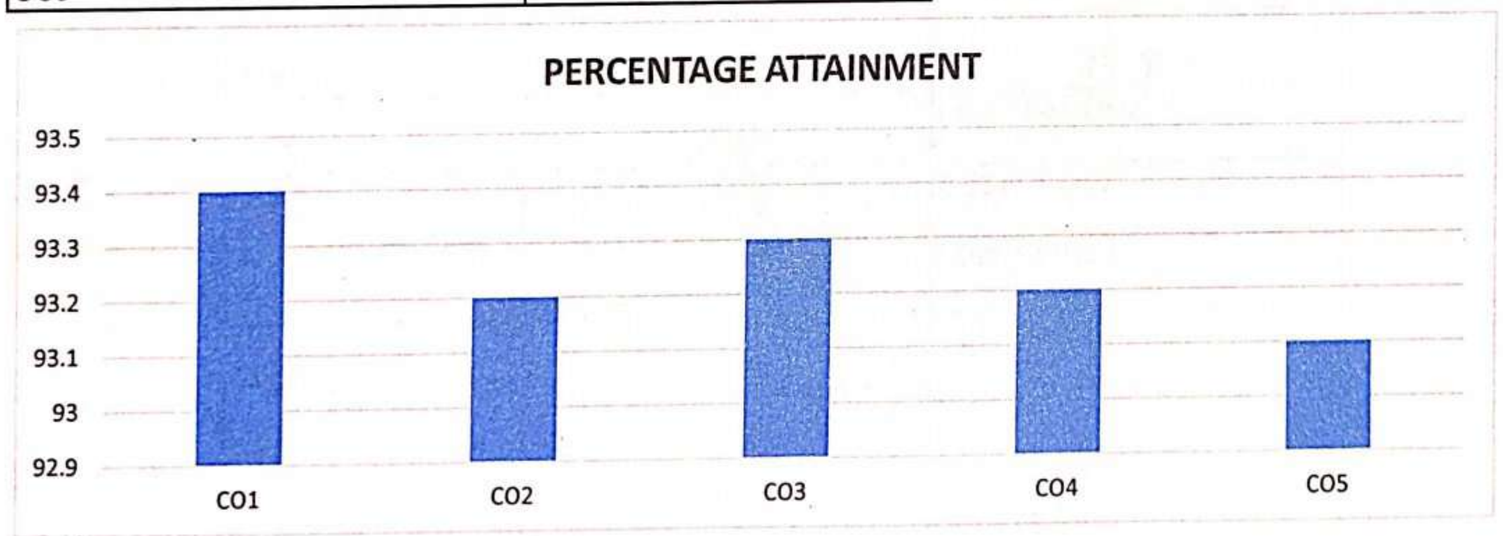
Expected Attainment in each CO - 85%

	Int. Exam + Assignment	End Sem	Total	%
CO6	4.42	75	79.42	93.4
CO7	4.25	75	79.25	93.2
CO8	4.29	75	79.29	93.3
CO9	4.21	75	79.21	93.2
CO10	4.16	75	79.16	93.1

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS
SUBJECT CODE : 16SCCCA8
NO.OF STUDENTS : 85

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.4
CO2	93.2
CO3	93.3
CO4	93.2
CO5	93.1



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	5	OUTSTANDING
80-89	17	EXCELLENT
70-79	28	DISTINCTION
60-69	20	VERY GOOD
50-59	3	GOOD
40-49	0	AVERAGE
0-39	8	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	20.00%	OUTSTANDING
80-89	32.94%	EXCELLENT
70-79	23.53%	DISTINCTION
60-69	3.53%	VERY GOOD
50-59	4.11%	GOOD
0-39	9.41%	REAPPEAR

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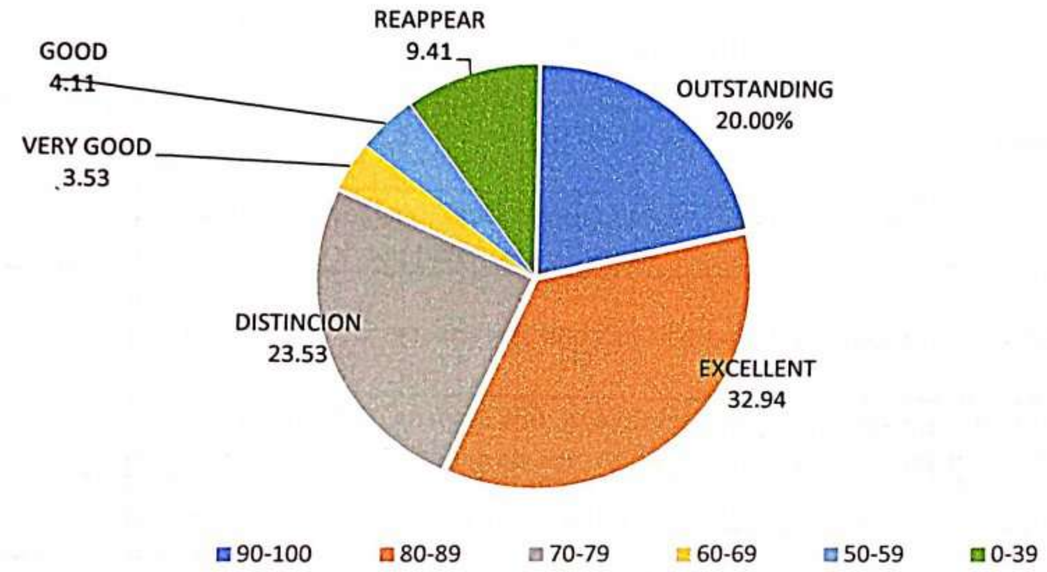
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
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Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - SOFTWARE ENGINEERING(MBECA1:1/10)

COURSE OUTCOME

CO1	Plan a software engineering process life cycle .
CO2	Able to elicit, analyze and specify software requirements with various stakeholders of the project.
CO3	Analyze and translate a specification into a design using an appropriate software engineering methodology.
CO4	Know how to develop the code from the design.
CO5	Able to use modern engineering tools necessary for software project management, time management and software reuse.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	1
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	2
Average	2	0.6	2.2	2	0.6

Bharath College of Science & Management
Thanjavur

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AASHA.B	CB16S 244981	5	5	5	5	5	25	100
2	ABDUL MAJEED. H	CB16S 244982	5	4	4	4	4	21	84
3	ADITHYAN. B	CB16S 244983	5	5	5	5	4	24	96
4	AJAY. S	CB16S 244984	4	3	4	4	3	18	72
5	AJITHKUMAR .V	CB16S 244985	5	5	4	4	4	22	88
6	AKASH. M	CB16S 244986	5	5	4	5	4	23	92
7	AKASHSELVAM. A	CB16S 244987	5	4	4	5	4	22	88
8	ARUN SABARI BALAJI. C	CB16S 244989	5	5	4	5	4	23	92
9	AYYAPPAN	CB16S 244990	4	4	4	4	4	20	80
10	BALAMURUGAN. T	CB16S 244991	5	4	4	5	4	22	88
11	DHIVAKARAN. P	CB16S 244992	5	4	5	5	5	24	96
12	DINESHKUMAR. S	CB16S 244993	5	4	4	5	4	22	88
13	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	5	5	4	5	4	23	92
14	GAYATHRI. S	CB16S 244996	5	5	5	5	5	25	100
15	GIRITHARAN.P	CB16S 244997	5	4	4	4	4	21	84
16	GNANASEKAR. M	CB16S 244998	5	4	5	5	5	24	96
17	GOWSALYA. L	CB16S 244999	5	5	4	5	4	23	92

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18	HAZAN.A	CB16S 245000	5	4	5	4	5	23	92
19	HEMASHREE. V	CB16S 245001	5	4	4	4	4	21	84
20	IMRAN. N	CB16S 245002	5	5	5	5	4	24	96
21	JABARALI. A	CB16S 245003	5	4	5	5	5	24	96
22	JAGAN NATH. G	CB16S 245004	5	4	5	4	5	23	92
23	JEEVA .A	CB16S 245005	5	5	4	5	4	23	92
24	JEEVA. M	CB16S 245006	5	4	5	4	5	23	92
25	JOELRICHARD. R	CB16S 245007	4	3	4	3	3	17	68
26	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	5	25	100
27	KIRUBAKARAN. G	CB16S 245009	4	5	4	4	4	21	84
28	LAKSHMANAN. S	CB16S 245010	4	4	3	4	3	18	72
29	MADHUMITHA. S	CB16S 245011	5	4	4	4	4	21	84
30	MAKIZHVANAN. D	CB16S 245012	5	4	5	4	4	22	88
31	MALAIYARASAN. G	CB16S 245013	5	5	4	4	4	22	88
32	MANIKANDAN M	CB16S 245014	5	4	4	4	4	21	84
33	MOHAMED AZARUDEEN. S	CB16S 245015	5	4	5	4	4	22	88
34	MOHAMED THAHA. A	CB16S 245016	5	4	5	4	5	23	92
35	MOHAMMED THARIQUE. M	CB16S 245017	5	4	5	4	4	22	88
36	MOHAMMEDABDULKHADER. A	CB16S 245018	5	4	5	4	4	22	88

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37	MONISHA. R	CB16S 245019	5	4	5	4	5	23	92
38	MURUGANANDHAM. R	CB16S 245020	5	4	5	5	5	24	96
39	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
40	MUTHUVEL. V	CB16S 245022	5	5	5	5	5	25	100
41	NAVIN KUMAR. R	CB16S 245023	5	5	5	5	5	25	100
42	NAVINKUMAR. T	CB16S 245024	5	4	5	4	5	23	92
43	NIVETHA. N	CB16S 245025	5	4	5	5	5	24	96
44	PRABAKARAN. K	CB16S 245026	5	4	4	4	4	21	84
45	RAJKUMAR. K	CB16S 245029	4	4	4	4	4	20	80
46	RAMANATHAN. T S B	CB16S 245030	5	5	5	5	5	25	100
47	RASHIKA. G	CB16S 245032	5	4	4	4	4	21	84
48	SANTHOSHKUMAR. R	CB16S 245033	5	4	5	4	5	23	92
49	SATHISH. R	CB16S 245034	4	4	4	4	4	20	80
50	SELVAKUMAR .K	CB16S 245035	5	5	5	5	5	25	100
51	SIVANANDAM. P	CB16S 245037	5	5	5	5	5	25	100
52	SOWMYA. A A	CB16S 245038	5	5	5	5	5	25	100
53	SRIRAM. G	CB16S 245039	5	4	5	4	4	22	88
54	SUBASH K	CB16S 245040	4	4	4	4	4	20	80
55	SUDARSON. S.P	CB16S 245041	5	5	5	5	5	25	100

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56	SWETHA. T.S	CB16S 245042	5	5	5	5	5	25	100
57	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	5	5	5	5	5	25	100
58	THARANI. M	CB16S 245044	5	4	4	4	4	21	84
59	UMAR .S	CB16S 245045	5	5	5	5	5	25	100
60	AJAY. S	CB16S 245046	5	4	4	4	4	21	84
61	AJITHKUMAR. R	CB16S 245047	4	5	4	4	4	21	84
62	JARALDINPREETHI. J	CB16S 245048	5	5	5	5	5	25	100
63	KARTHIKEYAN. R	CB16S 245049	5	4	4	4	4	21	84
64	KISMATH BATCHA. S	CB16S 245050	5	4	4	4	4	21	84
65	MOHAMED SHAREEF. J	CB16S 245051	5	5	5	5	5	25	100
66	MOHAMED BAYAS. U	CB16S 245052	5	5	4	4	4	22	88
67	PREMKUMAR. M	CB16S 245053	4	4	4	4	4	20	80
68	RAJARATHINAM. G	CB16S 245054	5	4	4	4	4	21	84
69	SIVA. R	CB16S 245055	4	3	4	3	3	17	68
70	SOWMIYASHREE. S	CB16S 245056	5	4	4	5	4	22	88
71	SWETHA. S	CB16S 245057	5	5	4	5	4	23	92
72	THIRUMALAIVASAN. S	CB16S 245058	5	4	5	4	5	23	92
73	THIRUPPATHI. S	CB16S 245059	4	4	4	4	4	20	80
74	UMAPATHI. G	CB16S 245060	4	4	4	4	4	20	80

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75	VAIRAPPAN .R	CB16S 245061	4	5	4	4	4	21
76	VEERA MANI. M	CB16S 245062	5	4	4	4	4	21
77	VEERARAGAVAN. K	CB16S 245064	5	5	5	5	5	25
78	VEERASARAVANAN. E	CB16S 245065	5	4	5	5	5	24
79	VENKATESH. D	CB16S 245066	5	4	5	4	5	23
80	VIGNESH. G	CB16S 245067	4	4	4	4	4	20
81	VIGNESH. K	CB16S 245068	5	4	4	4	4	21
82	VIGNESH .R	CB16S 245069	4	5	4	4	4	21
83	VIGNESH. S	CB16S 245070	5	4	4	4	4	21
84	VIGNESHWARAN .N	CB16S 245071	5	4	5	4	5	23
85	VIJAY .B	CB16S 245072	5	4	5	5	5	24
86	WILLIAMS RUBAN. M	CB16S 245073	5	5	5	5	5	25
87	ZAFFAR ALI. M	CB16S 245074	5	5	5	5	5	25
88	VIGNESHWARAN. G	CB16S 245075	5	5	5	5	5	25
89	RATHIKA. S	CB15S 240864	4	4	3	4	4	19
Average			4.808988764	4.359550562	4.471910112	4.415730337	4.370786517	

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.81	75	79.81	93.9
CO2	4.36	75	79.36	93.4
CO3	4.47	75	79.47	93.5
CO4	4.42	75	79.42	93.4
CO5	4.37	75	79.37	93.4

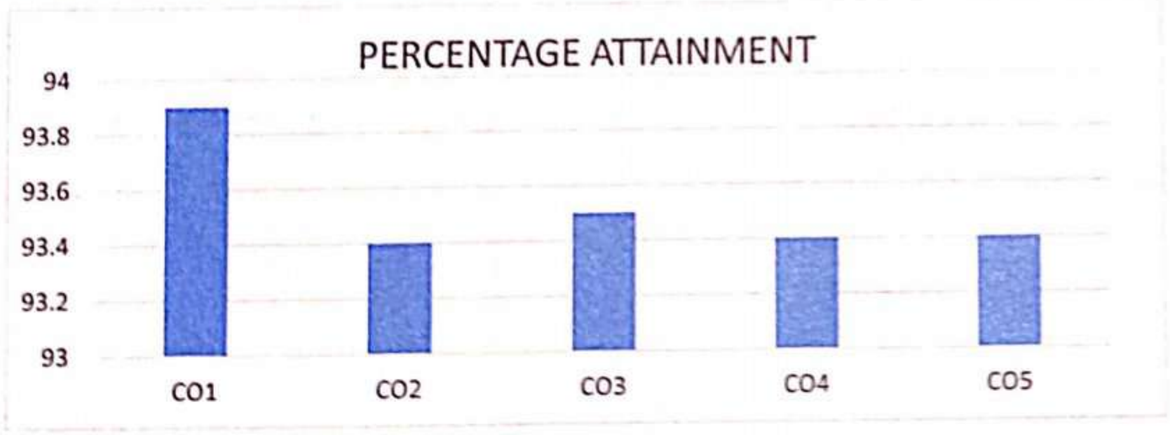
COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : SOFTWARE ENGINEERING

SUBJECT CODE : 16SMBECA1:2

NO.OF STUDENTS : 89

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.9
CO2	93.4
CO3	93.5
CO4	93.4
CO5	93.4



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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	7	EXCELLENT
70-79	9	DISTINCTION
60-69	33	VERY GOOD
50-59	36	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	8.24%	EXCELLENT
70-79	10.59%	DISTINCTION
60-69	38.82%	VERY GOOD
50-59	42.35%	GOOD

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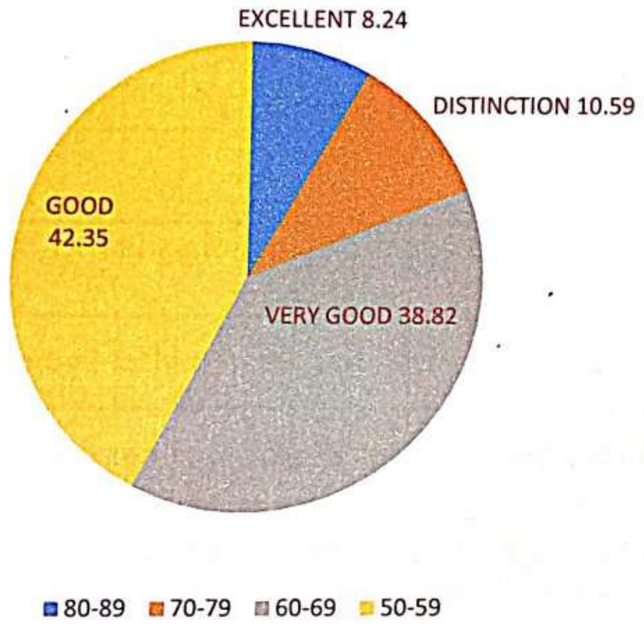
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - CLOUD COMPUTING(16SMBECA2:1)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Understand the importance of virtualization in distributed computing and how this has enabled the development of Cloud Computing
CO3	Implement different cloud storage technologies and Service Oriented cloud systems
CO4	Understand the key security and compliance challenges of cloud computing
CO5	Choose among various cloud technologies for implementing applications

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	1	3	1	2	1
CO2	3	2	2	2	2
CO3	2	2	2	2	2
CO4	3	2	2	2	1
CO5	2	1	2	2	2
Average	2.2	2	1.8	2	1.6

Bharath College of Science & Management
Thanjavur

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABDUL MAJEED. H	CB16S 244982	5	4	5	4	4	22	88
2	ADITHYAN. B	CB16S 244983	4	4	4	4	4	20	80
3	AJAY. S	CB16S 244984	4	4	4	4	4	20	80
4	AJITHKUMAR .V	CB16S 244985	4	4	4	4	4	20	80
5	AKASH. M	CB16S 244986	4	4	4	4	4	20	80
6	AKASHSELVAM. A	CB16S 244987	4	4	4	4	4	20	80
7	ARUN SABARI BALAJI. C	CB16S 244989	5	5	5	5	4	24	96
8	BALAMURUGAN. T	CB16S 244991	4	4	4	4	4	20	80
9	DHIVAKARAN. P	CB16S 244992	5	4	5	4	5	23	92
10	DINESHKUMAR. S	CB16S 244993	4	4	4	4	4	20	80
11	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	5	4	5	4	5	23	92
12	GAYATHRI. S	CB16S 244996	5	5	4	5	4	23	92
13	GNANASEKAR. M	CB16S 244998	5	5	5	5	5	25	100
14	GOWSALYA. L	CB16S 244999	5	4	5	5	5	22	88
15	HAZAN.A	CB16S 245000	5	4	5	4	5	23	92
16	HEMASHREE. V	CB16S 245001	4	4	4	4	4	20	80

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17	IMRAN. N	CB16S 245002	5	4	4	4	4	21	84
18	JABARALI. A	CB16S 245003	5	5	5	5	4	24	96
19	JAGAN NATH. G	CB16S 245004	5	4	5	5	5	24	96
20	JEEVA .A	CB16S 245005	5	5	4	5	4	24	96
21	JEEVA. M	CB16S 245006	4	5	5	5	5	24	96
22	JOELRICHARD. R	CB16S 245007	5	4	4	5	4	22	88
23	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	5	25	100
24	KIRUBAKARAN. G	CB16S 245009	4	4	4	4	4	20	80
25	LAKSHMANAN. S	CB16S 245010	4	4	4	4	4	20	80
26	MADHUMITHA. S	CB16S 245011	4	4	4	4	4	20	80
27	MAKIZHVANAN. D	CB16S 245012	4	4	4	4	4	20	80
28	MALAIYARASAN. G	CB16S 245013	4	4	4	4	4	20	80
29	MANIKANDAN M	CB16S 245014	5	4	5	4	5	23	92
30	MOHAMED AZARUDEEN. S	CB16S 245015	5	4	4	5	4	22	88
31	MOHAMED THAHA. A	CB16S 245016	4	4	4	4	4	20	80
32	MOHAMMED THARIQUE. M	CB16S 245017	4	4	4	4	4	20	80
33	MOHAMMEDABDULKHADER. A	CB16S 245018	5	4	4	5	4	22	88
34	MONISHA. R	CB16S 245019	4	4	4	4	4	20	80

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35	MURUGANANDHAM. R	CB16S 245020	5	5	5	5	4	24	96
36	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
37	MUTHUVEL. V	CB16S 245022	5	5	5	5	5	25	100
38	NAVIN KUMAR. R	CB16S 245023	5	5	5	5	4	24	96
39	NAVINKUMAR. T	CB16S 245024	5	4	5	4	5	23	92
40	NIVETHA. N	CB16S 245025	4	4	4	4	4	20	80
41	PRABAKARAN. K	CB16S 245026	5	4	5	4	5	23	92
42	RAJKUMAR. K	CB16S 245029	5	4	4	4	4	21	84
43	RAMANATHAN. T S B	CB16S 245030	5	5	5	5	5	25	100
44	RASHIKA. G	CB16S 245032	4	4	4	4	4	20	80
45	SANTHOSHKUMAR. R	CB16S 245033	4	4	4	4	4	20	80
46	SATHISH. R	CB16S 245034	4	4	4	4	4	20	80
47	SELVAKUMAR .K	CB16S 245035	5	5	5	5	5	25	100
48	SIVANANDAM. P	CB16S 245037	5	5	5	5	5	25	100
49	SOWMYA. A A	CB16S 245038	5	4	4	5	4	22	88
50	SRIRAM. G	CB16S 245039	5	4	5	4	5	23	92
51	SUBASH K	CB16S 245040	5	4	4	5	4	22	88
52	SUDARSON. S.P	CB16S 245041	5	5	5	5	5	25	100

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53	SWETHA. T.S	CB16S 245042	4	4	4	4	4	20	80
54	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	4	5	5	5	5	24	96
55	THARANI. M	CB16S 245044	4	4	4	4	4	20	80
56	UMAR .S	CB16S 245045	5	5	5	5	4	24	96
57	AJAY. S	CB16S 245046	5	4	5	5	5	24	96
58	AJITHKUMAR. R	CB16S 245047	5	5	5	5	4	24	96
59	JARALDINPREETHI. J	CB16S 245048	5	5	5	5	5	25	100
60	KARTHIKEYAN. R	CB16S 245049	5	4	5	4	5	23	92
61	KISMATH BATCHA. S	CB16S 245050	5	4	4	5	4	22	88
62	MOHAMED SHAREEF. J	CB16S 245051	4	4	4	4	4	20	80
63	MOHAMED BAYAS. U	CB16S 245052	5	4	5	4	5	23	92
64	PREMKUMAR. M	CB16S 245053	4	4	4	4	4	20	80
65	RAJARATHINAM. G	CB16S 245054	5	4	4	5	4	22	88
66	SIVA. R	CB16S 245055	4	4	4	4	4	20	80
67	SOWMIYASHREE. S	CB16S 245056	4	4	4	4	4	20	80
68	SWETHA. S	CB16S 245057	5	5	5	5	5	25	100
69	THIRUMALAIVASAN. S	CB16S 245058	5	5	5	5	5	25	100
70	THIRUPPATHI. S	CB16S 245059	5	5	5	5	4	24	96

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71	UMAPATHI. G	CB16S 245060	5	4	4	5	4	22	88
72	VAIRAPPAN .R	CB16S 245061	5	4	5	4	5	23	92
73	VEERA MANI. M	CB16S 245062	4	4	4	4	4	20	80
74	VEERARAGAVAN. K	CB16S 245064	5	4	5	5	5	24	96
75	VEERASARAVANAN. E	CB16S 245065	5	5	5	5	4	24	96
76	VENKATESH. D	CB16S 245066	5	4	4	4	4	21	84
77	VIGNESH. G	CB16S 245067	4	4	4	4	4	20	80
78	VIGNESH .R	CB16S 245069	4	4	4	4	4	20	80
79	VIGNESH. S	CB16S 245070	4	4	4	4	4	20	80
80	VIGNESHWARAN .N	CB16S 245071	5	5	5	5	5	25	100
81	VIJAY .B	CB16S 245072	5	5	5	5	5	25	100
82	WILLIAMS RUBAN. M	CB16S 245073	5	5	5	5	5	25	100
83	ZAFFAR ALI. M	CB16S 245074	5	5	5	5	5	25	100
84	VIGNESHWARAN. G	CB16S 245075	5	4	5	4	5	23	92
85	RATHIKA. S	CB15S 240864	4	4	4	4	4	20	80
Average			4.61176471	4.31764706	4.48235294	4.45882353	4.37647059		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.81	75	79.81	93.9
CO2	4.36	75	79.36	93.4
CO3	4.47	75	79.47	93.5
CO4	4.42	75	79.42	93.4
CO5	4.37	75	79.37	93.4

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : SOFTWARE ENGINEERING

SUBJECT CODE : 16SMBECA1:2

NO.OF STUDENTS : 89

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.9
CO2	93.4
CO3	93.5
CO4	93.4
CO5	93.4

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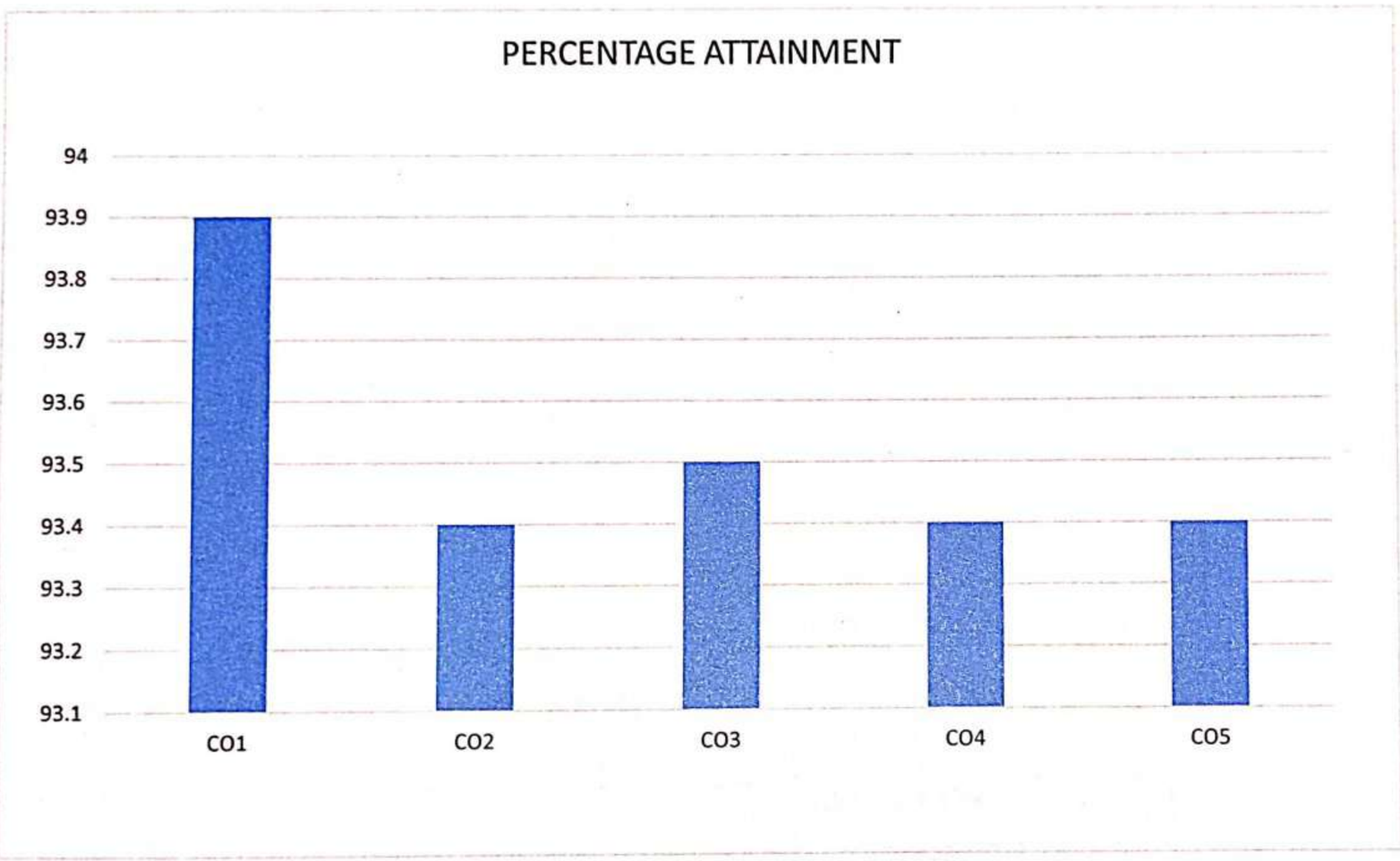

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THANJAVUR - 613 005.

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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	7	EXCELLENT
70-79	9	DISTINCTION
60-69	33	VERY GOOD
50-59	36	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	8.24%	EXCELLENT
70-79	10.59%	DISTINCTION
60-69	38.82%	VERY GOOD
50-59	42.35%	GOOD

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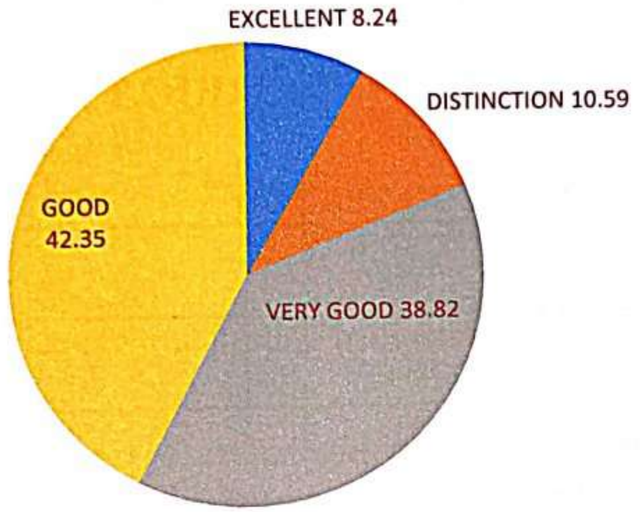
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - CLOUD COMPUTING(16SMBECA2:1)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Understand the importance of virtualization in distributed computing and how this has enabled the development of Cloud Computing
CO3	Implement different cloud storage technologies and Service Oriented cloud systems
CO4	Understand the key security and compliance challenges of cloud computing
CO5	Choose among various cloud technologies for implementing applications

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	1	3	1	2	1
CO2	3	2	2	2	2
CO3	2	2	2	2	2
CO4	3	2	2	2	1
CO5	2	1	2	2	2
Average	2.2	2	1.8	2	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

Bharath College of Science & Management Thanjavur

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABDUL MAJEED. H	CB16S 244982	5	4	5	4	4	22	88
2	ADITHYAN. B	CB16S 244983	4	4	4	4	4	20	80
3	AJAY. S	CB16S 244984	4	4	4	4	4	20	80
4	AJITHKUMAR .V	CB16S 244985	4	4	4	4	4	20	80
5	AKASH. M	CB16S 244986	4	4	4	4	4	20	80
6	AKASHSELVAM. A	CB16S 244987	4	4	4	4	4	20	80
7	ARUN SABARI BALAJI. C	CB16S 244989	5	5	5	5	4	24	96
8	BALAMURUGAN. T	CB16S 244991	4	4	4	4	4	20	80
9	DHIVAKARAN. P	CB16S 244992	5	4	5	4	5	23	92
10	DINESHKUMAR. S	CB16S 244993	4	4	4	4	4	20	80
11	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	5	4	5	4	5	23	92
12	GAYATHRI. S	CB16S 244996	5	5	4	5	4	23	92
13	GNANASEKAR. M	CB16S 244998	5	5	5	5	5	25	100
14	GOWSALYA. L	CB16S 244999	5	4	5	5	5	22	88
15	HAZAN.A	CB16S 245000	5	4	5	4	5	23	92

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16	HEMASHREE. V	CB16S 245001	4	4	4	4	4	20	80
17	IMRAN. N	CB16S 245002	5	4	4	4	4	21	84
18	JABARALI. A	CB16S 245003	5	5	5	5	4	24	96
19	JAGAN NATH. G	CB16S 245004	5	4	5	5	5	24	96
20	JEEVA .A	CB16S 245005	5	5	4	5	4	24	96
21	JEEVA. M	CB16S 245006	4	5	5	5	5	24	96
22	JOELRICHARD. R	CB16S 245007	5	4	4	5	4	22	88
23	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	5	25	100
24	KIRUBAKARAN. G	CB16S 245009	4	4	4	4	4	20	80
25	LAKSHMANAN. S	CB16S 245010	4	4	4	4	4	20	80
26	MADHUMITHA. S	CB16S 245011	4	4	4	4	4	20	80
27	MAKIZHVANAN. D	CB16S 245012	4	4	4	4	4	20	80
28	MALAIYARASAN. G	CB16S 245013	4	4	4	4	4	20	80
29	MANIKANDAN M	CB16S 245014	5	4	5	4	5	23	92
30	MOHAMED AZARUDEEN. S	CB16S 245015	5	4	4	5	4	22	88
31	MOHAMED THAHA. A	CB16S 245016	4	4	4	4	4	20	80
32	MOHAMMED THARIQUE. M	CB16S 245017	4	4	4	4	4	20	80
33	MOHAMMEDABDULKHADER. A	CB16S 245018	5	4	4	5	4	22	88

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34	MONISHA. R	CB16S 245019	4	4	4	4	4	20	80
35	MURUGANANDHAM. R	CB16S 245020	5	5	5	5	4	24	96
36	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
37	MUTHUVEL. V	CB16S 245022	5	5	5	5	5	25	100
38	NAVIN KUMAR. R	CB16S 245023	5	5	5	5	4	24	96
39	NAVINKUMAR. T	CB16S 245024	5	4	5	4	5	23	92
40	NIVETHA. N	CB16S 245025	4	4	4	4	4	20	80
41	PRABAKARAN. K	CB16S 245026	5	4	5	4	5	23	92
42	RAJKUMAR. K	CB16S 245029	5	4	4	4	4	21	84
43	RAMANATHAN. T S B	CB16S 245030	5	5	5	5	5	25	100
44	RASHIKA. G	CB16S 245032	4	4	4	4	4	20	80
45	SANTHOSHKUMAR. R	CB16S 245033	4	4	4	4	4	20	80
46	SATHISH. R	CB16S 245034	4	4	4	4	4	20	80
47	SELVAKUMAR .K	CB16S 245035	5	5	5	5	5	25	100
48	SIVANANDAM. P	CB16S 245037	5	5	5	5	5	25	100
49	SOWMYA. A A	CB16S 245038	5	4	4	5	4	22	88
50	SRIRAM. G	CB16S 245039	5	4	5	4	5	23	92
51	SUBASH K	CB16S 245040	5	4	4	5	4	22	88

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52	SUDARSON. S.P	CB16S 245041	5	5	5	5	5	25	100
53	SWETHA. T.S	CB16S 245042	4	4	4	4	4	20	80
54	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	4	5	5	5	5	24	96
55	THARANI. M	CB16S 245044	4	4	4	4	4	20	80
56	UMAR .S	CB16S 245045	5	5	5	5	4	24	96
57	AJAY. S	CB16S 245046	5	4	5	5	5	24	96
58	AJITHKUMAR. R	CB16S 245047	5	5	5	5	4	24	96
59	JARALDINPREETHI. J	CB16S 245048	5	5	5	5	5	25	100
60	KARTHIKEYAN. R	CB16S 245049	5	4	5	4	5	23	92
61	KISMATH BATCHA. S	CB16S 245050	5	4	4	5	4	22	88
62	MOHAMED SHAREEF. J	CB16S 245051	4	4	4	4	4	20	80
63	MOHAMED BAYAS. U	CB16S 245052	5	4	5	4	5	23	92
64	PREMKUMAR. M	CB16S 245053	4	4	4	4	4	20	80
65	RAJARATHINAM. G	CB16S 245054	5	4	4	5	4	22	88
66	SIVA. R	CB16S 245055	4	4	4	4	4	20	80
67	SOWMIYASHREE. S	CB16S 245056	4	4	4	4	4	20	80
68	SWETHA. S	CB16S 245057	5	5	5	5	5	25	100
69	THIRUMALAIVASAN. S	CB16S 245058	5	5	5	5	5	25	100

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70	THIRUPPATHI. S	CB16S 245059	5	5	5	5	4	24	96
71	UMAPATHI. G	CB16S 245060	5	4	4	5	4	22	88
72	VAIRAPPAN .R	CB16S 245061	5	4	5	4	5	23	92
73	VEERA MANI. M	CB16S 245062	4	4	4	4	4	20	80
74	VEERARAGAVAN. K	CB16S 245064	5	4	5	5	5	24	96
75	VEERASARAVANAN. E	CB16S 245065	5	5	5	5	4	24	96
76	VENKATESH. D	CB16S 245066	5	4	4	4	4	21	84
77	VIGNESH. G	CB16S 245067	4	4	4	4	4	20	80
78	VIGNESH .R	CB16S 245069	4	4	4	4	4	20	80
79	VIGNESH. S	CB16S 245070	4	4	4	4	4	20	80
80	VIGNESHWARAN .N	CB16S 245071	5	5	5	5	5	25	100
81	VIJAY .B	CB16S 245072	5	5	5	5	5	25	100
82	WILLIAMS RUBAN. M	CB16S 245073	5	5	5	5	5	25	100
83	ZAFFAR ALI. M	CB16S 245074	5	5	5	5	5	25	100
84	VIGNESHWARAN. G	CB16S 245075	5	4	5	4	5	23	92
85	RATHIKA. S	CB15S 240864	4	4	4	4	4	20	80
Average			4.611764706	4.317647059	4.482352941	4.458823529	4.376470588		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.61	75	79.61	93.7
CO2	4.32	75	79.32	93.3
CO3	4.48	75	79.48	93.5
CO4	4.46	75	79.46	93.5
CO5	4.38	75	79.38	93.4

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : CLOUD COMPUTING

SUBJECT CODE : 16SMBECA2:1

NO.OF STUDENTS : 85

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.7
CO2	93.3
CO3	93.5
CO4	93.5
CO5	93.4

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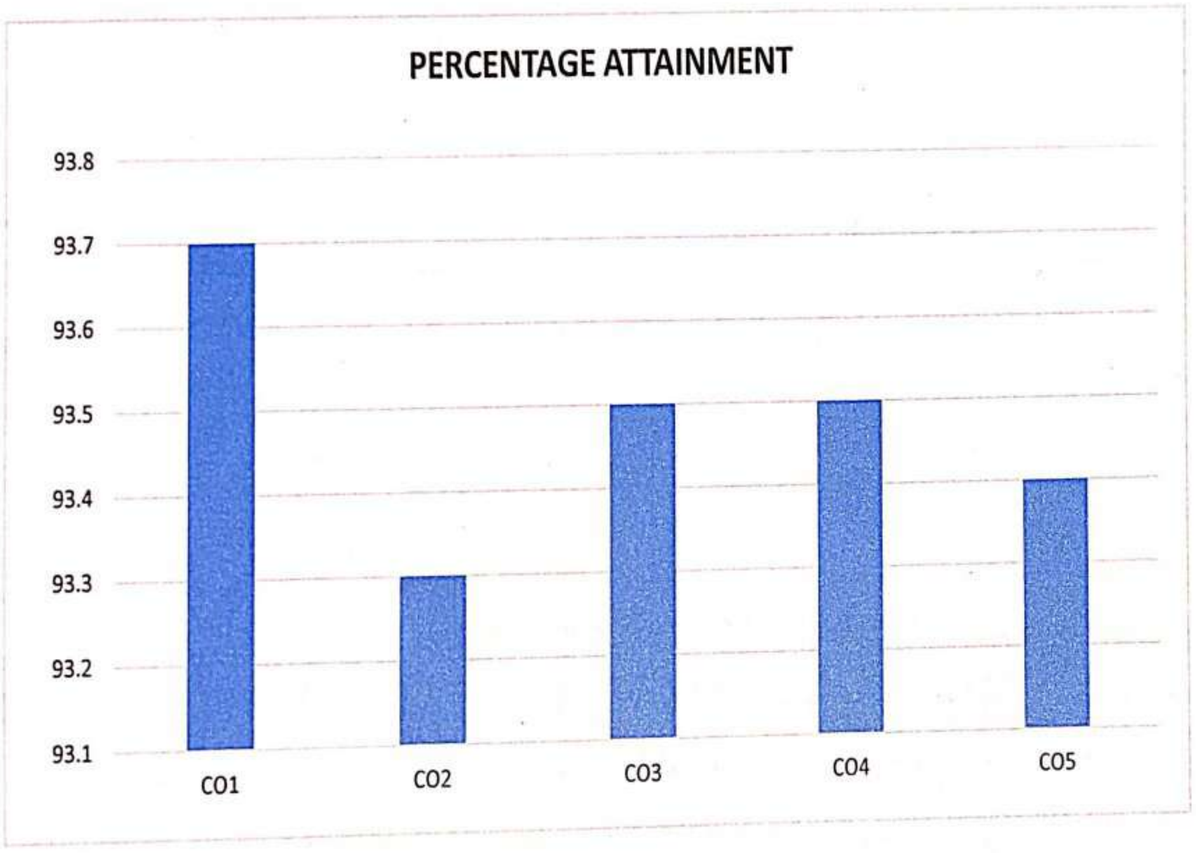

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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	1	OUTSTANDING
80-89	2	EXCELLENT
70-79	19	DISTINCTION
60-69	35	VERY GOOD
50-59	24	GOOD
40-49	1	AVERAGE
0-39	3	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	1.18%	OUTSTANDING
80-89	2.35%	EXCELLENT
70-79	22.35%	DISTINCTION
60-69	41.17%	VERY GOOD
50-59	28.24%	GOOD
40-49	1.18%	AVERAGE
0-39	4.11%	REAPPEAR

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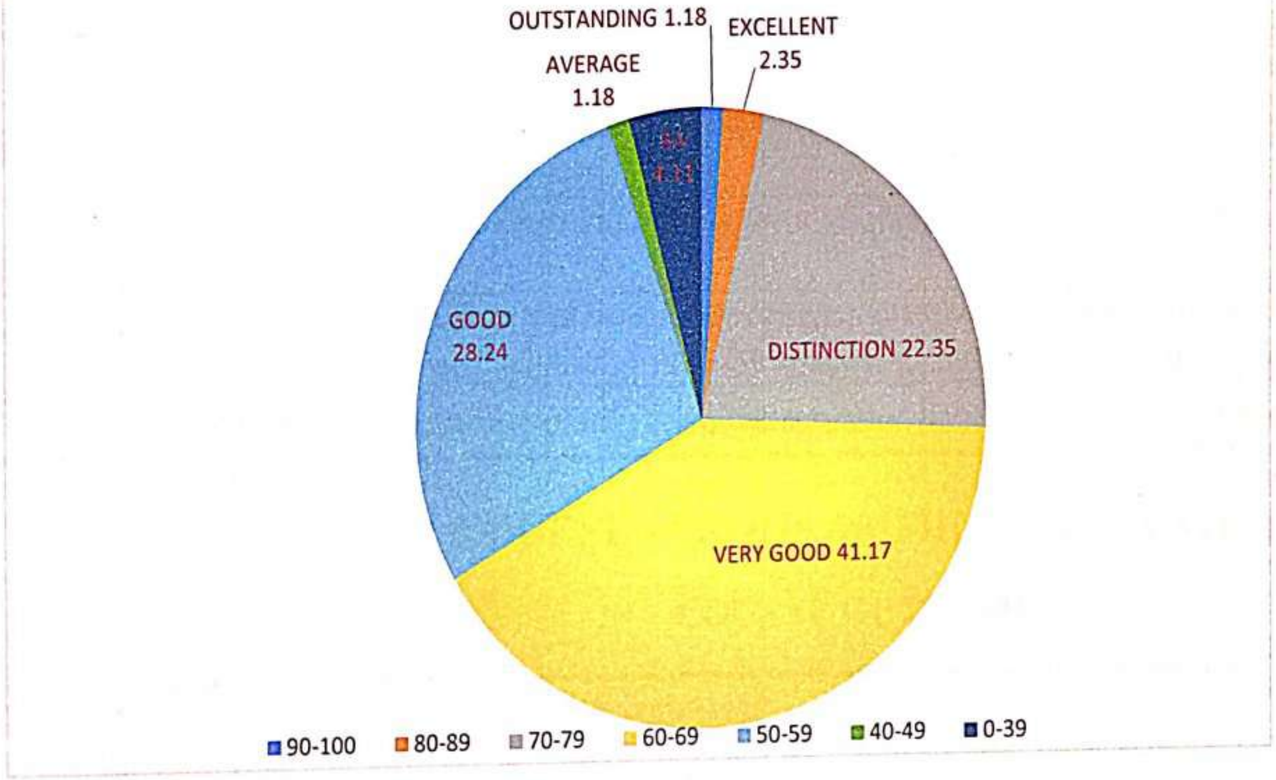
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - PROGRAMMING IN JAVA(16SCCCA3)

COURSE OUTCOME

CO1	To acquire the programming skills with java.
CO2	To implement the object oriented concepts with java language
CO3	To understand the concepts of multithreading.
CO4	To learn the art of GUI programming with Applet.
CO5	To learn about Database connectivity.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	0

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	5	5	5	5	25	100
2	AATHISH.S	CB17S 249686	4	4	4	4	4	20	80
3	ABDULLA. A	CB17S 249688	4	4	4	4	4	20	80
4	ALENRAFIN. D	CB17S 249691	5	5	5	5	4	24	96
5	ANAND. R	CB17S 249693	4	3	4	3	4	18	72
6	ARAVINDH. M	CB17S 249694	4	3	3	3	3	16	64
7	ARAVINDH. R	CB17S 249695	3	3	3	3	3	15	60
8	ARAVINTH. S	CB17S 249696	5	4	4	4	4	21	84
9	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
10	ASWIN. K	CB17S 249698	5	4	5	5	5	24	96
11	BARATHVAJ. D	CB17S 249699	4	3	4	3	4	18	72
12	CHARLES .S	CB17S 249700	4	4	3	4	4	19	76
13	DHARMARAJ. N	CB17S 249701	4	4	4	3	3	18	72
14	DINESH. M	CB17S 249702	4	3	3	3	3	16	64
15	ELAVARASAN. R	CB17S 249703	4	3	4	3	4	18	72
16	GAYATHREE. J	CB17S 249704	5	5	4	5	5	24	96
17	GOWTHAM. M	CB17S 249705	4	3	4	4	4	19	76
18	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100

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19	HARI KRISHNAN. P	CB17S 249707	4	3	3	3	3	16	64
20	HARIHARAN. M	CB17S 249708	5	5	5	5	4	24	96
21	JANAKIPARKAVI. S	CB17S 249709	5	4	5	5	5	24	96
22	JAYASURIYA. V	CB17S 249710	4	3	4	3	4	18	72
23	KALAIVANAN. S	CB17S 249711	3	3	3	3	3	15	60
24	KISHORERAJ. S	CB17S 249714	4	4	4	4	4	20	80
25	LOKESH.V	CB17S 249715	5	5	5	5	4	24	96
26	MADHANA GOPAL.K	CB17S 249716	5	4	5	4	5	23	92
27	MANIKANDAN .R	CB17S 249717	4	4	4	4	4	20	80
28	MANIKANDAN. P	CB17S 249718	4	4	4	4	4	20	80
29	MANIKANDAN. V	CB17S 249719	4	3	4	3	3	17	68
30	MANIKANDAPRABU. M	CB17S 249720	4	4	3	3	4	18	72
31	MANOJ. M	CB17S 249721	4	3	4	4	3	18	72
32	MOHAN KUMAR .M	CB17S 249722	4	4	4	4	4	20	80
33	MUTHURAMAN. K	CB17S 249723	5	5	5	5	4	24	96
34	PRAMATHI. K	CB17S 249724	5	5	5	5	5	25	100
35	SHADHANA SINDHU. R	CB17S 249725	5	5	4	5	5	24	96
36	VINITHA. J	CB17S 249726	5	5	5	5	5	25	100
37	KANNADHASAN.G	CB17S 249727	4	3	4	3	3	17	68
38	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100

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39	MAHESHWARI. A	CB17S 249729	5	4	4	4	4	21	84
40	NANTHAKUMAR.M	CB17S 249731	3	3	2	2	2	12	48
41	NITHIYANAND. S	CB17S 249732	5	5	4	5	5	24	96
42	PARAMESWARAN. K	CB17S 249734	4	3	4	4	3	18	72
43	PETER. H	CB17S 249735	5	5	5	5	5	25	100
44	PRADHEESH.P	CB17S 249736	5	4	4	4	4	21	84
45	PRAGADEESH. D	CB17S 249737	4	4	4	4	4	20	80
46	PRAGADEESH. P	CB17S 249738	5	5	4	5	4	23	92
47	PRAKASH .G	CB17S 249739	5	5	5	5	5	25	100
48	PRAVIN. R	CB17S 249740	4	4	4	4	4	20	80
49	PRIYANGA. S	CB17S 249741	5	5	4	5	4	23	92
50	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
51	RAJESH. R	CB17S 249743	3	3	3	3	3	15	60
52	RAM. A.V	CB17S 249744	5	5	5	5	5	25	100
53	RAMANI .S	CB17S 249745	5	4	5	5	5	24	96
54	RANJITHKUMAR .M	CB17S 249746	4	3	4	4	4	19	76
55	RUBINIKOLASH G	CB17S 249747	5	5	4	5	4	23	92
56	SABARIVASAN. S	CB17S 249748	5	5	4	5	4	23	92
57	SANJIVI. S	CB17S 249749	5	4	5	5	5	24	96
58	SANTHOSHI .M	CB17S 249750	5	5	5	4	5	24	96

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59	SANTHOSHKUMAR. P	CB17S 249751	5	5	4	5	5	24	96
60	SARAN. R	CB17S 249752	5	4	5	5	5	24	96
61	SARAVANAN .N	CB17S 249753	5	4	5	5	5	22	88
62	SURESH. A	CB17S 249754	4	4	4	4	4	20	80
63	SURIYA. B	CB17S 249755	4	3	4	3	4	18	72
64	TAMILSELVAN.T	CB17S 249756	4	4	3	4	3	18	72
65	VASANTH .A	CB17S 249757	4	3	4	4	4	19	76
66	VEERAMANI. R	CB17S 249758	4	4	4	4	4	20	80
67	VEERARAJ. K	CB17S 249759	4	4	3	4	3	18	72
68	VENKATESWARAN. S	CB17S 249760	5	5	5	5	4	24	96
69	VIDHYA .S	CB17S 249761	5	5	5	5	5	25	100
70	VIGNESH. J	CB17S 249762	4	4	4	4	4	20	80
71	VIJAY. M	CB17S 249763	4	3	4	4	4	19	76
72	VIJAYAKANTH. P	CB17S 249764	5	4	5	4	4	22	88
73	VIKRAM. M	CB17S 249765	4	4	3	4	4	19	76
74	YOGESHRAM .B	CB17S 249767	4	4	4	4	4	20	80
75	YUVARAJ. P	CB17S 249768	3	3	3	3	3	15	60
Average			4.41	4.05	4.15	4.16	4.09		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.41	75	79.41	93.4
CO2	4.05	75	79.05	93.0
CO3	4.15	75	79.15	93.1
CO4	4.16	75	79.16	93.1
CO5	4.09	75	79.09	93.0

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN JAVA

SUBJECT CODE : 16SCCCA3

NO.OF STUDENTS : 75

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.40
CO2	93
CO3	93.10
CO4	93.10
CO5	93

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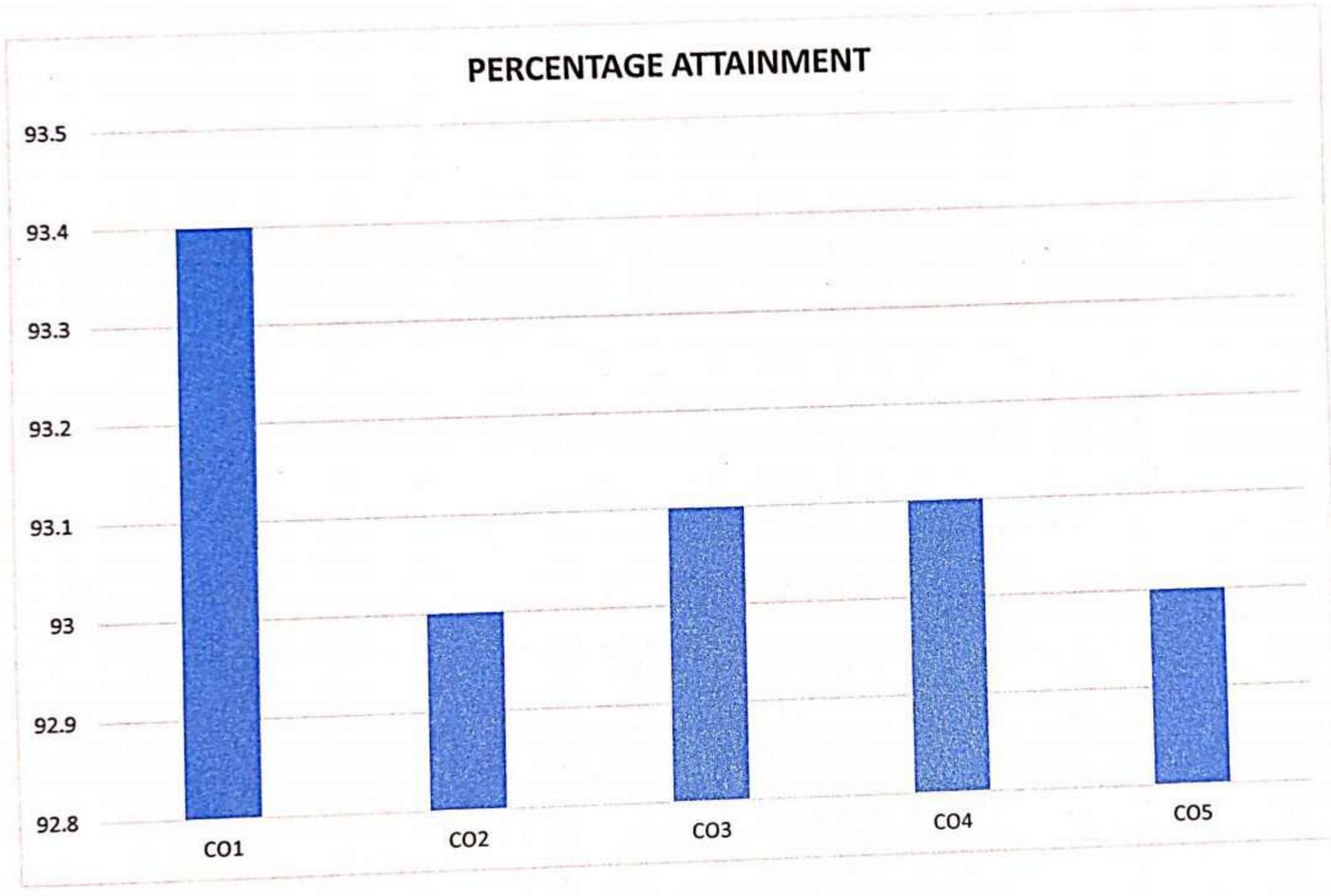

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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
91-100	1	OUTSTANDING
80-89	4	EXCELLENT
70-79	7	DISTINCTION
60-69	18	VERY GOOD
50-59	22	GOOD
40-49	8	AVERAGE
0-39	11	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
91-100	1.41%	OUTSTANDING
80-89	5.63%	EXCELLENT
70-79	7%	DISTINCTION
60-69	9.86%	VERY GOOD
50-59	30.99%	GOOD
40-49	11.27%	AVERAGE
0-39	15.49%	REAPPEAR

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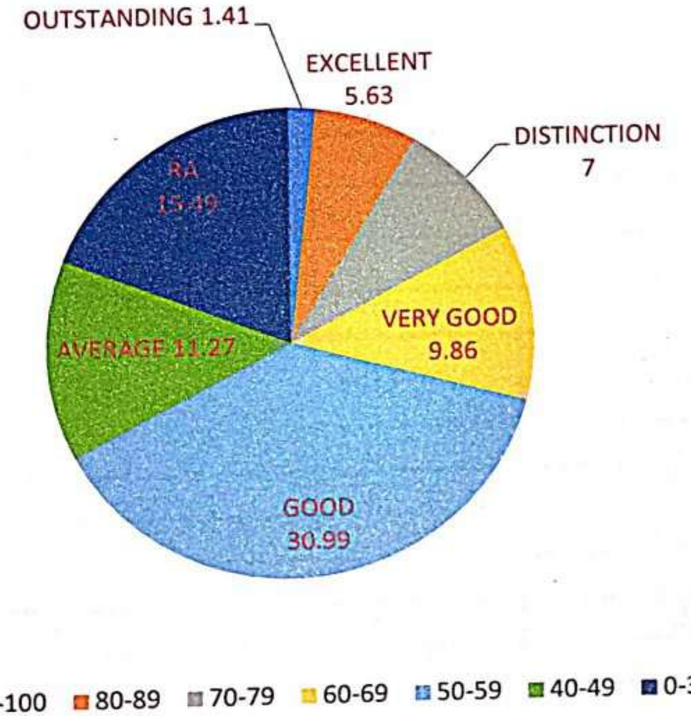
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - PROGRAMMING IN PHP(16SCCCA9)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Using PHP build-in functions and creating custom functions
CO3	To create a database in PhpMyAdmin
CO4	How to receive and process Form submission data
CO5	To create images on Server.

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	2	1
CO2	2	2	2	2	2
CO3	3	2	2	2	0
CO4	2	2	2	2	1
CO5	1	1	2	2	2
Average	2.2	1.8	1.8	2	1.2

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABDUL MAJEED. H	CB16S 244982	4	3	4	3	4	18	72
2	ADITHYAN. B	CB16S 244983	4	4	3	4	4	19	76
3	AJAY. S	CB16S 244984	4	4	4	4	3	19	76
4	AJITHKUMAR .V	CB16S 244985	4	4	3	4	4	19	76
5	AKASH. M	CB16S 244986	4	3	4	3	4	18	72
6	AKASHSELVAM. A	CB16S 244987	4	4	3	4	4	19	76
7	ARUN SABARI BALAJI. C	CB16S 244989	4	4	4	4	4	20	80
8	BALAMURUGAN. T	CB16S 244991	4	3	4	4	4	19	76
9	DHIVAKARAN. P	CB16S 244992	4	4	4	4	4	20	80
10	DINESHKUMAR. S	CB16S 244993	4	4	3	4	3	18	72
11	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	4	4	4	4	4	20	80
12	GAYATHRI. S	CB16S 244996	5	5	5	5	4	24	96
13	GNANASEKAR. M	CB16S 244998	5	5	4	5	4	23	92
14	GOWSALYA. L	CB16S 244999	4	4	4	4	4	20	80
15	HAZAN.A	CB16S 245000	4	4	4	4	4	20	80

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16	HEMASHREE. V	CB16S 245001	4	4	4	4	4	20	80
17	IMRAN. N	CB16S 245002	4	4	4	4	4	20	80
18	JABARALI. A	CB16S 245003	5	4	4	4	4	21	84
19	JAGAN NATH. G	CB16S 245004	5	4	4	4	4	21	84
20	JEEVA .A	CB16S 245005	5	4	5	4	5	23	92
21	JEEVA. M	CB16S 245006	5	5	4	5	4	23	92
22	JOELRICHARD. R	CB16S 245007	4	4	4	4	4	20	80
23	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	4	24	96
24	KIRUBAKARAN. G	CB16S 245009	4	4	4	4	4	20	80
25	LAKSHMANAN. S	CB16S 245010	4	4	4	4	4	20	80
26	MADHUMITHA. S	CB16S 245011	4	4	4	4	4	20	80
27	MAKIZHVANAN. D	CB16S 245012	4	4	4	4	4	20	80
28	MALAIYARASAN. G	CB16S 245013	5	4	5	4	4	22	88
29	MANIKANDAN M	CB16S 245014	5	4	4	5	4	22	88
30	MOHAMED AZARUDEEN. S	CB16S 245015	5	4	4	4	4	21	84
31	MOHAMED THAHA. A	CB16S 245016	4	4	4	4	4	20	80
32	MOHAMMED THARIQUE. M	CB16S 245017	4	4	4	4	4	20	80
33	MOHAMMEDABDULKHADER. A	CB16S 245018	5	4	4	4	4	21	84

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34	MONISHA. R	CB16S 245019	4	4	4	4	4	20	80
35	MURUGANANDHAM. R	CB16S 245020	5	4	4	4	4	21	84
36	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
37	MUTHUVEL. V	CB16S 245022	5	5	5	5	5	25	100
38	NAVIN KUMAR. R	CB16S 245023	5	4	5	4	5	23	92
39	NAVINKUMAR. T	CB16S 245024	5	4	4	4	4	21	84
40	NIVETHA. N	CB16S 245025	4	4	4	4	4	20	80
41	PRABAKARAN. K	CB16S 245026	4	4	4	4	4	20	80
42	RAJKUMAR. K	CB16S 245029	4	4	4	4	4	20	80
43	RAMANATHAN. T S B	CB16S 245030	5	5	5	5	5	25	100
44	RASHIKA. G	CB16S 245032	4	4	4	4	4	20	80
45	SANTHOSHKUMAR. R	CB16S 245033	4	4	4	4	4	20	80
46	SATHISH. R	CB16S 245034	4	4	4	4	4	20	80
47	SELVAKUMAR .K	CB16S 245035	5	4	5	4	4	22	88
48	SIVANANDAM. P	CB16S 245037	5	5	5	5	5	25	100
49	SOWMYA. A A	CB16S 245038	5	4	5	5	4	23	92
50	SRIRAM. G	CB16S 245039	5	4	4	4	4	21	84
51	SUBASH K	CB16S 245040	4	4	4	4	4	20	80

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52	SUDARSON. S.P	CB16S 245041	5	5	5	5	4	24	96
53	SWETHA. T.S	CB16S 245042	5	4	5	5	5	24	96
54	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	5	5	5	5	5	25	100
55	THARANI. M	CB16S 245044	4	4	4	4	4	20	80
56	UMAR .S	CB16S 245045	5	5	4	5	4	23	92
57	AJAY. S	CB16S 245046	5	4	5	4	5	23	92
58	AJITHKUMAR. R	CB16S 245047	5	5	4	4	5	23	92
59	JARALDINPREETHI. J	CB16S 245048	5	5	5	5	5	25	100
60	KARTHIKEYAN. R	CB16S 245049	5	4	4	4	5	22	88
61	KISMATH BATCHA. S	CB16S 245050	4	4	4	4	4	20	80
62	MOHAMED SHAREEF. J	CB16S 245051	5	4	4	4	4	21	84
63	MOHAMED BAYAS. U	CB16S 245052	4	5	4	4	4	21	84
64	PREMKUMAR. M	CB16S 245053	4	4	4	4	4	20	80
65	RAJARATHINAM. G	CB16S 245054	4	4	4	4	4	20	80
66	SIVA. R	CB16S 245055	4	4	4	4	4	20	80
67	SOWMIYASHREE. S	CB16S 245056	4	4	4	4	4	20	80
68	SWETHA. S	CB16S 245057	5	5	5	5	5	25	100
69	THIRUMALAIVASAN. S	CB16S 245058	5	5	5	4	5	24	96

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70	THIRUPPATHI. S	CB16S 245059	5	4	4	4	4	21	84
71	UMAPATHI. G	CB16S 245060	5	4	5	4	4	22	88
72	VAIRAPPAN .R	CB16S 245061	4	4	4	4	4	20	80
73	VEERA MANI. M	CB16S 245062	4	4	4	4	4	20	80
74	VEERARAGAVAN. K	CB16S 245064	5	5	5	5	5	25	100
75	VEERASARAVANAN. E	CB16S 245065	5	5	4	4	5	23	92
76	VENKATESH. D	CB16S 245066	4	4	4	4	4	20	80
77	VIGNESH. G	CB16S 245067	4	4	4	4	4	20	80
78	VIGNESH .R	CB16S 245069	4	4	4	4	4	20	80
79	VIGNESH. S	CB16S 245070	4	4	4	4	4	20	80
80	VIGNESHWARAN .N	CB16S 245071	5	4	5	4	5	23	92
81	VIJAY .B	CB16S 245072	5	5	4	5	5	24	96
82	WILLIAMS RUBAN. M	CB16S 245073	5	5	5	5	5	25	100
83	ZAFFAR ALI. M	CB16S 245074	5	5	5	5	5	25	100
84	VIGNESHWARAN. G	CB16S 245075	5	4	5	5	5	24	96
85	RATHIKA. S	CB15S 240864	5	4	4	4	4	21	84
	Average		4.49411765	4.21176471	4.23529412	4.22352941	4.22352941		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.49	75	79.49	93.5
CO2	4.21	75	79.21	93.2
CO3	4.24	75	79.24	93.2
CO4	4.22	75	79.22	93.2
CO5	4.22	75	79.22	93.2

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN PHP

SUBJECT CODE : 16SCCCA9

NO.OF STUDENTS : 85

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.50
CO2	93.2
CO3	93.20
CO4	93.20
CO5	93.2

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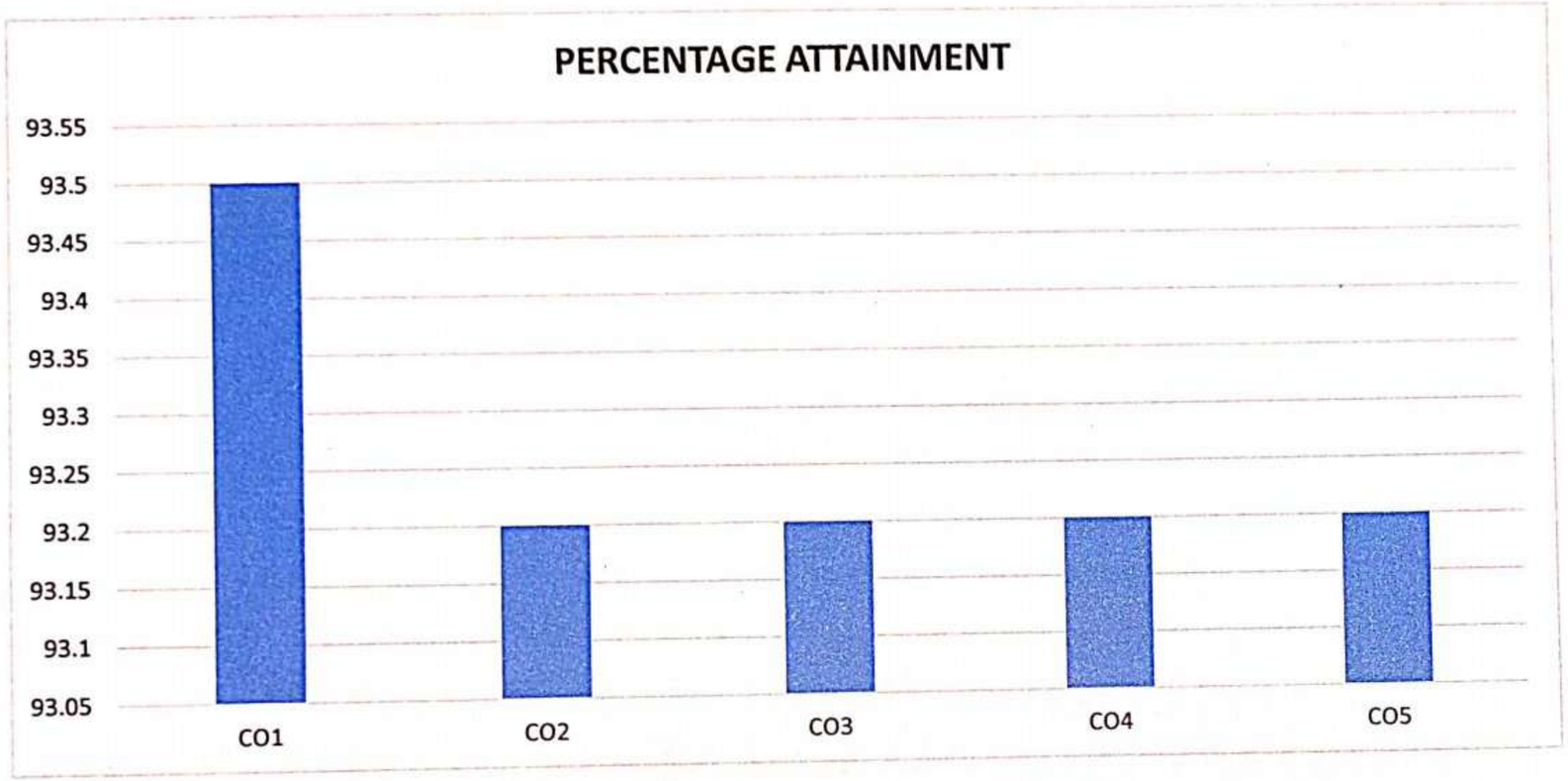

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Thanjavur

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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	4	EXCELLENT
70-79	23	DISTINCTION
60-69	31	VERY GOOD
50-59	21	GOOD
40-49	1	AVERAGE
0-39	5	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	4.71%	EXCELLENT
70-79	27.01%	DISTINCTION
60-69	36.47%	VERY GOOD
50-59	24.71%	GOOD
40-49	1.18%	AVERAGE
0-39	5.88%	REAPPEAR

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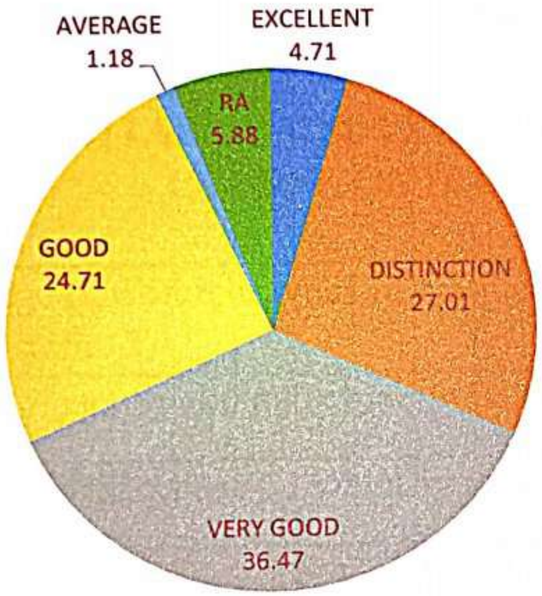
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

Attainment of program outcomes and course outcomes

COURSE - DIGITAL COMPUTER FUNDAMENTALS(16SCCCA7)
COURSE OUTCOME

CO1	Gain knowledge of different types of number system and Perform Number Conversions from one System to another System
CO2	Identify the logic gates and their functionality and understand the basics of Boolean algebra.
CO3	Design various logic gates and simplify Boolean functions
CO4	Learn to Design basic electronic Circuits and combinational circuits
CO5	Understand various flip flops, shift registers and the Construction of Memory Unit

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	0

Bharathidasan College of Science & Management Thanjavur

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AASHA.B	CB16S 244981	5	5	5	5	5	25	100
2	ABDUL MAJEED. H	CB16S 244982	4	5	4	4	5	22	88
3	ADITHYAN. B	CB16S 244983	4	5	5	5	4	23	92
4	AJAY. S	CB16S 244984	3	4	3	4	3	17	68
5	AJITHKUMAR .V	CB16S 244985	4	4	4	5	4	21	84
6	AKASH. M	CB16S 244986	5	4	5	5	5	24	96
7	AKASHSELVAM. A	CB16S 244987	4	4	4	5	4	21	84
8	ARUN SABARI BALAJI. C	CB16S 244989	5	5	5	4	5	24	96
9	AYAPPAN.M	CB16S 244990	4	4	4	5	4	21	84
10	BALAMURUGAN. T	CB16S 244991	4	4	5	5	4	22	88
11	DHIVAKARAN. P	CB16S 244992	5	4	5	4	5	23	92
12	DINESHKUMAR. S	CB16S 244993	4	5	4	4	4	21	84
13	FRANKLIN DHEVANATHAN. S .A	CB16S 244995	5	5	5	5	4	24	96
14	GAYATHRI. S	CB16S 244996	5	5	5	5	5	25	100
15	GIRIRITHARAN.P	CB16S 244997	4	5	4	5	4	22	88
16	GNANASEKAR. M	CB16S 244998	5	5	5	5	5	25	100
17	GOWSALYA. L	CB16S 244999	5	4	5	5	5	24	96

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18	HAZAN.A	CB16S 245000	5	4	4	5	4	22	88
19	HEMASHREE. V	CB16S 245001	4	5	4	5	4	22	88
20	IMRAN. N	CB16S 245002	4	5	5	5	4	23	92
21	JABARALI. A	CB16S 245003	4	5	5	4	5	23	92
22	JAGAN NATH. G	CB16S 245004	5	4	5	5	5	24	96
23	JEEVA .A	CB16S 245005	4	5	4	5	4	22	88
24	JEEVA. M	CB16S 245006	5	4	5	5	5	24	96
25	JOELRICHARD. R	CB16S 245007	3	4	3	4	4	18	72
26	JOHN INFANT EDWIN. J	CB16S 245008	5	5	5	5	5	25	100
27	KIRUBAKARAN. G	CB16S 245009	4	4	5	5	4	22	88
28	LAKSHMANAN. S	CB16S 245010	3	4	3	4	3	17	68
29	MADHUMITHA. S	CB16S 245011	4	4	4	4	4	20	80
30	MAKIZHVANAN. D	CB16S 245012	4	4	4	5	4	21	84
31	MALAIYARASAN. G	CB16S 245013	5	4	5	5	5	24	96
32	MANIKANDAN M	CB16S 245014	5	4	5	4	4	22	88
33	MOHAMED AZARUDEEN. S	CB16S 245015	4	4	4	4	4	20	80
34	MOHAMED THAHA. A	CB16S 245016	4	5	4	5	4	22	88
35	MOHAMMED THARIQUE. M	CB16S 245017	4	4	4	4	5	21	84
36	MOHAMMEDABDULKHADER. A	CB16S 245018	4	5	4	4	4	21	84

Bharath College of Engineering Thanjavur

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37	MONISHA. R	CB16S 245019	4	5	5	4	5	23	92
38	MURUGANANDHAM. R	CB16S 245020	5	5	5	5	5	25	100
39	MUTHURAMAN. R	CB16S 245021	5	5	5	5	5	25	100
40	MUTHUVEL. V	CB16S 245022	5	5	5	5	5	25	100
41	NAVIN KUMAR. R	CB16S 245023	5	5	5	5	5	25	100
42	NAVINKUMAR. T	CB16S 245024	4	5	5	4	5	23	92
43	NIVETHA. N	CB16S 245025	5	5	4	5	5	24	96
44	PRABAKARAN. K	CB16S 245026	4	4	4	4	4	20	80
45	RAJKUMAR. K	CB16S 245029	5	4	5	4	4	22	88
46	RAMANATHAN. T S B	CB16S 245030	5	5	5	5	5	25	100
47	RASHIKA. G	CB16S 245032	4	4	4	4	4	20	80
48	SANTHOSHKUMAR. R	CB16S 245033	5	5	5	5	5	25	100
49	SATHISH. R	CB16S 245034	4	4	4	4	4	20	80
50	SELVAKUMAR .K	CB16S 245035	5	5	5	5	5	25	100
51	SIVANANDAM. P	CB16S 245037	5	5	5	5	5	25	100
52	SOWMYA. A A	CB16S 245038	5	5	5	5	5	25	100
53	SRIRAM. G	CB16S 245039	4	4	4	4	4	20	80
54	SUBASH K	CB16S 245040	5	4	5	4	4	22	88
55	SUDARSON. S.P	CB16S 245041	5	4	5	5	5	24	96

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56	SWETHA. T.S	CB16S 245042	5	5	5	5	5	25	100
57	SYEDMAHABOOBHUSSAIN. S	CB16S 245043	5	5	5	5	5	25	100
58	THARANI. M	CB16S 245044	4	4	4	4	4	20	80
59	UMAR .S	CB16S 245045	5	4	5	5	5	24	96
60	AJAY. S	CB16S 245046	5	4	4	5	4	22	88
61	AJITHKUMAR. R	CB16S 245047	5	4	5	4	4	22	88
62	JARALDINPREETHI. J	CB16S 245048	5	5	5	5	5	25	100
63	KARTHIKEYAN. R	CB16S 245049	4	4	4	4	4	20	80
64	KISMATH BATCHA. S	CB16S 245050	5	4	5	4	4	22	88
65	MOHAMED SHAREEF. J	CB16S 245051	5	4	5	5	5	24	96
66	MOHAMED BAYAS. U	CB16S 245052	4	4	4	5	4	21	84
67	PREMKUMAR. M	CB16S 245053	4	5	4	4	4	21	84
68	RAJARATHINAM. G	CB16S 245054	5	4	5	5	4	23	92
69	SIVA. R	CB16S 245055	3	4	3	4	4	18	72
70	SOWMIYASHREE. S	CB16S 245056	4	4	5	4	4	21	84
71	SWETHA. S	CB16S 245057	5	4	5	5	5	24	96
72	THIRUMALAIVASAN. S	CB16S 245058	5	4	4	4	4	21	84
73	THIRUPPATHI. S	CB16S 245059	4	4	4	4	4	20	80
74	UMAPATHI. G	CB16S 245060	4	4	5	4	4	21	84

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75	VAIRAPPAN .R	CB16S 245061	4	4	4	4	4	20	80
76	VEERA MANI. M	CB16S 245062	4	4	4	4	4	20	80
77	VEERARAGAVAN. K	CB16S 245064	5	5	5	5	5	25	100
78	VEERASARAVANAN. E	CB16S 245065	5	5	5	5	5	25	100
79	VENKATESH. D	CB16S 245066	4	5	4	4	4	21	84
80	VIGNESH. G	CB16S 245067	4	4	4	4	4	20	80
81	VIGNESH. K	CB16S 245068	4	4	4	4	4	20	80
82	VIGNESH .R	CB16S 245069	4	4	4	4	4	20	80
83	VIGNESH. S	CB16S 245070	4	4	4	4	4	20	80
84	VIGNESHWARAN .N	CB16S 245071	5	5	5	4	5	24	96
85	VIJAY .B	CB16S 245072	5	5	5	5	5	25	100
86	WILLIAMS RUBAN. M	CB16S 245073	5	5	5	5	5	25	100
87	ZAFFAR ALI. M	CB16S 245074	5	5	5	5	5	25	100
88	VIGNESHWARAN. G	CB16S 245075	5	5	5	5	5	25	100
89	RATHIKA. S	CB15S 240864	3	4	4	4	4	19	76
Average			4.449438202	4.449438202	4.516853933	4.550561798	4.426966292		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.44	75	79.44	93.5
CO2	4.44	75	79.44	93.5
CO3	4.51	75	79.51	93.5
CO4	4.55	75	79.55	93.6
CO5	4.26	75	79.26	93.2

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : DIGITAL COMPUTER FUNDAMENTALS

SUBJECT CODE : 16SCCCA7

NO OF STUDENTS : 89

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.5
CO2	93.5
CO3	93.5
CO4	93.6
CO5	93.2

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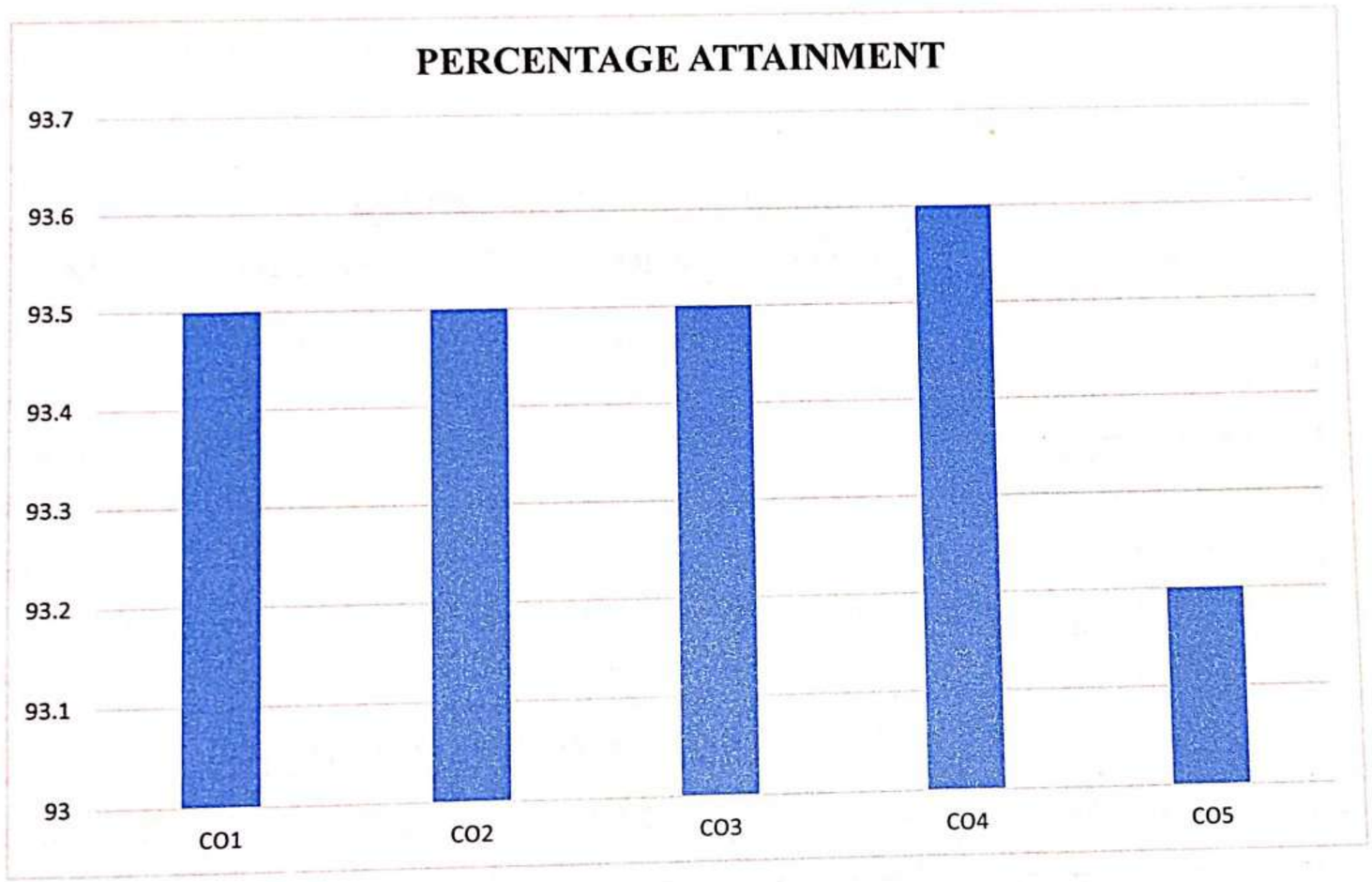

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA7

SUBJECT NAME : DIGITAL COMPUTER FUNDAMENTALS

NO OF STUDENTS : 89

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	7	EXCELLENT
70-79	21	DISTINCTION
60-69	17	VERY GOOD
50-59	18	GOOD
40-49	8	AVERAGE
0-39	18	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	7.87%	EXCELLENT
70-79	23.60%	DISTINCTION
60-69	19%	VERY GOOD
50-59	20.22%	GOOD
40-49	8.99%	AVERAGE
0-39	20.22%	REAPPEAR

Bharath College of Science & Management Thanjavur

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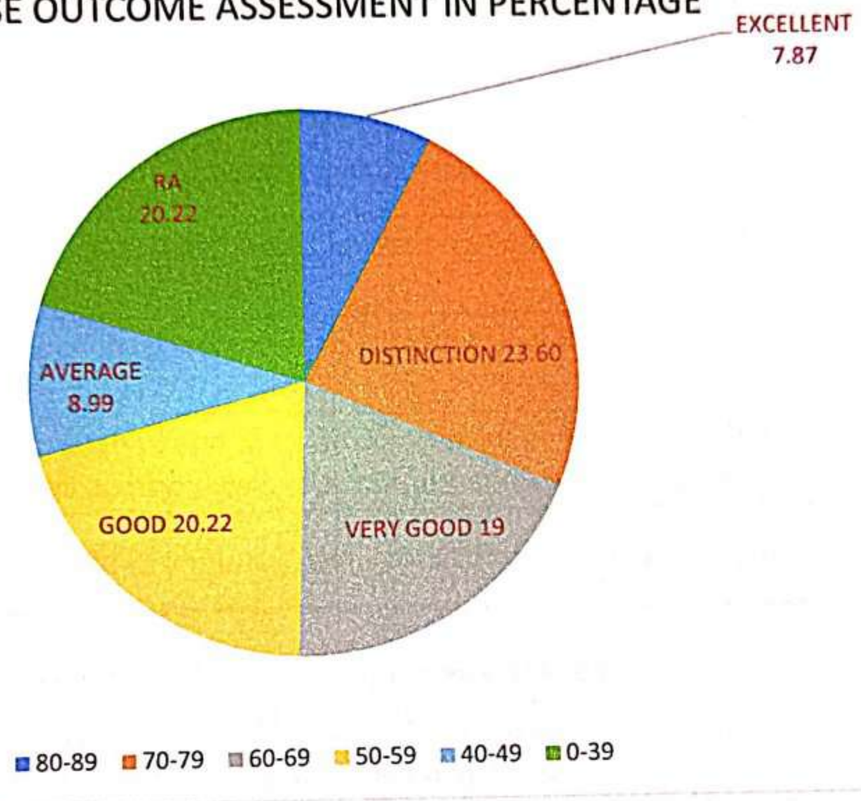
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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Bharath College of Science & Management
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PROGRAM OUTCOME FOR PRACTICAL

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

PROGRAMMIMG IN C (16SCCCA1P)
COURSE OUTCOME

CO1	Develop programming skills using the fundamentals and basics of C Language
CO2	Develop programs using the basic elements like control statements, Arrays and Strings
CO3	Enable effective usage of arrays, structures and unions
CO4	Understanding the concepts of functions and pointers
CO5	Implement files and understanding various file modes.

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PROGRAMMING IN C++ (16SCCCA2P)

COURSE OUTCOME

CO1	Creating simple programs using classes and objects in C++ and implement the concepts of object oriented programming
CO2	Understanding the concept of constructors and Apply string functions to perform operator overloading
CO3	To be able to program using C++ features such as composition of objects and function overloading
CO4	Demonstrate Virtual functions, Inheritance & Polymorphism
CO5	Implement Object Oriented Programs using templates and exceptional handling concepts.

PROGRAMMING IN JAVA LAB(16SCCCA3P)

COURSE OUTCOME

CO1	Using Graphics, Animations and Multithreading for designing Simulation and Game based applications.
CO2	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
CO3	Design and develop Web applications.
CO4	Designing Enterprise based applications by encapsulating an application's business logic.
CO5	Designing applications using pre-built frameworks.

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DATABASE SYSTEMS LAB(16SCCCA4P)
COURSE OUTCOME

CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

COMPUTER GRAPHICS AND ANIMATION LAB (16SCCCA5P)
COURSE OUTCOME

CO1	Use the basic tools found in Adobe Photoshop to Understand image editing and graphic design features
CO2	Enable to know about work with images in different file formats
CO3	Understanding to Develop a commercial brochure
CO4	Enable to do Basic Drawing and Painting in flash
CO5	Understanding about Animation and to Know First movement of animation

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PROGRAMMING IN PHP LAB(16SCCCA6P)

COURSE OUTCOME

CO1	Use PHP to create a data driven website.
CO2	Use PHP to read a file and add records to the database.
CO3	Create a form on a webpage and use PHP to check the validity of the form.
CO4	Use built-in features of PHP such as data and string manipulation.
CO5	Test and debug PHP scripts while working with live data.

MINI PROJECT (16SMBECAPW)

COURSE OUTCOME

CO1	Understand the basics of programming and able to interpret real world problems into software solutions
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills
CO5	Understanding to Implement, evaluate and generate reports.

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Thanjavur – 5.

Department of Computer Applications

PROGRAM OUTCOME
&
COURSE OUTCOME

2019-2020

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Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

Department of Computer Applications (2019-2020)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - PROGRAMMING IN C (16SCCCA1)

COURSE OUTCOME

CO1	Defines the concept of C programming and it's fundamental
CO2	Managing I/O operations , various control statements and looping statements.
CO3	Understanding Arrays , Strings and User defined Functions.
CO4	Differentiate Structures and unions. Defines Pointer concepts and File management
CO5	Explain the uses of pre-processors, memory allocation and Programming Guide lines.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	3
CO2	1	0	2	2	0
CO3	2	1	3	2	1
CO4	2	0	2	2	2
CO5	3	1	1	1	1
Average	2.2	0.6	2	0.6	1.4

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Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AARTHI. R	CB19S 258636	4	4	4	4	4	20	80
2	ABISHEK. M	CB19S 258637	4	3	4	4	4	19	76
3	ALWIN. C	CB19S 258638	4	4	4	4	4	20	80
4	ANAND. V	CB19S 258639	4	3	4	3	4	18	72
5	ASWIN. K	CB19S 258640	5	5	5	5	5	25	100
6	ASWIN. U	CB19S 258641	4	3	4	3	4	18	72
7	BALAGURUMOORTHY. V	CB19S 258642	2	2	2	2	2	10	40
8	BHARATHI. K	CB19S 258643	5	4	5	5	5	24	96
9	BOSE ARASAN. A	CB19S 258644	4	3	4	4	4	19	76
10	CHANDRU. M	CB19S 258645	4	3	4	3	4	18	72
11	DHINAKAR.M	CB19S 258646	3	4	3	4	4	18	72
12	DILIP. P	CB19S 258647	4	3	4	4	4	19	76
13	DURAIYARASAN. M	CB19S 258648	4	3	3	3	3	16	64
14	GANESH KUMAR. R	CB19S 258649	4	3	4	3	4	18	72
15	GAYATHRI. L	CB19S 258650	5	5	5	5	4	24	96
16	GOWTHAM. K	CB19S 258651	4	3	3	3	3	16	64
17	HARISH. S	CB19S 258652	2	2	2	2	2	10	40
18	JAYA VIGNESH. S	CB19S 258653	4	4	4	4	4	20	80
19	KAMALRAJ. S	CB19S 258654	5	5	5	5	4	24	96
20	KAMESHWARAN. K	CB19S 258655	4	4	4	4	4	20	80

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21	KARTHIK.K	CB19S 258656	4	4	4	4	4	20	80
22	KARTHIKEYAN. R	CB19S 258657	3	2	2	2	2	11	44
23	KARUNASVARAN. M	CB19S 258658	5	4	4	4	4	21	84
24	KESAVAN. S	CB19S 258659	4	3	3	4	4	18	72
25	KESAVAN. V	CB19S 258660	5	5	5	5	4	24	96
26	MANIKANDAN. U	CB19S 258661	4	4	3	4	4	19	76
27	MANO BHARATHI. B	CB19S 258662	4	3	4	3	4	18	72
28	MATHIVANAN. R	CB19S 258663	4	3	3	4	3	17	68
29	MITHRAN. S B	CB19S 258664	4	3	4	4	3	18	72
30	MOHAMED FAYAZ. S	CB19S 258665	4	4	3	4	4	19	76
31	MOHAMMAD AZHARUDDIN. S	CB19S 258666	4	3	4	3	4	18	72
32	NATHIYA. S	CB19S 258667	5	5	5	5	4	24	96
33	NITHEESH. N	CB19S 258668	3	3	3	3	3	15	60
34	RAJARAJAN. S	CB19S 258669	4	3	4	3	4	18	72
35	RAJESH. R	CB19S 258670	3	3	3	3	3	15	60
36	RAMANI. N	CB19S 258671	2	2	2	2	2	10	40
37	SANKAR. N	CB19S 258672	4	3	3	4	4	18	72
38	SANTHOSH. N	CB19S 258673	4	4	4	3	3	18	72
39	SANTHOSHKUMAR. S	CB19S 258674	4	3	3	3	4	17	68
40	SARAN. S	CB19S 258675	4	4	4	4	4	20	80
41	SHAFIK. S	CB19S 258676	5	5	5	5	4	24	96

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42	SILAMBARASAN. N	CB19S 258677	4	4	4	3	4	19	76
43	SIVAGURUNATHAN. R	CB19S 258678	4	3	4	4	4	19	76
44	SIVARANJANI. P	CB19S 258679	5	5	5	5	4	24	96
45	SRIHARAN. S	CB19S 258680	4	3	4	4	4	19	76
46	SRIKANTH. M	CB19S 258681	4	4	3	4	3	18	72
47	SRINITHAN. S	CB19S 258682	4	3	4	4	4	19	76
48	SUBHA. K	CB19S 258683	5	4	5	5	5	24	96
49	SUBITSHA. S	CB19S 258684	5	5	5	5	4	24	96
50	SUBRAMANIYAN. K	CB19S 258685	4	3	3	4	4	18	72
51	SURYARAJ. S	CB19S 258686	4	3	4	3	3	17	68
52	SUVEDHAN. E	CB19S 258687	5	5	5	4	4	23	92
53	SWETHA. S	CB19S 258688	5	5	5	4	5	24	96
54	THIRUSELVI. M	CB19S 258689	5	5	5	5	4	24	96
55	VEERAMANI. M	CB19S 258690	4	4	3	4	4	19	76
56	VEERAMANIKANDAN. D	CB19S 258691	4	3	4	4	4	19	76
57	VICTOR VIMALRAJ. M	CB19S 258692	4	4	4	4	4	20	80
58	VIJAY. S	CB19S 258693	5	4	4	4	4	21	84
59	YOGARAJAN. R	CB19S 258694	4	3	4	3	4	18	72
60	YOGESH KUMAR. S	CB19S 258695	4	4	3	4	4	19	76
61	YUVAYOGI. V	CB19S 258696	4	4	4	4	4	20	80
		Average	4.081967213	3.62295082	3.836065574	3.786885246	3.786885246		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.08	75	79.08	93.0
CO2	3.62	75	78.62	92.5
CO3	3.84	75	78.84	92.8
CO4	3.79	75	78.79	92.7
CO5	3.79	75	78.79	92.7

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 61

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93
CO2	92.5
CO3	92.8
CO4	92.7
CO5	92.7

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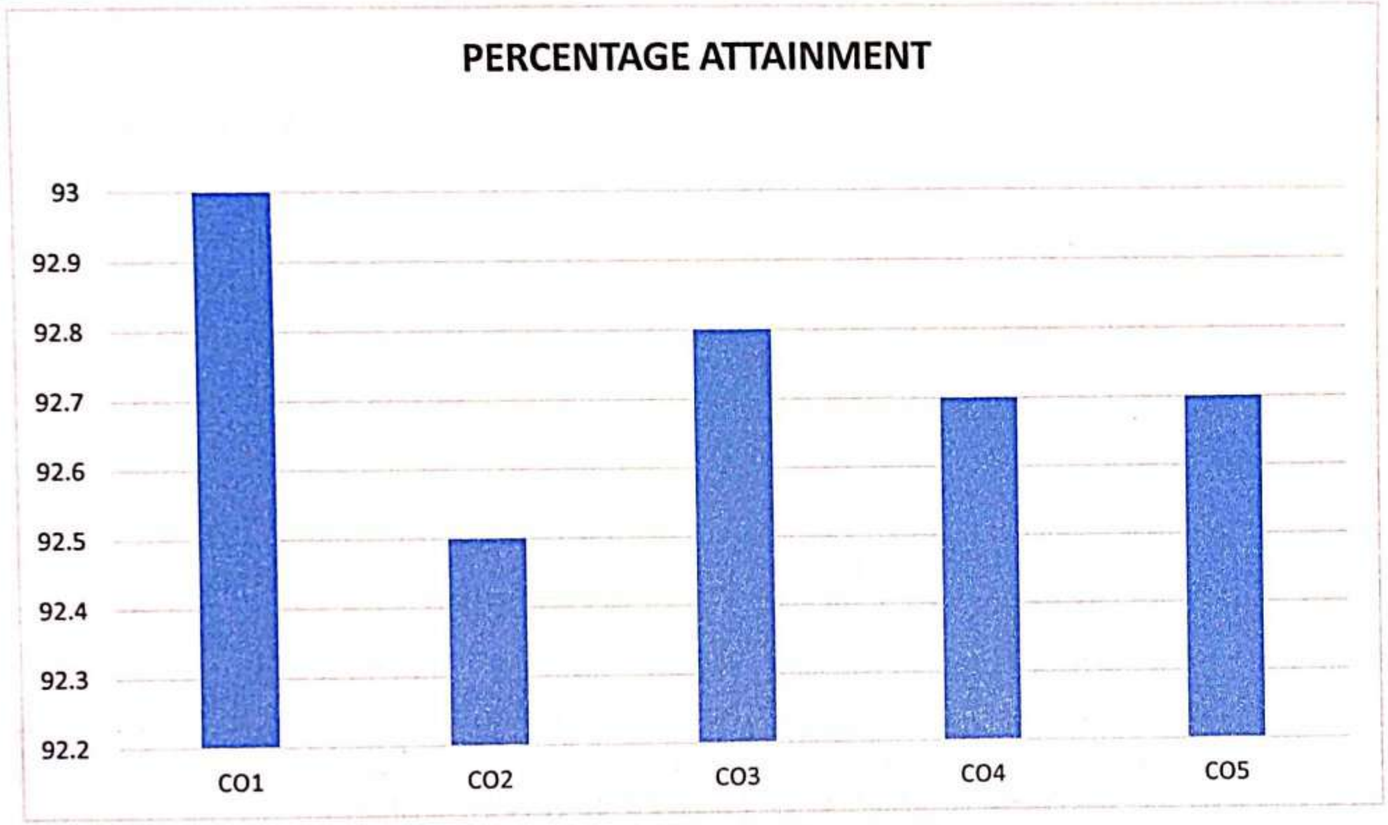

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COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 61

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	1	OUTSTANDING
80-89	3	EXCELLENT
70-79	5	DISTINCTION
60-69	9	VERY GOOD
50-59	21	GOOD
40-49	9	AVERAGE
0-39	13	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	1.79%	OUTSTANDING
80-89	5.36%	EXCELLENT
70-79	8.93%	DISTINCTION
60-69	16.07%	VERY GOOD
50-59	37.50%	GOOD
40-49	16.07%	AVERAGE
0-39	21.31%	REAPPEAR

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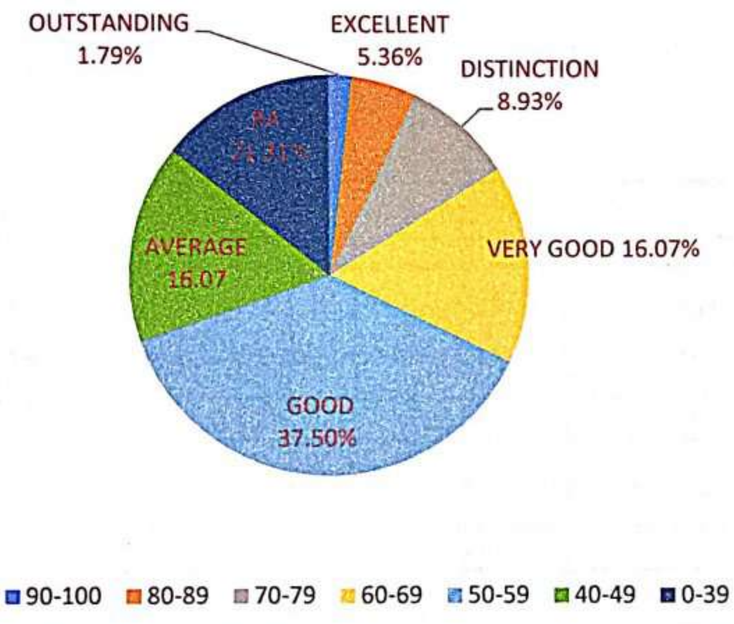
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - Computer Networks(16SCCCA8)

COURSE OUTCOME

CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference models
CO2	Defines Datalink layer services , Error detection and Error correction methods
CO3	Explain Network layer basics and routing algorithms
CO4	Understanding TCP features and congestion control
CO5	Enable to work with Application layer www, e-mail and DNS

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	2	2	1	3	1
CO2	3	2	2	2	2
CO3	3	2	2	3	2
CO4	2	2	2	2	1
CO5	3	1	2	2	2
Average	2.6	1.8	1.8	2.4	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	5	5	5	5	25	100
2	ABDULLA. A	CB17S 249688	5	4	4	5	5	23	92
3	AJITHKUMAR. A(12/9/2000)	CB17S 249689	5	4	5	4	4	22	88
4	ALENRAFIN. D	CB17S 249691	5	5	4	5	5	24	96
5	ANAND. R	CB17S 249693	5	4	5	4	5	23	92
6	ARAVINDH. M	CB17S 249694	5	5	4	5	4	23	92
7	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
8	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
9	ASWIN. K	CB17S 249698	5	4	5	4	5	23	92
10	BARATHVAJ. D	CB17S 249699	5	5	4	5	5	24	96
11	CHARLES .S	CB17S 249700	5	5	4	5	4	23	92
12	DHARMARAJ. N	CB17S 249701	5	4	5	4	5	23	92
13	DINESH. M	CB17S 249702	5	5	4	4	4	22	88
14	ELAVARASAN. R	CB17S 249703	5	4	4	5	5	23	92
15	GAYATHREE. J	CB17S 249704	5	5	5	5	5	25	100
16	GOWTHAM. M	CB17S 249705	5	4	5	5	5	24	96
17	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100
18	HARI KRISHNAN. P	CB17S 249707	5	5	4	5	4	23	92

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19	HARIHARAN. M	CB17S 249708	5	5	4	5	5	24	96
20	JANAKIPARKAVI. S	CB17S 249709	5	5	5	5	5	25	100
21	JAYASURIYA. V	CB17S 249710	5	4	5	5	5	24	96
22	KALAIVANAN. S	CB17S 249711	5	5	4	5	4	23	92
23	KISHORERAJ. S	CB17S 249714	5	5	5	5	5	25	100
24	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
25	MADHANA GOPAL.K	CB17S 249716	5	4	4	5	5	23	92
26	MANIKANDAN .R	CB17S 249717	5	5	5	4	5	24	96
27	MANIKANDAN. P	CB17S 249718	4	4	4	4	4	20	80
28	MANIKANDAN. V	CB17S 249719	5	4	4	5	5	23	92
29	MANIKANDAPRABU. M	CB17S 249720	5	5	5	4	5	24	96
30	MANOJ. M	CB17S 249721	5	5	5	5	4	24	96
31	MOHAN KUMAR .M	CB17S 249722	5	5	4	5	5	24	96
32	MUTHURAMAN. K	CB17S 249723	5	5	5	5	4	24	96
33	PRAMATHI. K	CB17S 249724	5	5	5	5	5	25	100
34	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
35	VINITHA. J	CB17S 249726	5	4	4	5	5	23	92
36	KANNADHASAN.G	CB17S 249727	4	4	4	4	4	20	80
37	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100

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38	MAHESHWARI. A	CB17S 249729	5	4	4	5	5	23	92
39	NITHIYANAND. S	CB17S 249732	5	5	5	4	5	24	96
40	PARAMESWARAN. K	CB17S 249734	5	5	5	5	4	24	96
41	PETER. H	CB17S 249735	5	5	5	5	5	25	100
42	PRADHEESH.P	CB17S 249736	5	4	5	4	5	23	92
43	PRAGADEESH. D	CB17S 249737	5	5	5	5	5	25	100
44	PRAGADEESH. P	CB17S 249738	5	5	5	5	5	25	100
45	PRAKASH .G	CB17S 249739	5	5	5	5	4	24	96
46	PRAVIN. R	CB17S 249740	5	4	5	5	5	24	96
47	PRIYANGA. S	CB17S 249741	5	5	4	5	5	24	96
48	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
49	RAJESH. R	CB17S 249743	5	4	5	4	5	23	92
50	RAM. A.V	CB17S 249744	5	5	5	5	5	25	100
51	RAMANI .S	CB17S 249745	5	4	5	4	5	23	92
52	RANJITHKUMAR .M	CB17S 249746	5	5	4	5	5	24	96
53	RUBINIKOLASH G	CB17S 249747	5	5	5	5	5	25	100
54	SABARIVASAN. S	CB17S 249748	5	4	5	5	4	23	92
55	SANJIVI. S	CB17S 249749	5	5	5	4	5	24	96
56	SANTHOSHI .M	CB17S 249750	5	5	5	5	5	25	100

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57	SANTHOSHKUMAR. P	CB17S 249751	5	5	5	5	5	25	100
58	SARAN. R	CB17S 249752	5	5	5	5	5	25	100
59	SARAVANAN .N	CB17S 249753	5	4	5	5	5	24	96
60	SURESH. A	CB17S 249754	5	5	5	5	5	25	100
61	SURIYA. B	CB17S 249755	5	4	5	4	5	23	92
62	VASANTH .A	CB17S 249757	5	5	5	5	5	25	100
63	VEERAMANI. R	CB17S 249758	5	5	4	5	4	23	92
64	VEERARAJ. K	CB17S 249759	5	4	4	5	5	23	92
65	VENKATESWARAN. S	CB17S 249760	5	5	5	5	5	25	100
66	VIDHYA .S	CB17S 249761	5	5	4	5	5	24	96
67	VIGNESH. J	CB17S 249762	4	4	4	4	4	20	80
68	VIJAY. M	CB17S 249763	5	4	5	5	5	24	96
69	VIJAYAKANTH. P	CB17S 249764	5	5	4	5	4	23	92
70	VIKRAM. M	CB17S 249765	5	4	4	5	5	23	92
71	YOGESHRAM .B	CB17S 249767	5	5	4	5	4	23	92
72	YUVARAJ. P	CB17S 249768	5	4	5	5	5	24	96
73	VETRISELVI.S	CB17S 249769	5	5	5	5	5	25	100
		Average	4.95890411	4.643835616	4.643835616	4.780821918	4.767123288		

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Expected Attainment in each CO - 85%

	Int. Exam + Assignment	End Sem	Total	%
CO1	4.96	75	79.96	94.1
CO2	4.64	75	79.64	93.7
CO3	4.64	75	79.64	93.7
CO4	4.78	75	79.78	93.9
CO5	4.77	75	79.77	93.8

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS

SUBJECT CODE : 16SCCCA8

NO.OF STUDENTS : 73

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.1
CO2	93.7
CO3	93.7
CO4	93.9
CO5	93.8

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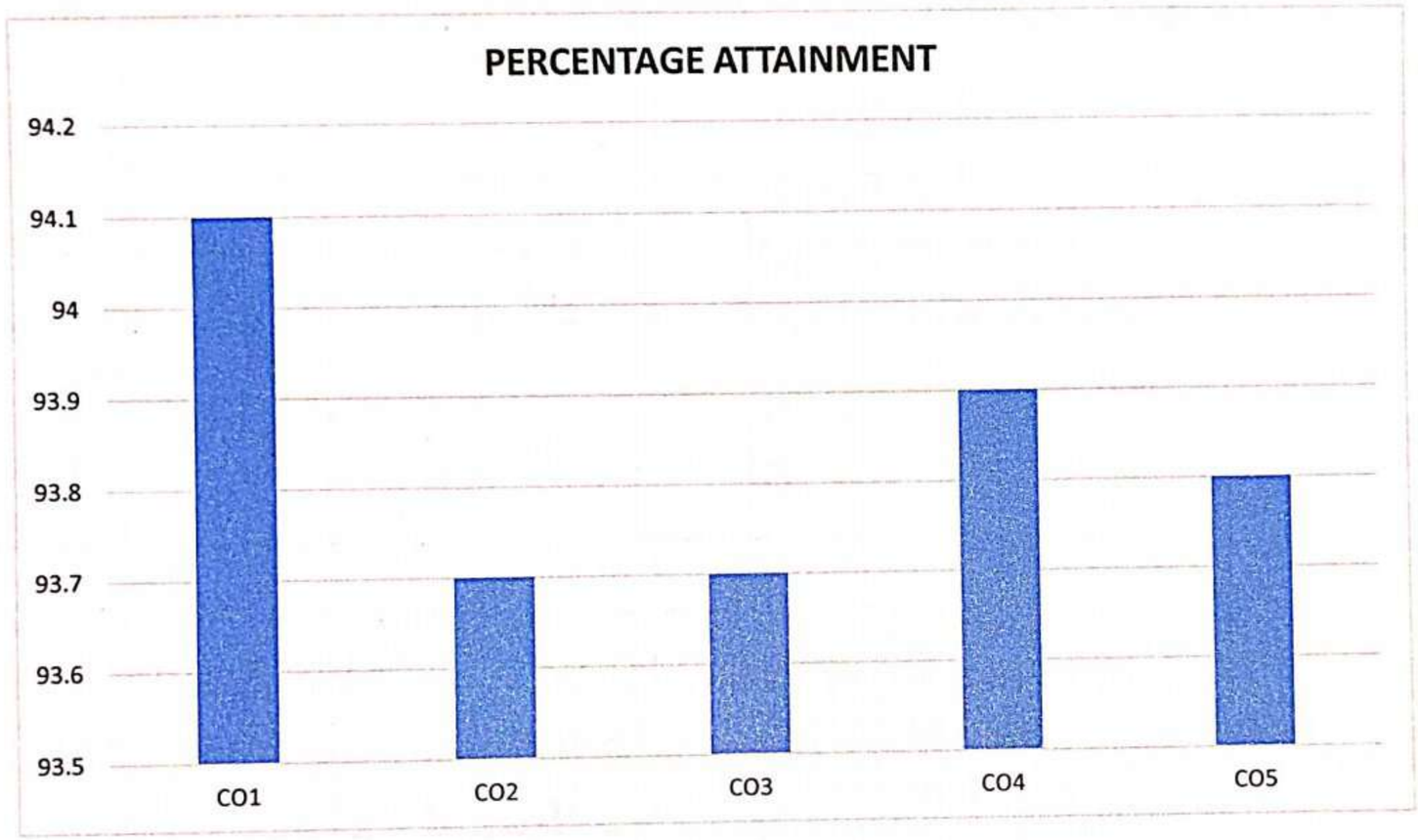

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COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
91-100	5	OUTSTANDING
80-89	17	EXCELLENT
70-79	28	DISTINCTION
60-69	20	VERY GOOD
50-59	2	GOOD
40-49	0	AVERAGE
0-39	1	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
91-100	6.94	OUTSTANDING
80-89	23.61	EXCELLENT
70-79	38.89	DISTINCTION
60-69	27.78	VERY GOOD
50-59	2.78	GOOD

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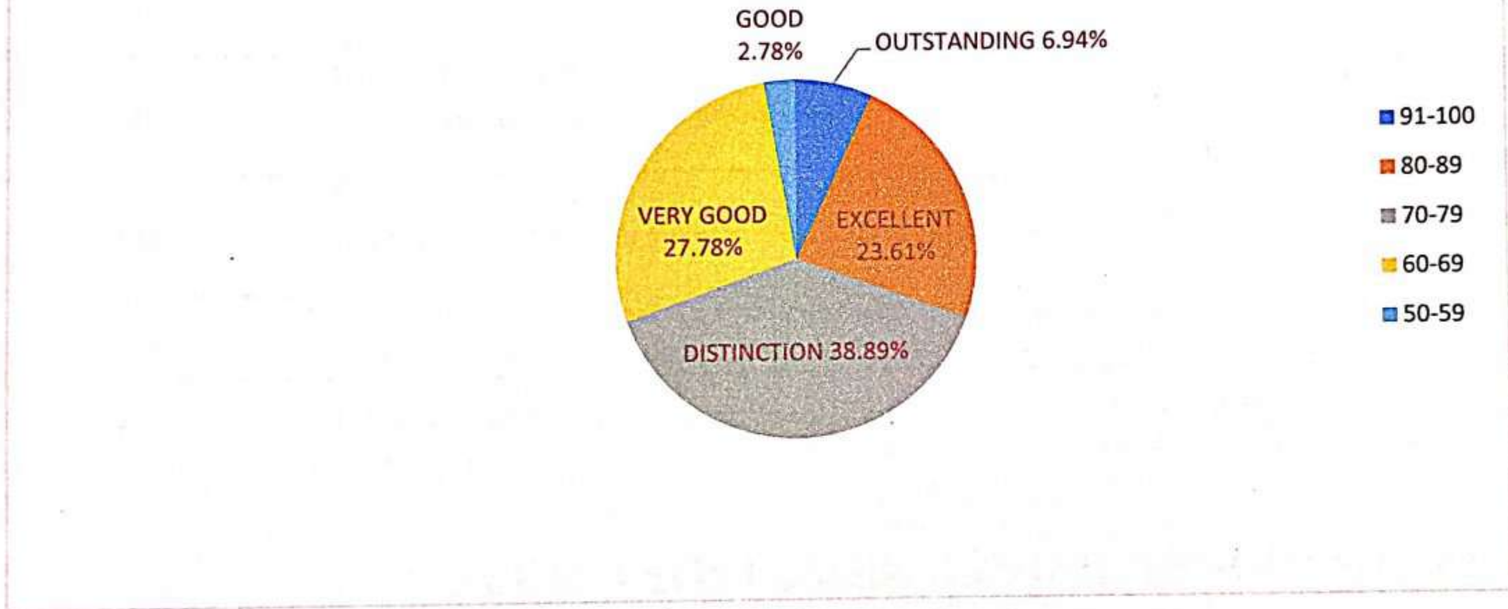
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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PRINCIPAL
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Bharath Avenue (Near New Bus Stand)
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(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.

Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - SOFTWARE ENGINEERING(16SMBECA1:2)

COURSE OUTCOME

CO1	Plan a software engineering process life cycle .
CO2	Able to elicit, analyze and specify software requirements with various stakeholders of the project.
CO3	Analyze and translate a specification into a design using an appropriate software engineering methodology.
CO4	Know how to develop the code from the design.
CO5	Able to use modern engineering tools necessary for software project management, time management and software reuse.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	0

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	5	5	5	4	24	96
2	AATHISH.A	CB17S 249686	4	3	4	3	4	18	72
3	ABDULLA. A	CB17S 249688	5	5	4	5	4	23	92
4	AJITHKUMAR.A(12.9.2000)	CB17S 249689	4	4	4	4	4	20	80
5	ALENRAFIN. D	CB17S 249691	5	4	5	5	5	24	96
6	ANAND. R	CB17S 249693	4	4	4	4	4	17	68
7	ARAVINDH. M	CB17S 249694	4	4	4	4	4	19	76
8	ARAVINDH. R	CB17S 249695	4	4	4	4	4	16	64
9	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
10	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
11	ASWIN. K	CB17S 249698	4	4	4	4	4	20	80
12	BARATHVAJ. D	CB17S 249699	4	4	4	4	4	20	80
13	CHARLES .S	CB17S 249700	4	3	4	3	4	18	72
14	DHARMARAJ. N	CB17S 249701	4	3	3	3	3	16	64
15	DINESH. M	CB17S 249702	3	3	3	3	4	16	64
16	ELAVARASAN. R	CB17S 249703	5	4	4	4	4	21	84
17	GAYATHREE. J	CB17S 249704	5	4	5	4	5	23	92
18	GOWTHAM. M	CB17S 249705	5	5	5	4	5	24	96

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19	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100
20	HARI KRISHNAN. P	CB17S 249707	4	4	3	4	4	19	76
21	HARIHARAN. M	CB17S 249708	5	5	4	5	4	23	92
22	JANAKIPARKAVI. S	CB17S 249709	5	5	5	4	5	24	96
23	JAYASURIYA. V	CB17S 249710	4	4	4	4	4	20	80
24	KALAIVANAN. S	CB17S 249711	4	3	4	4	4	19	76
25	KISHORERAJ. S	CB17S 249714	5	4	5	4	4	22	88
26	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
27	MADHANA GOPAL.K	CB17S 249716	5	5	5	5	5	25	100
28	MANIKANDAN .R	CB17S 249717	5	4	5	4	4	22	88
29	MANIKANDAN. P	CB17S 249718	5	4	4	4	4	21	84
30	MANIKANDAN. V	CB17S 249719	4	5	4	4	4	21	84
31	MANIKANDAPRABU. M	CB17S 249720	4	3	4	3	3	17	68
32	MANOJ. M	CB17S 249721	3	4	3	4	4	18	72
33	MOHAN KUMAR .M	CB17S 249722	4	3	4	3	3	17	68
34	MUTHURAMAN. K	CB17S 249723	5	4	5	4	5	22	88
35	PRAMATHI. K	CB17S 249724	5	5	5	4	5	24	96
36	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
37	VINITHA. J	CB17S 249726	5	4	5	4	4	22	88
38	KANNADHASAN.G	CB17S 249727	4	3	4	3	3	17	68

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39	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100
40	MAHESHWARI. A	CB17S 249729	3	4	3	4	4	18	72
41	NITHIYANAND. S	CB17S 249732	4	5	4	4	4	21	84
42	PARAMESWARAN. K	CB17S 249734	4	3	4	3	3	17	68
43	PETER. H	CB17S 249735	5	5	5	5	5	25	100
44	PRADHEESH.P	CB17S 249736	5	4	5	4	5	22	88
45	PRAGADEESH. D	CB17S 249737	4	3	4	3	3	17	68
46	PRAGADEESH. P	CB17S 249738	5	5	5	4	5	24	96
47	PRAKASH .G	CB17S 249739	5	5	4	5	5	24	96
48	PRAVIN. R	CB17S 249740	5	5	5	4	5	24	96
49	PRIYANGA. S	CB17S 249741	4	5	4	4	4	21	84
50	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
51	RAJESH. R	CB17S 249743	4	3	4	3	3	17	68
52	RAM. A.V	CB17S 249744	5	4	4	4	4	21	84
53	RAMANI .S	CB17S 249745	4	5	4	4	4	21	84
54	RANJITHKUMAR .M	CB17S 249746	3	4	3	4	4	18	72
55	RUBINIKOLASH G	CB17S 249747	5	5	4	5	4	23	92
56	SABARIVASAN. S	CB17S 249748	5	5	5	4	5	24	96
57	SANJIVI. S	CB17S 249749	5	5	4	5	4	23	92
58	SANTHOSHI .M	CB17S 249750	5	5	5	4	5	24	96

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59	SANTHOSHKUMAR. P	CB17S 249751	5	4	5	5	4	23	92
60	SARAN. R	CB17S 249752	5	5	4	5	4	23	92
61	SARAVANAN .N	CB17S 249753	5	4	5	4	5	22	88
62	SURESH. A	CB17S 249754	5	5	5	4	5	24	96
63	SURIYA. B	CB17S 249755	4	4	3	4	4	19	76
64	VASANTH .A	CB17S 249757	5	4	4	4	4	21	84
65	VEERAMANI. R	CB17S 249758	4	4	4	4	4	20	80
66	VEERARAJ. K	CB17S 249759	4	4	3	4	4	19	76
67	VENKATESWARAN. S	CB17S 249760	5	5	5	4	5	24	96
68	VIDHYA .S	CB17S 249761	5	4	5	4	4	22	88
69	VIGNESH. J	CB17S 249762	4	5	4	4	4	21	84
70	VIJAY. M	CB17S 249763	5	5	5	4	5	24	96
71	VIJAYAKANTH. P	CB17S 249764	5	5	4	4	4	22	88
72	VIKRAM. M	CB17S 249765	4	4	3	4	4	19	76
73	YOGESHRAM .B	CB17S 249767	5	4	4	4	4	21	84
74	YUVARAJ. P	CB17S 249768	4	4	3	4	4	19	76
75	VETRISELVI.S	CB17S 249769	5	4	5	4	4	22	88
Average			4.52	4.28	4.28	4.11	4.24		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.52	75	79.52	93.6
CO2	4.28	75	79.28	93.3
CO3	4.28	75	79.28	93.3
CO4	4.11	75	79.11	93.1
CO5	4.24	75	79.24	93.2

COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT CODE : 16SMBECA1:2

SUBJECT NAME : SOFTWARE ENGINEERING

NO OF STUDENTS : 75

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.6
CO2	93.3
CO3	93.3
CO4	93.1
CO5	93.2

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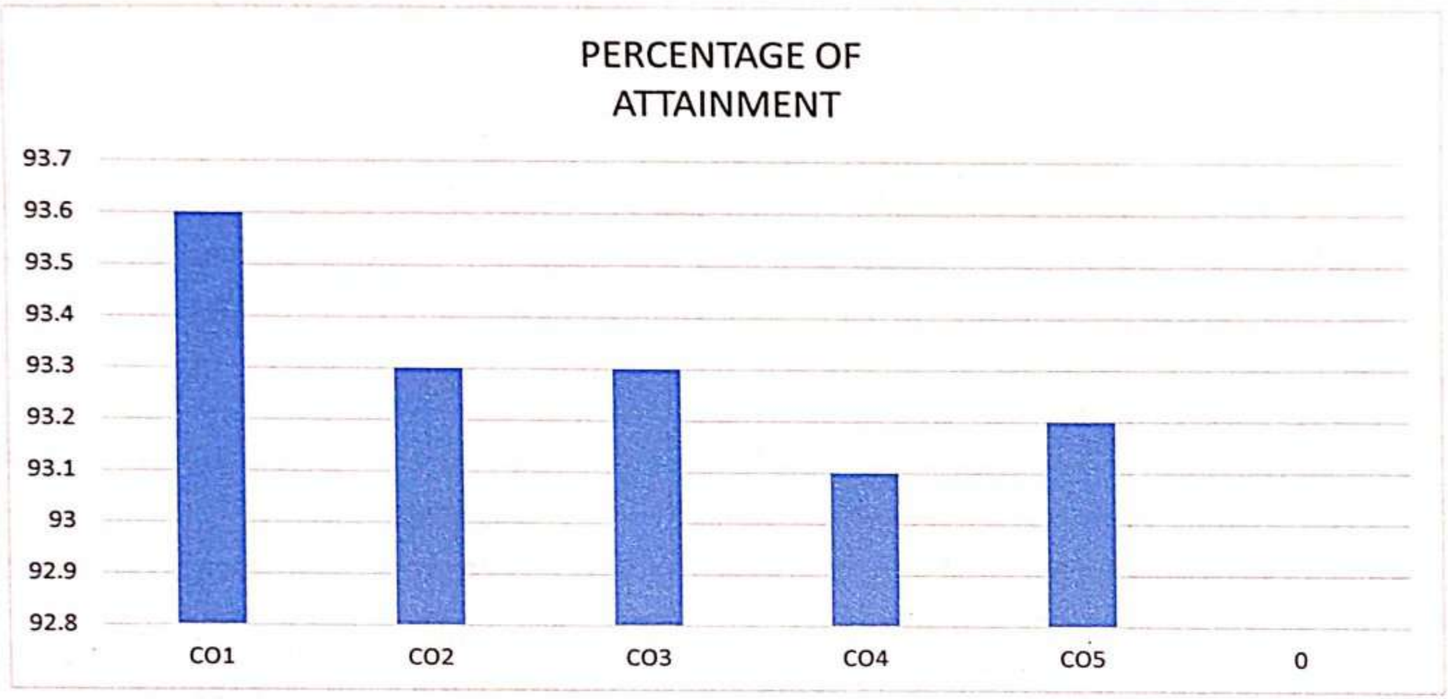

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT CODE : 16SMBECA1:2

SUBJECT NAME : SOFTWARE ENGINEERING

NO OF STUDENTS : 75

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
91-100	1	OUTSTANDING
80-89	2	EXCELLENT
70-79	1	DISTINCTION
60-69	26	VERY GOOD
50-59	18	GOOD
40-49	7	AVERAGE
0-39	20	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
91-100	1.43%	OUTSTANDING
80-89	2.86%	EXCELLENT
70-79	1.43%	DISTINCTION
60-69	37.14%	VERY GOOD
50-59	25.71%	GOOD
40-49	10%	AVERAGE
0-39	21.43%	REAPPEAR

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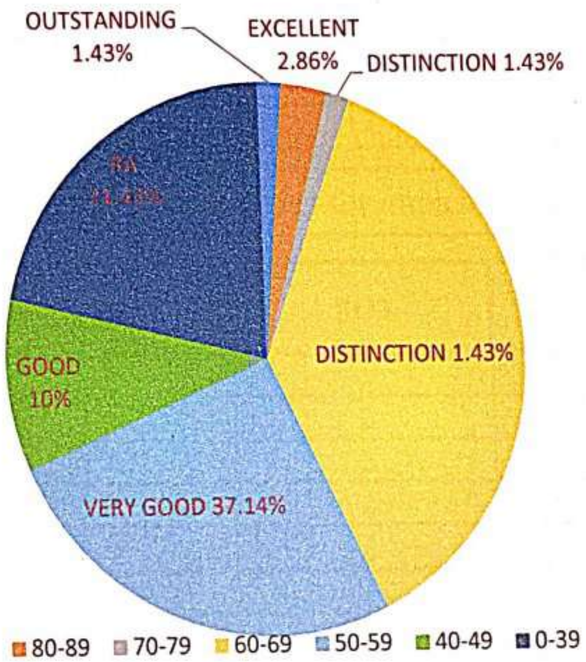
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - CLOUD COMPUTING(16SMBECA2:1)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Understand the importance of virtualization in distributed computing and how this has enabled the development of Cloud Computing
CO3	Implement different cloud storage technologies and Service Oriented cloud systems
CO4	Understand the key security and compliance challenges of cloud computing
CO5	Choose among various cloud technologies for implementing applications

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	1	3
CO2	2	2	2	2	2
CO3	3	2	2	1	2
CO4	3	2	2	2	1
CO5	2	1	2	2	2
Average	2.6	1.8	1.8	1.6	2

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	5	5	5	5	25	100
2	ABDULLA. A	CB17S 249688	5	4	5	4	5	23	92
3	AJITHKUMAR.A(12.9.2000)	CB17S 249689	4	5	4	5	4	22	88
4	ALENRAFIN. D	CB17S 249691	5	4	5	5	5	24	96
5	ANAND. R	CB17S 249693	5	5	4	5	4	23	92
6	ARAVINDH. M	CB17S 249694	5	4	5	4	5	23	92
7	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
8	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
9	ASWIN. K	CB17S 249698	5	4	5	5	5	24	96
10	BARATHVAJ. D	CB17S 249699	5	5	4	5	4	23	92
11	CHARLES .S	CB17S 249700	5	4	5	4	5	23	92
12	DHARMARAJ. N	CB17S 249701	4	5	4	5	5	23	92
13	DINESH. M	CB17S 249702	5	4	5	4	4	22	88
14	ELAVARASAN. R	CB17S 249703	5	5	4	5	5	24	96
15	GAYATHREE. J	CB17S 249704	5	5	5	5	5	25	100
16	GOWTHAM. M	CB17S 249705	4	5	5	5	5	24	96
17	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100

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18	HARI KRISHNAN. P	CB17S 249707	5	4	5	4	5	23	92
19	HARIHARAN. M	CB17S 249708	5	5	4	5	4	23	92
20	JANAKIPARKAVI. S	CB17S 249709	5	5	5	5	5	25	100
21	JAYASURIYA. V	CB17S 249710	4	5	5	5	5	24	96
22	KALAIVANAN. S	CB17S 249711	5	4	5	4	5	23	92
23	KISHORERAJ. S	CB17S 249714	5	5	5	5	5	25	100
24	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
25	MADHANA GOPAL.K	CB17S 249716	5	5	4	5	4	23	92
26	MANIKANDAN .R	CB17S 249717	4	5	5	5	5	24	96
27	MANIKANDAN. P	CB17S 249718	4	4	4	4	4	20	80
28	MANIKANDAN. V	CB17S 249719	5	4	5	5	5	24	96
29	MANIKANDAPRABU. M	CB17S 249720	5	5	4	5	5	24	96
30	MANOJ. M	CB17S 249721	5	4	5	4	5	23	92
31	MOHAN KUMAR .M	CB17S 249722	4	5	5	5	5	24	96
32	MUTHURAMAN. K	CB17S 249723	5	5	4	5	5	24	96
33	PRAMATHI. K	CB17S 249724	5	5	5	5	5	25	100
34	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
35	VINITHA. J	CB17S 249726	5	4	5	4	5	23	92
36	KANNADHASAN.G	CB17S 249727	4	4	4	4	4	20	80
37	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100

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38	MAHESHWARI. A	CB17S 249729	5	5	4	5	4	23	92
39	NITHIYANAND. S	CB17S 249732	5	4	5	5	5	24	96
40	PARAMESWARAN. K	CB17S 249734	4	5	5	5	5	24	96
41	PETER. H	CB17S 249735	5	5	5	5	5	25	100
42	PRADHEESH.P	CB17S 249736	5	4	5	4	5	23	92
43	PRAGADEESH. D	CB17S 249737	5	5	5	5	5	25	100
44	PRAGADEESH. P	CB17S 249738	5	5	5	5	5	25	100
45	PRAKASH .G	CB17S 249739	4	5	4	5	5	23	92
46	PRAVIN. R	CB17S 249740	5	5	5	5	4	24	96
47	PRIYANGA. S	CB17S 249741	5	5	5	5	5	25	100
48	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
49	RAJESH. R	CB17S 249743	5	4	5	4	5	23	92
50	RAM. A.V	CB17S 249744	5	5	5	5	5	25	100
51	RAMANI .S	CB17S 249745	5	4	5	5	4	23	92
52	RANJITHKUMAR .M	CB17S 249746	5	5	5	4	5	24	96
53	RUBINIKOLASH G	CB17S 249747	5	5	5	5	5	25	100
54	SABARIVASAN. S	CB17S 249748	5	5	4	5	5	24	96
55	SANJIVI. S	CB17S 249749	5	4	5	5	5	24	96
56	SANTHOSHI .M	CB17S 249750	5	5	5	5	5	25	100
57	SANTHOSHKUMAR. P	CB17S 249751	5	5	5	5	5	25	100

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58	SARAN. R	CB17S 249752	5	5	5	5	5	25	100
59	SARAVANAN .N	CB17S 249753	4	5	5	5	5	24	96
60	SURESH. A	CB17S 249754	5	5	5	5	5	25	100
61	SURIYA. B	CB17S 249755	5	4	5	4	5	23	92
62	VASANTH .A	CB17S 249757	5	5	5	5	5	25	100
63	VEERAMANI. R	CB17S 249758	5	5	4	5	4	23	92
64	VEERARAJ. K	CB17S 249759	5	4	5	4	4	22	88
65	VENKATESWARAN. S	CB17S 249760	5	5	5	5	5	25	100
66	VIDHYA .S	CB17S 249761	5	5	5	5	4	24	96
67	VIGNESH. J	CB17S 249762	4	4	4	4	4	20	80
68	VIJAY. M	CB17S 249763	5	5	4	4	5	23	92
69	VIJAYAKANTH. P	CB17S 249764	5	4	5	5	4	23	92
70	VIKRAM. M	CB17S 249765	4	5	4	5	4	22	88
71	YOGESHRAM .B	CB17S 249767	5	5	4	5	4	23	92
72	YUVARAJ. P	CB17S 249768	5	4	5	4	5	23	92
73	VETRISELVI.S	CB17S 249769	5	5	5	5	5	25	100
Average			4.82	4.68	4.74	4.75	4.75		

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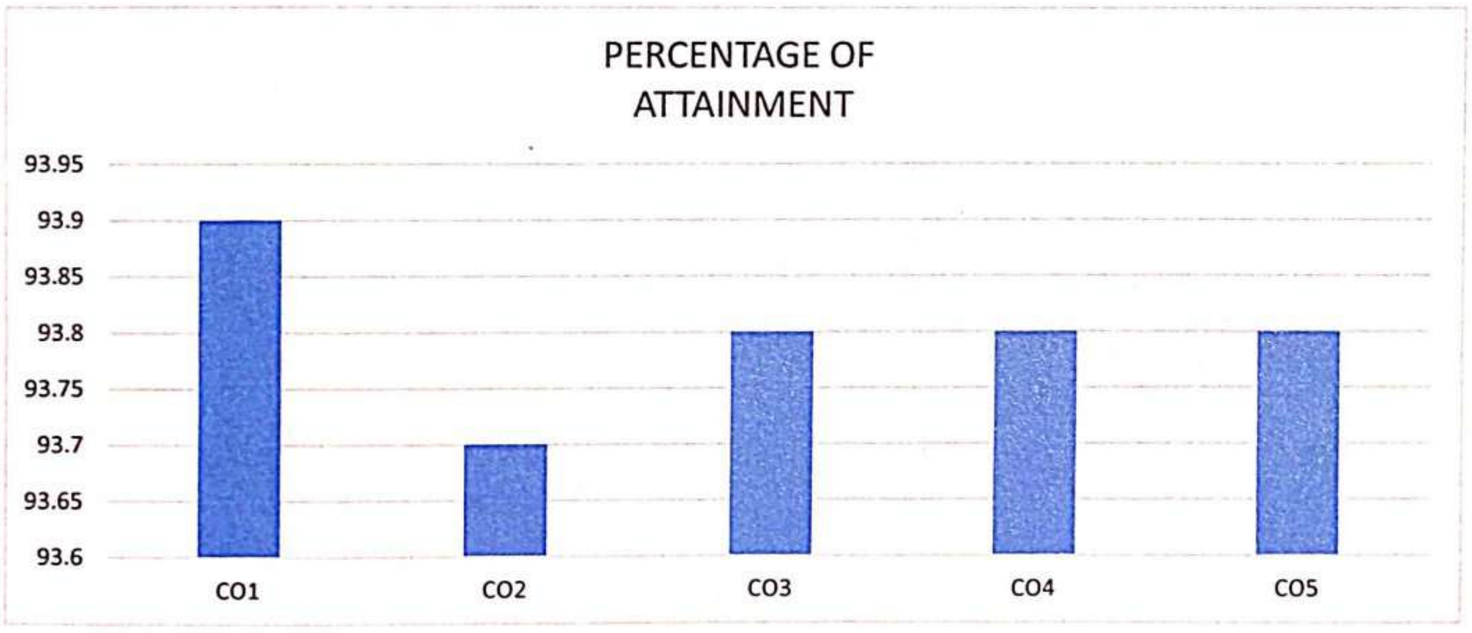
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.82	75	79.82	93.9
CO2	4.68	75	79.68	93.7
CO3	4.74	75	79.74	93.8
CO4	4.75	75	79.75	93.8
CO5	4.75	75	79.75	93.8

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.9
CO2	93.7
CO3	93.8
CO4	93.8
CO5	93.8



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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT CODE : 16SMBECA2:1

SUBJECT NAME : CLOUD COMPUTING

NO OF STUDENTS : 73

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
91-100	5	OUTSTANDING
80-89	10	EXCELLENT
70-79	28	DISTINCTION
60-69	22	VERY GOOD
50-59	8	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
91-100	6.85%	OUTSTANDING
80-89	13.70%	EXCELLENT
70-79	38.36%	DISTINCTION
60-69	30.14%	VERY GOOD
50-59	10.96%	GOOD

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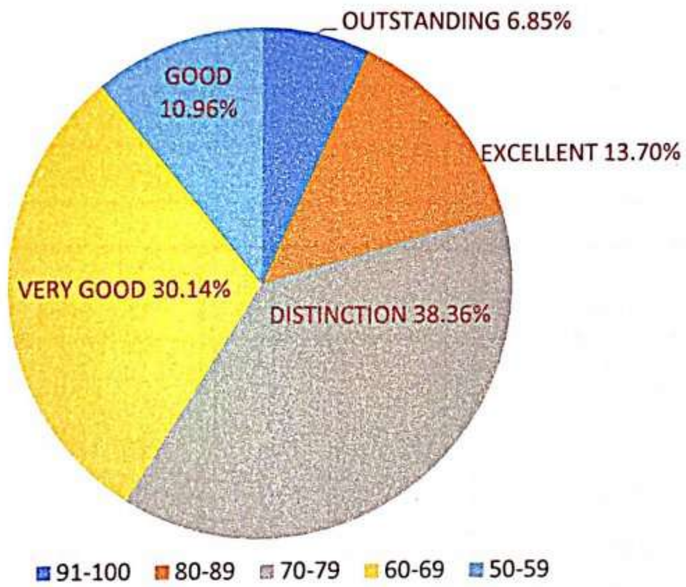
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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Bharath Avenue (Near New Bus Stand)
THANJ... 05.

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT Near New Bus Stand, THANJAVUR-5

COURSE - PROGRAMMING IN JAVA(16SCCCA3)

COURSE OUTCOME

CO1	To acquire the programming skills with java.
CO2	To implement the object oriented concepts with java language
CO3	To understand the concepts of multithreading.
CO4	To learn the art of GUI programming with Applet.
CO5	To learn about Database connectivity.

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	2
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	3
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	1

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	4	4	3	4	4	19	76
2	AJITH. G	CB18S 254292	4	3	4	4	3	18	72
3	AKASH. R (26.02.2001)	CB18S 254293	3	3	3	3	3	15	60
4	AKASH. R (02.10.1998)	CB18S 254294	4	3	4	3	3	17	68
5	AKILAN. V	CB18S 254295	4	4	4	4	4	20	80
6	ARULARASAN. S	CB18S 254297	4	3	4	3	4	18	72
7	ARUNKUMAR. K.C	CB18S 254298	5	4	5	4	4	22	88
8	BASKAR. P	CB18S 254299	5	4	4	4	4	21	84
9	BHARATHKUMAR. B	CB18S 254300	5	5	5	4	4	23	92
10	BOOMINDHRA. R.N	CB18S 254301	4	4	4	3	4	19	76
11	CHANDRU. S	CB18S 254302	4	4	4	4	4	20	80
12	DANIEL. S	CB18S 254303	4	3	4	4	4	19	76
13	DEVENDHIRAN. P	CB18S 254304	4	4	4	4	4	20	80
14	DEVKANTH RAO. L	CB18S 254305	4	4	4	4	4	20	80
15	DHANUSIYA. D	CB18S 254306	5	5	5	5	5	25	100
16	DHIVAKAR. B	CB18S 254307	4	3	4	4	4	19	76
17	DINESHKUMAR. K	CB18S 254308	5	5	5	5	4	24	96

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18	DIVYESH. S	CB18S 254309	5	4	5	4	5	23	92
19	EZHIL. M	CB18S 254310	5	5	4	5	4	23	92
20	GOKUL. K	CB18S 254311	4	3	4	4	3	18	72
21	GOWTHAMAN. M	CB18S 254312	5	5	5	5	5	25	100
22	HARIHARASUTHAN. R	CB18S 254313	5	4	5	4	5	23	92
23	ISWARYA. A	CB18S 254314	4	4	4	4	4	20	80
24	JAMUNA. V	CB18S 254315	5	4	5	4	4	22	88
25	JANAKIRAMAN. V	CB18S 254316	4	4	4	4	4	20	80
26	JANANI. S	CB18S 254317	5	4	5	4	5	23	92
27	JAYA SUDHAN. S	CB18S 254318	3	3	3	3	3	15	60
28	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	5	4	24	96
29	KAMALESH. S	CB18S 254320	4	4	4	4	4	20	80
30	KARIKALAN. S	CB18S 254321	2	2	2	2	2	10	40
31	KARMUKILAN. R.R	CB18S 254322	4	4	4	4	4	20	80
32	KISHORE KUMAR. T	CB18S 254323	5	5	5	5	4	24	96
33	KRISHNAMOORTHY. P	CB18S 254324	5	4	5	4	4	22	88
34	KRITHIKA. R.S	CB18S 254325	5	4	4	4	4	21	84
35	KUZHANTHAIVEL. M	CB18S 254326	5	4	5	4	5	23	92
36	LOGESWAR. S	CB18S 254327	4	4	4	4	4	20	80

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37	LOHA PRIYA. C	CB18S 254328	5	5	5	5	4	24	96
38	LORDSON JEEVAPRIYAN. E	CB18S 254329	4	3	3	4	4	18	72
39	MAHALAKSHMI. M	CB18S 254330	4	4	4	3	4	19	76
40	MANIBHARATHI. R	CB18S 254331	3	3	3	3	3	15	60
41	MANIKANDAN..R	CB18S 254332	4	3	4	4	3	18	72
42	MATHESH. T	CB18S 254334	4	4	3	4	4	19	76
43	MOHAMED RIYAS. J	CB18S 254335	5	5	5	5	5	25	100
44	MOHAMED RIYASKHAN. S	CB18S 254336	5	5	5	4	5	24	96
45	MOSES PRABAKARAN. M	CB18S 254337	5	5	5	5	5	25	100
46	MUBARAK ALI. J	CB18S 254338	5	5	5	5	5	25	100
47	MUKILAN. S	CB18S 254339	5	5	5	5	4	24	96
48	ARNALD. S	CB18S 254340	5	4	5	4	5	23	92
49	BALAJI. K	CB18S 254341	5	5	4	5	4	23	92
50	KALIYARASAN. M	CB18S 254342	4	4	4	4	4	20	80
51	NITHISH KUMAR. A	CB18S 254343	4	3	4	4	4	19	76
52	OLI MOHAMED. A	CB18S 254344	4	4	3	4	4	19	76
53	PANDIYARAJAN. R	CB18S 254345	4	3	4	3	4	18	72
54	POOVARASAN. S	CB18S 254346	4	4	3	4	3	18	72
55	PRAGATHESWARAN. G	CB18S 254348	4	3	4	4	4	19	76

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56	PRAKASH. J	CB18S 254349	5	4	4	4	4	21	84
57	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	5	4	5	4	5	23	92
58	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	5	5	4	5	4	23	92
59	PREMNATH. S	CB18S 254352	4	4	4	4	4	20	80
60	RAGU. R	CB18S 254353	4	3	4	3	4	18	72
61	RAJASANKARI. A	CB18S 254354	5	5	5	5	4	24	96
62	RAJASRIRAM. K	CB18S 254355	4	3	4	4	4	19	76
63	RAMJI. H	CB18S 254356	5	5	5	5	4	24	96
64	RENGARAJ. M	CB18S 254357	5	5	4	4	5	23	92
65	SANGEETHA. G	CB18S 254358	5	5	5	5	5	25	100
66	SARAVANAN. A	CB18S 254359	4	4	4	4	4	20	80
67	SARAVANAN. P	CB18S 254360	5	4	4	4	4	21	84
68	SARAVASHREE. K	CB18S 254361	5	5	5	4	5	24	96
69	SATCHINKUMAR. G	CB18S 254362	5	5	5	5	5	25	100
70	SATHEESH KUMAR. M	CB18S 254363	4	3	4	4	4	19	76
71	SATHISH KUMAR. M	CB18S 254364	4	4	3	4	3	18	72
72	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	5	5	5	5	25	100
73	SIVA SANKARI. S	CB18S 254366	5	4	5	4	5	23	92
74	SIVA. S	CB18S 254367	5	5	5	5	4	24	96

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75	SRI GAYATHRI .N	CB18S 254368	5	5	5	5	5	25	100
76	SRINIVASAN. S	CB18S 254369	5	4	5	4	5	23	92
77	SUGANTHI. S	CB18S 254370	5	5	5	5	4	24	96
78	SUGUNESH. M	CB18S 254371	4	4	4	4	4	20	80
79	SUNDHAR. R	CB18S 254372	4	3	3	4	4	18	72
80	SURENDHAR. S	CB18S 254373	5	4	5	4	5	23	92
81	SURENTHIRANATH. N	CB18S 254374	4	5	5	5	4	23	92
82	SWATHI. G	CB18S 254375	5	5	5	4	5	24	96
83	VAIRAMUTHU. M	CB18S 254376	4	3	4	3	4	18	72
84	VASANTH. K	CB18S 254377	4	4	4	4	4	20	80
85	VENKATESAN. M	CB18S 254378	4	4	4	4	4	20	80
86	VIGNESH . S (03.05.2001)	CB18S 254379	5	4	5	4	5	23	92
87	VIGNESH. V	CB18S 254380	5	5	4	5	4	23	92
88	VIGNESH. R	CB18S 254381	4	4	4	4	4	25	100
89	VIGNESH.S (21.01.2001)	CB18S 254382	5	5	4	4	4	22	88
90	VISHALI. T	CB18S 254384	5	4	5	4	5	23	92
91	YOGESWARAN. C	CB18S 254385	4	3	4	3	4	18	72
92	YOKESH. S	CB18S 254386	4	4	4	4	4	20	80
Average			4.45	4.08	4.27	4.11	4.14		

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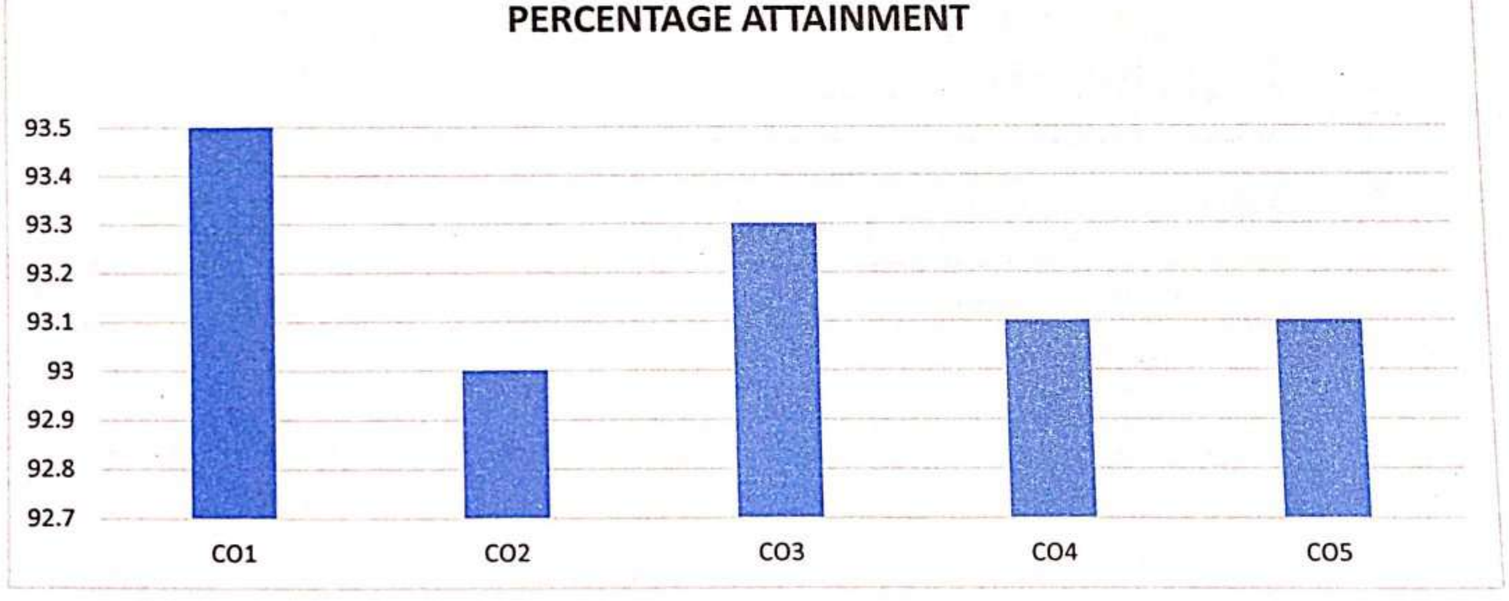
THANJAVUR-5.

Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.45	75	79.45	93.5
CO2	4.08	75	79.08	93.0
CO3	4.27	75	79.27	93.3
CO4	4.11	75	79.11	93.1
CO5	4.14	75	79.14	93.1

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.50
CO2	93
CO3	93.30
CO4	93.10
CO5	93.1



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

COURSE ATTAINMENT FOR BACHELOR OFCOMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA3

SUBJECT NAME : PROGRAMMING IN JAVA

NO OF STUDENTS : 90

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
90-100	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	12	DISTINCTION
60-69	13	VERY GOOD
50-59	32	GOOD
40-49	4	AVERAGE
0-39	29	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
70-79	13.33%	DISTINCTION
60-69	14.44%	VERY GOOD
50-59	35.26%	GOOD
40-49	4.44%	AVERAGE
0-39	32.22%	REAPPEAR

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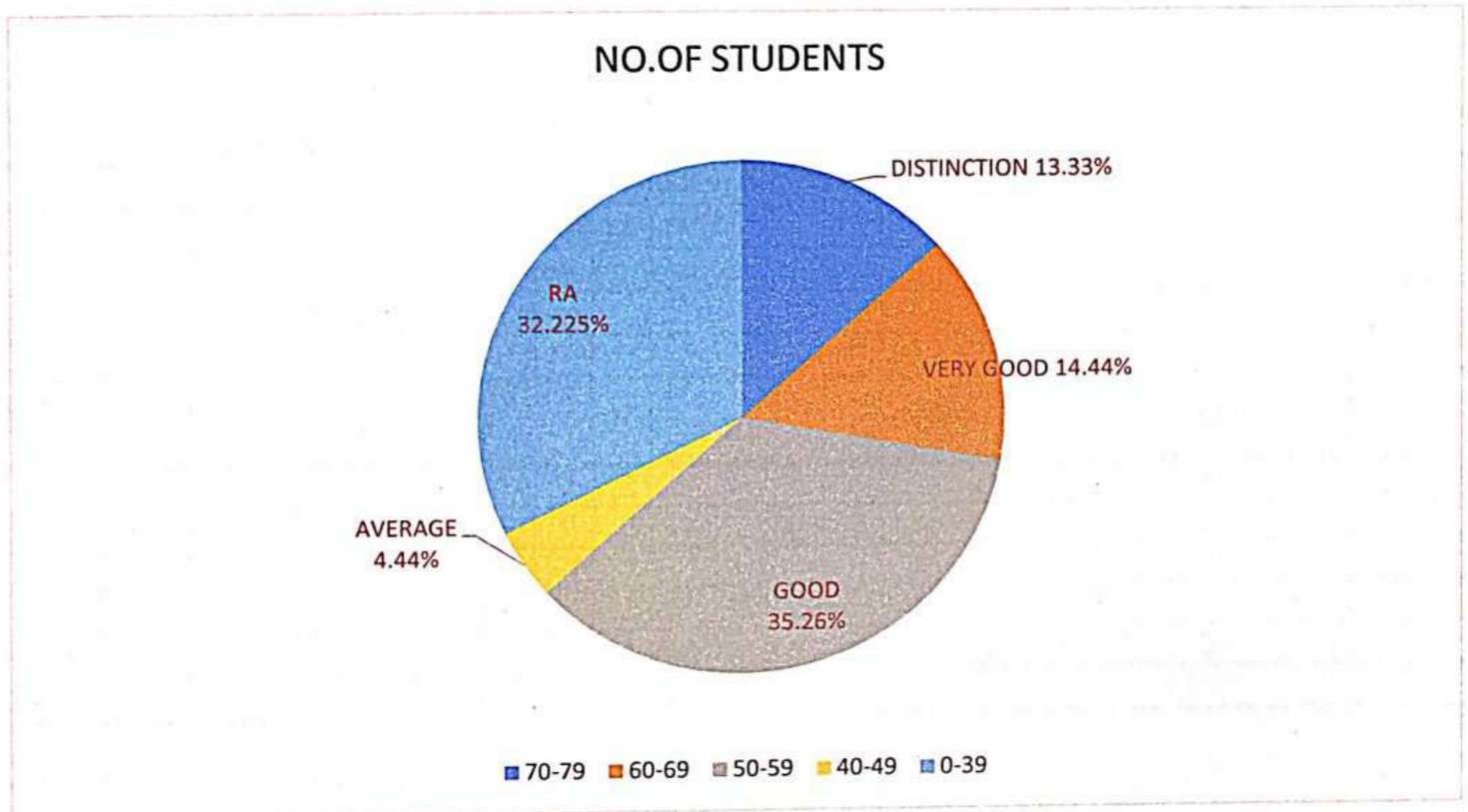

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT Near New Bus Stand, THANJAVUR-5

COURSE - PROGRAMMING IN PHP(16SCCCA9)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Using PHP build-in functions and creating custom functions
CO3	To create a database in PhpMyAdmin
CO4	How to receive and process Form submission data
CO5	To create images on Server.

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	3	1
CO2	2	2	2	2	2
CO3	3	2	2	2	2
CO4	3	2	2	3	1
CO5	3	1	3	2	2
Average	2.8	1.8	2	2.4	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	5	5	5	5	25	100
3	ABDULLA. A	CB17S 249688	5	5	4	4	4	22	88
4	ALENRAFIN. D	CB17S 249691	5	5	5	5	4	24	96
5	ANAND. R	CB17S 249693	5	5	4	5	4	23	92
6	ARAVINDH. M	CB17S 249694	5	5	4	4	4	22	88
7	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
8	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
9	ASWIN. K	CB17S 249698	5	5	4	5	4	23	92
10	BARATHVAJ. D	CB17S 249699	5	4	5	4	5	23	92
11	CHARLES .S	CB17S 249700	5	5	4	5	4	23	92
12	DHARMARAJ. N	CB17S 249701	5	4	5	4	5	22	88
13	DINESH. M	CB17S 249702	5	5	5	4	4	23	92
14	ELAVARASAN. R	CB17S 249703	5	4	5	4	5	23	92
15	GAYATHREE. J	CB17S 249704	5	5	5	5	4	24	96
16	GOWTHAM. M	CB17S 249705	5	4	5	4	5	23	92
17	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100
18	HARI KRISHNAN. P	CB17S 249707	5	4	5	4	4	22	88

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19	HARIHARAN. M	CB17S 249708	5	5	5	4	4	23	92
20	JANAKIPARKAVI. S	CB17S 249709	5	5	5	5	5	25	100
21	JAYASURIYA. V	CB17S 249710	5	5	5	5	5	25	100
22	KALAIVANAN. S	CB17S 249711	5	4	5	4	4	22	88
23	KISHORERAJ. S	CB17S 249714	5	5	5	5	5	25	100
24	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
25	MADHANA GOPAL.K	CB17S 249716	5	4	5	5	4	23	92
26	MANIKANDAN .R	CB17S 249717	5	5	4	4	5	23	92
27	MANIKANDAN. P	CB17S 249718	4	4	4	4	4	20	80
28	MANIKANDAN. V	CB17S 249719	5	4	5	4	5	23	92
29	MANIKANDAPRABU. M	CB17S 249720	5	5	4	5	4	23	92
30	MANOJ. M	CB17S 249721	5	5	5	5	4	24	96
31	MOHAN KUMAR .M	CB17S 249722	5	5	4	5	5	24	96
32	MUTHURAMAN. K	CB17S 249723	5	5	4	5	5	23	92
33	PRAMATHI. K	CB17S 249724	5	5	5	5	5	25	100
34	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
35	VINITHA. J	CB17S 249726	5	4	5	4	5	23	92
36	KANNADHASAN.G	CB17S 249727	4	4	4	4	4	20	80
37	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100

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38	MAHESHWARI. A	CB17S 249729	5	4	5	4	5	23	92
39	NITHIYANAND. S	CB17S 249732	5	5	4	5	4	23	92
40	PARAMESWARAN. K	CB17S 249734	5	5	5	5	4	24	96
41	PETER. H	CB17S 249735	5	5	5	5	5	25	100
42	PRADHEESH.P	CB17S 249736	5	4	5	5	5	24	96
43	PRAGADEESH. D	CB17S 249737	5	5	5	5	5	25	100
44	PRAGADEESH. P	CB17S 249738	5	5	5	5	5	25	100
45	PRAKASH .G	CB17S 249739	5	5	5	4	5	24	96
46	PRAVIN. R	CB17S 249740	5	5	5	5	4	24	96
47	PRIYANGA. S	CB17S 249741	5	4	5	5	5	24	96
48	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
49	RAJESH. R	CB17S 249743	5	4	5	4	4	22	88
50	RAM. A.V	CB17S 249744	5	5	5	5	5	25	100
51	RAMANI .S	CB17S 249745	5	5	5	5	4	24	96
52	RANJITHKUMAR .M	CB17S 249746	5	4	5	4	5	23	92
53	RUBINIKOLASH G	CB17S 249747	5	5	5	5	4	24	96
54	SABARIVASAN. S	CB17S 249748	5	4	5	4	5	23	92
55	SANJIVI. S	CB17S 249749	5	5	5	5	4	24	96
56	SANTHOSHI .M	CB17S 249750	5	4	5	5	5	24	96

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57	SANTHOSHKUMAR. P	CB17S 249751	5	5	5	5	5	25	100
58	SARAN. R	CB17S 249752	5	5	5	5	5	25	100
59	SARAVANAN .N	CB17S 249753	5	4	5	4	5	23	92
60	SURESH. A	CB17S 249754	5	5	5	5	5	25	100
61	SURIYA. B	CB17S 249755	5	5	5	5	4	24	96
62	VASANTH .A	CB17S 249757	5	5	5	5	5	25	100
63	VEERAMANI. R	CB17S 249758	5	4	5	4	5	23	92
64	VEERARAJ. K	CB17S 249759	5	4	5	4	4	22	88
65	VENKATESWARAN. S	CB17S 249760	5	5	5	5	5	25	100
66	VIDHYA .S	CB17S 249761	5	5	4	5	5	24	96
67	VIGNESH. J	CB17S 249762	4	4	4	4	4	20	80
68	VIJAY. M	CB17S 249763	5	4	5	4	5	23	92
69	VIJAYAKANTH. P	CB17S 249764	5	5	4	5	4	23	92
70	VIKRAM. M	CB17S 249765	5	5	5	5	4	24	96
71	YOGESHRAM .B	CB17S 249767	5	4	5	4	5	22	88
72	YUVARAJ. P	CB17S 249768	5	5	5	4	4	23	92
73	VETRISELVI.S	CB17S 249769	5	4	5	5	5	24	96
Average			4.89	4.59	4.73	4.56	4.53		

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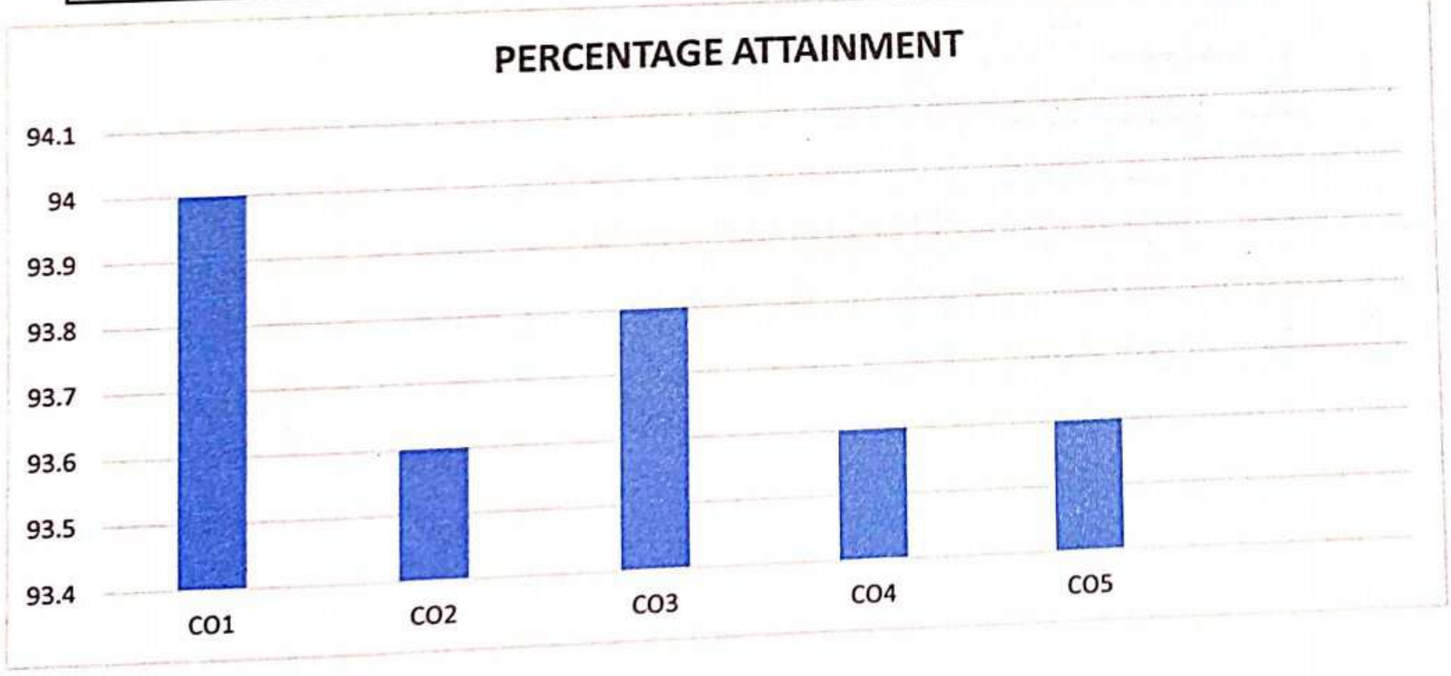
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.89	75	79.89	94.0
CO2	4.59	75	79.59	93.6
CO3	4.73	75	79.73	93.8
CO4	4.56	75	79.56	93.6
CO5	4.53	75	79.53	93.6

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.00
CO2	93.6
CO3	93.80
CO4	93.60
CO5	93.6



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

VALLIAMMAI COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

SUBJECT CODE : 16SCCCA9

SUBJECT NAME : PROGRAMMING IN PHP

NO OF STUDENTS : 73

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
91-100	2	OUTSTANDING
80-89	23	EXCELLENT
70-79	26	DISTINCTION
60-69	17	VERY GOOD
50-59	5	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENATGE	STATUS
91-100	2.74	OUTSTANDING
80-89	31.51	EXCELLENT
70-79	35.62	DISTINCTION
60-69	23.29	VERY GOOD
50-59	6.85	GOOD

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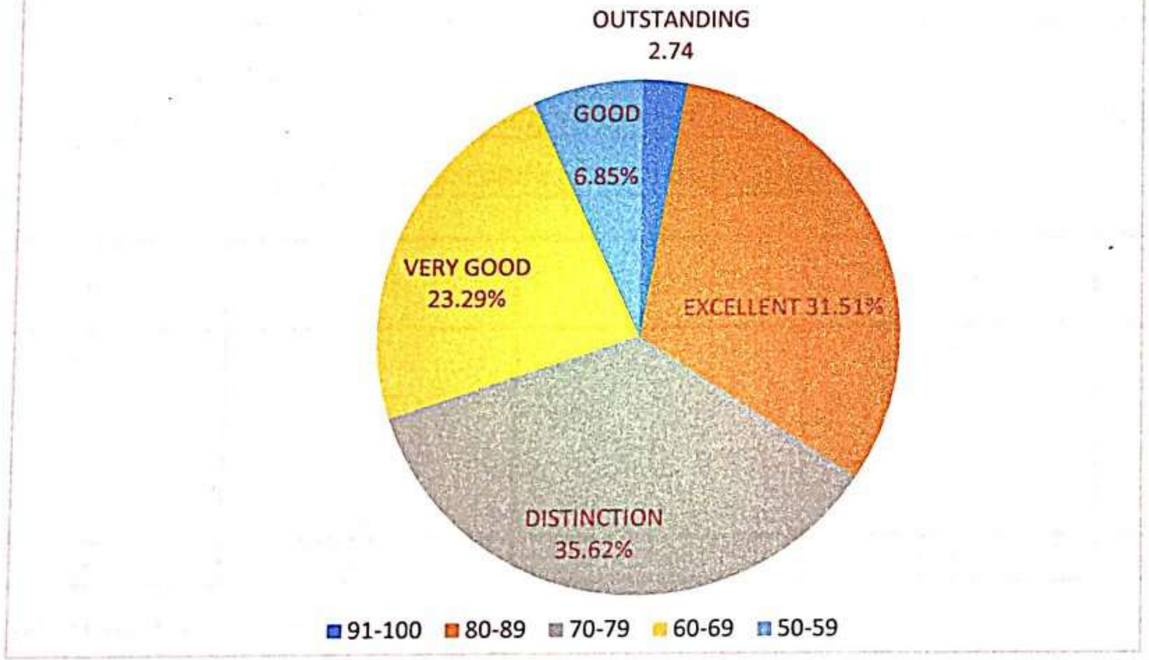
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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(Affiliated to Bharathidasan University, Tiruchirappalli-24)

COURSE - DATA STRUCTURE AND ALGORITHMS(16SCCCA5)

COURSE OUTCOME

CO1	Understanding the linear and non-linear data structures and Ability to choose appropriate data structures to represent data items in real world problems.
CO2	Ability to differentiate variety of data structures such as stacks, queues, Trees and Graphs
CO3	Analyze the performance of Searching and Sorting techniques.
CO4	Implement and know the application of algorithms for optimal storage and pattern matching.
CO5	Design and apply appropriate data structures for solving computing problems

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	2
CO2	3	0	2	2	0
CO3	2	1	3	2	3
CO4	2	0	2	2	0
CO5	3	0	2	1	1
Average	2.4	0.6	2.2	2	1.2

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	5	4	5	5	24	96
2	AATHISH.S	CB17S 249686	4	4	4	3	3	18	72
3	ABDULLA. A	CB17S 249688	5	5	4	4	5	23	92
4	AJITH KUMAR.A	CB17S 249689	4	4	4	4	4	20	80
5	ALENRAFIN. D	CB17S 249691	5	5	4	5	5	24	96
6	ANAND. R	CB17S 249693	4	4	4	3	3	18	72
7	ARAVINDH. M	CB17S 249694	4	4	4	4	3	19	76
8	ARAVINTH. R	CB17S 249695	5	5	5	5	5	15	60
9	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
10	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
11	ASWIN. K	CB17S 249698	4	4	4	3	4	19	76
12	BARATHVAJ. D	CB17S 249699	4	4	4	4	5	21	84
13	CHARLES .S	CB17S 249700	4	4	4	4	3	19	76
14	DHARMARAJ. N	CB17S 249701	3	3	3	4	3	16	64
15	DINESH. M	CB17S 249702	3	3	3	3	3	15	60
16	ELAVARASAN. R	CB17S 249703	4	4	4	4	4	20	80
17	GAYATHREE. J	CB17S 249704	5	5	4	4	5	23	92
18	GOWTHAM. M	CB17S 249705	5	5	4	5	5	24	96

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19	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100
20	HARI KRISHNAN. P	CB17S 249707	4	3	3	3	4	17	68
21	HARIHARAN. M	CB17S 249708	5	5	5	4	4	23	92
22	JANAKIPARKAVI. S	CB17S 249709	5	5	5	5	4	24	96
23	JAYASURIYA. V	CB17S 249710	4	4	4	4	4	20	80
24	KALAIVANAN. S	CB17S 249711	4	3	3	3	4	17	68
25	KISHORERAJ. S	CB17S 249714	5	5	4	3	5	22	88
26	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
27	MADHANA GOPAL.K	CB17S 249716	5	5	5	5	5	25	100
28	MANIKANDAN .R	CB17S 249717	5	5	4	4	5	23	92
29	MANIKANDAN. P	CB17S 249718	5	5	4	4	5	23	92
30	MANIKANDAN. V	CB17S 249719	5	5	4	3	5	22	88
31	MANIKANDAPRABU. M	CB17S 249720	5	5	5	5	5	18	72
32	MANOJ. M	CB17S 249721	4	3	3	3	4	17	68
33	MOHAN KUMAR .M	CB17S 249722	4	3	4	3	4	18	72
34	MUTHURAMAN. K	CB17S 249723	5	5	5	4	4	23	92
35	PRAMATHI. K	CB17S 249724	5	5	5	5	4	24	96
36	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
37	VINITHA. J	CB17S 249726	4	4	4	4	4	20	80
38	KANNADHASAN.G	CB17S 249727	4	3	4	3	4	18	72

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39	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100
40	MAHESHWARI. A	CB17S 249729	3	3	4	3	4	17	68
41	NITHIYANAND. S	CB17S 249732	5	5	4	3	5	22	88
42	PARAMESWARAN. K	CB17S 249734	4	3	4	3	4	18	72
43	PETER. H	CB17S 249735	5	5	5	5	5	25	100
44	PRADHEESH.P	CB17S 249736	4	5	5	4	5	23	92
45	PRAGADEESH. D	CB17S 249737	3	3	3	3	3	15	60
46	PRAGADEESH. P	CB17S 249738	4	5	5	5	5	24	96
47	PRAKASH .G	CB17S 249739	5	5	4	5	5	24	96
48	PRAVIN. R	CB17S 249740	5	4	5	5	5	24	96
49	PRIYANGA. S	CB17S 249741	5	5	4	3	5	22	88
50	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
51	RAJESH. R	CB17S 249743	4	3	4	3	4	18	72
52	RAM. A.V	CB17S 249744	5	5	5	4	5	24	96
53	RAMANI .S	CB17S 249745	4	4	4	4	5	21	84
54	RANJITHKUMAR .M	CB17S 249746	4	3	4	3	4	18	72
55	RUBINIKOLASH G	CB17S 249747	5	4	5	5	5	24	96
56	SABARIVASAN. S	CB17S 249748	5	5	4	4	5	23	92
57	SANJIVI. S	CB17S 249749	5	5	4	4	5	23	92
58	SANTHOSHI .M	CB17S 249750	5	4	5	5	5	24	96

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59	SANTHOSHKUMAR. P	CB17S 249751	5	5	4	4	5	23	92
60	SARAN. R	CB17S 249752	5	5	4	3	5	22	88
61	SARAVANAN .N	CB17S 249753	5	5	4	4	5	23	92
62	SURESH. A	CB17S 249754	5	4	5	5	5	24	96
63	SURIYA. B	CB17S 249755	4	3	4	3	4	18	72
64	VASANTH .A	CB17S 249757	4	4	4	4	4	20	80
65	VEERAMANI. R	CB17S 249758	4	4	4	4	4	20	80
66	VEERARAJ. K	CB17S 249759	4	3	4	3	4	18	72
67	VENKATESWARAN. S	CB17S 249760	5	5	4	4	5	23	92
68	VIDHYA .S	CB17S 249761	5	5	4	4	5	23	92
69	VIGNESH. J	CB17S 249762	4	4	4	4	4	20	80
70	VIJAY. M	CB17S 249763	5	4	5	5	5	24	96
71	VIJAYAKANTH. P	CB17S 249764	5	5	4	4	5	23	92
72	VIKRAM. M	CB17S 249765	4	3	4	3	4	18	72
73	YOGESHRAM .B	CB17S 249767	4	4	4	4	4	20	80
74	YUVARAJ. P	CB17S 249768	3	4	4	4	3	18	72
75	VETRISELVI.S	CB17S 249769	5	5	5	5	4	24	96
Average			4.62	4.44	4.36	4.14	4.56		

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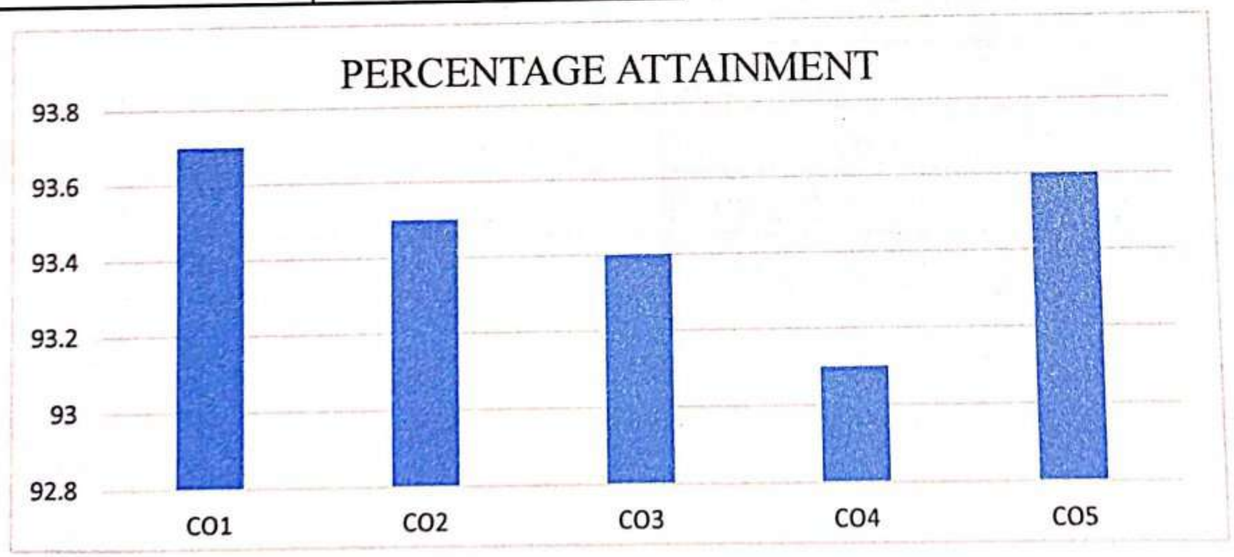
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.62	75	79.62	93.7
CO2	4.44	75	79.44	93.5
CO3	4.36	75	79.36	93.4
CO4	4.14	75	79.14	93.1
CO5	4.56	75	79.56	93.6

COURSE ATTAINMENT FOR BACHELOR OFCOMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA5
SUBJECT NAME : DATA STRUSTURE AND ALGORITHMS
NO OF STUDENTS : 75

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.7
CO2	93.5
CO3	93.4
CO4	93.1
CO5	93.6



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COURSE ATTAINMENT FOR BACHELOR OFCOMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA5

SUBJECT NAME : DATA STRUSTURE AND ALGORITHMS

NO OF STUDENTS : 75

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
91-100	0	OUTSTANDING
80-89	1	EXCELLENT
70-79	12	DISTINCTION
60-69	17	VERY GOOD
50-59	28	GOOD
40-49	5	AVERAGE
0-39	11	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	1.33%	EXCELLENT
70-79	16.00%	DISTINCTION
60-69	22.67%	VERY GOOD
50-59	37%	GOOD
40-49	6.67%	AVERAGE
0-39	15%	REAPPEAR

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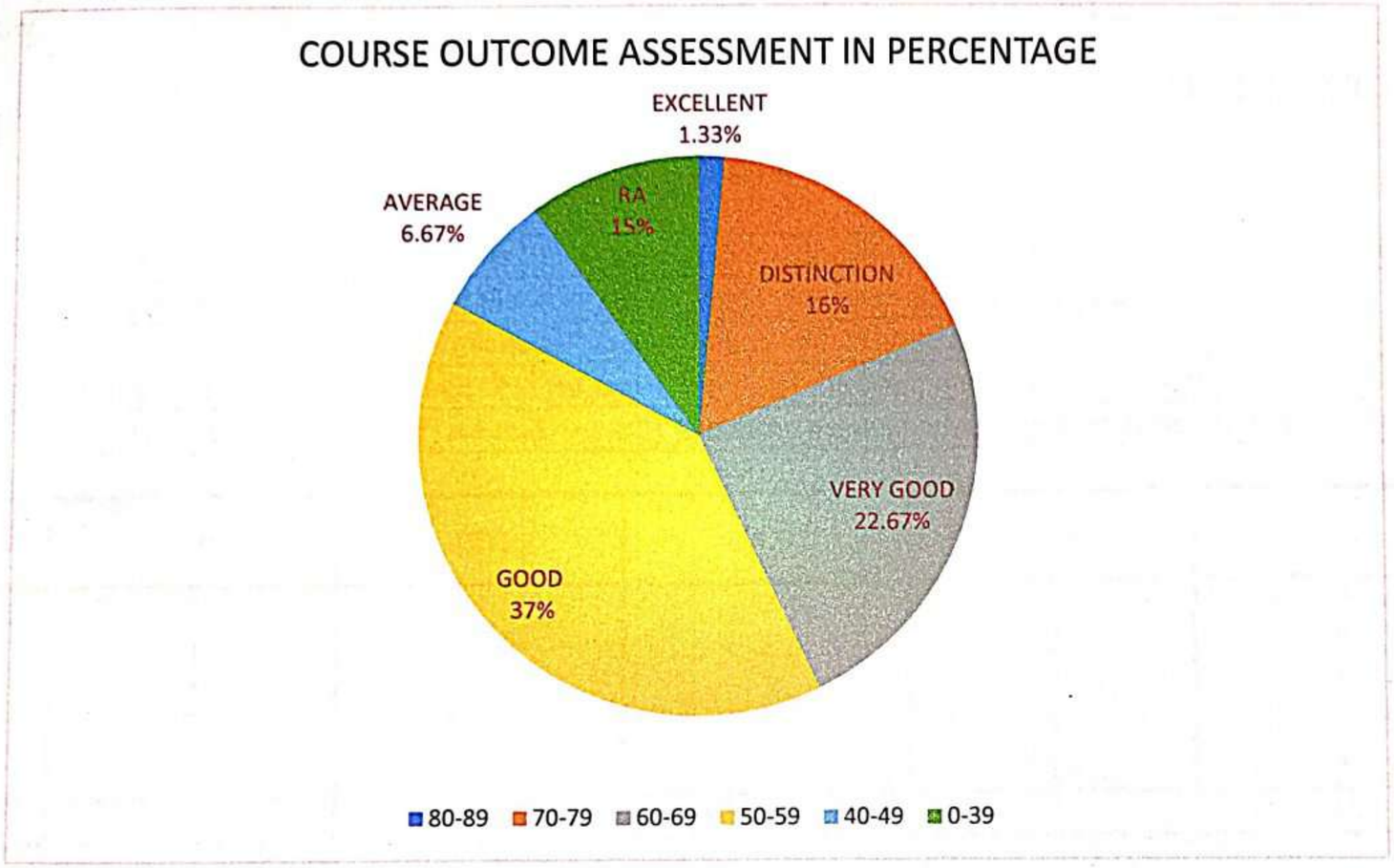
Near New Bus Stand, THANJAVUR-5.



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THANJAVUR-5

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, Near New Bus Stand, THANJAVUR-5

COURSE - OPERATING SYSTEM(16SCCCA6)

COURSE OUTCOME

CO1	understand the basic components of a computer operating system and interactions among the various components
CO2	Compare and contrast various Memory management schemes and Page replacement policies
CO3	Understanding various CPU scheduling algorithms and remove deadlocks
CO4	Ability to differentiate storage devices and understand the components of I/O Systems
CO5	Recognize file system interface and security mechanisms such as Controlled access to files, Access protection and User authentication

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	3	0	2	2	0
CO3	2	1	3	2	1
CO4	2	0	2	2	0
CO5	2	3	2	1	3
Average	2.2	1.2	2.2	2	0.8

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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Near New Bus Stand
THANJAVUR-5

S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	4	5	5	5	24	96
2	AATHISH.S	CB17S 249686	4	4	4	4	3	19	76
3	ABDULLA. A	CB17S 249688	4	5	4	4	5	22	88
4	AJITH KUMAR.A	CB17S 249689	4	5	4	4	4	21	84
5	ALENRAFIN. D	CB17S 249691	5	4	5	5	5	24	96
6	ANAND. R	CB17S 249693	4	4	4	4	3	19	76
7	ARAVINDH. M	CB17S 249694	4	4	4	4	4	20	80
8	ARAVINTH. R	CB17S 249695	3	3	4	3	3	16	64
9	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
10	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
11	ASWIN. K	CB17S 249698	4	4	4	4	4	20	80
12	BARATHVAJ. D	CB17S 249699	4	4	4	4	4	20	80
13	CHARLES .S	CB17S 249700	3	4	4	3	4	18	72
14	DHARMARAJ. N	CB17S 249701	3	4	3	3	4	17	68
15	DINESH. M	CB17S 249702	3	4	3	3	3	16	64
16	ELAVARASAN. R	CB17S 249703	4	5	4	4	4	21	84
17	GAYATHREE. J	CB17S 249704	5	4	5	5	5	24	96
18	GOWTHAM. M	CB17S 249705	5	4	5	5	4	23	92

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19	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100
20	HARI KRISHNAN. P	CB17S 249707	4	3	4	4	3	18	72
21	HARIHARAN. M	CB17S 249708	4	5	5	5	5	24	96
22	JANAKIPARKAVI. S	CB17S 249709	5	5	5	4	5	24	96
23	JAYASURIYA. V	CB17S 249710	4	5	4	4	4	21	84
24	KALAIVANAN. S	CB17S 249711	4	3	4	4	4	19	76
25	KISHORERAJ. S	CB17S 249714	5	4	5	5	4	23	92
26	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
27	MADHANA GOPAL.K	CB17S 249716	5	5	5	5	5	25	100
28	MANIKANDAN .R	CB17S 249717	4	5	4	5	4	22	88
29	MANIKANDAN. P	CB17S 249718	5	5	4	4	4	22	88
30	MANIKANDAN. V	CB17S 249719	4	5	4	4	4	21	84
31	MANIKANDAPRABU. M	CB17S 249720	3	4	4	4	4	19	76
32	MANOJ. M	CB17S 249721	3	4	4	4	3	18	72
33	MOHAN KUMAR .M	CB17S 249722	4	3	4	4	4	19	76
34	MUTHURAMAN. K	CB17S 249723	4	5	5	5	5	24	96
35	PRAMATHI. K	CB17S 249724	5	4	5	5	5	24	96
36	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
37	VINITHA. J	CB17S 249726	4	5	4	4	4	21	84
38	KANNADHASAN.G	CB17S 249727	4	4	4	4	3	19	76

Near New Bus Stand, THANJAVUR-5

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39	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100
40	MAHESHWARI. A	CB17S 249729	3	4	4	4	3	18	72
41	NITHIYANAND. S	CB17S 249732	5	4	5	5	4	23	92
42	PARAMESWARAN. K	CB17S 249734	4	4	4	3	4	19	76
43	PETER. H	CB17S 249735	5	5	5	5	5	25	100
44	PRADHEESH.P	CB17S 249736	5	4	5	5	5	24	96
45	PRAGADEESH. D	CB17S 249737	3	4	4	3	4	18	72
46	PRAGADEESH. P	CB17S 249738	4	4	4	4	4	24	96
47	PRAKASH .G	CB17S 249739	4	4	4	4	4	24	96
48	PRAVIN. R	CB17S 249740	4	4	4	4	4	24	96
49	PRIYANGA. S	CB17S 249741	5	4	5	5	4	23	92
50	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
51	RAJESH. R	CB17S 249743	4	3	3	4	4	18	72
52	RAM. A.V	CB17S 249744	4	5	5	5	4	23	92
53	RAMANI .S	CB17S 249745	4	5	5	5	4	22	88
54	RANJITHKUMAR .M	CB17S 249746	3	4	4	4	4	19	76
55	RUBINIKOLASH G	CB17S 249747	5	5	5	4	5	24	96
56	SABARIVASAN. S	CB17S 249748	5	4	5	5	5	24	96
57	SANJIVI. S	CB17S 249749	5	5	5	5	4	24	96
58	SANTHOSHI .M	CB17S 249750	5	4	5	5	5	24	96

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59	SANTHOSHKUMAR. P	CB17S 249751	5	5	4	5	5	24	96
60	SARAN. R	CB17S 249752	5	4	5	5	4	23	92
61	SARAVANAN .N	CB17S 249753	5	4	5	5	5	24	96
62	SURESH. A	CB17S 249754	5	4	5	5	5	24	96
63	SURIYA. B	CB17S 249755	3	4	4	4	4	19	76
64	VASANTH .A	CB17S 249757	4	4	4	4	5	21	84
65	VEERAMANI. R	CB17S 249758	4	5	4	4	4	21	84
66	VEERARAJ. K	CB17S 249759	4	3	4	4	4	19	76
67	VENKATESWARAN. S	CB17S 249760	5	4	5	5	5	24	96
68	VIDHYA .S	CB17S 249761	5	5	5	5	4	24	96
69	VIGNESH. J	CB17S 249762	4	5	4	4	4	21	84
70	VIJAY. M	CB17S 249763	4	5	5	5	5	24	96
71	VIJAYAKANTH. P	CB17S 249764	5	5	5	4	5	24	96
72	VIKRAM. M	CB17S 249765	3	4	4	4	4	19	76
73	YOGESHRAM .B	CB17S 249767	4	4	5	4	4	21	84
74	YUVARAJ. P	CB17S 249768	4	3	4	4	4	19	76
75	VETRISELVI.S	CB17S 249769	5	4	5	5	4	23	92
Average			4.40	4.42	4.56	4.49	4.38		

Near New Bus Stand, THANJAVUR-5

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.4	75	79.4	93.4
CO2	4.42	75	79.42	93.4
CO3	4.56	75	79.56	93.6
CO4	4.49	75	79.49	93.5
CO5	4.38	75	79.38	93.4

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : OPERATING SYSTEM

SUBJECT CODE : 16SCCCA6

NO OF STUDENTS : 75

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.4
CO2	93.4
CO3	93.6
CO4	93.5
CO5	93.4

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

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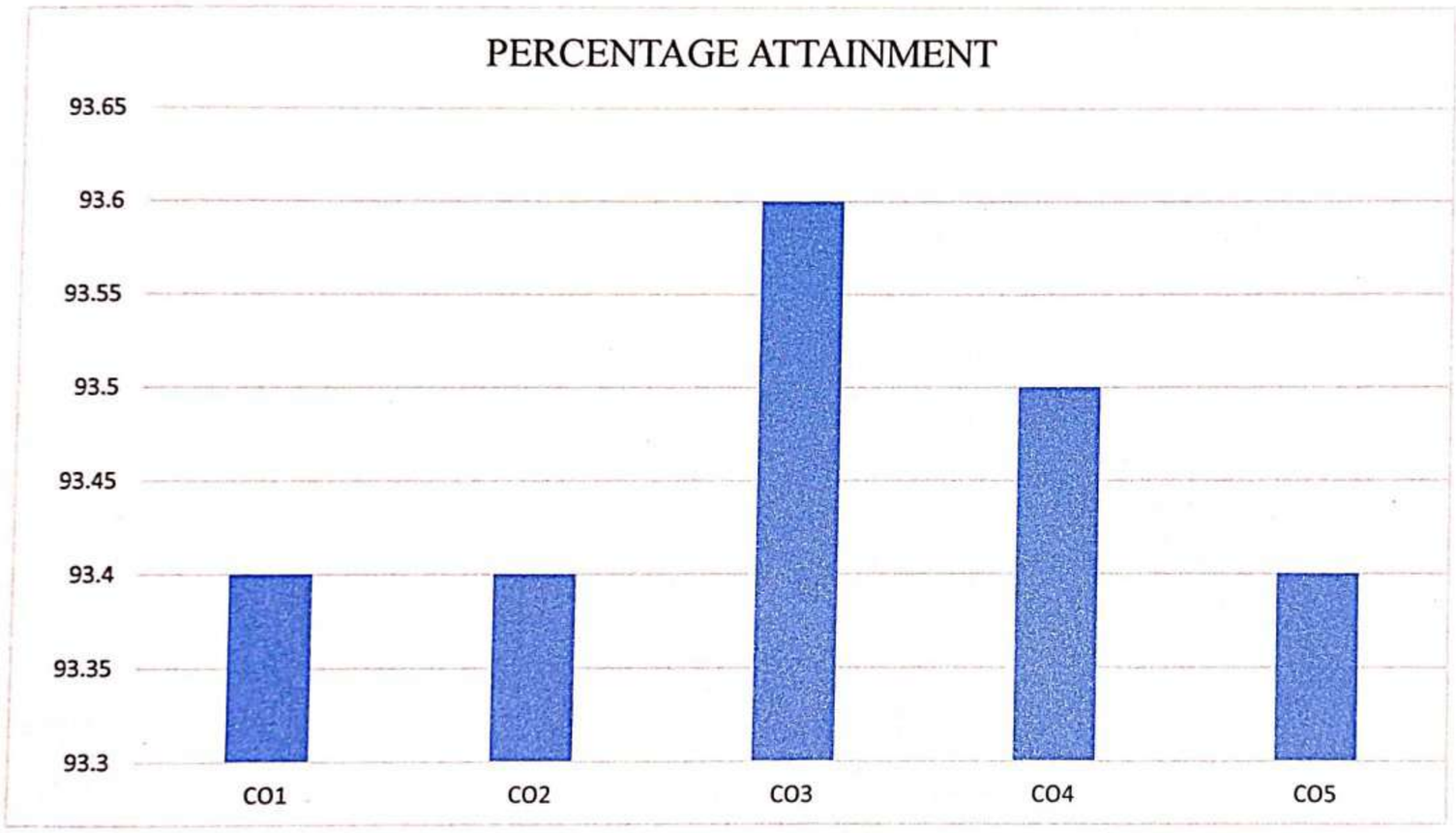
BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.



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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

SUBJECT CODE : 16SCCCA6

SUBJECT NAME : OPERATING SYSTEMS

NO OF STUDENTS : 75

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
91-100	1	OUTSTANDING
80-89	8	EXCELLENT
70-79	17	DISTINCTION
60-69	20	VERY GOOD
50-59	12	GOOD
40-49	6	AVERAGE
0-39	11	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
91-100	1.41%	OUTSTANDING
80-89	11.27%	EXCELLENT
70-79	23.94%	DISTINCTION
60-69	28.17%	VERY GOOD
50-59	16.90%	GOOD
40-49	8.45%	AVERAGE
0-39	9.86%	REAPPEAR

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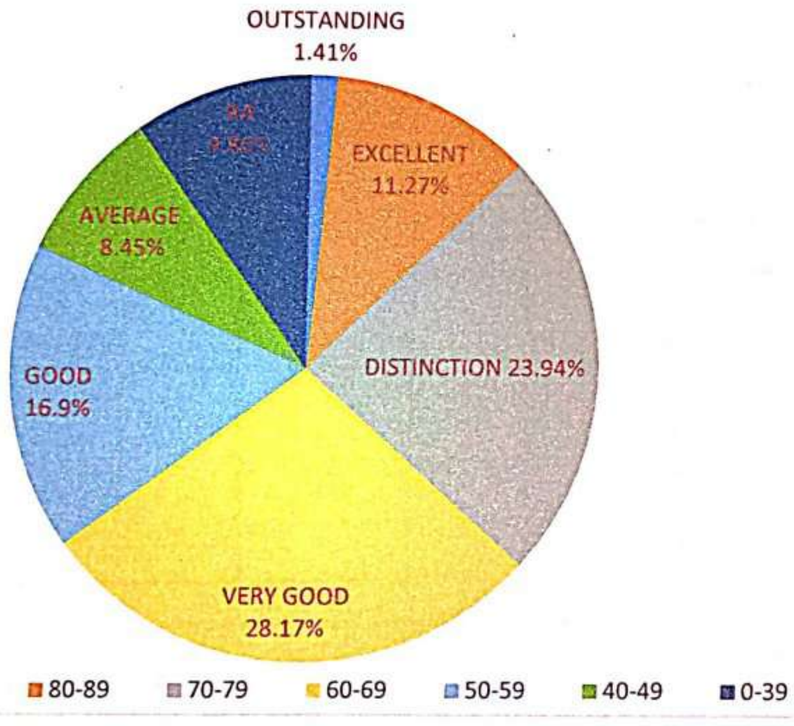
BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand,
THANJAVUR-5

COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT. Near New Bus Stand THANJAVUR-5

COURSE - DIGITAL COMPUTER FUNDAMENTALS(16SCCCA7)

COURSE OUTCOME

CO1	Gain knowledge of different types of number system and Perform Number Conversions from one System to another System
CO2	Identify the logic gates and their functionality and understand the basics of Boolean algebra.
CO3	Design various logic gates and simplify Boolean functions
CO4	Learn to Design basic electronic Circuits and combinational circuits
CO5	Understand various flip flops, shift registers and the Construction of Memory Unit

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	2
CO2	2	3	2	2	3
CO3	2	1	3	2	0
CO4	3	0	2	2	1
CO5	2	0	1	3	2
Average	2.2	1.2	2	2.4	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal (15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	SENGODI.J.L	CB17S 248624	5	4	5	5	5	24	96
2	AATHISH.S	CB17S 249686	3	4	3	3	4	17	68
3	ABDULLA. A	CB17S 249688	4	4	5	4	4	21	84
4	AJITH KUMAR.A	CB17S 249689	4	3	4	4	4	19	76
5	ALENRAFIN. D	CB17S 249691	5	5	5	4	5	24	96
6	ANAND. R	CB17S 249693	3	4	3	4	4	18	72
7	ARAVINDH. M	CB17S 249694	3	4	4	3	4	18	72
8	ARAVINTH. R	CB17S 249695	3	3	3	3	3	15	60
9	ARAVINTH. S	CB17S 249696	5	5	5	5	5	25	100
10	ARJUN. K	CB17S 249697	5	5	5	5	5	25	100
11	ASWIN. K	CB17S 249698	4	4	4	4	4	20	80
12	BARATHVAJ. D	CB17S 249699	4	4	5	4	4	21	84
13	CHARLES .S	CB17S 249700	3	4	4	4	4	19	76
14	DHARMARAJ. N	CB17S 249701	3	4	4	3	4	18	72
15	DINESH. M	CB17S 249702	3	3	3	3	3	15	60
16	ELAVARASAN. R	CB17S 249703	4	4	4	4	4	20	80
17	GAYATHREE. J	CB17S 249704	5	5	4	5	4	23	92

Near New Bus Stand THANJAVUR-5

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18	GOWTHAM. M	CB17S 249705	5	5	5	5	5	25	100
19	GUHAN. S	CB17S 249706	5	5	5	5	5	25	100
20	HARI KRISHNAN. P	CB17S 249707	3	4	4	3	4	18	72
21	HARIHARAN. M	CB17S 249708	5	4	5	5	5	24	96
22	JANAKIPARKAVI. S	CB17S 249709	5	5	5	5	4	24	96
23	JAYASURIYA. V	CB17S 249710	4	5	4	4	4	21	84
24	KALAIVANAN. S	CB17S 249711	3	4	4	3	4	18	72
25	KISHORERAJ. S	CB17S 249714	5	5	4	5	4	23	92
26	LOKESH.V	CB17S 249715	5	5	5	5	5	25	100
27	MADHANA GOPAL.K	CB17S 249716	5	5	5	5	5	25	100
28	MANIKANDAN .R	CB17S 249717	5	5	4	5	4	23	92
29	MANIKANDAN. P	CB17S 249718	4	4	4	4	4	20	80
30	MANIKANDAN. V	CB17S 249719	4	4	4	4	4	20	80
31	MANIKANDAPRABU. M	CB17S 249720	3	4	4	3	4	18	72
32	MANOJ. M	CB17S 249721	3	3	4	3	4	17	68
33	MOHAN KUMAR .M	CB17S 249722	3	4	4	3	4	18	72
34	MUTHURAMAN. K	CB17S 249723	5	5	4	5	4	23	92
35	PRAMATHI. K	CB17S 249724	5	5	5	4	5	24	96
36	SHADHANA SINDHU. R	CB17S 249725	5	5	5	5	5	25	100
37	VINITHA. J	CB17S 249726	5	4	4	4	4	21	84

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38	KANNADHASAN.G	CB17S 249727	3	4	4	3	4	18	72
39	MADHUMITHA.K	CB17S 249728	5	5	5	5	5	25	100
40	MAHESHWARI. A	CB17S 249729	3	4	4	4	4	19	76
41	NITHIYANAND. S	CB17S 249732	5	4	4	5	4	22	88
42	PARAMESWARAN. K	CB17S 249734	3	4	4	3	4	18	72
43	PETER. H	CB17S 249735	5	5	5	5	5	25	100
44	PRADHEESH.P	CB17S 249736	5	5	4	5	4	23	92
45	PRAGADEESH. D	CB17S 249737	3	3	3	3	3	15	60
46	PRAGADEESH. P	CB17S 249738	4	5	5	5	5	24	96
47	PRAKASH .G	CB17S 249739	5	5	4	5	5	24	96
48	PRAVIN. R	CB17S 249740	5	5	5	5	4	24	96
49	PRIYANGA. S	CB17S 249741	4	5	4	5	4	22	88
50	PUGAZHENTHI .R	CB17S 249742	5	5	5	5	5	25	100
51	RAJESH. R	CB17S 249743	3	4	3	4	3	17	68
52	RAM. A.V	CB17S 249744	5	4	5	4	4	22	88
53	RAMANI .S	CB17S 249745	5	4	4	5	4	22	88
54	RANJITHKUMAR .M	CB17S 249746	3	4	3	5	4	19	76
55	RUBINIKOLASH G	CB17S 249747	5	5	5	4	5	24	96
56	SABARIVASAN. S	CB17S 249748	5	5	4	5	4	23	92
57	SANJIVI. S	CB17S 249749	5	5	5	5	4	24	96

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Near New Bus Stand
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58	SANTHOSHI .M	CB17S 249750	5	4	5	5	5	24	96
59	SANTHOSHKUMAR. P	CB17S 249751	5	5	4	5	5	24	96
60	SARAN. R	CB17S 249752	5	5	5	4	5	24	96
61	SARAVANAN .N	CB17S 249753	5	5	4	5	4	23	92
62	SURESH. A	CB17S 249754	5	5	5	4	5	24	96
63	SURIYA. B	CB17S 249755	3	4	3	4	4	18	72
64	VASANTH .A	CB17S 249757	5	4	4	4	3	20	80
65	VEERAMANI. R	CB17S 249758	4	5	3	5	4	21	84
66	VEERARAJ. K	CB17S 249759	3	4	3	4	4	18	72
67	VENKATESWARAN. S	CB17S 249760	4	5	5	5	5	23	92
68	VIDHYA .S	CB17S 249761	4	5	5	4	5	23	92
69	VIGNESH. J	CB17S 249762	5	3	4	4	4	20	80
70	VIJAY. M	CB17S 249763	4	5	5	5	5	24	96
71	VIJAYAKANTH. P	CB17S 249764	4	5	5	5	4	23	92
72	VIKRAM. M	CB17S 249765	3	4	3	4	4	18	72
73	YOGESHRAM .B	CB17S 249767	4	3	4	5	4	20	80
74	YUVARAJ. P	CB17S 249768	3	4	3	4	4	18	72
Average			4.15	4.33	4.24	4.22	4.222222222		

Expected Attainment in each CO - 85%

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.15	75	79.15	93.1
CO2	4.33	75	79.33	93.3
CO3	4.24	75	79.24	93.2
CO4	4.22	75	79.22	93.2
CO5	4.22	75	79.22	93.2

COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT NAME : DIGITAL COMPUTER FUNDAMENTALS

SUBJECT CODE : 16SCCCA7

NO OF STUDENTS : 74

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.1
CO2	93.3
CO3	93.2
CO4	93.2
CO5	93.2

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

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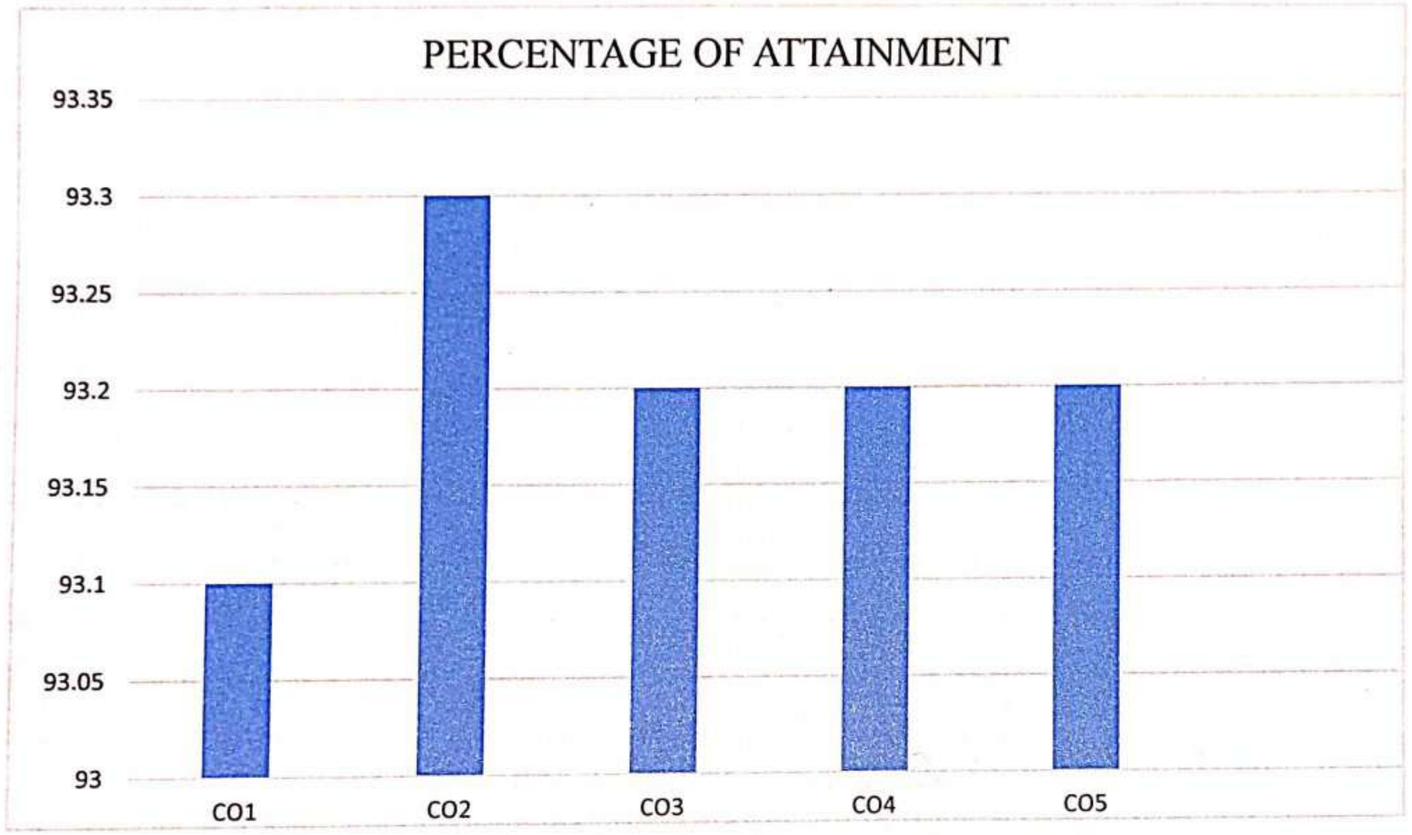
BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
THANJAVUR-5



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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.

SUBJECT CODE : 16SCCCA7

SUBJECT NAME : DIGITAL COMPUTER FUNDAMENTALS

NO OF STUDENTS : 74

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
91-100	0	OUTSTANDING
80-89	5	EXCELLENT
70-79	7	DISTINCTION
60-69	24	VERY GOOD
50-59	20	GOOD
40-49	5	AVERAGE
0-39	13	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	6.76%	EXCELLENT
70-79	9.46%	DISTINCTION
60-69	32.43%	VERY GOOD
50-59	27.02%	GOOD
40-49	6.76%	AVERAGE
0-39	17.57%	REAPPEAR

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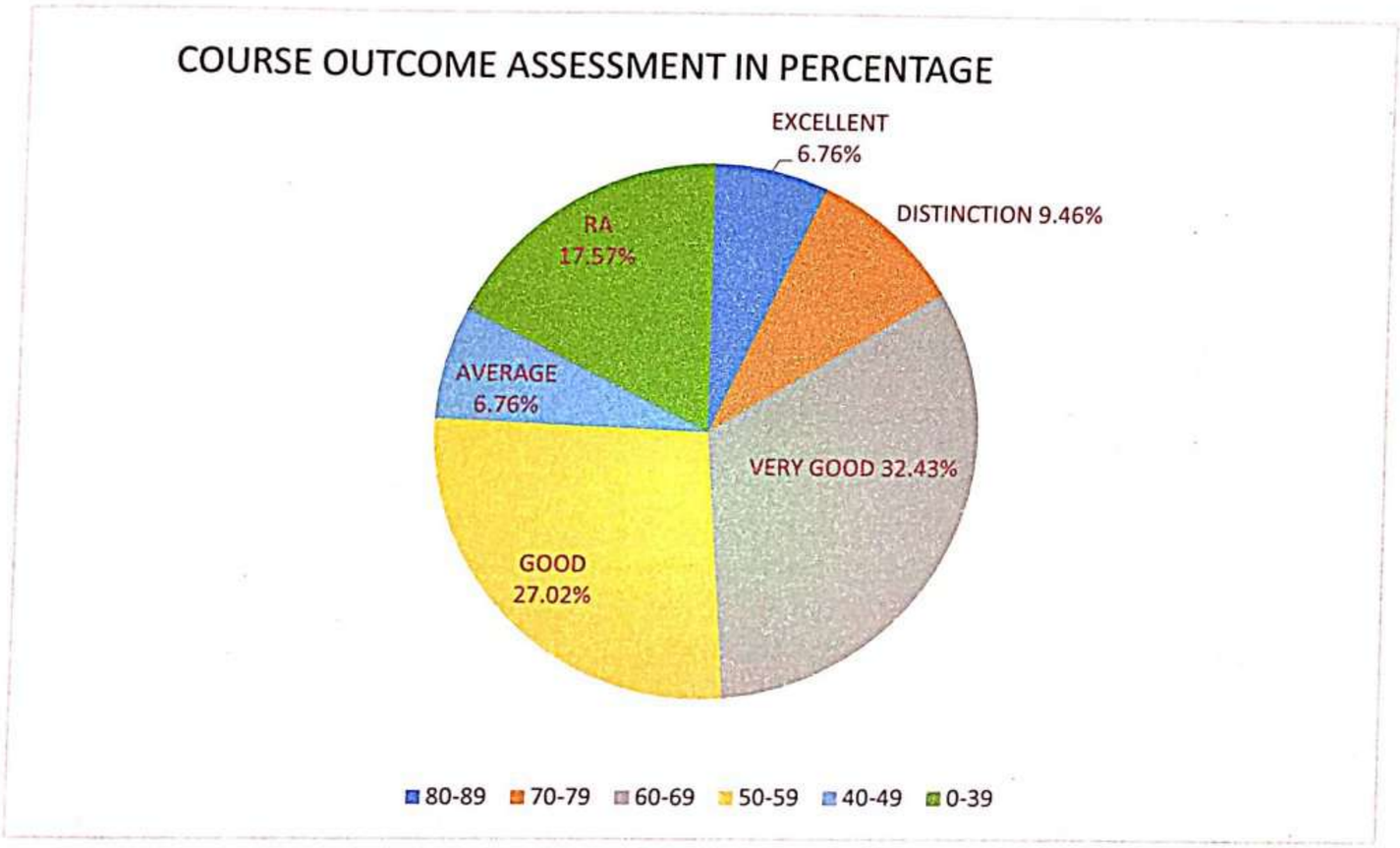

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(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

PROGRAMMIMG IN C (16SCCCA1P)

COURSE OUTCOME

CO1	Develop programming skills using the fundamentals and basics of C Language
CO2	Develop programs using the basic elements like control statements, Arrays and Strings
CO3	Enable effective usage of arrays, structures and unions
CO4	Understanding the concepts of functions and pointers
CO5	Implement files and understanding various file modes.

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PROGRAMMING IN C++ (16SCCCA2P)

COURSE OUTCOME

CO1	Creating simple programs using classes and objects in C++ and implement the concepts of object oriented programming
CO2	Understanding the concept of constructors and Apply string functions to perform operator overloading
CO3	To be able to program using C++ features such as composition of objects and function overloading
CO4	Demonstrate Virtual functions, Inheritance & Polymorphism
CO5	Implement Object Oriented Programs using templates and exceptional handling concepts.

PROGRAMMING IN JAVA LAB(16SCCCA3P)

COURSE OUTCOME

CO1	Using Graphics, Animations and Multithreading for designing Simulation and Game based applications.
CO2	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
CO3	Design and develop Web applications.
CO4	Designing Enterprise based applications by encapsulating an application's business logic.
CO5	Designing applications using pre-built frameworks.

DATABASE SYSTEMS LAB(16SCCCA4P)

COURSE OUTCOME

CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

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COMPUTER GRAPHICS AND ANIMATION LAB (16SCCCA5P)

COURSE OUTCOME

CO1	Use the basic tools found in Adobe Photoshop to Understand image editing and graphic design features
CO2	Enable to know about work with images in different file formats
CO3	Understanding to Develop a commercial brochure
CO4	Enable to do Basic Drawing and Painting in flash
CO5	Understanding about Animation and to Know First movement of animation

PROGRAMMING IN PHP LAB(16SCCCA6P)

COURSE OUTCOME

CO1	Use PHP to create a data driven website.
CO2	Use PHP to read a file and add records to the database.
CO3	Create a form on a webpage and use PHP to check the validity of the form.
CO4	Use built-in features of PHP such as data and string manipulation.
CO5	Test and debug PHP scripts while working with live data.

MINI PROJECT (16SMBECAPW)

COURSE OUTCOME

CO1	Understand the basics of programming and able to interpret real world problems into software solutions
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills
CO5	Understanding to Implement, evaluate and generate reports.

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Thanjavur – 5.

Department of Computer Applications

PROGRAM OUTCOME
&
COURSE OUTCOME

2020-2021

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT Near New Bus Stand, THANJAVUR-5

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

Department of Computer Applications (2020-2021)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need.

COURSE - PROGRAMMING IN C(16SCCCA1)

COURSE OUTCOME

CO1	Defines the concept of C programming and it's fundamental
CO2	Managing I/O operations , various control statements and looping statements.
CO3	Understanding Arrays , Strings and User defined Functions.
CO4	Differentiate Structures and unions. Defines Pointer concepts and File management .
CO5	Explain the uses of pre-processors, memory allocation and Programming Guide lines.

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PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	3	3
CO2	1	0	2	2	0
CO3	2	1	3	2	1
CO4	2	0	2	2	0
CO5	3	3	3	1	1
Average	2.2	1.2	2.2	0.6	1

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ANGALS .T	CB20S 259955	5	4	4	4	4	21	84
2	AZHAGARASAN. A	CB20S 259956	5	4	4	5	4	22	88
3	BALAJI. V .T	CB20S 259957	4	5	5	4	5	23	92
4	CHANDRAN.P	CB20S 259958	4	4	4	4	4	20	80
5	DEENATHAYALAN.R	CB20S 259959	5	4	5	4	4	23	92
6	DEEPIKA.S	CB20S 259960	5	5	5	4	5	24	96
7	DHANARAJ.M	CB20S 259961	4	5	4	5	4	22	88
8	DINESH KUMAR.T	CB20S 259962	4	5	5	4	5	23	92
9	ELANGOVAN.I	CB20S 259963	5	4	5	4	4	22	88
10	GURU VASANTH.R.P	CB20S 259964	5	5	5	4	5	24	96
11	HARISH RAGAVENDHRAN.M	CB20S 259965	5	4	5	4	5	23	92
12	IYAPPAN.M	CB20S 259966	4	5	4	5	4	22	88
13	KABILAN.C	CB20S 259967	5	5	5	5	4	24	96
14	KAVIMANI.R	CB20S 259968	5	4	5	4	5	23	92
15	KESAVAN.K	CB20S 259969	4	5	5	5	4	23	92
16	MANIKANDAN.M	CB20S 259970	5	4	5	4	5	23	92
17	MOHAMED BASITH.M	CB20S 259971	5	5	5	5	4	24	96
18	MUGESHKUMAR.P	CB20S 259972	5	5	5	4	5	24	96
19	NETHAKRISHNAN.S	CB20S 259973	5	5	4	5	5	24	96

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20	PRATHEESH.C	CB20S 259975	5	4	5	5	5	24	96
21	RADHA KRISHNAN.A	CB20S 259976	5	5	5	5	4	24	96
22	RAGAVENDAR.A	CB20S 259977	5	4	5	4	5	23	92
23	RAHUL KUMAR.S	CB20S 259978	4	5	4	5	5	23	92
24	SACHIN.S	CB20S 259979	5	4	5	5	5	24	96
25	SARATHISH.S	CB20S 259980	5	4	5	4	5	23	92
26	SARAVANAKUMAR.P	CB20S 259981	5	5	5	4	5	24	96
27	SIYAMALA.C	CB20S 259982	5	5	4	5	4	23	92
28	SRI RAMANI CHANDRAN.S	CB20S 259983	5	5	5	4	5	24	96
29	STALIN.V	CB20S 259984	5	4	5	4	5	23	92
30	SUBASH.S	CB20S 259985	4	5	5	5	5	24	96
31	SUDHAN.K	CB20S 259986	5	5	4	5	5	24	96
32	SURIYA.A	CB20S 259987	5	4	5	4	5	23	92
33	TAMILARASAN.M	CB20S 259988	5	5	4	5	5	24	96
34	THIRUMANIKANDAN.R	CB20S 259989	5	4	5	4	5	23	92
35	VEERASURYA.M	CB20S 259990	5	5	5	5	4	24	96
36	VIGNESH.V	CB20S 259991	5	4	5	4	5	23	92
37	VINOTH.T	CB20S 259992	5	4	4	5	4	22	88
38	VISHNU SHARMA.K	CB20S 259993	4	5	5	4	5	23	92
39	YOGA SARATHY.B	CB20S 259994	5	4	5	5	4	23	92
Average			4.769230769	4.538461538	4.717948718	4.461538462	4.615384615		

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.77	75	79.77	93.8
CO2	4.54	75	79.54	93.6
CO3	4.72	75	79.72	93.8
CO4	4.46	75	79.46	93.5
CO5	4.62	75	79.62	93.7

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 39

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.8
CO2	93.6
CO3	93.8
CO4	93.5
CO5	93.7

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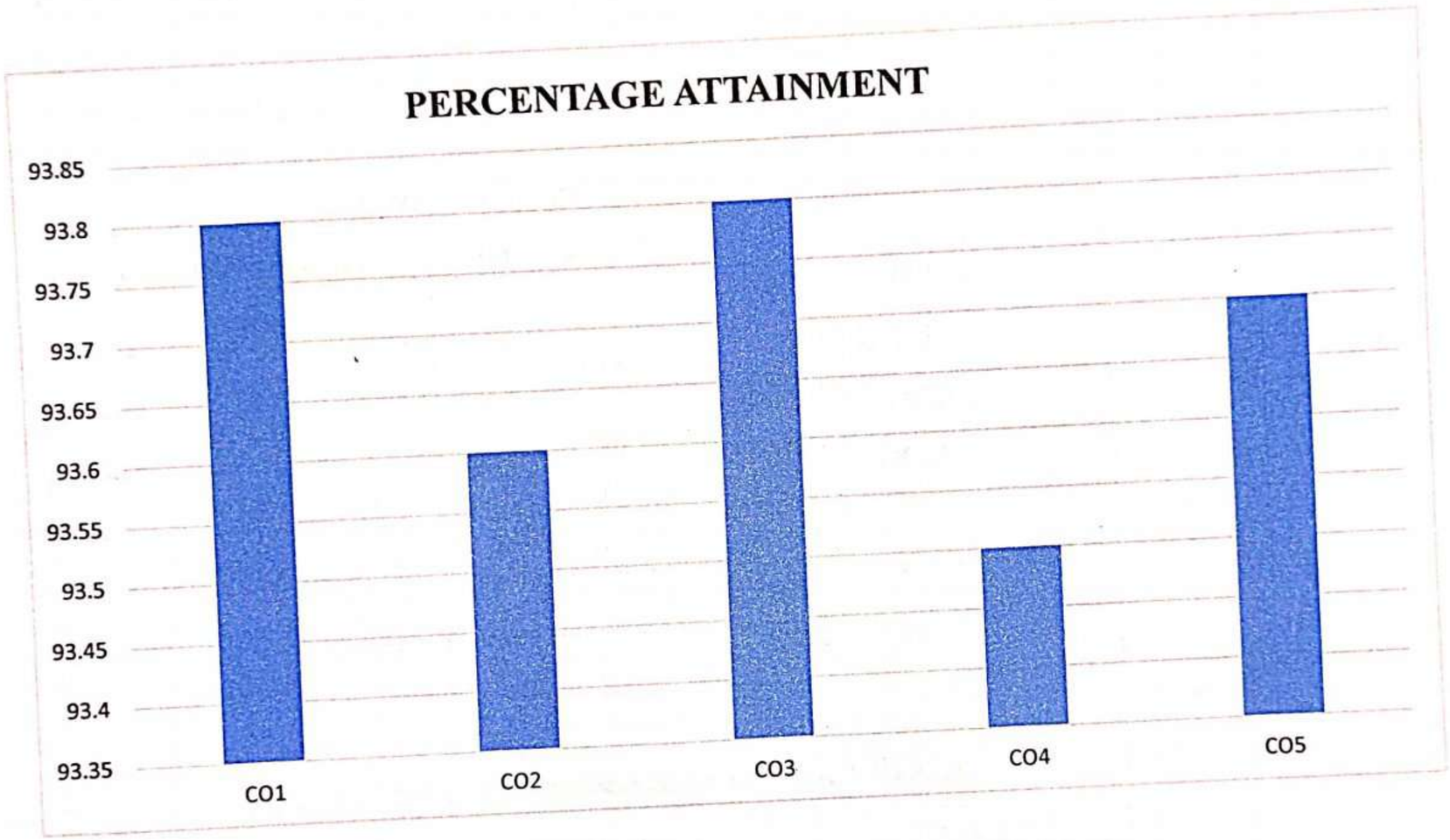

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Near New Bus Stand, THANJAVUR-5.

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 39

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	19	OUTSTANDING
80-89	11	EXCELLENT
70-79	9	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	48.72%	OUTSTANDING
80-89	28.21%	EXCELLENT
70-79	23.08%	DISTINCTION

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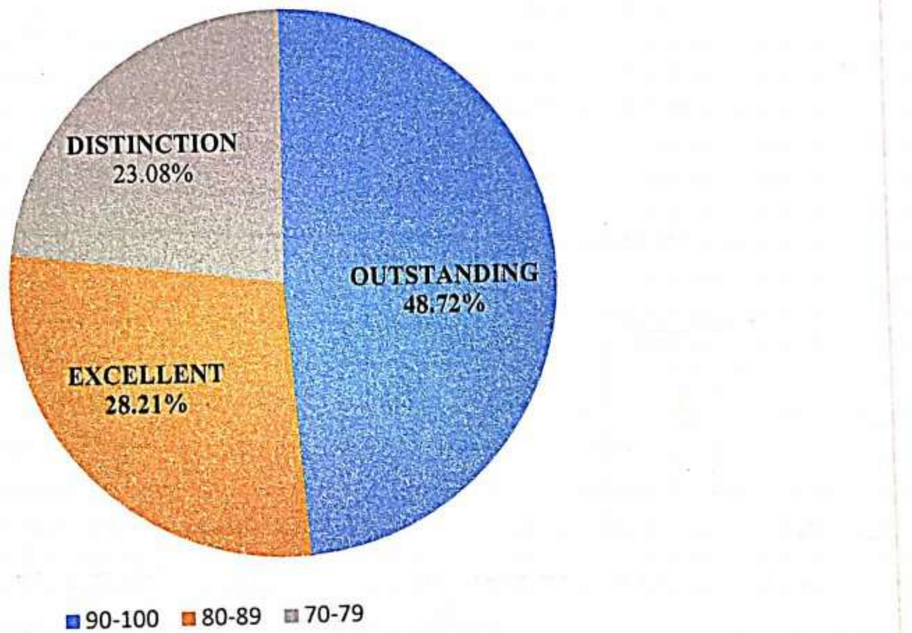
BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand,
THANJAVUR-5

COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - Computer Networks(16SCCCA8)

COURSE OUTCOME

CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference models
CO2	Defines Datalink layer services , Error detection and Error correction methods
CO3	Explain Network layer basics and routing algorithms
CO4	Understanding TCP features and congestion control
CO5	Enable to work with Application layer www, e-mail and DNS

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	2	1	2	1
CO2	3	2	2	2	2
CO3	3	2	2	2	2
CO4	3	2	2	2	1
CO5	3	1	2	2	2
Average	3	1.8	1.8	2	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	5	4	5	4	5	23	92
2	AJITH. G	CB18S 254292	5	4	4	5	4	22	88
3	AKASH. R (26.02.2001)	CB18S 254293	5	4	4	4	4	21	84
4	AKASH. R (02.10.1998)	CB18S 254294	4	5	4	4	4	21	84
5	AKILAN. V	CB18S 254295	5	5	5	5	5	25	100
6	ARULARASAN. S	CB18S 254297	5	4	5	5	5	24	96
7	ARUNKUMAR. K.C	CB18S 254298	5	5	5	5	5	25	100
8	BASKAR. P	CB18S 254299	5	5	4	5	5	24	96
9	BHARATHKUMAR. B	CB18S 254300	5	5	5	4	5	24	96
10	BOOMINDHRA. R.N	CB18S 254301	5	5	5	5	4	24	96
11	CHANDRU. S	CB18S 254302	5	4	5	5	5	24	96
12	DANIEL. S	CB18S 254303	5	5	4	5	4	23	92
13	DEVENDHIRAN. P	CB18S 254304	5	4	5	5	5	24	96
14	DEVKANTH RAO. L	CB18S 254305	5	5	4	4	5	23	92
15	DHANUSIYA. D	CB18S 254306	5	5	5	5	5	25	100
16	DHIVAKAR. B	CB18S 254307	5	4	5	5	5	24	96
17	DINESHKUMAR. K	CB18S 254308	5	5	4	5	5	24	96

Near New Bus Stand, THANJAVUR-5

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18	DIVYESH. S	CB18S 254309	5	5	5	5	5	25	100
19	EZHIL. M	CB18S 254310	5	5	5	5	5	25	100
20	GOKUL. K	CB18S 254311	5	4	5	4	5	23	92
21	GOWTHAMAN. M	CB18S 254312	5	5	5	5	5	25	100
22	HARIHARASUTHAN. R	CB18S 254313	5	4	5	5	5	24	96
23	ISWARYA. A	CB18S 254314	5	5	5	4	4	23	92
24	JAMUNA. V	CB18S 254315	5	5	4	4	5	23	92
25	JANAKIRAMAN. V	CB18S 254316	5	4	5	5	5	24	96
26	JANANI. S	CB18S 254317	5	5	4	5	4	23	92
27	JAYA SUDHAN. S	CB18S 254318	5	4	5	5	5	24	96
28	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	5	5	25	100
29	KAMALESH. S	CB18S 254320	5	5	5	4	4	23	92
30	KARIKALAN. S	CB18S 254321	5	4	5	4	4	22	88
31	KARMUKILAN. R.R	CB18S 254322	5	5	5	5	5	25	100
32	KISHORE KUMAR. T	CB18S 254323	5	5	5	5	5	25	100
33	KRISHNAMOORTHY. P	CB18S 254324	5	5	5	5	5	25	100
34	KRITHIKA. R.S	CB18S 254325	5	4	5	5	5	24	96
35	KUZHANTHAIVEL. M	CB18S 254326	5	5	5	5	5	25	100
36	LOGESWAR. S	CB18S 254327	5	5	5	5	5	24	96

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37	LOHA PRIYA. C	CB18S 254328	5	5	5	5	5	25	100
38	LORDSON JEEVAPRIYAN. E	CB18S 254329	5	5	4	5	5	24	96
39	MAHALAKSHMI. M	CB18S 254330	5	5	5	4	5	24	96
40	MANIBHARATHI. R	CB18S 254331	5	4	4	4	4	21	84
41	MANIKANDAN..R	CB18S 254332	5	4	5	5	5	24	96
42	MATHESH. T	CB18S 254334	4	5	5	5	5	24	96
43	MOHAMED RIYAS. J	CB18S 254335	5	5	5	5	5	25	100
44	MOHAMED RIYASKHAN. S	CB18S 254336	5	5	5	5	5	25	100
45	MOSES PRABAKARAN. M	CB18S 254337	5	5	5	5	5	25	100
46	MUBARAK ALI. J	CB18S 254338	5	5	5	5	5	25	100
47	MUKILAN. S	CB18S 254339	5	5	5	5	5	25	100
48	ARNALD. S	CB18S 254340	5	4	5	5	5	24	96
49	BALAJI. K	CB18S 254341	5	5	4	5	5	24	96
50	KALIYARASAN. M	CB18S 254342	5	5	4	4	5	23	92
51	NITHISH KUMAR. A	CB18S 254343	5	5	5	5	4	24	96
52	OLI MOHAMED. A	CB18S 254344	5	5	4	5	5	24	96
53	PANDIYARAJAN. R	CB18S 254345	5	4	4	4	5	22	88
54	POOVARASAN. S	CB18S 254346	5	4	5	4	5	23	92
55	PRAGATHESWARAN. G	CB18S 254348	5	5	4	5	4	23	92

Near New Bus Stand, THANJAVUR-5.
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56	PRAKASH. J	CB18S 254349	5	4	5	5	5	24	96
57	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	5	5	4	5	5	24	96
58	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	5	5	5	4	5	24	96
59	PREMNATH. S	CB18S 254352	5	4	5	5	5	24	96
60	RAGU. R	CB18S 254353	5	5	4	5	4	23	92
61	RAJASANKARI. A	CB18S 254354	5	5	5	5	5	25	100
62	RAJASRIRAM. K	CB18S 254355	5	4	5	5	5	24	96
63	RAMJI. H	CB18S 254356	5	5	5	5	5	25	100
64	RENGARAJ. M	CB18S 254357	5	5	4	5	5	24	96
65	SANGEETHA. G	CB18S 254358	5	5	5	5	5	25	100
66	SARAVANAN. A	CB18S 254359	5	5	4	5	4	23	92
67	SARAVANAN. P	CB18S 254360	5	4	5	4	5	23	92
68	SARAVASHREE. K	CB18S 254361	5	5	5	5	5	25	100
69	SATCHINKUMAR. G	CB18S 254362	5	5	5	5	5	25	100
70	SATHEESH KUMAR. M	CB18S 254363	5	4	5	4	5	23	92
71	SATHISH KUMAR. M	CB18S 254364	5	5	4	5	4	23	92
72	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	5	5	5	5	25	100
73	SIVA SANKARI. S	CB18S 254366	5	4	5	5	5	24	96
74	SIVA. S	CB18S 254367	5	5	5	5	5	25	100

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75	SRI GAYATHRI .N	CB18S 254368	5	5	5	5	5	25	100
76	SRINIVASAN. S	CB18S 254369	5	5	4	5	5	24	96
77	SUGANTHI. S	CB18S 254370	5	5	5	5	5	25	100
78	SUGUNESH. M	CB18S 254371	5	4	5	5	5	24	96
79	SUNDHAR. R	CB18S 254372	5	5	4	5	4	23	92
80	SURENDHAR. S	CB18S 254373	5	4	5	5	5	24	96
81	SURENTHIRANATH. N	CB18S 254374	5	5	4	5	5	24	96
82	SWATHI. G	CB18S 254375	5	5	5	4	5	24	96
83	VAIRAMUTHU. M	CB18S 254376	4	4	4	4	4	20	80
84	VASANTH. K	CB18S 254377	5	5	4	5	5	24	96
85	VENKATESAN. M	CB18S 254378	5	5	5	5	5	25	100
86	VIGNESH . S (03.05.2001)	CB18S 254379	5	4	5	4	5	23	92
87	VIGNESH. V	CB18S 254380	5	5	4	5	5	24	96
88	VIGNESH. R	CB18S 254381	5	5	5	5	5	25	100
89	VIGNESH.S (21.01.2001)	CB18S 254382	5	4	5	4	5	23	92
90	VISHALI. T	CB18S 254384	5	5	4	5	4	23	92
91	YOGESWARAN. C	CB18S 254385	5	4	4	5	5	23	92
92	YOKESH. S	CB18S 254386	4	5	5	5	5	24	96
		Average	4.95652174	4.67391304	4.68478261	4.76086957	4.80434783		

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Near New Bus Stand, THANJAVUR-5.

Expected Attainment in each CO - 85%

	Int. Exam + Assignment	End Sem	Total	%
CO1	4.96	75	79.96	94.1
CO2	4.67	75	79.67	93.7
CO3	4.68	75	79.68	93.7
CO4	4.76	75	79.76	93.8
CO5	4.8	75	79.8	93.9

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS

SUBJECT CODE : 16SCCCA8

NO.OF STUDENTS : 92

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.1
CO2	93.7
CO3	93.7
CO4	93.8
CO5	93.9

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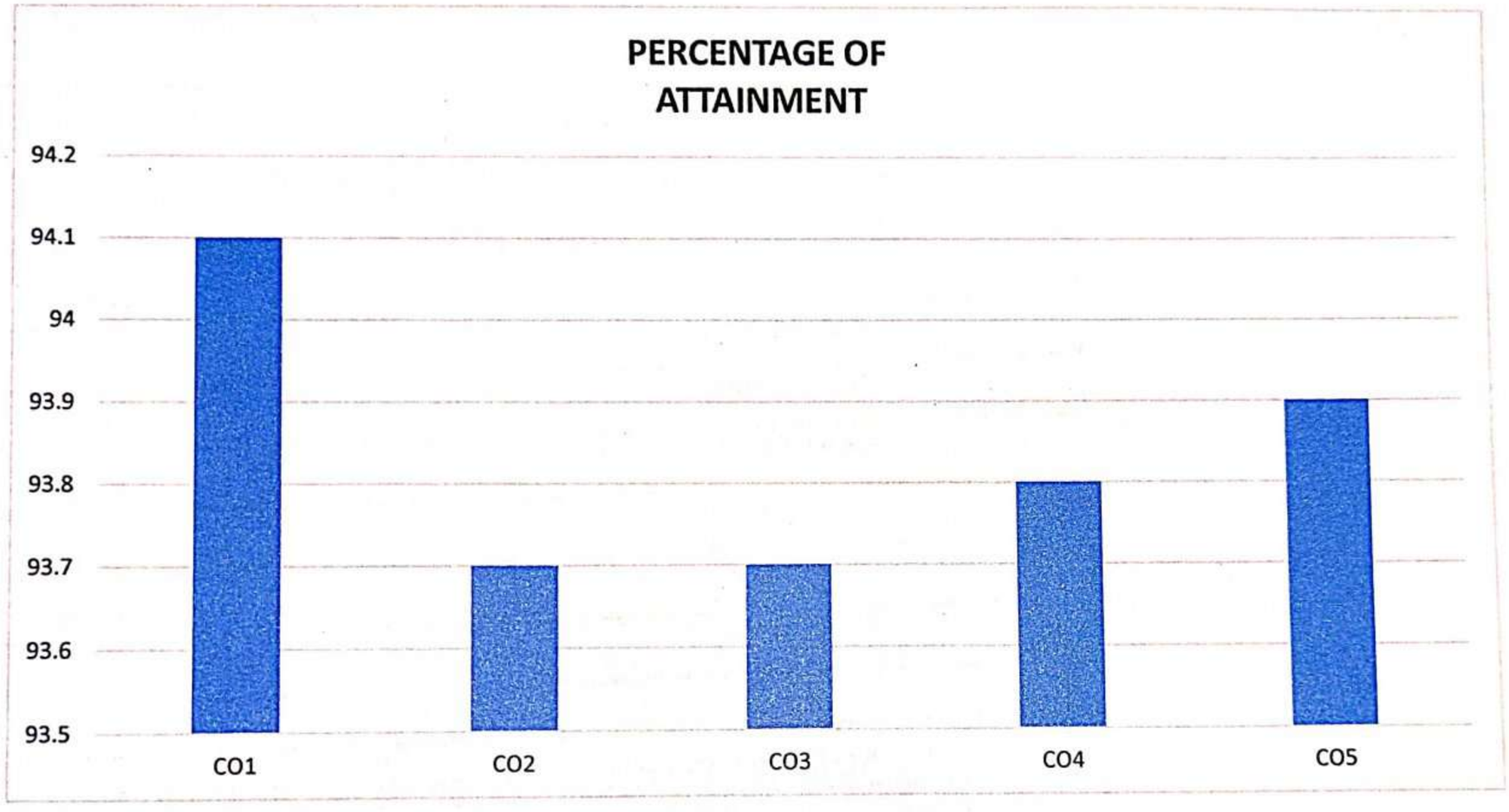
THANJAVUR-5.



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS

SUBJECT CODE : 16SCCCA8

NO.OF STUDENTS : 92

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	3	DISTINCTION
60-69	14	VERY GOOD
50-59	45	GOOD
40-49	30	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
70-79	3.26	DISTINCTION
60-69	15.22	VERY GOOD
50-59	48.91	GOOD
40-49	32.61	AVERAGE

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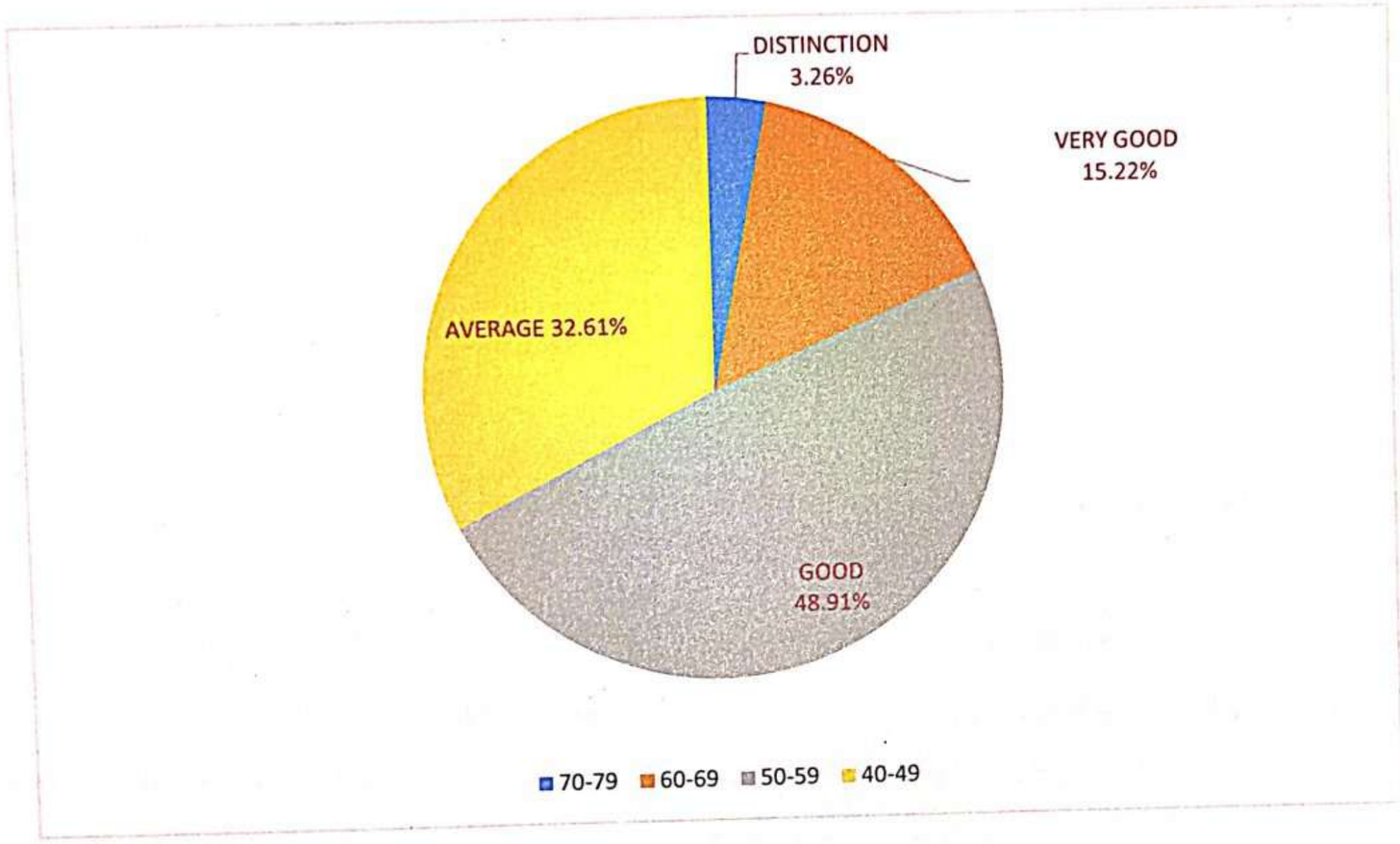

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
New New Bus Stand, THANJAVUR-5

R. ARAVAZHI, M.C.A., M.Phil.,
HEAD
Department of Computer Applications
BHARATH COLLEGE OF SCIENCE & MANAGEMENT
THANJAVUR- 613005.

PRINCIPAL
Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT. Near New Bus Stand. THANJAVUR-5.

Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - SOFTWARE ENGINEERING(MBECA1:1/10)

COURSE OUTCOME

CO1	Plan a software engineering process life cycle .
CO2	Able to elicit, analyze and specify software requirements with various stakeholders of the project.
CO3	Analyze and translate a specification into a design using an appropriate software engineering methodology.
CO4	Know how to develop the code from the design.
CO5	Able to use modern engineering tools necessary for software project management, time management and software reuse.

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PO⟶ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	0

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	4	3	4	4	4	19	76
2	AJITH. G	CB18S 254292	5	4	5	5	5	24	96
3	AKASH. R (26.02.2001)	CB18S 254293	5	4	5	4	5	23	92
4	AKASH. R (02.10.1998)	CB18S 254294	4	3	4	4	3	18	72
5	AKILAN. V	CB18S 254295	5	4	5	4	4	22	88
6	ARULARASAN. S	CB18S 254297	4	3	4	4	4	19	76
7	ARUNKUMAR. K.C	CB18S 254298	5	4	5	5	5	24	96
8	BASKAR. P	CB18S 254299	5	4	5	4	5	23	92
9	BHARATHKUMAR. B	CB18S 254300	5	4	5	4	4	22	88
10	BOOMINDHRA. R.N	CB18S 254301	5	4	5	4	5	23	92
11	CHANDRU. S	CB18S 254302	5	4	5	4	4	22	88
12	DANIEL. S	CB18S 254303	5	4	4	5	4	22	88
13	DEVENDHIRAN. P	CB18S 254304	5	5	4	5	4	23	92
14	DEVKANTH RAO. L	CB18S 254305	5	4	5	4	5	23	92
15	DHANUSIYA. D	CB18S 254306	5	4	5	5	5	24	96
16	DHIVAKAR. B	CB18S 254307	5	4	5	4	4	22	88
17	DINESHKUMAR. K	CB18S 254308	5	4	4	5	4	22	88

Near New Bus Stand THANJAVUR-5

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18	DIVYESH. S	CB18S 254309	5	5	4	5	4	23	92
19	EZHIL. M	CB18S 254310	5	4	5	5	5	24	96
20	GOKUL. K	CB18S 254311	5	4	5	4	4	22	88
21	GOWTHAMAN. M	CB18S 254312	5	4	5	5	5	24	96
22	HARIHARASUTHAN. R	CB18S 254313	5	5	4	5	4	23	92
23	ISWARYA. A	CB18S 254314	5	4	5	5	5	24	96
24	JAMUNA. V	CB18S 254315	5	5	4	5	4	23	92
25	JANAKIRAMAN. V	CB18S 254316	5	4	5	4	5	23	92
26	JANANI. S	CB18S 254317	5	4	4	4	4	24	96
27	JAYA SUDHAN. S	CB18S 254318	5	4	5	4	4	22	88
28	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	5	5	25	100
29	KAMALESH. S	CB18S 254320	5	4	5	4	5	23	92
30	KARIKALAN. S	CB18S 254321	5	5	4	5	4	23	92
31	KARMUKILAN. R.R	CB18S 254322	5	5	4	5	5	24	96
32	KISHORE KUMAR. T	CB18S 254323	5	5	5	4	5	24	96
33	KRISHNAMOORTHY. P	CB18S 254324	5	5	5	5	5	25	100
34	KRITHIKA. R.S	CB18S 254325	5	4	5	4	5	23	92
35	KUZHANTHAIVEL. M	CB18S 254326	4	5	5	5	5	24	96
36	LOGESWAR. S	CB18S 254327	5	4	5	4	5	23	92

Near New Bus Stand. THANJAVUR-5

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37	LOHA PRIYA. C	CB18S 254328	5	5	5	5	5	25	100
38	LORDSON JEEVAPRIYAN. E	CB18S 254329	4	4	4	4	4	20	80
39	MAHALAKSHMI. M	CB18S 254330	5	5	5	5	5	25	100
40	MANIBHARATHI. R	CB18S 254331	4	3	4	4	3	18	72
41	MANIKANDAN..R	CB18S 254332	5	4	5	4	5	23	92
42	MATHESH. T	CB18S 254334	5	4	4	5	4	22	88
43	MOHAMED RIYAS. J	CB18S 254335	5	4	5	5	5	24	96
44	MOHAMED RIYASKHAN. S	CB18S 254336	5	5	4	5	5	24	96
45	MOSES PRABAKARAN. M	CB18S 254337	5	4	5	4	4	22	88
46	MUBARAK ALI. J	CB18S 254338	5	4	5	5	5	24	96
47	MUKILAN. S	CB18S 254339	5	4	5	4	5	23	92
48	ARNALD. S	CB18S 254340	5	4	5	4	5	23	92
49	BALAJI. K	CB18S 254341	5	5	5	4	5	24	96
50	KALIYARASAN. M	CB18S 254342	5	5	5	5	4	24	96
51	NITHISH KUMAR. A	CB18S 254343	5	5	4	5	4	23	92
52	OLI MOHAMED. A	CB18S 254344	4	3	4	3	3	17	68
53	PANDIYARAJAN. R	CB18S 254345	5	4	4	4	4	21	84
54	POOVARASAN. S	CB18S 254346	4	4	4	4	4	20	80
55	PRAGATHESWARAN. G	CB18S 254348	4	3	3	3	3	16	64

Near New Bus Stand, THANJAVUR-5

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56	PRAKASH. J	CB18S 254349	3	3	3	3	3	15	60
57	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	4	3	4	3	3	17	68
58	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	5	5	5	5	4	24	96
59	PREMNATH. S	CB18S 254352	5	4	4	4	4	21	84
60	RAGU. R	CB18S 254353	3	3	3	3	3	15	60
61	RAJASANKARI. A	CB18S 254354	5	5	5	5	5	25	100
62	RAJASRIRAM. K	CB18S 254355	5	4	4	4	4	21	84
63	RAMJI. H	CB18S 254356	4	5	5	5	5	24	96
64	RENGARAJ. M	CB18S 254357	5	4	5	4	5	23	92
65	SANGEETHA. G	CB18S 254358	5	5	5	4	5	24	96
66	SARAVANAN. A	CB18S 254359	5	4	5	4	5	23	92
67	SARAVANAN. P	CB18S 254360	5	4	4	5	4	22	88
68	SARAVASHREE. K	CB18S 254361	5	4	5	5	5	24	96
69	SATCHINKUMAR. G	CB18S 254362	5	5	5	5	5	25	100
70	SATHEESH KUMAR. M	CB18S 254363	5	4	4	4	4	21	84
71	SATHISH KUMAR. M	CB18S 254364	5	5	4	5	4	23	92
72	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	5	5	5	5	25	100
73	SIVA SANKARI. S	CB18S 254366	5	4	5	5	5	24	96
74	SIVA. S	CB18S 254367	5	5	4	5	5	24	96

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Near New Bus Stand
THANJAVUR-5

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75	SRI GAYATHRI .N	CB18S 254368	5	5	5	4	5	24	96
76	SRINIVASAN. S	CB18S 254369	5	5	5	5	4	24	96
77	SUGANTHI. S	CB18S 254370	4	5	5	5	5	24	96
78	SUGUNESH. M	CB18S 254371	5	4	5	4	4	22	88
79	SUNDHAR. R	CB18S 254372	4	3	4	4	4	19	76
80	SURENDHAR. S	CB18S 254373	5	4	5	4	5	23	92
81	SURENTHIRANATH. N	CB18S 254374	4	3	3	3	3	16	64
82	SWATHI. G	CB18S 254375	5	5	5	5	4	24	96
83	VAIRAMUTHU. M	CB18S 254376	4	3	4	4	3	18	72
84	VASANTH. K	CB18S 254377	5	4	4	5	4	22	88
85	VENKATESAN. M	CB18S 254378	5	4	5	4	4	22	88
86	VIGNESH . S (03.05.2001)	CB18S 254379	3	4	3	3	3	16	64
87	VIGNESH. V	CB18S 254380	5	4	5	4	5	23	92
88	VIGNESH. R	CB18S 254381	5	5	5	4	5	24	96
89	VIGNESH.S (21.01.2001)	CB18S 254382	3	4	3	3	4	17	68
90	VISHALI. T	CB18S 254384	5	4	5	4	4	22	88
91	YOGESWARAN. C	CB18S 254385	4	3	4	3	3	17	68
92	YOKESH. S	CB18S 254386	5	4	5	4	5	23	92
		Average	4.74	4.17	4.53	4.33	4.36		

Near New Bus Stand THANJAVUR-5

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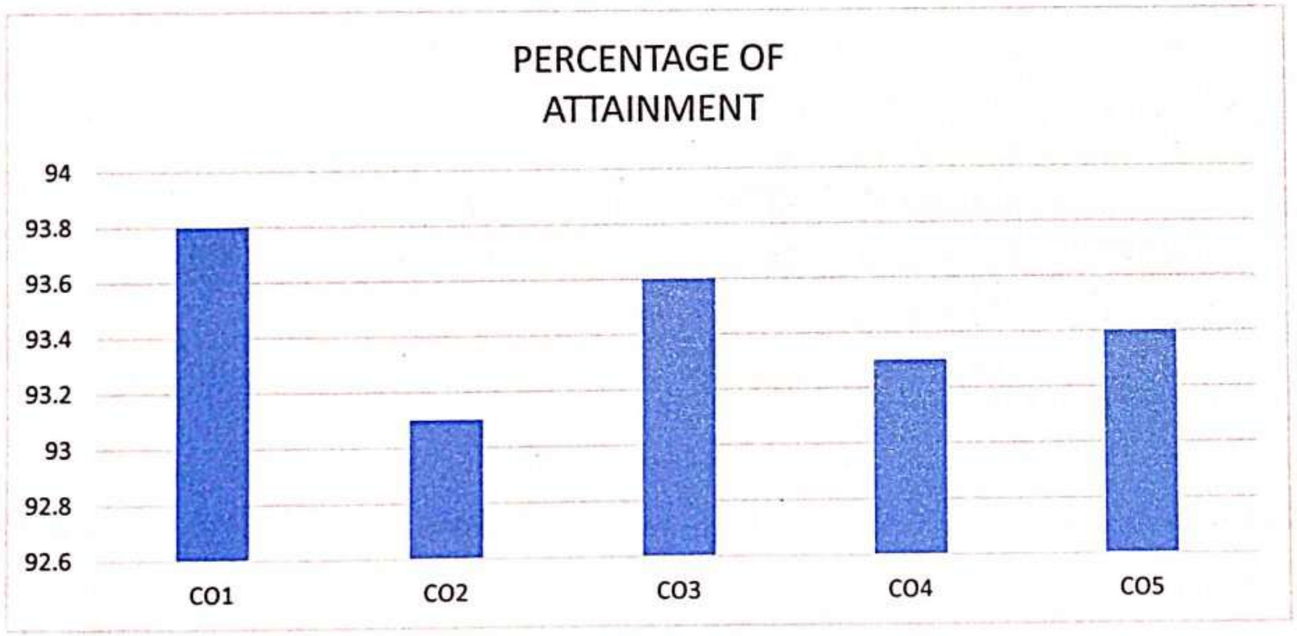
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.74	75	79.74	93.8
CO2	4.17	75	79.17	93.1
CO3	4.53	75	79.53	93.6
CO4	4.33	75	79.33	93.3
CO5	4.36	75	79.36	93.4

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.8
CO2	93.1
CO3	93.6
CO4	93.3
CO5	93.4



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Near New Bus Stand, THANJAVUR-5

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

SUBJECT CODE : 16SMBECA1:2

SUBJECT NAME : SOFTWARE ENGINEERING

NO OF STUDENTS : 92

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	7	OUTSTANDING
80-89	30	EXCELLENT
70-79	46	DISTINCTION
60-69	6	VERY GOOD
50-59	2	GOOD
40-49	1	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	7.61%	OUTSTANDING
80-89	32.61%	EXCELLENT
70-79	50%	DISTINCTION
60-69	6.52%	VERY GOOD
50-59	2.17%	GOOD
40-49	1.09%	AVERAGE

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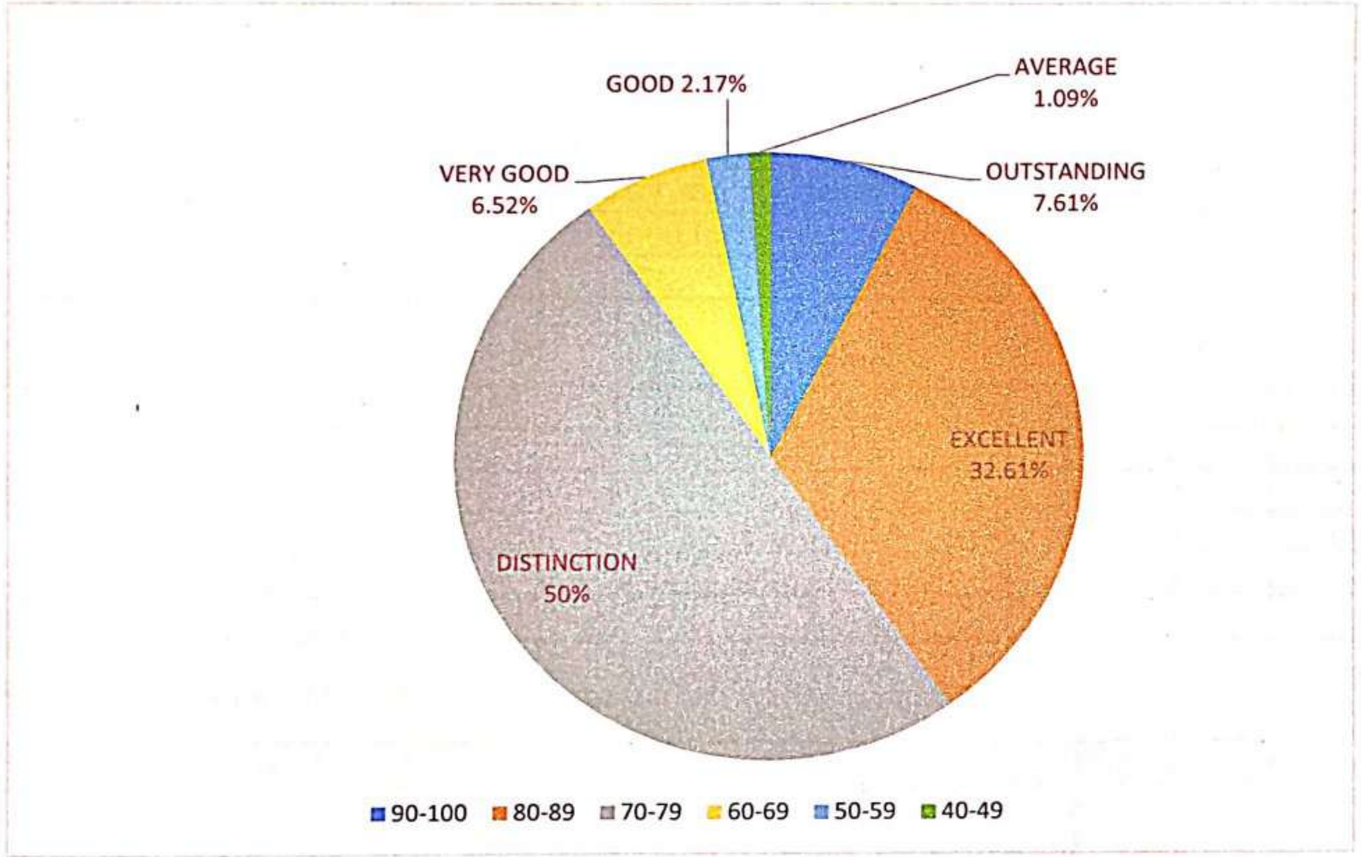
COURSE OUTCOME ASSESMENT IN PERCENTAGE



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, Near New Bus Stand, THANJAVUR-5

COURSE - CLOUD COMPUTING(16SMBECA2:1)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Understand the importance of virtualization in distributed computing and how this has enabled the development of Cloud Computing
CO3	Implement different cloud storage technologies and Service Oriented cloud systems
CO4	Understand the key security and compliance challenges of cloud computing
CO5	Choose among various cloud technologies for implementing applications

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO6	3	2	1	2	1
CO7	3	2	2	3	2
CO8	3	2	2	2	2
CO9	3	2	2	2	1
CO10	3	1	3	3	2
Average	3	1.8	2	2.4	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	5	5	5	5	4	24	96
2	AJITH. G	CB18S 254292	4	4	4	4	4	20	80
3	AKASH. R (26.02.2001)	CB18S 254293	4	4	4	4	4	20	80
4	AKASH. R (02.10.1998)	CB18S 254294	5	4	5	4	5	23	92
5	AKILAN. V	CB18S 254295	5	5	5	5	5	25	100
6	ARULARASAN. S	CB18S 254297	4	5	5	5	5	24	96
7	ARUNKUMAR. K.C	CB18S 254298	5	5	5	5	5	25	100
8	BASKAR. P	CB18S 254299	5	4	5	5	5	24	96
9	BHARATHKUMAR. B	CB18S 254300	5	5	4	5	5	24	96
10	BOOMINDHRA. R.N	CB18S 254301	5	5	5	4	5	24	96
11	CHANDRU. S	CB18S 254302	5	5	5	5	4	24	96
12	DANIEL. S	CB18S 254303	4	5	5	5	5	24	96
13	DEVENDHIRAN. P	CB18S 254304	5	4	5	5	5	24	96
14	DEVKANTH RAO. L	CB18S 254305	5	5	e	5	e	23	92
15	DHANUSIYA. D	CB18S 254306	5	5	5	5	5	25	100
16	DHIVAKAR. B	CB18S 254307	5	e	5	5	5	24	96
17	DINESHKUMAR. K	CB18S 254308	5	5	5	5	4	24	96

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18	DIVYESH. S	CB18S 254309	5	5	5	5	5	25	100
19	EZHIL. M	CB18S 254310	5	5	5	5	5	25	100
20	GOKUL. K	CB18S 254311	5	4	5	4	5	23	92
21	GOWTHAMAN. M	CB18S 254312	5	5	5	5	5	25	100
22	HARIHARASUTHAN. R	CB18S 254313	5	5	4	5	5	24	96
23	ISWARYA. A	CB18S 254314	5	4	5	5	5	24	96
24	JAMUNA. V	CB18S 254315	4	5	5	5	5	24	96
25	JANAKIRAMAN. V	CB18S 254316	5	5	5	5	4	24	96
26	JANANI. S	CB18S 254317	5	4	5	4	5	23	92
27	JAYA SUDHAN. S	CB18S 254318	4	5	5	5	5	24	96
28	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	5	5	25	100
29	KAMALESH. S	CB18S 254320	5	5	4	5	4	23	92
30	KARIKALAN. S	CB18S 254321	5	4	5	4	5	23	92
31	KARMUKILAN. R.R	CB18S 254322	5	5	5	5	5	25	100
32	KISHORE KUMAR. T	CB18S 254323	5	5	5	5	5	25	100
33	KRISHNAMOORTHY. P	CB18S 254324	5	5	5	5	5	25	100
34	KRITHIKA. R.S	CB18S 254325	5	5	5	4	5	24	96
35	KUZHANTHAIVEL. M	CB18S 254326	5	5	5	5	5	25	100
36	LOGESWAR. S	CB18S 254327	5	4	5	5	5	24	96
37	LOHA PRIYA. C	CB18S 254328	5	5	5	5	5	25	100

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38	LORDSON JEEVAPRIYAN. E	CB18S 254329	5	5	5	5	4	24	96
39	MAHALAKSHMI. M	CB18S 254330	5	5	4	5	5	24	96
40	MANIBHARATHI. R	CB18S 254331	5	4	5	4	5	23	92
41	MANIKANDAN..R	CB18S 254332	5	5	5	5	4	24	96
42	MATHESH. T	CB18S 254334	5	5	5	4	5	24	96
43	MOHAMED RIYAS. J	CB18S 254335	5	5	5	5	5	25	100
44	MOHAMED RIYASKHAN. S	CB18S 254336	5	5	5	5	5	25	100
45	MOSES PRABAKARAN. M	CB18S 254337	5	5	5	5	5	25	100
46	MUBARAK ALI. J	CB18S 254338	5	5	5	5	5	25	100
47	MUKILAN. S	CB18S 254339	5	5	5	5	5	25	100
48	ARNALD. S	CB18S 254340	5	4	5	5	5	24	96
49	BALAJI. K	CB18S 254341	4	5	5	5	5	24	96
50	KALIYARASAN. M	CB18S 254342	5	5	4	5	4	23	92
51	NITHISH KUMAR. A	CB18S 254343	5	4	5	5	5	24	96
52	OLI MOHAMED. A	CB18S 254344	4	5	5	5	5	24	96
53	PANDIYARAJAN. R	CB18S 254345	5	4	5	4	4	22	88
54	POOVARASAN. S	CB18S 254346	5	5	4	5	4	23	92
55	PRAGATHESWARAN. G	CB18S 254348	5	5	4	5	4	23	92
56	PRAKASH. J	CB18S 254349	5	5	4	5	5	24	96
57	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	4	5	5	5	5	24	96

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58	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	5	5	4	5	5	24	96
59	PREMNATH. S	CB18S 254352	4	5	5	5	5	24	96
60	RAGU. R	CB18S 254353	5	5	4	5	4	23	92
61	RAJASANKARI. A	CB18S 254354	5	5	5	5	5	25	100
62	RAJASRIRAM. K	CB18S 254355	4	5	5	5	5	24	96
63	RAMJI. H	CB18S 254356	5	5	5	5	5	25	100
64	RENGARAJ. M	CB18S 254357	4	5	5	5	5	24	96
65	SANGEETHA. G	CB18S 254358	5	5	5	5	5	25	100
66	SARAVANAN. A	CB18S 254359	5	5	4	5	4	23	92
67	SARAVANAN. P	CB18S 254360	5	4	5	4	5	23	92
68	SARAVASHREE. K	CB18S 254361	5	5	5	5	5	25	100
69	SATCHINKUMAR. G	CB18S 254362	5	5	5	5	5	25	100
70	SATHEESH KUMAR. M	CB18S 254363	5	4	5	4	5	23	92
71	SATHISH KUMAR. M	CB18S 254364	5	5	4	5	4	23	92
72	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	5	5	5	5	25	100
73	SIVA SANKARI. S	CB18S 254366	4	5	5	5	5	24	96
74	SIVA. S	CB18S 254367	5	5	5	5	5	25	100
75	SRI GAYATHRI .N	CB18S 254368	5	5	5	5	5	25	100
76	SRINIVASAN. S	CB18S 254369	5	4	5	5	5	24	96
77	SUGANTHI. S	CB18S 254370	5	5	5	5	5	25	100

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78	SUGUNESH. M	CB18S 254371	4	5	5	5	5	24	96
79	SUNDHAR. R	CB18S 254372	5	4	5	4	5	23	92
80	SURENDHAR. S	CB18S 254373	5	5	5	5	4	24	96
81	SURENTHIRANATH. N	CB18S 254374	5	4	5	5	5	24	96
82	SWATHI. G	CB18S 254375	5	5	4	5	5	24	96
83	VAIRAMUTHU. M	CB18S 254376	5	4	5	4	4	22	88
84	VASANTH. K	CB18S 254377	5	5	4	5	5	24	96
85	VENKATESAN. M	CB18S 254378	5	5	5	5	5	25	100
86	VIGNESH . S (03.05.2001)	CB18S 254379	5	4	5	5	4	23	92
87	VIGNESH. V	CB18S 254380	5	5	4	5	5	24	96
88	VIGNESH. R	CB18S 254381	5	5	5	5	5	25	100
89	VIGNESH.S (21.01.2001)	CB18S 254382	5	4	5	4	5	23	92
90	VISHALI. T	CB18S 254384	5	5	4	5	4	23	92
91	YOGESWARAN. C	CB18S 254385	4	5	5	4	5	23	92
92	YOKESH. S	CB18S 254386	5	4	5	5	5	24	96
Average			4.83695652	4.69565217	4.75	4.81521739	4.72826087		

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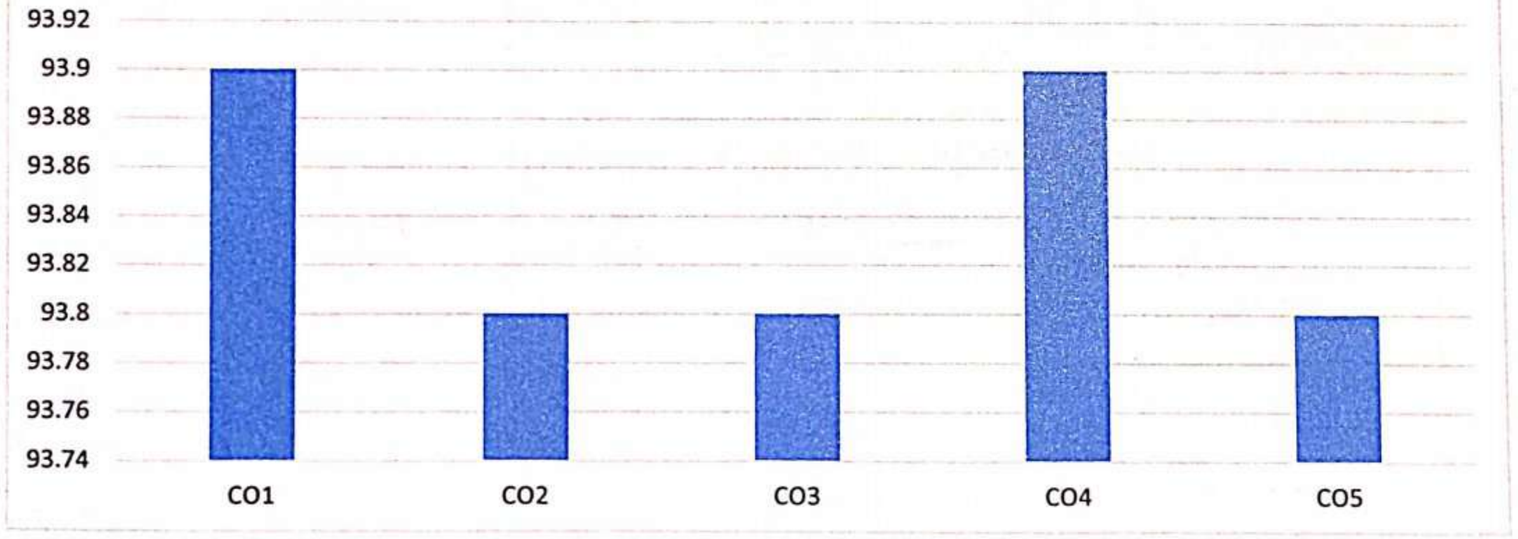
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.84	75	79.84	93.9
CO2	4.69	75	79.69	93.8
CO3	4.75	75	79.75	93.8
CO4	4.82	75	79.82	93.9
CO5	4.73	75	79.73	93.8

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.9
CO2	93.8
CO3	93.8
CO4	93.9
CO5	93.8



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT CODE : 16SMBECA2:1

SUBJECT NAME : CLOUD COMPUTING

NO OF STUDENTS : 92

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	8	DISTINCTION
60-69	45	VERY GOOD
50-59	32	GOOD
40-49	7	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
70-79	8.70%	DISTINCTION
60-69	48.91%	VERY GOOD
50-59	34.78%	GOOD
40-49	7.61%	AVERAGE

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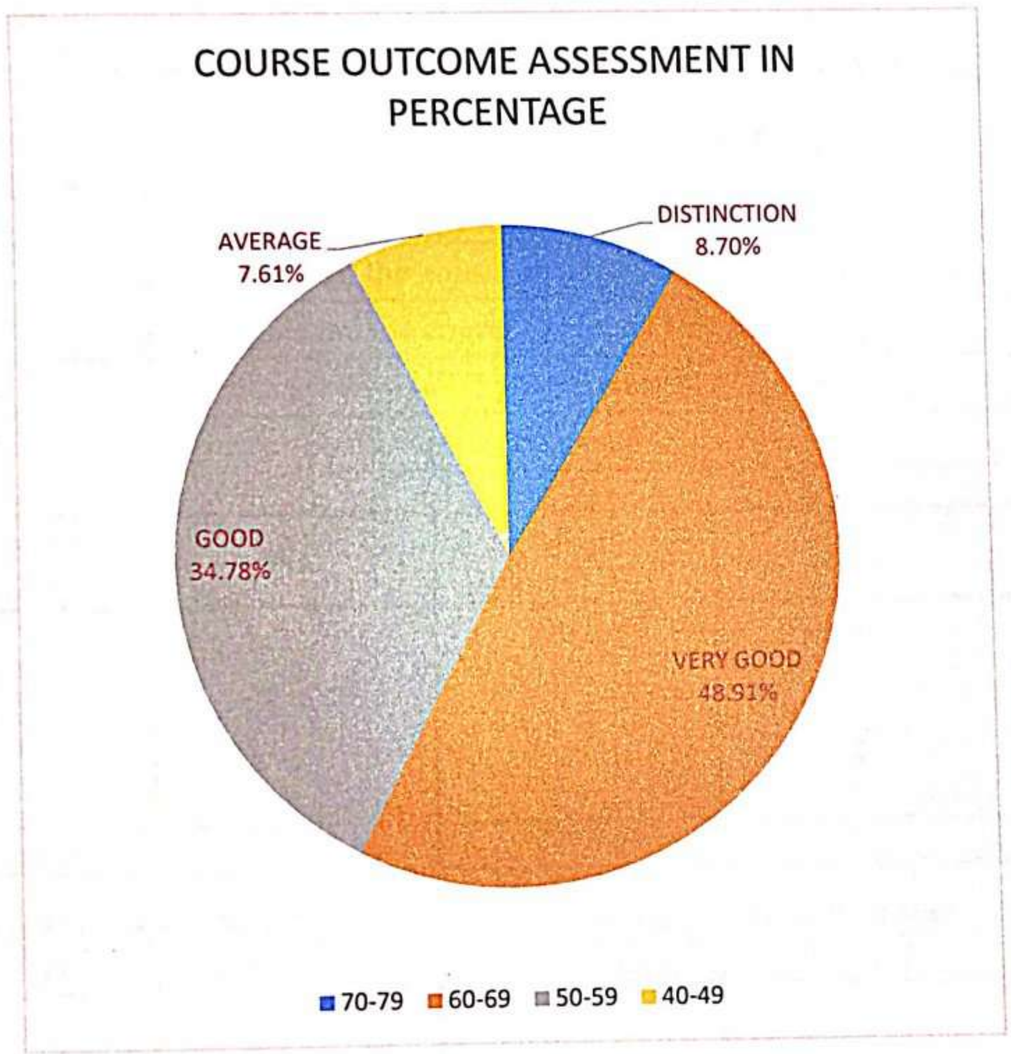

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COURSE - PROGRAMMING IN JAVA(16SCCCA3)

COURSE OUTCOME

CO1	To acquire the programming skills with java.
CO2	To implement the object oriented concepts with java language
CO3	To understand the concepts of multithreading.
CO4	To learn the art of GUI programming with Applet.
CO5	To learn about Database connectivity.

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	3
CO2	2	0	2	2	0
CO3	2	1	3	2	3
CO4	3	0	2	2	2
CO5	3	0	2	1	1
Average	2.6	0.6	2.2	2	1.8

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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Near New Bus Stand, THANJAVUR-5.

S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AARTHI. R	CB19S 258636	4	5	3	5	4	21	84
2	ABISHEK. M	CB19S 258637	5	3	5	5	4	22	88
3	ALWIN. C	CB19S 258638	4	5	4	5	5	23	92
4	ANAND. V	CB19S 258639	4	5	5	3	5	21	84
5	ASWIN. K	CB19S 258640	5	5	5	5	5	25	100
6	ASWIN. U	CB19S 258641	5	3	4	4	5	20	80
7	BALAGURUMOORTHY. V	CB19S 258642	3	4	3	4	4	19	76
8	BHARATHI. K	CB19S 258643	5	5	4	5	5	24	96
9	BOSE ARASAN. A	CB19S 258644	4	5	5	4	5	23	92
10	CHANDRU. M	CB19S 258645	5	3	5	5	5	22	88
11	DHINAKAR.M	CB19S 258646	4	5	4	5	4	21	84
12	DILIP. P	CB19S 258647	4	5	4	4	4	21	84
13	DURAIYARASAN. M	CB19S 258648	5	4	5	4	4	22	88
14	GANESH KUMAR. R	CB19S 258649	5	3	5	5	5	23	92
15	GAYATHRI. L	CB19S 258650	5	5	5	5	4	24	96
16	GOWTHAM. K	CB19S 258651	4	5	5	4	5	23	92
17	HARISH. S	CB19S 258652	4	5	4	4	4	21	84

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18	JAYA VIGNESH. S	CB19S 258653	5	4	5	4	5	22	88
19	KAMALRAJ. S	CB19S 258654	5	4	5	5	4	24	96
20	KAMESHWARAN. K	CB19S 258655	4	5	5	4	5	23	92
21	KARTHIK.K	CB19S 258656	4	4	5	4	5	22	88
22	KARUNASVARAN. M	CB19S 258658	5	4	4	5	5	23	92
23	KESAVAN. S	CB19S 258659	5	5	5	4	5	24	96
24	KESAVAN. V	CB19S 258660	5	4	5	4	5	23	92
25	MANIKANDAN. U	CB19S 258661	4	5	5	4	4	22	88
26	MANO BHARATHI. B	CB19S 258662	5	4	5	5	4	23	92
27	MATHIVANAN. R	CB19S 258664	5	4	5	4	4	22	88
28	MITHRAN. S B	CB19S 258665	4	5	4	5	4	22	88
29	MOHAMED FAYAZ. S	CB19S 258666	5	4	5	5	5	24	96
30	MOHAMMAD AZHARUDDIN. S	CB19S 258667	5	4	5	4	4	23	92
31	NATHIYA. S	CB19S 258668	5	5	5	5	5	25	100
32	RAJARAJAN. S	CB19S 258670	5	4	5	5	4	23	92
33	RAMANI. N	CB19S 258672	3	4	5	3	4	19	76
34	SANKAR. N	CB19S 258673	5	4	5	5	4	23	92
35	SANTHOSH. N	CB19S 258674	4	5	3	5	5	21	84
36	SANTHOSHKUMAR. S	CB19S 258675	3	4	4	3	4	18	72
37	SARAN. S	CB19S 258676	4	5	5	5	4	23	92

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38	SHAFIK. S	CB19S 258677	4	5	5	5	5	24	96
39	SILAMBARASAN. N	CB19S 258678	4	5	5	4	5	23	92
40	SIVARANJANI. P	CB19S 258680	5	5	5	5	5	25	100
41	SRIKANTH. M	CB19S 258682	4	5	4	5	4	22	88
42	SUBHA. K	CB19S 258684	5	5	5	5	5	25	100
43	SUBITSHA. S	CB19S 258685	5	5	5	5	5	25	100
44	SUBRAMANIYAN. K	CB19S 258686	5	5	5	5	5	21	84
45	SURYARAJ. S	CB19S 258687	5	4	4	5	4	22	88
46	SUVEDHAN. E	CB19S 258688	5	5	4	5	5	24	96
47	SWETHA. S	CB19S 258689	5	5	5	5	5	25	100
48	THIRUSELVI. M	CB19S 258690	5	5	5	4	5	24	96
49	VEERAMANI. M	CB19S 258691	4	3	4	4	4	19	76
50	VEERAMANIKANDAN. D	CB19S 258692	4	4	4	5	4	21	84
51	VIJAY. S	CB19S 258694	4	5	4	5	5	23	92
52	YOGARAJAN. R	CB19S 258695	4	5	4	5	4	22	88
53	YOGESH KUMAR. S	CB19S 258696	5	5	5	4	5	21	84
54	YUVAYOGI. V	CB19S 258697	5	4	5	4	5	23	92
Average			4.50	4.48	4.59	4.52	4.555555556		

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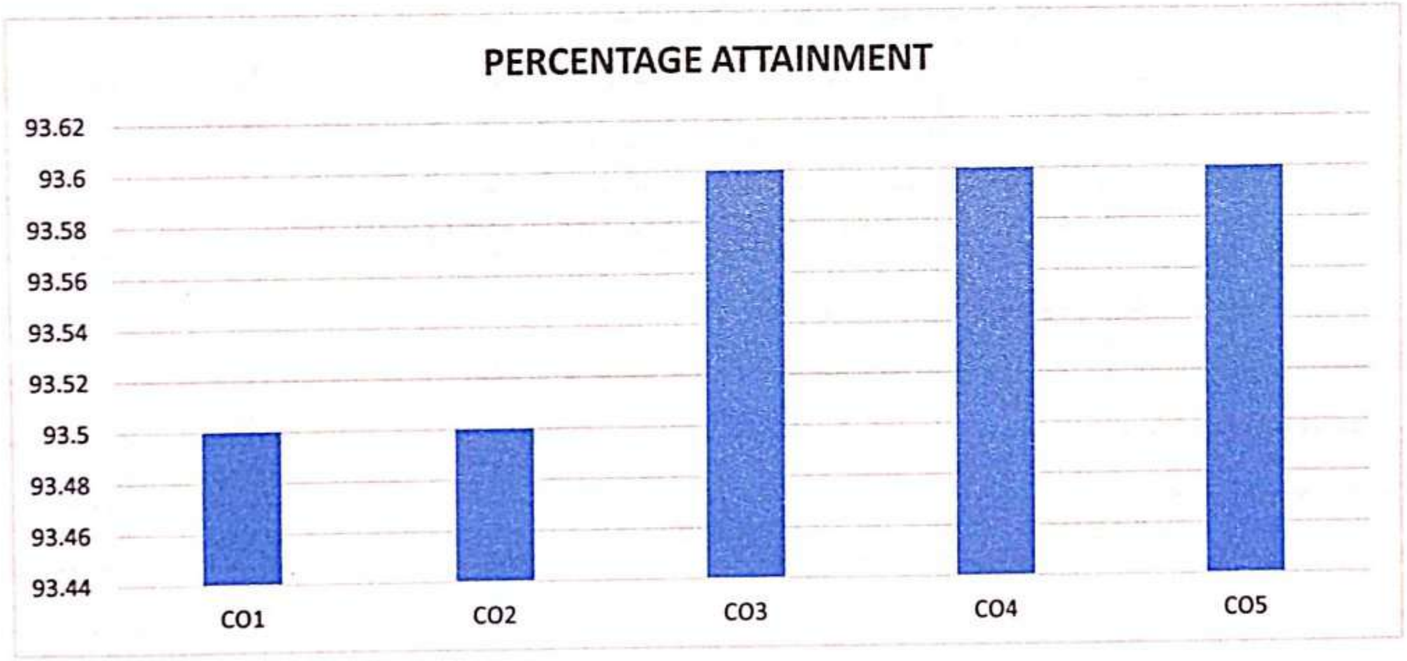
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.5	75	79.5	93.5
CO2	4.48	75	79.48	93.5
CO3	4.59	75	79.59	93.6
CO4	4.52	75	79.52	93.6
CO5	4.55	75	79.55	93.6

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.50
CO2	93.5
CO3	93.60
CO4	93.60
CO5	93.6



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
New New Bus Stand
THANJAVUR-5

COURSE ATTAINMENT FOR BACHELOR OFCOMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA3

SUBJECT NAME : PROGRAMMING IN JAVA

NO OF STUDENTS : 54

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	6	OUTSTANDING
80-89	14	EXCELLENT
70-79	19	DISTINCTION
60-69	11	VERY GOOD
50-59	4	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	11.11%	OUTSTANDING
80-89	25.93%	EXCELLENT
70-79	35.19%	DISTINCTION
60-69	20.37%	VERY GOOD
50-59	7.41%	GOOD

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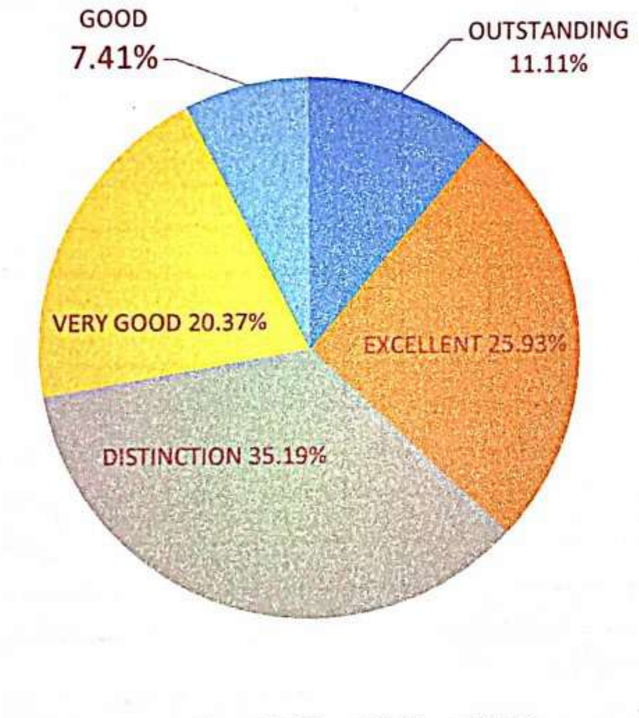
THANJAVUR-5

COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - PROGRAMMING IN PHP(16SCCCA9)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Using PHP build-in functions and creating custom functions
CO3	To create a database in PhpMyAdmin
CO4	How to receive and process Form submission data
CO5	To create images on Server.

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO6	3	2	1	3	1
CO7	3	2	2	2	2
CO8	3	2	2	2	2
CO9	3	2	2	3	1
CO10	3	3	2	2	2
Average	3	2.2	1.8	2.4	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand,
THANJAVUR-5

S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	5	5	4	5	4	23	92
2	AJITH. G	CB18S 254292	5	4	5	4	4	22	88
3	AKASH. R (26.02.2001)	CB18S 254293	5	5	4	4	4	22	88
4	AKASH. R (02.10.1998)	CB18S 254294	4	5	4	5	4	22	88
5	AKILAN. V	CB18S 254295	5	5	5	5	5	25	100
6	ARULARASAN. S	CB18S 254297	5	4	5	5	5	24	96
7	ARUNKUMAR. K.C	CB18S 254298	5	5	5	5	5	25	100
8	BASKAR. P	CB18S 254299	5	5	4	5	5	24	96
9	BHARATHKUMAR. B	CB18S 254300	5	5	5	4	5	24	96
10	BOOMINDHRA. R.N	CB18S 254301	5	5	5	5	4	24	96
11	CHANDRU. S	CB18S 254302	5	4	5	5	5	24	96
12	DANIEL. S	CB18S 254303	5	5	5	5	4	24	96
13	DEVENDHIRAN. P	CB18S 254304	5	4	5	5	5	24	96
14	DEVKANTH RAO. L	CB18S 254305	5	5	4	5	4	23	92
15	DHANUSIYA. D	CB18S 254306	5	5	5	5	5	25	100
16	DHIVAKAR. B	CB18S 254307	5	4	5	5	5	24	96
17	DINESHKUMAR. K	CB18S 254308	5	5	4	5	5	24	96

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18	DIVYESH. S	CB18S 254309	5	5	5	5	5	25	100
19	EZHIL. M	CB18S 254310	5	5	5	5	5	25	100
20	GOKUL. K	CB18S 254311	5	4	5	4	5	23	92
21	GOWTHAMAN. M	CB18S 254312	5	5	5	5	5	25	100
22	HARIHARASUTHAN. R	CB18S 254313	5	5	4	5	5	24	96
23	ISWARYA. A	CB18S 254314	5	5	5	4	5	24	96
24	JAMUNA. V	CB18S 254315	5	5	5	5	4	24	96
25	JANAKIRAMAN. V	CB18S 254316	5	4	5	5	5	24	96
26	JANANI. S	CB18S 254317	5	5	4	4	5	23	92
27	JAYA SUDHAN. S	CB18S 254318	5	5	5	5	4	24	96
28	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	5	5	25	100
29	KAMALESH. S	CB18S 254320	5	4	4	5	5	23	92
30	KARIKALAN. S	CB18S 254321	5	5	5	4	4	23	92
31	KARMUKILAN. R.R	CB18S 254322	5	5	5	5	5	25	100
32	KISHORE KUMAR. T	CB18S 254323	5	5	5	5	5	25	100
33	KRISHNAMOORTHY. P	CB18S 254324	5	5	5	5	5	25	100
34	KRITHIKA. R.S	CB18S 254325	5	4	5	5	5	24	96
35	KUZHANTHAIVEL. M	CB18S 254326	5	5	5	5	5	25	100
36	LOGESWAR. S	CB18S 254327	5	5	4	5	5	24	96
37	LOHA PRIYA. C	CB18S 254328	5	5	5	5	5	25	100

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38	LORDSON JEEVAPRIYAN. E	CB18S 254329	5	5	5	4	5	24	96
39	MAHALAKSHMI. M	CB18S 254330	5	5	5	5	4	24	96
40	MANIBHARATHI. R	CB18S 254331	5	4	5	4	5	23	92
41	MANIKANDAN..R	CB18S 254332	5	5	4	5	5	24	96
42	MATHESH. T	CB18S 254334	5	5	5	5	4	24	96
43	MOHAMED RIYAS. J	CB18S 254335	5	5	5	5	5	25	100
44	MOHAMED RIYASKHAN. S	CB18S 254336	5	5	5	5	5	25	100
45	MOSES PRABAKARAN. M	CB18S 254337	5	5	5	5	5	25	100
46	MUBARAK ALI. J	CB18S 254338	5	5	5	5	5	25	100
47	MUKILAN. S	CB18S 254339	5	5	5	5	5	25	100
48	ARNALD. S	CB18S 254340	5	4	5	5	5	24	96
49	BALAJI. K	CB18S 254341	5	5	4	5	5	24	96
50	KALIYARASAN. M	CB18S 254342	5	4	5	5	4	23	92
51	NITHISH KUMAR. A	CB18S 254343	5	5	4	5	5	24	96
52	OLI MOHAMED. A	CB18S 254344	5	5	5	4	5	24	96
53	PANDIYARAJAN. R	CB18S 254345	5	4	5	4	4	22	88
54	POOVARASAN. S	CB18S 254346	4	5	4	5	5	23	92
55	PRAGATHESWARAN. G	CB18S 254348	5	4	5	5	4	23	92
56	PRAKASH. J	CB18S 254349	5	5	4	5	5	24	96
57	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	4	5	5	5	5	24	96

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58	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	5	5	5	4	5	24	96
59	PREMNATH. S	CB18S 254352	5	5	5	5	4	24	96
60	RAGU. R	CB18S 254353	5	4	5	4	5	23	92
61	RAJASANKARI. A	CB18S 254354	5	5	5	5	5	25	100
62	RAJASRIRAM. K	CB18S 254355	5	4	5	5	5	24	96
63	RAMJI. H	CB18S 254356	5	5	5	5	5	25	100
64	RENGARAJ. M	CB18S 254357	4	5	5	5	5	24	96
65	SANGEETHA. G	CB18S 254358	5	5	5	5	5	25	100
66	SARAVANAN. A	CB18S 254359	5	5	4	5	4	23	92
67	SARAVANAN. P	CB18S 254360	5	4	5	4	5	23	92
68	SARAVASHREE. K	CB18S 254361	5	5	5	5	5	25	100
69	SATCHINKUMAR. G	CB18S 254362	5	4	5	5	4	23	92
70	SATHEESH KUMAR. M	CB18S 254363	5	5	4	4	5	23	92
71	SATHISH KUMAR. M	CB18S 254364	5	5	5	5	5	25	100
72	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	4	5	5	5	24	96
73	SIVA SANKARI. S	CB18S 254366	5	5	5	5	5	25	100
74	SIVA. S	CB18S 254367	5	5	5	5	5	25	100
75	SRI GAYATHRI .N	CB18S 254368	5	5	4	5	5	24	96
76	SRINIVASAN. S	CB18S 254369	5	5	5	5	5	25	100
77	SUGANTHI. S	CB18S 254370	5	5	5	4	5	24	96

Near New Bus Stand THANJAVUR-5

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78	SUGUNESH. M	CB18S 254371	5	4	5	5	4	23	92
79	SUNDHAR. R	CB18S 254372	5	5	4	5	5	24	96
80	SURENDHAR. S	CB18S 254373	5	5	5	4	5	24	96
81	SURENTHIRANATH. N	CB18S 254374	5	5	5	5	4	24	96
82	SWATHI. G	CB18S 254375	5	4	4	4	4	21	84
83	VAIRAMUTHU. M	CB18S 254376	5	5	4	5	5	24	96
84	VASANTH. K	CB18S 254377	5	5	5	5	5	25	100
85	VENKATESAN. M	CB18S 254378	5	4	5	4	5	23	92
86	VIGNESH . S (03.05.2001)	CB18S 254379	5	5	5	5	4	24	96
87	VIGNESH. V	CB18S 254380	5	5	5	5	5	25	100
88	VIGNESH. R	CB18S 254381	5	4	5	4	5	23	92
89	VIGNESH.S (21.01.2001)	CB18S 254382	5	5	4	5	4	23	92
90	VISHALI. T	CB18S 254384	5	4	5	4	5	23	92
91	YOGESWARAN. C	CB18S 254385	5	5	4	5	4	23	92
92	YOKESH. S	CB18S 254386	5	4	5	5	5	24	96
Average			4.96	4.73	4.75	4.77	4.74		

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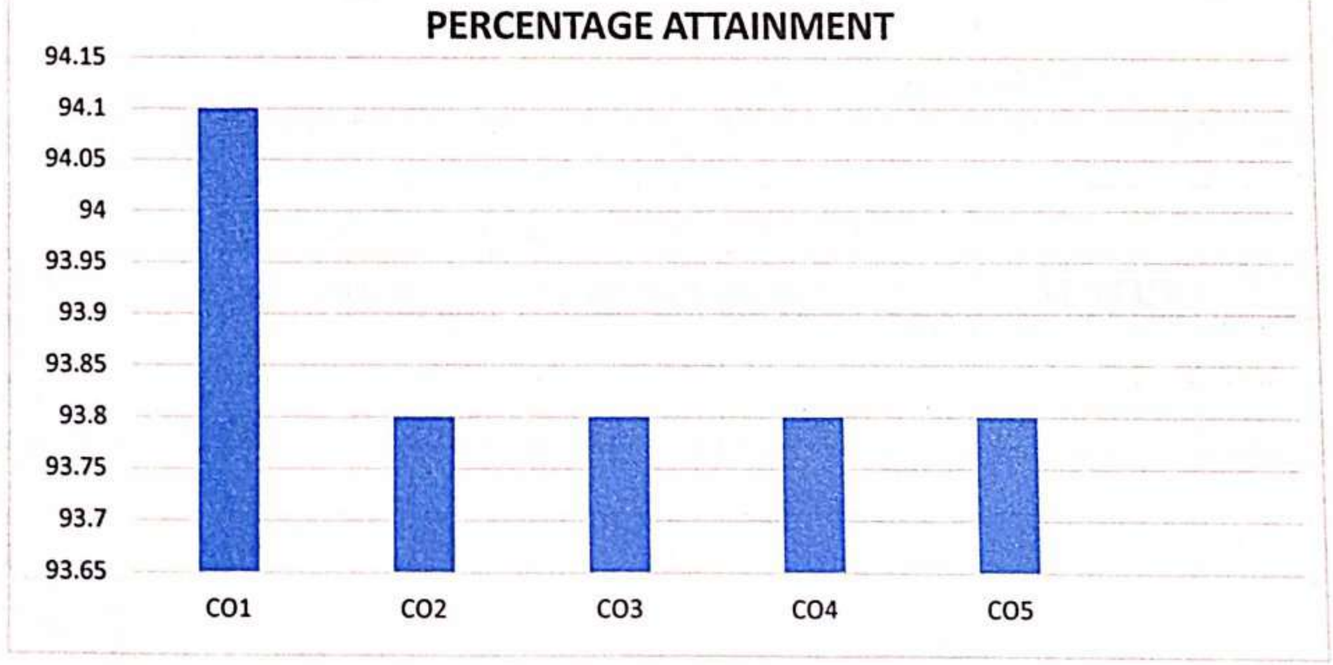
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.96	75	79.96	94.1
CO2	4.73	75	79.73	93.8
CO3	4.75	75	79.75	93.8
CO4	4.77	75	79.77	93.8
CO5	4.74	75	79.74	93.8

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.10
CO2	93.8
CO3	93.80
CO4	93.80
CO5	93.8



BHAKTHI COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5.

SUBJECT CODE : 16SCCCA9

SUBJECT NAME : PROGRAMMING IN PHP

NO OF STUDENTS : 92

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	0	EXCELLENT
70-79	5	DISTINCTION
60-69	29	VERY GOOD
50-59	53	GOOD
40-49	5	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
70-79	5.43%	DISTINCTION
60-69	31.52%	VERY GOOD
50-59	57.61%	GOOD
40-49	5.43%	AVERAGE

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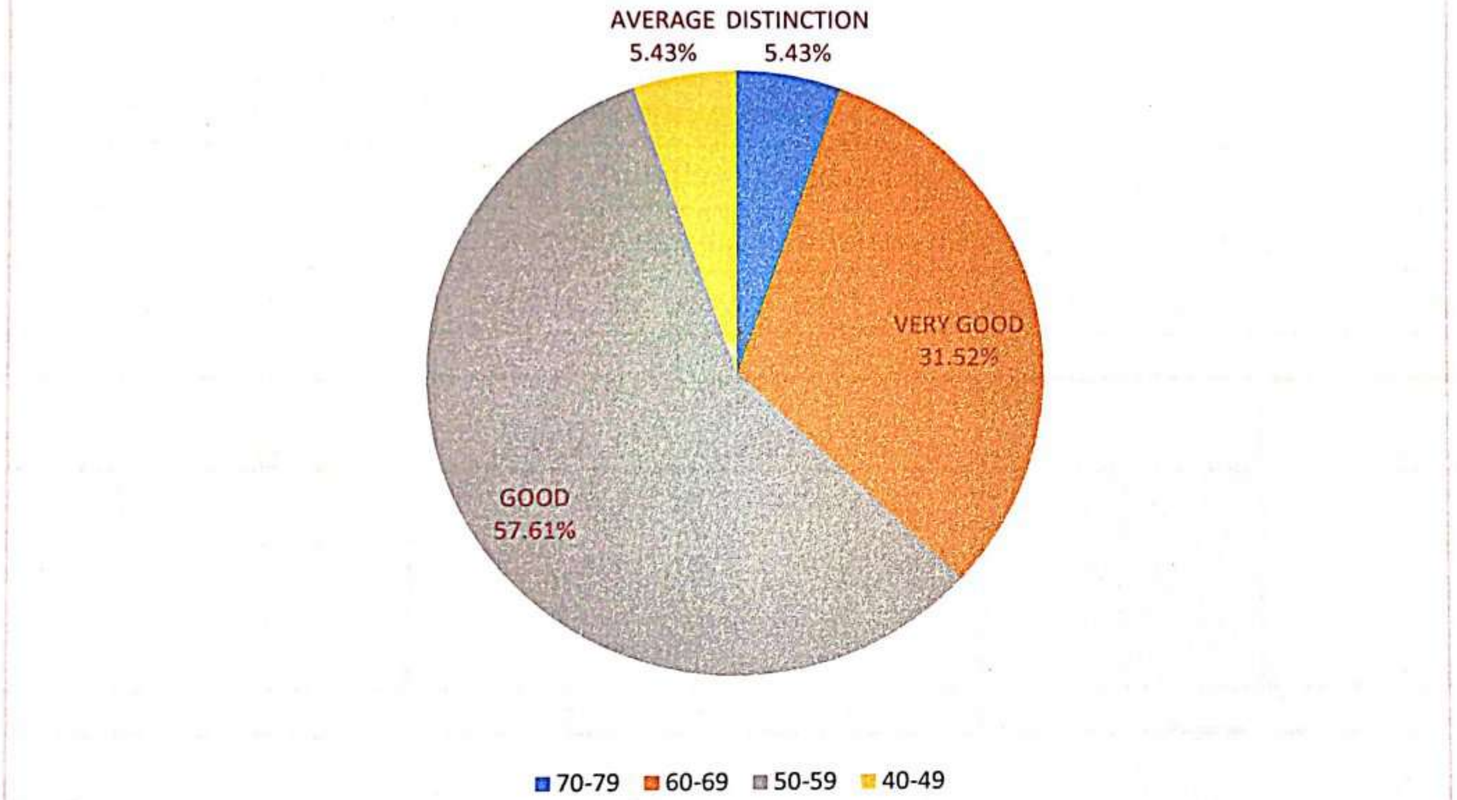
THANJAVUR-5

COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.
(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

COURSE - OPERATING SYSTEM(16SCCCA6)

COURSE OUTCOME

CO1	understand the basic components of a computer operating system and interactions among the various components
CO2	Compare and contrast various Memory management schemes and Page replacement policies
CO3	Understanding various CPU scheduling algorithms and remove deadlocks
CO4	Ability to differentiate storage devices and understand the components of I/O Systems
CO5	Recognize file system interface and security mechanisms such as Controlled access to files, Access protection and User authentication

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	0

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ABINESH. M	CB18S 254291	4	5	4	4	5	22	88
2	AJITH. G	CB18S 254292	5	5	5	4	5	24	96
3	AKASH. R (26.02.2001)	CB18S 254293	4	5	5	5	5	24	96
4	AKASH. R (02.10.1998)	CB18S 254294	3	4	4	4	3	18	72
5	AKILAN. V	CB18S 254295	4	4	4	5	4	21	84
6	ARULARASAN. S	CB18S 254297	4	5	4	4	4	21	84
7	ARUNKUMAR. K.C	CB18S 254298	4	5	5	5	5	24	96
8	BASKAR. P	CB18S 254299	4	4	4	5	5	22	88
9	BHARATHKUMAR. B	CB18S 254300	5	4	4	4	4	21	84
10	BOOMINDHRA. R.N	CB18S 254301	5	4	5	5	4	23	92
11	CHANDRU. S	CB18S 254302	4	3	4	4	4	19	76
12	DANIEL. S	CB18S 254303	4	5	4	5	4	22	88
13	DEVENDHIRAN. P	CB18S 254304	4	4	4	5	4	22	88
14	DEVKANTH RAO. L	CB18S 254305	5	5	5	5	4	24	96
15	DHANUSIYA. D	CB18S 254306	5	4	4	4	4	21	84
16	DHIVAKAR. B	CB18S 254307	4	4	4	5	5	22	88
17	DINESHKUMAR. K	CB18S 254308	5	4	4	4	5	22	88

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18	DIVYESH. S	CB18S 254309	4	4	4	5	5	22	88
19	EZHIL. M	CB18S 254310	5	4	5	5	4	23	92
20	GOKUL. K	CB18S 254311	4	5	4	4	4	21	84
21	GOWTHAMAN. M	CB18S 254312	5	5	4	5	5	24	96
22	HARIHARASUTHAN. R	CB18S 254313	5	5	5	4	5	24	96
23	ISWARYA. A	CB18S 254314	5	5	4	5	5	24	96
24	JAMUNA. V	CB18S 254315	4	5	5	4	5	23	92
25	JANAKIRAMAN. V	CB18S 254316	4	4	5	4	5	22	88
26	JANANI. S	CB18S 254317	5	5	5	5	5	23	92
27	JAYA SUDHAN. S	CB18S 254318	4	4	4	4	4	20	80
28	JAYACHANDRA SURIYAN. B	CB18S 254319	5	5	5	5	5	25	100
29	KAMALESH. S	CB18S 254320	5	4	5	4	5	23	92
30	KARIKALAN. S	CB18S 254321	4	5	4	5	5	23	92
31	KARMUKILAN. R.R	CB18S 254322	5	4	5	5	4	23	92
32	KISHORE KUMAR. T	CB18S 254323	5	5	5	5	5	25	100
33	KRISHNAMOORTHY. P	CB18S 254324	5	5	5	5	5	25	100
34	KRITHIKA. R.S	CB18S 254325	5	5	4	4	4	22	88
35	KUZHANTHAIVEL. M	CB18S 254326	5	5	5	5	5	25	100
36	LOGESWAR. S	CB18S 254327	4	5	4	5	4	22	88

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37	LOHA PRIYA. C	CB18S 254328	5	5	5	4	5	24	96
38	LORDSON JEEVAPRIYAN. E	CB18S 254329	4	5	4	4	4	21	84
39	MAHALAKSHMI. M	CB18S 254330	4	5	4	4	5	22	88
40	MANIBHARATHI. R	CB18S 254331	3	3	3	3	3	15	60
41	MANIKANDAN..R	CB18S 254332	5	4	5	4	5	23	92
42	MATHESH. T	CB18S 254334	4	5	5	5	4	23	92
43	MOHAMED RIYAS. J	CB18S 254335	4	5	5	5	5	24	96
44	MOHAMED RIYASKHAN. S	CB18S 254336	5	5	5	5	5	25	100
45	MOSES PRABAKARAN. M	CB18S 254337	5	5	5	4	5	24	96
46	MUBARAK ALI. J	CB18S 254338	5	5	4	5	5	24	96
47	MUKILAN. S	CB18S 254339	5	4	5	5	4	23	92
48	ARNALD. S	CB18S 254340	4	5	4	5	4	22	88
49	BALAJI. K	CB18S 254341	5	5	5	5	4	24	96
50	KALIYARASAN. M	CB18S 254342	4	4	5	5	5	24	96
51	NITHISH KUMAR. A	CB18S 254343	4	5	5	4	4	22	88
52	OLI MOHAMED. A	CB18S 254344	5	5	5	4	5	24	96
53	PANDIYARAJAN. R	CB18S 254345	4	5	5	5	4	23	92
54	POOVARASAN. S	CB18S 254346	5	4	5	4	5	23	92
55	PRAGATHESWARAN. G	CB18S 254348	4	4	4	5	4	21	84

Near New Bus Stand, THANJAVUR-5.

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56	PRAKASH. J	CB18S 254349	4	5	4	4	5	22	88
57	PRAVEEN KUMAR. K (10.03.2000)	CB18S 254350	5	4	4	4	4	21	84
58	PRAVEENKUMAR. K (27.03.2001)	CB18S 254351	5	4	5	5	4	23	92
59	PREMNATH. S	CB18S 254352	4	5	4	5	4	22	88
60	RAGU. R	CB18S 254353	3	4	4	4	4	19	76
61	RAJASANKARI. A	CB18S 254354	5	5	4	4	5	22	88
62	RAJASRIRAM. K	CB18S 254355	5	4	4	4	4	21	84
63	RAMJI. H	CB18S 254356	4	5	4	4	4	21	84
64	RENGARAJ. M	CB18S 254357	4	5	5	4	5	23	92
65	SANGEETHA. G	CB18S 254358	4	5	5	5	5	24	96
66	SARAVANAN. A	CB18S 254359	5	5	5	4	5	24	96
67	SARAVANAN. P	CB18S 254360	5	4	5	5	5	24	96
68	SARAVASHREE. K	CB18S 254361	5	5	5	5	4	24	96
69	SATCHINKUMAR. G	CB18S 254362	5	5	5	5	5	25	100
70	SATHEESH KUMAR. M	CB18S 254363	4	5	4	3	3	19	76
71	SATHISH KUMAR. M	CB18S 254364	4	4	5	4	4	21	84
72	SATHISHKUMAR. S (01.11.2000)	CB18S 254365	5	5	5	4	5	24	96
73	SIVA SANKARI. S	CB18S 254366	4	5	5	5	5	24	96
74	SIVA. S	CB18S 254367	5	4	5	5	4	23	92

Near New Bus Stand, THANJAVUR-5.

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75	SRI GAYATHRI .N	CB18S 254368	5	5	5	5	5	25	100
76	SRINIVASAN. S	CB18S 254369	4	5	5	4	5	24	96
77	SUGANTHI. S	CB18S 254370	4	5	5	5	4	23	92
78	SUGUNESH. M	CB18S 254371	5	4	5	4	5	23	92
79	SUNDHAR. R	CB18S 254372	3	4	4	4	3	18	72
80	SURENDHAR. S	CB18S 254373	4	5	4	4	4	21	84
81	SURENTHIRANATH. N	CB18S 254374	4	5	4	4	4	20	80
82	SWATHI. G	CB18S 254375	5	5	4	5	5	24	96
83	VAIRAMUTHU. M	CB18S 254376	4	4	4	4	3	19	76
84	VASANTH. K	CB18S 254377	4	5	5	5	5	24	96
85	VENKATESAN. M	CB18S 254378	4	5	5	4	5	22	88
86	VIGNESH . S (03.05.2001)	CB18S 254379	3	4	4	4	3	18	72
87	VIGNESH. V	CB18S 254380	5	4	5	5	4	23	92
88	VIGNESH. R	CB18S 254381	5	4	5	5	5	24	96
89	VIGNESH.S (21.01.2001)	CB18S 254382	3	4	4	4	4	19	76
90	VISHALI. T	CB18S 254384	5	5	4	5	5	24	96
91	YOGESWARAN. C	CB18S 254385	3	4	4	3	4	18	72
92	YOKESH. S	CB18S 254386	4	5	4	4	5	22	88
Average			4.391304348	4.576086957	4.510869565	4.467391304	4.45652174		

Near New Bus Stand THANJAVUR-5

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Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.39	75	79.39	93.4
CO2	4.58	75	79.58	93.6
CO3	4.51	75	79.51	93.5
CO4	4.47	75	79.47	93.5
CO5	4.46	75	79.46	93.5

COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT NAME : OPERATING SYSTEM

SUBJECT CODE : 16SCCCA6

NO OF STUDENTS : 92

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.4
CO2	93.6
CO3	93.5
CO4	93.5
CO5	93.5

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
New New Bus Stand
THANJAVUR-5

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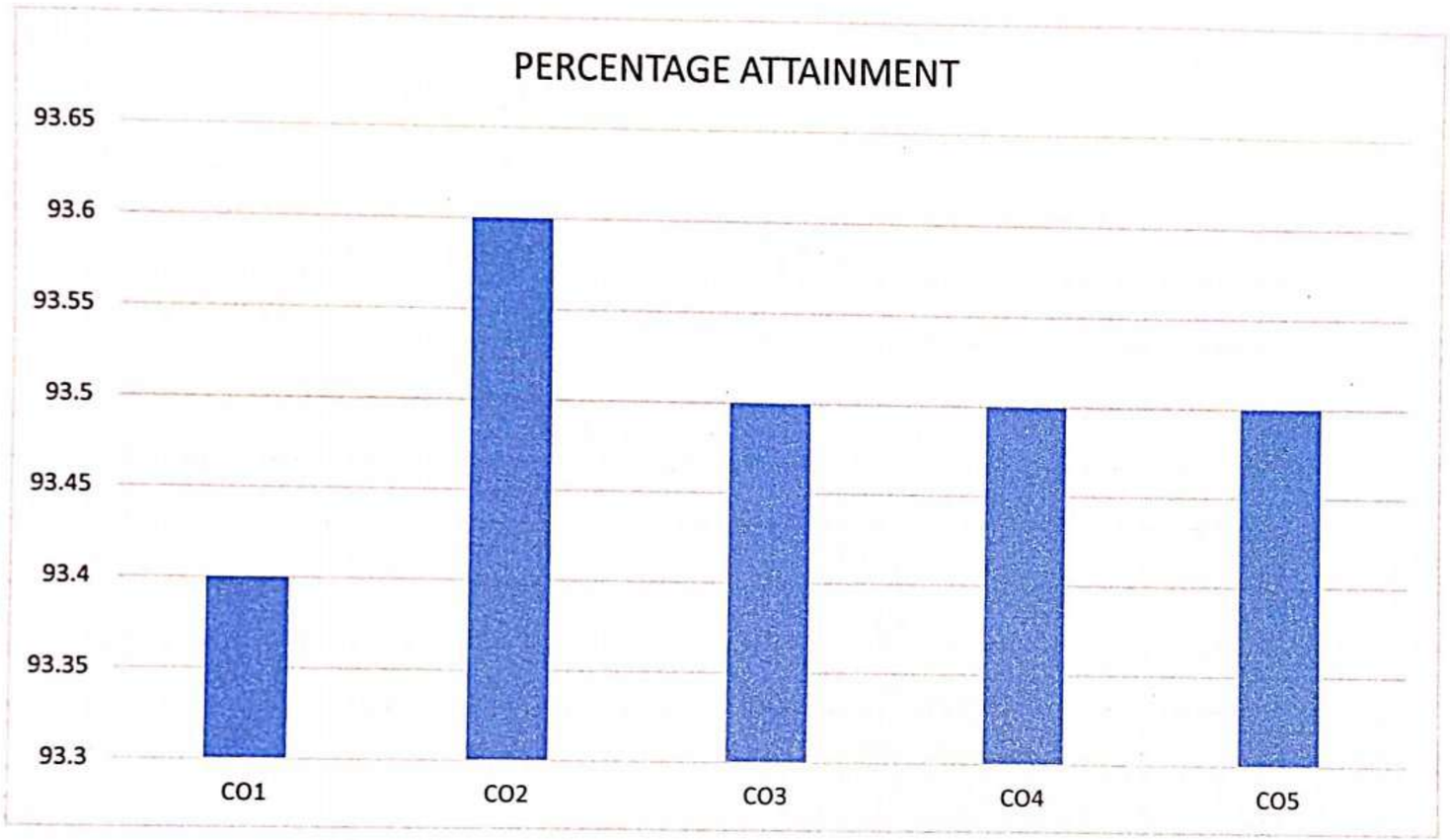

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
New New
Bus Stand,
THANJAVUR-5

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

SUBJECT CODE : 16SCCCA6

SUBJECT NAME : OPERATING SYSTEMS

NO OF STUDENTS : 92

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
90-100	7	OUTSTANDING
80-89	29	EXCELLENT
70-79	47	DISTINCTION
60-69	6	VERY GOOD
50-59	3	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	7.69%	OUTSTANDING
80-89	31.87%	EXCELLENT
70-79	51.65%	DISTINCTION
60-69	6.59%	VERY GOOD
50-59	2.20%	GOOD

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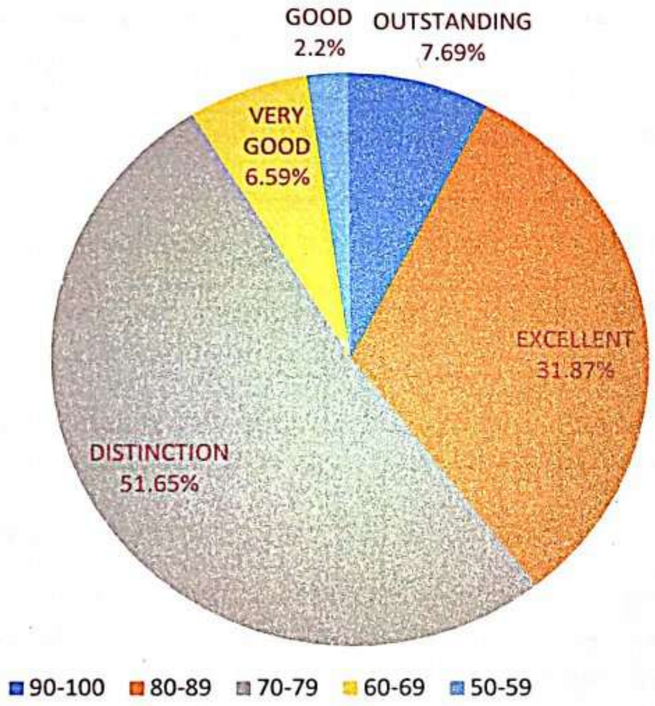
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli-24)

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT. Near New Bus Stand. THANJAVUR-5.

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

PROGRAMMIMG IN C (16SCCCA1P)

COURSE OUTCOME

CO1	Develop programming skills using the fundamentals and basics of C Language
CO2	Develop programs using the basic elements like control statements, Arrays and Strings
CO3	Enable effective usage of arrays, structures and unions
CO4	Understanding the concepts of functions and pointers
CO5	Implement files and understanding various file modes.

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COMPUTER GRAPHICS AND ANIMATION LAB (16SCCCA5P)

COURSE OUTCOME

CO1	Use the basic tools found in Adobe Photoshop to Understand image editing and graphic design features
CO2	Enable to know about work with images in different file formats
CO3	Understanding to Develop a commercial brochure
CO4	Enable to do Basic Drawing and Painting in flash
CO5	Understanding about Animation and to Know First movement of animation

PROGRAMMING IN PHP LAB(16SCCCA6P)

COURSE OUTCOME

CO1	Use PHP to create a data driven website.
CO2	Use PHP to read a file and add records to the database.
CO3	Create a form on a webpage and use PHP to check the validity of the form.
CO4	Use built-in features of PHP such as data and string manipulation.
CO5	Test and debug PHP scripts while working with live data.

MINI PROJECT (16SMBECAPW)

COURSE OUTCOME

CO1	Understand the basics of programming and able to interpret real world problems into software solutions
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills
CO5	Understanding to Implement, evaluate and generate reports.

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PROGRAMMING IN C++ (16SCCCA2P)

COURSE OUTCOME

CO1	Creating simple programs using classes and objects in C++ and implement the concepts of object oriented programming
CO2	Understanding the concept of constructors and Apply string functions to perform operator overloading
CO3	To be able to program using C++ features such as composition of objects and function overloading
CO4	Demonstrate Virtual functions, Inheritance & Polymorphism
CO5	Implement Object Oriented Programs using templates and exceptional handling concepts.

PROGRAMMING IN JAVA LAB(16SCCCA3P)

COURSE OUTCOME

CO1	Using Graphics, Animations and Multithreading for designing Simulation and Game based applications.
CO2	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
CO3	Design and develop Web applications.
CO4	Designing Enterprise based applications by encapsulating an application's business logic.
CO5	Designing applications using pre-built frameworks.

DATABASE SYSTEMS LAB(16SCCCA4P)

COURSE OUTCOME

CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

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Thanjavur – 5.

Department of Computer Applications

PROGRAM OUTCOME
&
COURSE OUTCOME

2021-2022

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, Near New Bus Stand, THANJAVUR-5

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

Department of Computer Applications (2021-2022)

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - PROGRAMMING IN C(16SCCCA1)

COURSE OUTCOME

CO1	Defines the concept of C programming and it's fundamental
CO2	Managing I/O operations , various control statements and looping statements.
CO3	Understanding Arrays , Strings and User defined Functions.
CO4	Differentiate Structures and unions. Defines Pointer concepts and File management
CO5	Explain the uses of pre-processors, memory allocation and Programming Guide lines.

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PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	3
CO2	1	0	2	2	0
CO3	2	1	3	2	1
CO4	2	0	2	2	3
CO5	3	1	3	1	1
Average	2.2	0.6	2.4	0.6	1.6

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentag
1	AJITHKUMAR M	CB21S 260487	5	4	5	4	5	23	92
2	AJITHPERUMAL J	CB21S 260488	5	5	5	5	4	24	96
3	ALICE JAYAMARY J	CB21S 260489	5	5	5	5	5	25	100
4	ANANTHAMANI J	CB21S 260490	5	4	5	5	5	24	96
5	ANBARASU R	CB21S 260491	5	4	5	4	5	23	92
6	ANBUTHAMBI A	CB21S 260492	4	5	5	4	5	23	92
7	AROKIYA AKASH S	CB21S 260493	5	5	4	5	4	23	92
8	BALAJI R 23.02.2004	CB21S 260494	4	5	5	4	5	23	92
9	BALAJI R 25.02.2004	CB21S 260495	5	5	5	5	5	25	100
10	BHARATH K	CB21S 260496	5	5	5	4	5	24	96
11	BHARATH R	CB21S 260497	5	4	5	4	5	23	92
12	ELAKKIYA	CB21S 260498	5	5	4	5	5	24	96
13	ELAIYARAJAN	CB21S 260499	5	4	5	5	4	23	92
14	ESRAVEL A	CB21S 260500	5	5	5	5	5	23	92
15	GOWTHAM S	CB21S 260501	5	5	5	5	5	24	96
16	HARIHARAN R	CB21S 260502	5	5	5	5	5	23	92
17	JOEJEFFIN V	CB21S 260503	5	4	5	5	4	23	92

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18	KAMATCHIRAJA S	CB21S 260504	4	5	5	4	5	23	92
19	MANUSH NANDHAN S	CB21S 260505	5	5	5	5	5	23	92
20	MOHAMED VALITH A	CB21S 260506	5	5	5	5	5	23	92
21	NAVEEN PRASATH G	CB21S 260507	5	5	5	5	5	23	92
22	PRITHIVIRAJ C	CB21S 260508	5	5	5	5	5	25	100
23	RAJA E	CB21S 260509	5	5	5	5	5	24	96
24	RAMJI R	CB21S 260510	5	5	5	5	5	23	92
25	ROHITH S	CB21S 260511	5	4	5	4	5	23	92
26	SAKTHIMANIKANDAN S	CB21S 260512	4	5	5	4	5	23	92
27	SANTHOSH S	CB21S 260513	5	5	4	5	4	23	92
28	SHALINI G	CB21S 260514	5	5	5	5	5	25	100
29	SRITHAR S	CB21S 260515	5	4	5	4	5	23	92
30	SUBHA S	CB21S 260516	5	5	5	5	5	25	100
31	SUKANTHAN K	CB21S 260517	5	5	5	5	5	25	100
32	VETRI R	CB21S 260518	5	5	5	5	5	25	100
33	VIDHYASAKAR R	CB21S 260519	5	5	5	5	5	25	100
34	VIGNESH A	CB21S 260520	5	4	5	4	5	23	92
35	VIGNESH R	CB21S 260521	5	5	5	5	5	25	100
	Average		4.885714286	4.742857143	4.914285714	4.685714286	4.857142857		

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.

Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.89	75	79.89	94.0
CO2	4.74	75	79.74	93.8
CO3	4.91	75	79.91	94.0
CO4	4.69	75	79.69	93.8
CO5	4.86	75	79.86	94.0

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 35

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94
CO2	93.8
CO3	94
CO4	93.8
CO5	94

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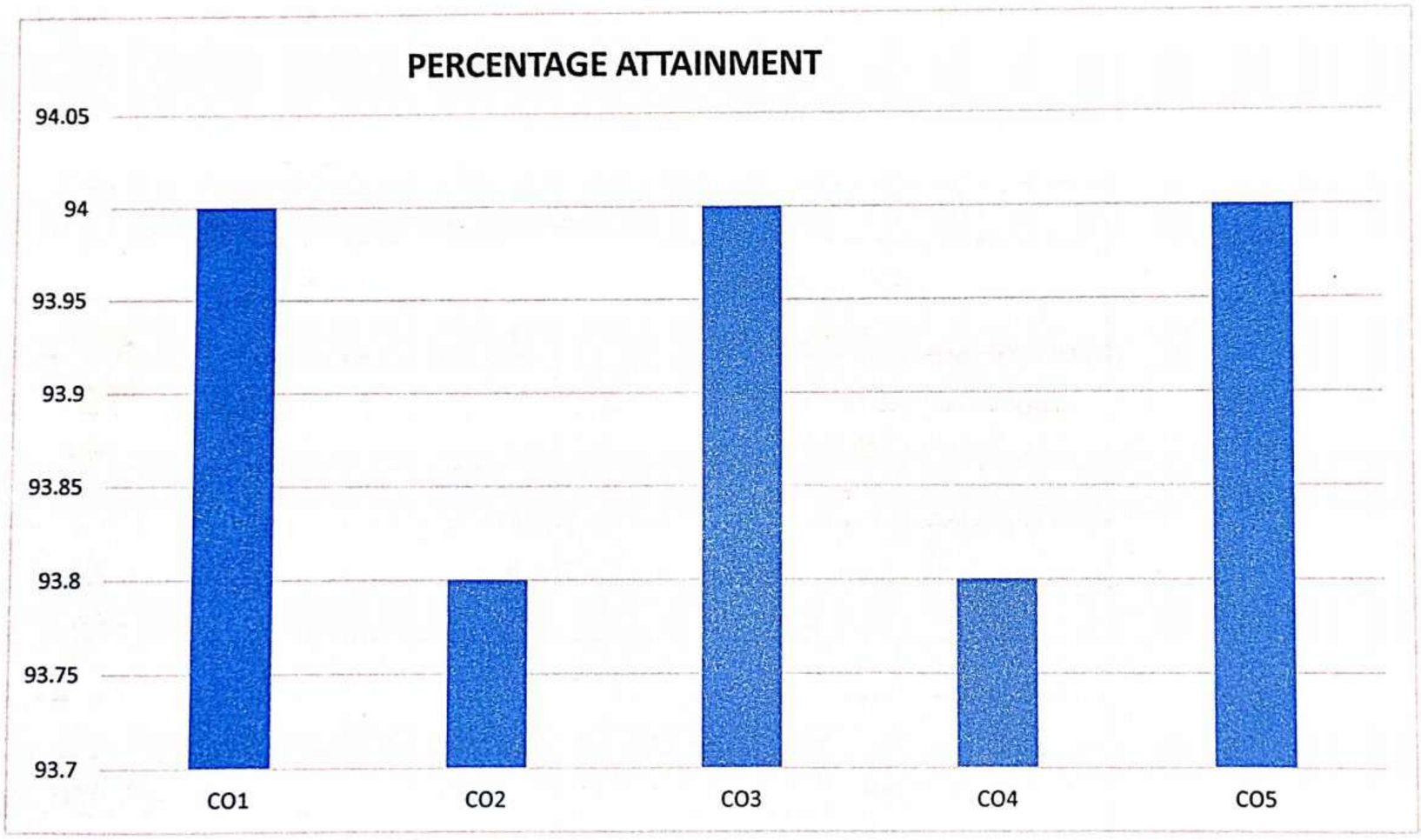

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COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 35

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	7	OUTSTANDING
80-89	8	EXCELLENT
70-79	19	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
0-39	1	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	20.59	OUTSTANDING
80-89	23.53	EXCELLENT
70-79	55.88	DISTINCTION

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COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.

SUBJECT NAME : PROGRAMMING IN C

SUBJECT CODE : 16SCCCA1

NO.OF STUDENTS : 35

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	7	OUTSTANDING
80-89	8	EXCELLENT
70-79	19	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
0-39	1	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	20.59	OUTSTANDING
80-89	23.53	EXCELLENT
70-79	55.88	DISTINCTION

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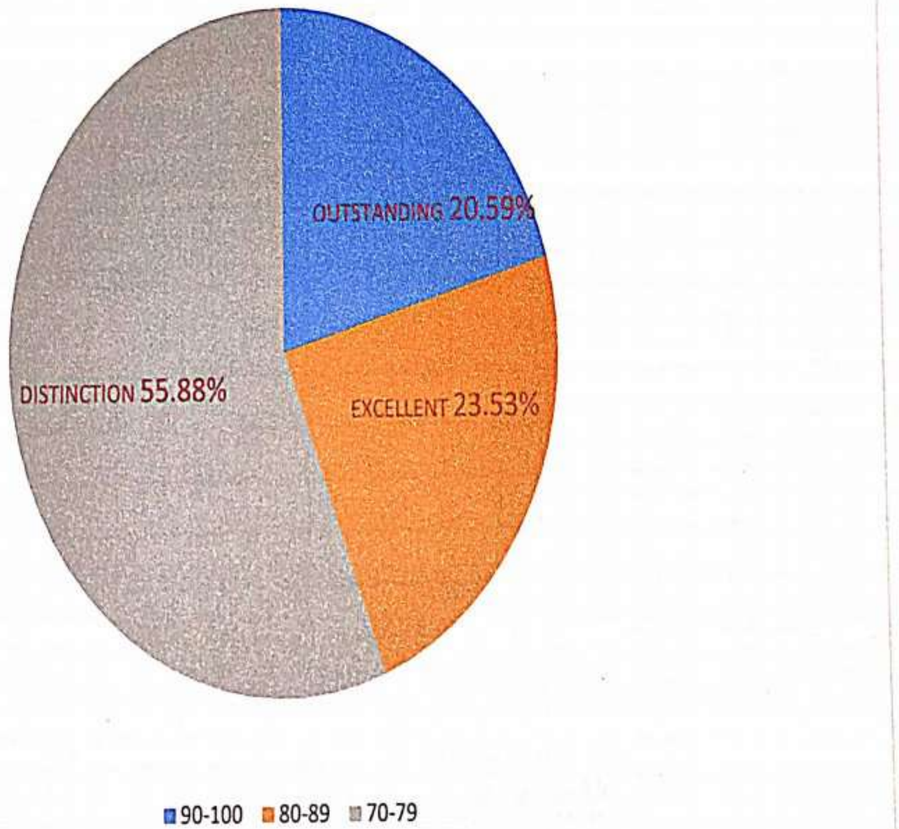
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, Near New Bus Stand, THANJAVUR-5.

COURSE - COMPUTER NETWORKS(16SCCCA8)

COURSE OUTCOME

CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference models
CO2	Defines Datalink layer services , Error detection and Error correction methods
CO3	Explain Network layer basics and routing algorithms
CO4	Understanding TCP features and congestion control
CO5	Enable to work with Application layer www, e-mail and DNS

PO→ CO↓	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**
CO1	2	2	1	1	1
CO2	3	1	2	2	2
CO3	1	2	3	2	2
CO4	3	2	2	3	1
CO5	2	3	3	2	2
Average	2.2	2	2.2	2	1.6

Internal Examination Mark Distribution for each Course outcome

CO	**Internal(15)**	**Assignment(5)**	**Seminar(5)**
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AARTHI. R	CB19S 258636	5	5	5	5	5	25	100
2	ABISHEK. M	CB19S 258637	5	5	5	5	5	25	100
3	ALWIN. C	CB19S 258638	5	5	5	5	5	25	100
4	ANAND. V	CB19S 258639	5	5	5	5	5	25	100
5	ASWIN. K	CB19S 258640	5	5	5	5	5	25	100
6	ASWIN. U	CB19S 258641	5	5	5	5	5	25	100
7	BALAGURUMOORTHY. V	CB19S 258642	5	5	5	5	5	25	100
8	BHARATHI. K	CB19S 258643	5	5	5	5	5	25	100
9	BOSE ARASAN. A	CB19S 258644	5	5	5	5	5	25	100
10	CHANDRU. M	CB19S 258645	5	5	4	5	5	24	96
11	DHINAKAR.M	CB19S 258646	5	5	5	5	5	25	100
12	DILIP. P	CB19S 258647	4	5	4	5	4	22	88
13	DURAIYARASAN. M	CB19S 258648	5	5	5	5	5	25	100
14	GANESH KUMAR. R	CB19S 258649	5	4	5	4	5	23	92
15	GAYATHRI. L	CB19S 258650	5	5	5	5	5	25	100
16	GOWTHAM. K	CB19S 258651	5	5	5	5	5	25	100
17	HARISH. S	CB19S 258652	5	5	5	5	5	25	100
18	JAYA VIGNESH. S	CB19S 258653	5	5	4	5	5	24	96

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19	KAMALRAJ. S	CB19S 258654	5	5	5	5	5	25	100
20	KAMESHWARAN. K	CB19S 258655	4	5	4	5	4	22	88
21	KARTHIK.K	CB19S 258656	5	5	5	5	5	25	100
22	KARUNASVARAN. M	CB19S 258658	5	5	5	5	5	25	100
23	KESAVAN. S	CB19S 258659	5	5	5	5	5	25	100
24	KESAVAN. V	CB19S 258660	5	5	5	5	5	25	100
25	MANIKANDAN. U	CB19S 258661	4	5	4	5	4	22	88
26	MANO BHARATHI. B	CB19S 258662	5	5	5	5	5	25	100
27	MATHIVANAN. R	CB19S 258664	5	5	5	5	5	25	100
28	MITHRAN. S B	CB19S 258665	5	5	5	5	5	25	100
29	MOHAMED FAYAZ. S	CB19S 258666	5	5	5	5	5	25	100
30	MOHAMMAD AZHARUDDIN. S	CB19S 258667	5	5	5	5	5	25	100
31	NATHIYA. S	CB19S 258668	5	5	5	5	5	25	100
32	RAJARAJAN. S	CB19S 258670	5	5	5	5	5	25	100
33	RAMANI. N	CB19S 258672	4	5	5	4	5	23	92
34	SANKAR. N	CB19S 258673	5	5	5	5	5	25	100
35	SANTHOSH. N	CB19S 258674	5	4	5	4	4	22	88
36	SANTHOSHKUMAR. S	CB19S 258675	5	5	5	5	5	25	100
37	SARAN. S	CB19S 258676	5	5	5	5	5	25	100
38	SHAFIK. S	CB19S 258677	5	5	5	5	5	25	100

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39	SILAMBARASAN. N	CB19S 258678	4	5	5	5	5	24	96
40	SIVARANJANI. P	CB19S 258680	5	5	5	5	5	25	100
41	SRIKANTH. M	CB19S 258682	5	5	5	5	5	25	100
42	SUBHA. K	CB19S 258684	5	5	5	5	5	25	100
43	SUBITSHA. S	CB19S 258685	5	5	5	5	5	25	100
44	SUBRAMANIYAN. K	CB19S 258686	5	5	5	5	5	25	100
45	SURYARAJ. S	CB19S 258687	5	5	5	5	5	25	100
46	SUVEDHAN. E	CB19S 258688	5	5	5	5	5	25	100
47	SWETHA. S	CB19S 258689	5	5	5	5	5	25	100
48	THIRUSELVI. M	CB19S 258690	5	5	5	5	5	25	100
49	VEERAMANI. M	CB19S 258691	5	5	5	5	5	25	100
50	VEERAMANIKANDAN. D	CB19S 258692	5	5	5	5	5	25	100
51	VIJAY. S	CB19S 258694	5	5	5	5	5	25	100
52	YOGARAJAN. R	CB19S 258695	5	4	5	4	4	22	88
53	YOGESH KUMAR. S	CB19S 258696	5	5	5	5	5	25	100
54	YUVAYOGI. V	CB19S 258697	5	5	5	5	5	25	100
	Average		4.907407407	4.944444444	4.907407407	4.925925926	4.907407407		

Near New Bus Stand, THANJAVUR-5

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5.

Expected Attainment in each CO - 85%

	Int. Exam + Assignment	End Sem	Total	%
CO1	4.94	75	79.94	94.0
CO2	4.94	75	79.94	94.0
CO3	4.92	75	79.92	94.0
CO4	4.94	75	79.94	94.0
CO5	4.93	75	79.93	94.0

COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS

SUBJECT CODE : 16SCCCA8

NO.OF STUDENTS : 54

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94
CO2	94
CO3	94
CO4	94
CO5	94

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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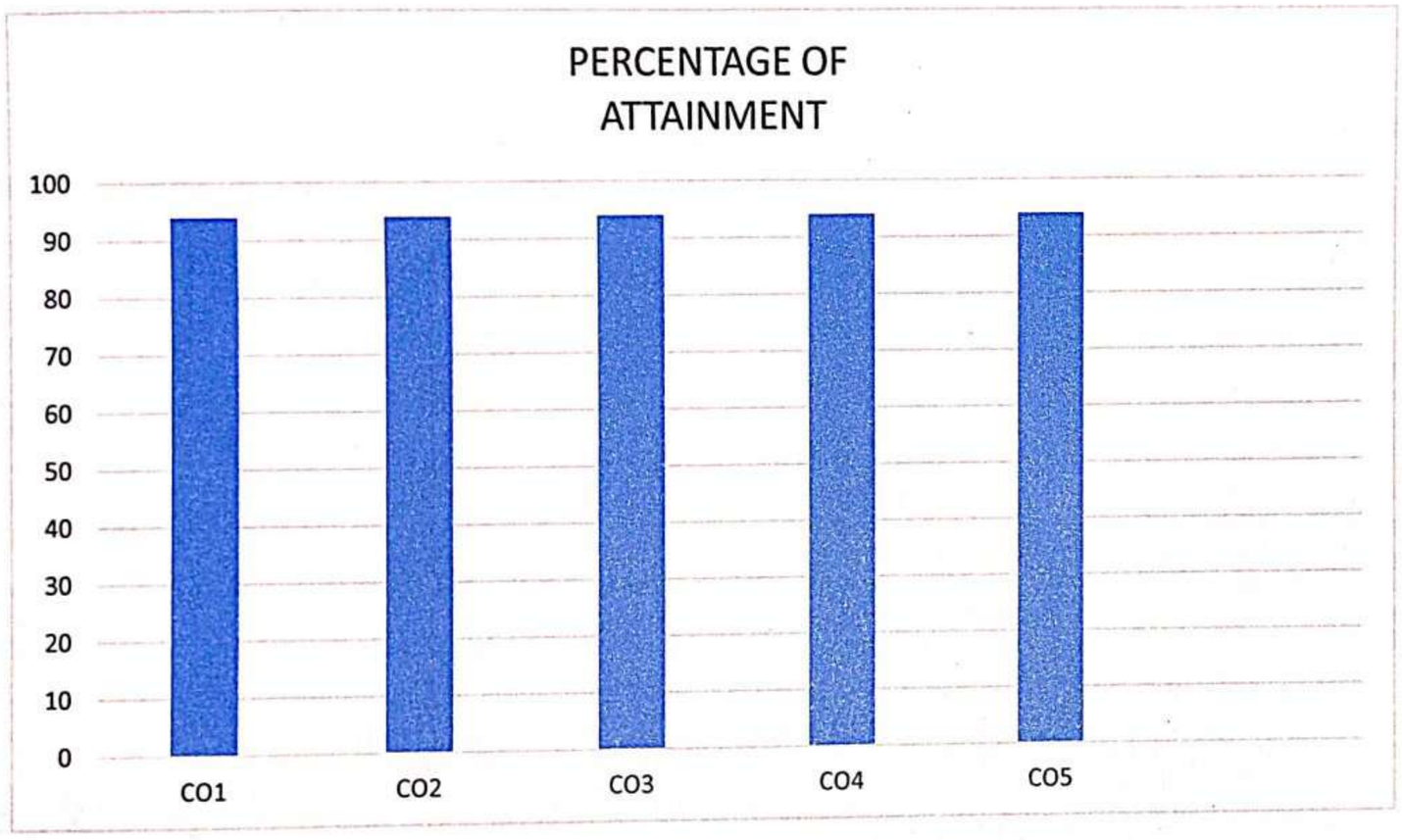

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COURSE ATTAINMENT FOR COMPUTER APPLICATIONS

SUBJECT NAME : COMPUTER NETWORKS

SUBJECT CODE : 16SCCCA8

NO.OF STUDENTS : 54

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	0	OUTSTANDING
80-89	2	EXCELLENT
70-79	5	DISTINCTION
60-69	19	VERY GOOD
50-59	25	GOOD
40-49	1	AVERAGE
0-39	2	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
80-89	3.70%	EXCELLENT
70-79	9.26%	DISTINCTION
60-69	35.19%	VERY GOOD
50-59	46.30%	GOOD
40-49	1.85%	AVERAGE
0-39	3.70%	REAPPEAR

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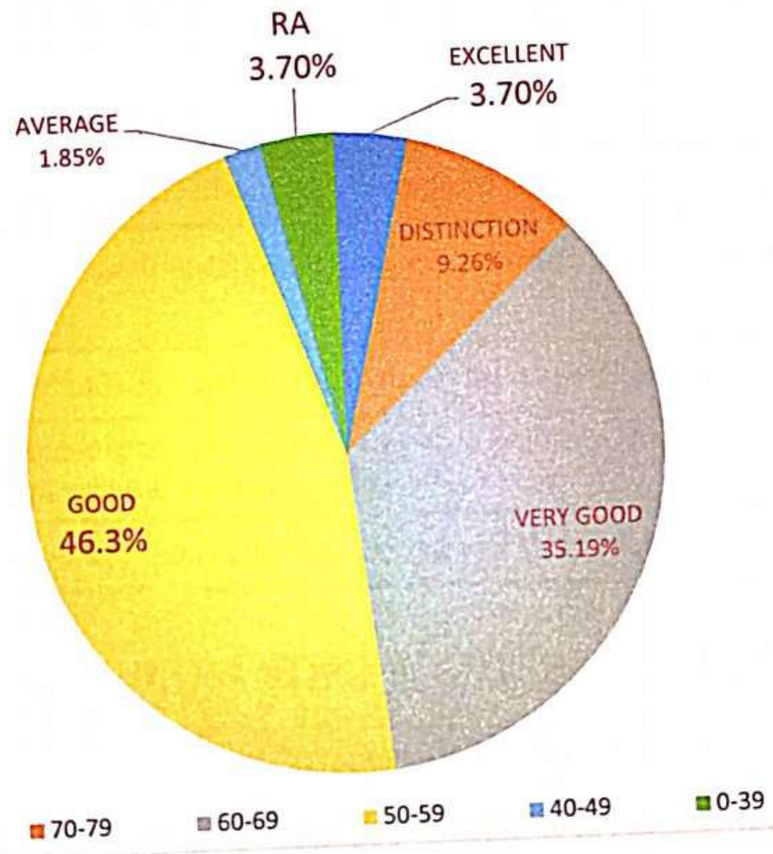
Near New Bus Stand,
THANJAVUR-5.

COURSE OUTCOME ASSESSMENT IN PERCENTAGE



R. ARAVAZHI, M.C.A., M.Phil.,
HEAD
Department of Computer Applications
BHARATH COLLEGE OF SCIENCE & MANAGEMENT
THANJAVUR- 613005.

PRINCIPAL
Bharath College of Science and Management
Bharath Avenue (Near New Bus Stand)
THANJAVUR - 613 005.

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT,THANJAVUR.

(UGC Recognized under 2(f) and 12(B) Institution)

(Affiliated to Bharathidasan University, Tiruchirappalli-24)

Attainment of program outcomes and course outcomes

PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems.
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

COURSE - SOFTWARE ENGINEERING (MBECA1:1/10)

COURSE OUTCOME

CO1	To acquire the programming skills with java.
CO2	Creating Technical Software evaluations.
CO3	To understand the concepts of multithreading.
CO4	To learn the art of GUI programming with Applet.
CO5	To learn about Database connectivity.

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THANJAVUR-5

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	0
CO2	2	0	2	2	0
CO3	2	1	3	2	0
CO4	2	0	2	2	0
CO5	2	0	2	1	0
Average	2	0.6	2.2	2	0

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AARTHI. R	CB19S 258636	5	4	5	5	5	24	96
2	ABISHEK. M	CB19S 258637	5	5	4	5	5	24	96
3	ALWIN. C	CB19S 258638	5	4	5	4	5	23	92
4	ANAND. V	CB19S 258639	5	4	5	4	4	23	92
5	ASWIN. K	CB19S 258640	5	5	5	5	5	25	100
6	ASWIN. U	CB19S 258641	5	4	5	4	5	23	92
7	BALAGURUMOORTHY. V	CB19S 258642	5	5	4	5	4	23	92
8	BHARATHI. K	CB19S 258643	5	5	5	5	5	25	100
9	BOSE ARASAN. A	CB19S 258644	5	4	5	5	5	24	96
10	CHANDRU. M	CB19S 258645	5	5	4	4	5	23	92
11	DHINAKAR.M	CB19S 258646	5	4	5	5	5	24	96
12	DILIP. P	CB19S 258647	5	5	4	5	4	23	92
13	DURAIYARASAN. M	CB19S 258648	5	4	5	4	5	23	92
14	GANESH KUMAR. R	CB19S 258649	4	5	4	5	5	23	92
15	GAYATHRI. L	CB19S 258650	5	5	5	5	5	25	100
16	GOWTHAM. K	CB19S 258651	5	4	5	4	5	23	92
17	HARISH. S	CB19S 258652	5	5	4	5	5	24	96
18	JAYA VIGNESH. S	CB19S 258653	4	5	5	4	5	23	92

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19	KAMALRAJ. S	CB19S 258654	5	4	5	5	5	24	96
20	KAMESHWARAN. K	CB19S 258655	5	5	4	5	4	23	92
21	KARTHIK.K	CB19S 258656	4	5	5	5	5	24	96
22	KARUNASVARAN. M	CB19S 258658	5	4	5	4	5	23	92
23	KESAVAN. S	CB19S 258659	5	5	5	4	5	24	96
24	KESAVAN. V	CB19S 258660	5	5	4	5	5	24	96
25	MANIKANDAN. U	CB19S 258661	4	5	5	5	5	24	96
26	MANO BHARATHI. B	CB19S 258662	5	5	4	5	4	23	92
27	MATHIVANAN. R	CB19S 258663	5	5	5	5	5	25	100
28	MITHRAN. S B	CB19S 258664	5	4	5	5	5	24	96
29	MOHAMED FAYAZ. S	CB19S 258665	4	5	5	5	5	24	96
30	MOHAMMAD AZHARUDDIN. S	CB19S 258666	5	5	4	5	4	23	92
31	NATHIYA. S	CB19S 258667	5	5	5	5	5	25	100
32	RAJARAJAN. S	CB19S 258669	5	4	5	4	5	23	92
33	RAMANI. N	CB19S 258671	4	5	4	5	5	23	92
34	SANKAR. N	CB19S 258672	5	5	4	4	5	23	92
35	SANTHOSHKUMAR. S	CB19S 258673	5	4	5	5	4	23	92
36	SANTHOSH. N	CB19S 258674	4	5	5	4	5	23	92
37	SARAN. S	CB19S 258675	5	4	5	5	4	23	92
38	SHAFIK. S	CB19S 258676	5	5	4	4	5	23	92

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39	SILAMBARASAN. N	CB19S 258677	5	4	5	5	4	23	92
40	SIVARANJANI. P	CB19S 258679	5	5	5	5	5	25	100
41	SRIHARAN.S	CB19S 258680	4	5	5	4	5	23	92
42	SRIKANTH. M	CB19S 258681	5	4	5	5	5	24	96
43	SRINITHAN.S	CB19S 258682	5	5	4	5	4	23	92
44	SUBHA. K	CB19S 258683	5	5	5	5	5	25	100
45	SUBITSHA. S	CB19S 258684	5	5	5	5	5	25	100
46	SUBRAMANIYAN. K	CB19S 258685	5	4	5	4	5	23	92
47	SURYARAJ. S	CB19S 258686	4	5	5	5	5	24	96
48	SUVEDHAN. E	CB19S 258687	5	5	5	5	5	25	100
49	SWETHA. S	CB19S 258688	5	5	5	5	5	25	100
50	THIRUSELVI. M	CB19S 258689	5	5	5	5	5	25	100
51	VEERAMANI. M	CB19S 258690	5	4	5	4	5	23	92
52	VEERAMANIKANDAN. D	CB19S 258691	4	5	5	5	5	24	96
53	VIJAY. S	CB19S 258693	5	4	5	4	5	23	92
54	YOGARAJAN. R	CB19S 258694	5	5	4	5	4	24	96
55	YOGESH KUMAR. S	CB19S 258695	5	4	5	4	5	23	92
56	YUVAYOGI. V	CB19S 258696	4	5	5	5	5	24	96
Average			4.80	4.64	4.73	4.68	4.80		0

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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THANJAVUR-5

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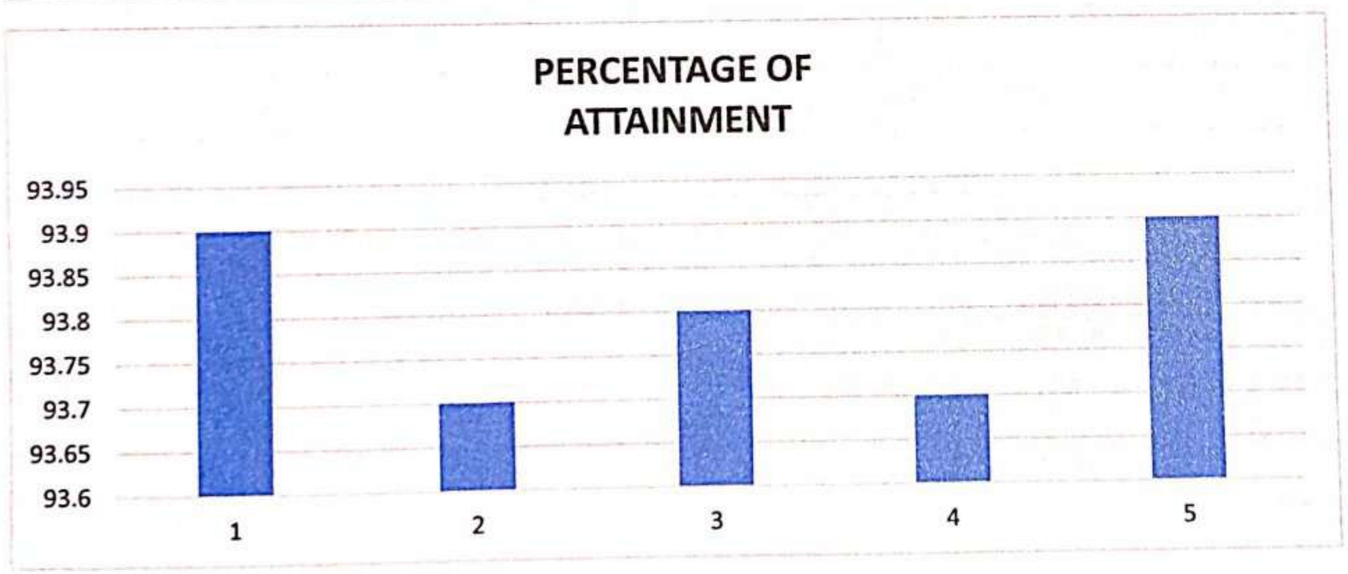
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.8	75	79.8	93.9
CO2	4.64	75	79.64	93.7
CO3	4.73	75	79.73	93.8
CO4	4.68	75	79.68	93.7
CO5	4.8	75	79.8	93.9

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.9
CO2	93.7
CO3	93.8
CO4	93.7
CO5	93.9



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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

SUBJECT CODE : 16SMBECA1:2

SUBJECT NAME : SOFTWARE ENGINEERING

NO OF STUDENTS : 56

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	**NO.OF STUDENTS**	**STATUS**
90-100	3	OUTSTANDING
80-89	43	EXCELLENT
70-79	10	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	**PERCENTAGE**	**STATUS**
90-100	5.36%	OUTSTANDING
80-89	76.79%	EXCELLENT
70-79	17.86%	DISTINCTION

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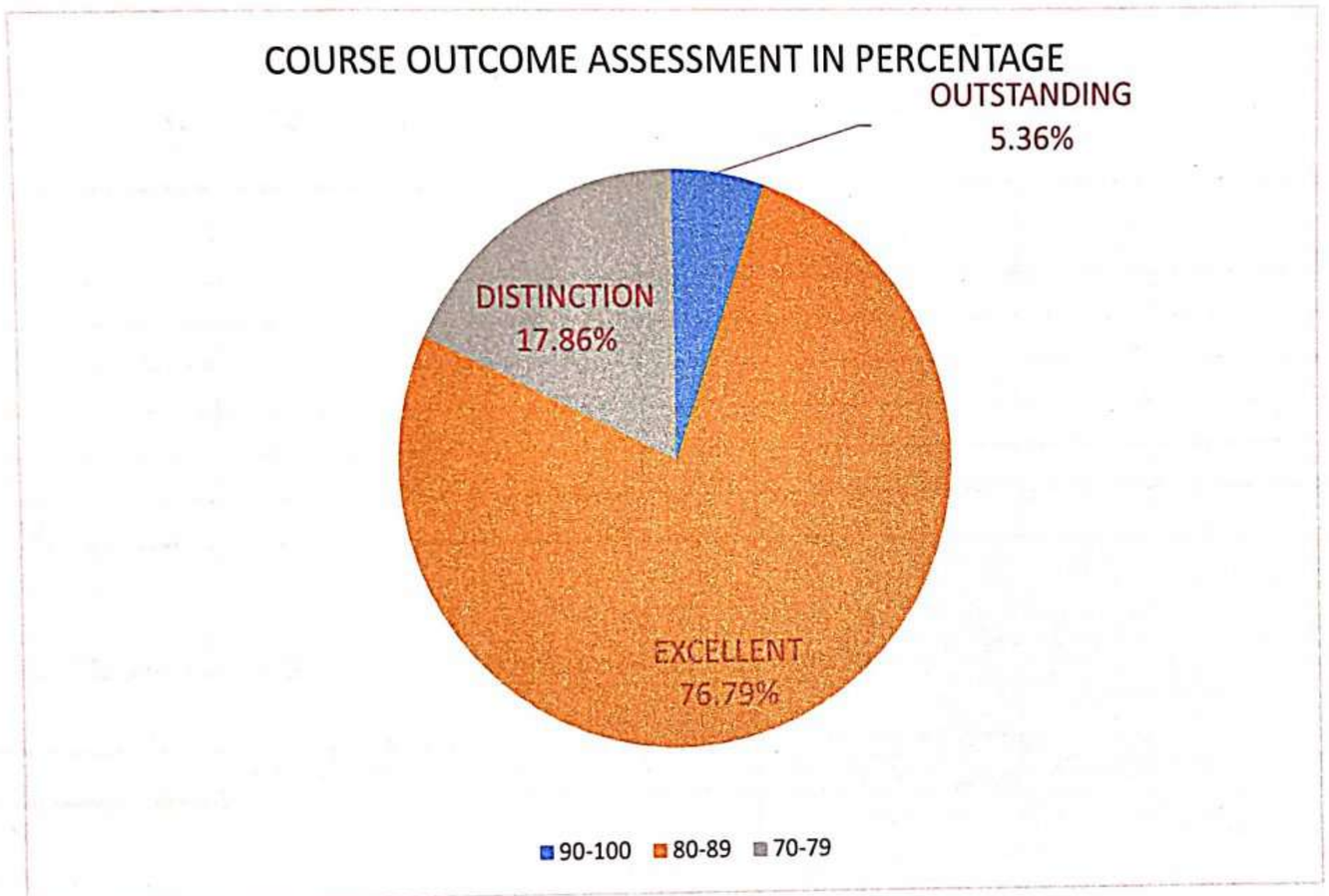

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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COURSE - CLOUD COMPUTING(16SMBECA2:1)

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	3	1	2	3
CO2	3	2	2	2	2
CO3	3	2	2	2	2
CO4	3	2	2	2	3
CO5	3	3	2	2	2
Average	3	2.4	1.8	2	2.4

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand, THANJAVUR-5

S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AARTHI. R	CB19S 258636	5	5	5	5	5	25	100
2	ABISHEK. M	CB19S 258637	5	5	5	5	5	25	100
3	ALWIN. C	CB19S 258638	5	5	5	5	5	25	100
4	ANAND. V	CB19S 258639	5	5	5	5	5	25	100
5	ASWIN. K	CB19S 258640	5	5	5	5	5	25	100
6	ASWIN. U	CB19S 258641	5	5	5	5	5	25	100
7	BALAGURUMOORTHY. V	CB19S 258642	5	5	5	5	5	25	100
8	BHARATHI. K	CB19S 258643	5	5	5	5	5	25	100
9	BOSE ARASAN. A	CB19S 258644	5	5	5	5	5	25	100
10	CHANDRU. M	CB19S 258645	5	4	5	4	4	22	88
11	DHINAKAR.M	CB19S 258646	5	5	5	5	5	25	100
12	DILIP. P	CB19S 258647	4	5	5	5	5	24	96
13	DURAIYARASAN. M	CB19S 258648	5	5	5	5	5	25	100
14	GANESH KUMAR. R	CB19S 258649	5	5	5	5	5	25	100
15	GAYATHRI. L	CB19S 258650	5	5	5	5	5	25	100
16	GOWTHAM. K	CB19S 258651	5	5	5	5	5	25	100
17	HARISH. S	CB19S 258652	5	5	5	5	5	25	100
18	JAYA VIGNESH. S	CB19S 258653	5	4	5	4	5	23	92

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19	KAMALRAJ. S	CB19S 258654	5	5	5	5	5	25	100
20	KAMESHWARAN. K	CB19S 258655	5	5	4	5	4	23	92
21	KARTHIK.K	CB19S 258656	5	5	5	5	5	25	100
22	KARUNASVARAN. M	CB19S 258658	5	5	5	5	5	25	100
23	KESAVAN. S	CB19S 258659	5	5	5	5	5	25	100
24	KESAVAN. V	CB19S 258660	5	5	5	5	5	25	100
25	MANIKANDAN. U	CB19S 258661	4	5	5	5	5	24	96
26	MANO BHARATHI. B	CB19S 258662	5	5	5	5	5	25	100
27	MATHIVANAN. R	CB19S 258664	5	5	5	5	5	25	100
28	MITHRAN. S B	CB19S 258665	5	5	5	5	5	25	100
29	MOHAMED FAYAZ. S	CB19S 258666	5	5	5	5	5	25	100
30	MOHAMMAD AZHARUDDIN. S	CB19S 258667	5	5	5	5	5	25	100
31	NATHIYA. S	CB19S 258668	5	5	5	5	5	25	100
32	RAJARAJAN. S	CB19S 258670	5	5	5	5	5	25	100
33	RAMANI. N	CB19S 258672	5	4	5	5	5	24	96
34	SANKAR. N	CB19S 258673	5	5	5	5	5	25	100
35	SANTHOSH. N	CB19S 258674	4	5	5	5	5	24	96
36	SANTHOSHKUMAR. S	CB19S 258675	5	5	5	5	5	25	100
37	SARAN. S	CB19S 258676	5	5	5	5	5	25	100
38	SHAFIK. S	CB19S 258677	5	5	5	5	5	25	100

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39	SILAMBARASAN. N	CB19S 258678	5	4	5	4	4	22	88
40	SIVARANJANI. P	CB19S 258680	5	5	5	5	5	25	100
41	SRIKANTH. M	CB19S 258682	5	5	5	5	5	25	100
42	SUBHA. K	CB19S 258684	5	5	5	5	5	25	100
43	SUBITSHA. S	CB19S 258685	5	5	5	5	5	25	100
44	SUBRAMANIYAN. K	CB19S 258686	5	5	5	5	5	25	100
45	SURYARAJ. S	CB19S 258687	5	5	5	5	5	25	100
46	SUVEDHAN. E	CB19S 258688	5	5	5	5	5	25	100
47	SWETHA. S	CB19S 258689	5	5	5	5	5	25	100
48	THIRUSELVI. M	CB19S 258690	5	5	5	5	5	25	100
49	VEERAMANI. M	CB19S 258691	5	5	5	5	5	25	100
50	VEERAMANIKANDAN. D	CB19S 258692	5	5	5	5	5	25	100
51	VIJAY. S	CB19S 258694	5	4	5	4	5	23	92
52	YOGARAJAN. R	CB19S 258695	5	5	5	5	5	25	100
53	YOGESH KUMAR. S	CB19S 258696	5	5	5	5	5	25	100
54	YUVAYOGI. V	CB19S 258697	5	5	5	5	5	25	100
Average			4.94	4.91	4.98	4.93	4.94		

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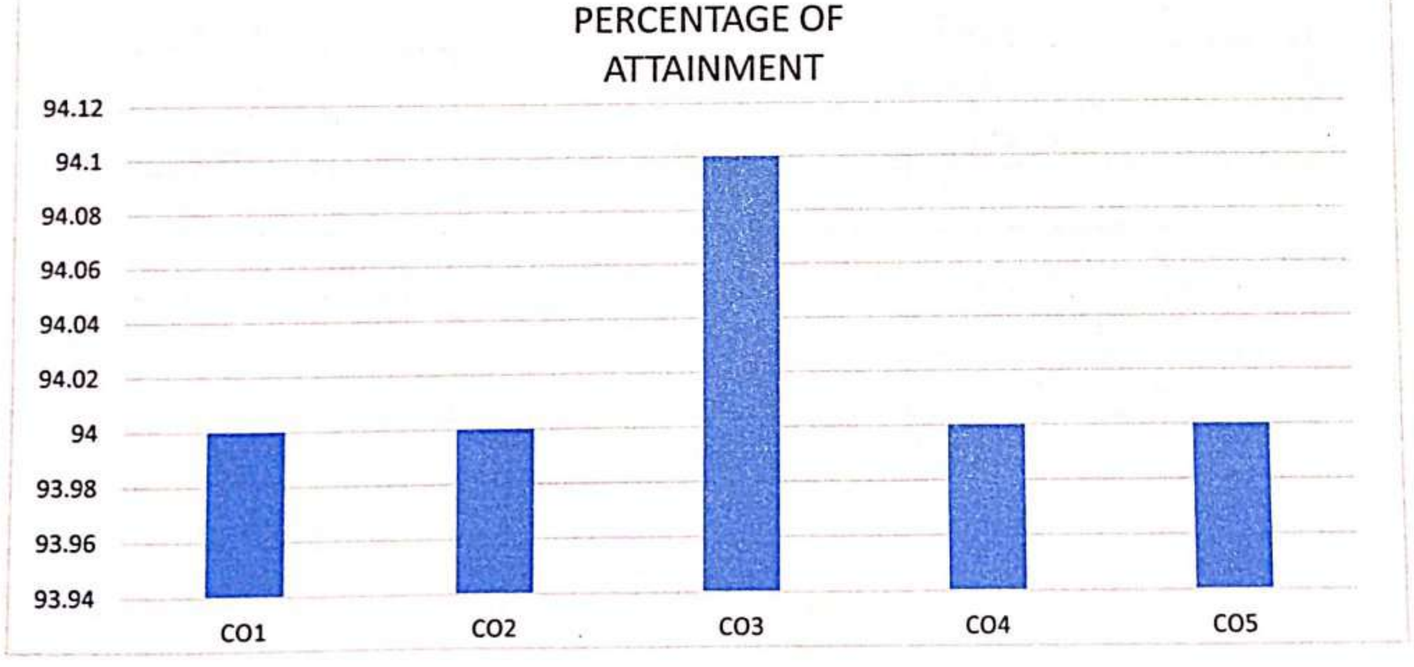
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.94	75	79.94	94.0
CO2	4.91	75	79.91	94.0
CO3	4.98	75	79.98	94.1
CO4	4.93	75	79.93	94.0
CO5	4.94	75	79.94	94.0

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94
CO2	94
CO3	94.1
CO4	94
CO5	94



BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
Near New Bus Stand
THANJAVUR-5

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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
New New Bus Stand, THANJAVUR-5

SUBJECT CODE : 16SMBECA2:1

SUBJECT NAME : CLOUD COMPUTING

NO OF STUDENTS : 54

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
90-100	1	OUTSTANDING
80-89	6	EXCELLENT
70-79	15	DISTINCTION
60-69	32	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
90-100	1.85%	OUTSTANDING
80-89	11.11%	EXCELLENT
70-79	27.78%	DISTINCTION
60-69	59.26%	VERY GOOD

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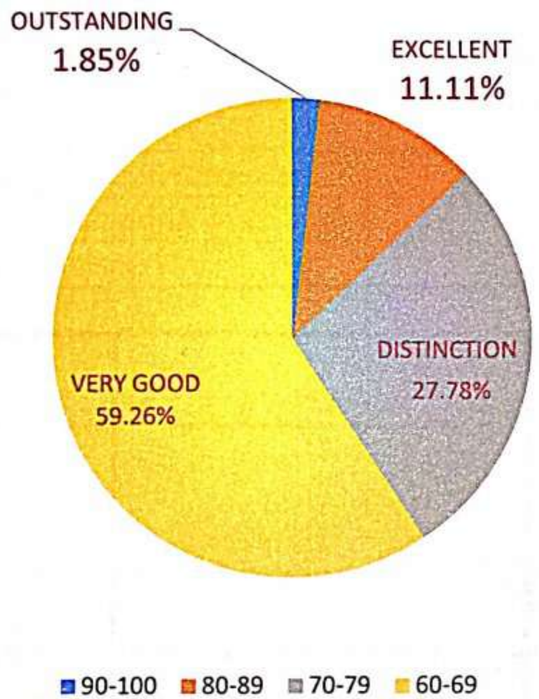
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - PROGRAMMING IN JAVA(16SCCCA3)

COURSE OUTCOME

CO1	To acquire the programming skills with java.
CO2	
CO3	To understand the concepts of multithreading.
CO4	To learn the art of GUI programming with Applet.
CO5	To learn about Database connectivity.

PO→ CO↓	PO1	PO2	PO3	PO4	PO5
CO1	3	2	2	3	3
CO2	2	0	2	2	2
CO3	3	1	3	2	0
CO4	2	0	2	2	3
CO5	3	0	2	1	1
Average	2.6	0.6	2.2	2	1.8

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	ANGALS. T	CB20S 259955	5	4	5	5	5	24	96
2	AZHAKARASAN. A	CB20S 259956	4	5	4	5	5	23	92
3	BALAJI. V.T	CB20S 259957	5	5	5	5	4	24	96
4	CHANDRAN. P	CB20S 259958	4	5	5	5	5	24	96
5	DEENATHAYALAN. R	CB20S 259959	5	4	5	5	5	24	96
6	DEEPIKA. S	CB20S 259960	5	5	5	5	5	25	100
7	DHANARJ. M	CB20S 259961	5	5	5	5	5	25	100
8	DINESHKUMAR. T	CB20S 259962	5	5	4	5	5	24	96
9	ELANGOVAN. I	CB20S 259963	5	3	5	5	5	23	92
10	GURU VASANTH. R.P	CB20S 259964	5	5	5	5	5	25	100
11	HARISH RAGAVENDHRAN. M	CB20S 259965	5	5	4	5	4	23	92
12	IYAPPAN. M	CB20S 259966	5	5	4	5	5	24	96
13	KABILAN. C	CB20S 259967	5	5	5	4	5	23	92
14	KAVIMANI. R	CB20S 259968	4	5	5	5	5	24	96
15	KESAVAN. K	CB20S 259969	4	5	4	5	5	23	92
16	MANIKANDAN. M	CB20S 259970	5	4	5	5	5	24	96
17	MOHAMED BASITH. M	CB20S 259971	5	3	5	5	5	23	92
18	MUGESH KUMAR. P	CB20S 259972	5	5	5	3	5	23	92
19	NETHAKRISHNAN. S	CB20S 259973	5	4	5	5	5	24	96

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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20	PRATHEESH. C	CB20S 259975	4	5	5	4	5	23	92
21	RADHA KRISHNAN. A	CB20S 259976	5	4	5	4	5	23	92
22	RAGAVENDAR. A	CB20S 259977	5	4	5	5	5	24	96
23	RAHUL KUMAR. S	CB20S 259978	5	4	5	4	5	23	92
24	SACHIN. S	CB20S 259979	5	4	5	5	4	23	92
25	SARATHISH. S	CB20S 259980	5	4	5	5	5	24	96
26	SARAVANAKUMAR. P	CB20S 259981	5	4	5	5	4	23	92
27	SIYAMALA. C	CB20S 259982	5	5	5	5	5	25	100
28	SRI RAMANICHANDRAN. S	CB20S 259983	4	5	5	5	4	23	92
29	STALIN. V	CB20S 259984	5	5	4	5	5	24	96
30	SUBASH. S	CB20S 259985	5	5	5	5	5	25	100
31	SUDHAN. K	CB20S 259986	5	4	5	5	5	24	96
32	SURIYA. A	CB20S 259987	5	5	5	5	4	24	96
33	TAMILARASAN. M	CB20S 259988	5	5	5	5	5	25	100
34	THIRUMANIKANDAN. R	CB20S 259989	5	4	5	5	5	24	96
35	VEERASURYA. M	CB20S 259990	5	5	5	4	5	24	96
36	VIGNESH. V	CB20S 259991	5	4	5	5	5	24	96
37	VINOTH. T	CB20S 259992	5	5	5	5	4	24	96
38	VISHNU SHARMA. K	CB20S 259993	5	4	5	5	5	24	96
39	YOGASARATHY. B	CB20S 259994	5	5	5	4	5	24	96
Average			4.85	4.54	4.85	4.79	4.82051282		

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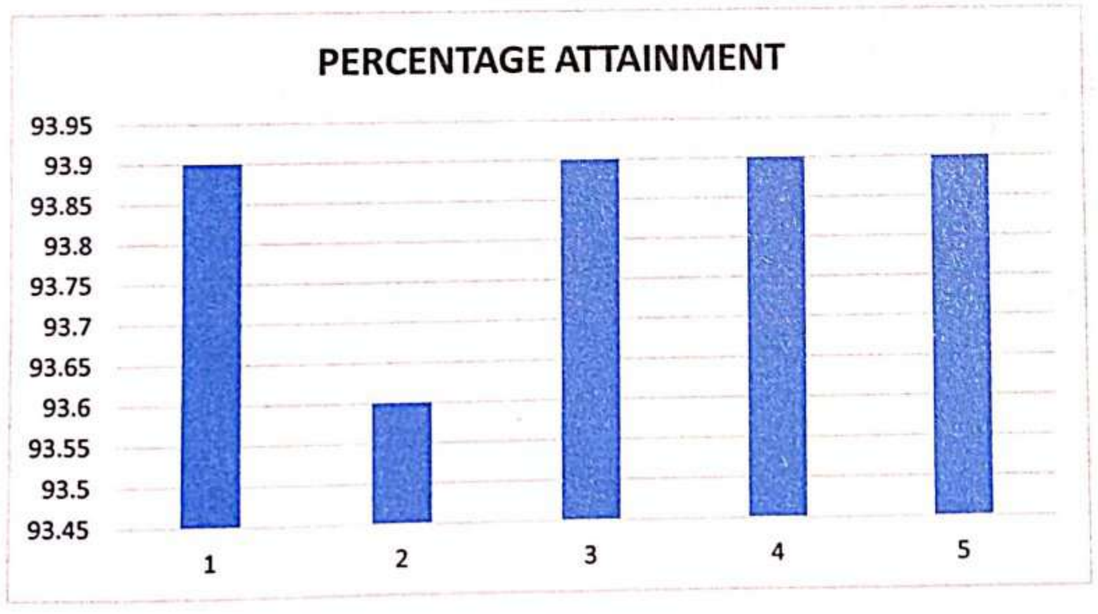
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.85	75	79.85	93.9
CO2	4.54	75	79.54	93.6
CO3	4.85	75	79.85	93.9
CO4	4.79	75	79.79	93.9
CO5	4.820513	75	79.820513	93.9

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	93.90
CO2	93.6
CO3	93.90
CO4	93.90
CO5	93.9



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COURSE ATTAINMENT FOR BACHELOR OFCOMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA3

SUBJECT NAME : PROGRAMMING IN JAVA

NO OF STUDENTS : 39

COURSE OUTCOME ASSESSMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
90-100	0	OUTSTANDING
80-89	25	EXCELLENT
70-79	14	DISTINCTION
60-69	0	VERY GOOD
50-59	0	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESSMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	64.10%	EXCELLENT
70-79	35.90%	DISTINCTION

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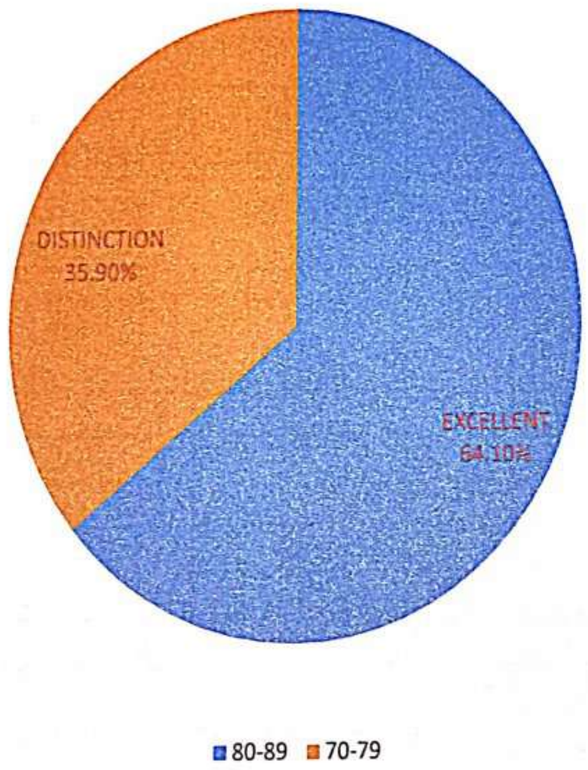
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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COURSE - PROGRAMMING IN PHP(16SCCCA9)

COURSE OUTCOME

CO1	To Store data in arrays
CO2	Using PHP build-in functions and creating custom functions
CO3	To create a database in PhpMyAdmin
CO4	How to receive and process Form submission data
CO5	To create images on Server.

PO→ CO↓	PO1	PO2	PO3	PO4	P05
CO1	3	3	1	3	1
CO2	3	2	2	2	2
CO3	3	2	2	3	2
CO4	3	3	2	2	1
CO5	3	1	2	3	2
Average	3	2.2	1.8	2.6	1.6

Internal Examination Mark Distribution for each Course outcome

CO	Internal(15)	Assignment(5)	Seminar(5)
CO1	3	1	1
CO2	3	1	1
CO3	3	1	1
CO4	3	1	1
CO5	3	1	1
Total	15	5	5

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S.NO	Name	Register Number	CO1	CO2	CO3	CO4	CO5	Total	Percentage
1	AARTHI. R	CB19S 258636	5	5	5	5	5	25	100
2	ABISHEK. M	CB19S 258637	5	5	5	5	5	25	100
3	ALWIN. C	CB19S 258638	5	5	3	5	5	22	88
4	ANAND. V	CB19S 258639	5	5	5	5	5	25	100
5	ASWIN. K	CB19S 258640	5	5	5	5	5	25	100
6	ASWIN. U	CB19S 258641	5	5	5	5	5	25	100
7	BALAGURUMOORTHY. V	CB19S 258642	5	5	5	4	5	24	96
8	BHARATHI. K	CB19S 258643	5	5	5	5	5	25	100
9	BOSE ARASAN. A	CB19S 258644	5	5	5	5	5	25	100
10	CHANDRU. M	CB19S 258645	5	5	5	5	5	25	100
11	DHINAKAR.M	CB19S 258646	5	5	5	5	4	24	96
12	DILIP. P	CB19S 258647	5	5	5	5	5	25	100
13	DURAIYARASAN. M	CB19S 258648	5	4	5	5	5	24	96
14	GANESH KUMAR. R	CB19S 258649	5	5	5	5	5	25	100
15	GAYATHRI. L	CB19S 258650	5	5	5	5	5	25	100
16	GOWTHAM. K	CB19S 258651	5	5	5	5	5	25	100
17	HARISH. S	CB19S 258652	4	5	5	5	5	24	96

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18	JAYA VIGNESH. S	CB19S 258653	5	5	5	5	5	25
19	KAMALRAJ. S	CB19S 258654	5	5	5	5	4	24
20	KAMESHWARAN. K	CB19S 258655	5	5	5	5	5	25
21	KARTHIK.K	CB19S 258656	5	5	5	5	5	25
22	KARUNASVARAN. M	CB19S 258658	5	5	4	5	5	24
23	KESAVAN. S	CB19S 258659	5	5	5	5	5	25
24	KESAVAN. V	CB19S 258660	5	5	5	5	5	25
25	MANIKANDAN. U	CB19S 258661	5	5	5	5	5	25
26	MANO BHARATHI. B	CB19S 258662	5	5	5	5	4	24
27	MATHIVANAN. R	CB19S 258664	5	5	5	5	5	25
28	MITHRAN. S B	CB19S 258665	5	5	5	5	5	25
29	MOHAMED FAYAZ. S	CB19S 258666	5	5	5	5	5	25
30	MOHAMMAD AZHARUDDIN. S	CB19S 258667	5	5	5	5	5	25
31	NATHIYA. S	CB19S 258668	5	5	5	5	5	25
32	RAJARAJAN. S	CB19S 258670	5	5	5	5	5	25
33	RAMANI. N	CB19S 258672	5	5	5	5	5	25
34	SANKAR. N	CB19S 258673	5	5	5	5	5	25
35	SANTHOSH. N	CB19S 258674	5	5	5	5	5	25
36	SANTHOSHKUMAR. S	CB19S 258675	4	5	5	4	5	23
37	SARAN. S	CB19S 258676	5	5	5	5	4	24

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38	SHAFIK. S	CB19S 258677	5	5	5	5	5	25
39	SILAMBARASAN. N	CB19S 258678	5	5	5	5	5	25
40	SIVARANJANI. P	CB19S 258680	5	5	5	5	5	25
41	SRIKANTH. M	CB19S 258682	5	5	4	5	5	24
42	SUBHA. K	CB19S 258684	5	5	5	5	5	25
43	SUBITSHA. S	CB19S 258685	5	5	5	5	5	25
44	SUBRAMANIYAN. K	CB19S 258686	5	5	5	5	5	25
45	SURYARAJ. S	CB19S 258687	5	5	5	5	5	25
46	SUVEDHAN. E	CB19S 258688	5	5	5	5	5	25
47	SWETHA. S	CB19S 258689	5	5	5	5	5	25
48	THIRUSELVI. M	CB19S 258690	5	5	5	5	5	25
49	VEERAMANI. M	CB19S 258691	5	5	5	5	5	25
50	VEERAMANIKANDAN. D	CB19S 258692	5	4	5	5	4	23
51	VIJAY. S	CB19S 258694	5	5	5	5	5	25
52	YOGARAJAN. R	CB19S 258695	5	5	5	5	5	25
53	YOGESH KUMAR. S	CB19S 258696	5	5	5	4	5	24
54	YUVAYOGI. V	CB19S 258697	5	5	5	5	5	25
Average			4.96	4.96	4.93	4.94	4.90740741	

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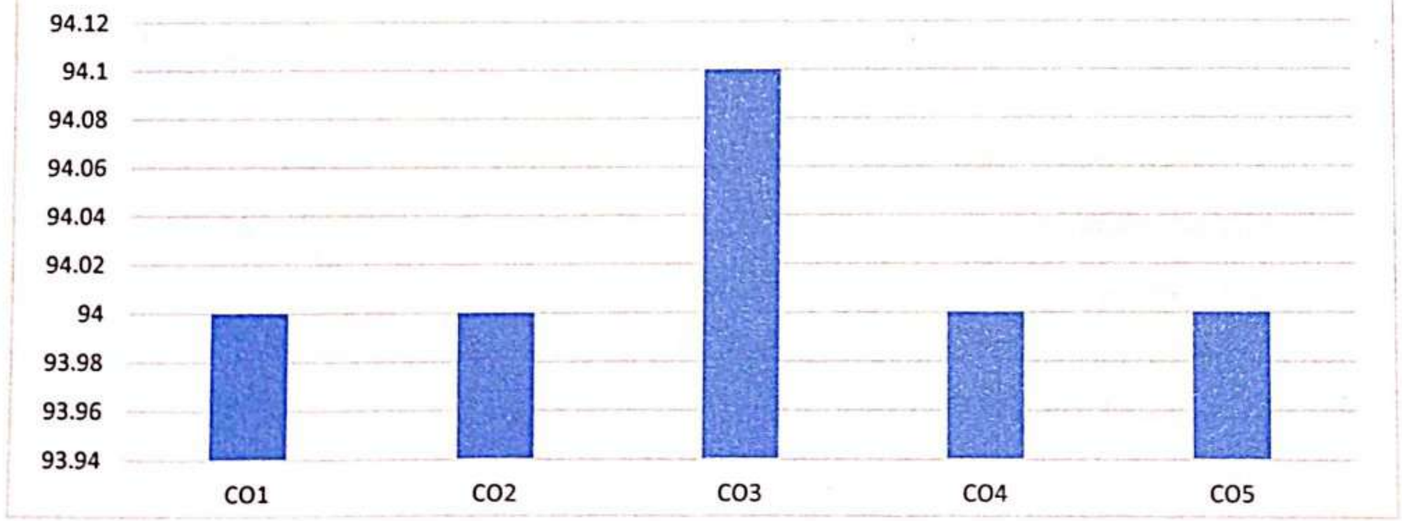
Expected Attainment in each CO - 85%

CO	Int. Exam + Assignment	End Sem	Total	%
CO1	4.96	75	79.96	94.1
CO2	4.96	75	79.96	94.1
CO3	4.93	75	79.93	94.0
CO4	4.94	75	79.94	94.0
CO5	4.907	75	79.907	94.0

COURSE OUTCOME	PERCENTAGE OF ATTAINMENT
CO1	94.10
CO2	94.1
CO3	94.00
CO4	94.00
CO5	94



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COURSE ATTAINMENT FOR BACHELOR OF COMPUTER APPLICATIONS

SUBJECT CODE : 16SCCCA9

SUBJECT NAME : PROGRAMMING IN PHP

NO OF STUDENTS : 54

COURSE OUTCOME ASSESMENT		
CATEGORY (MARKS)	NO.OF STUDENTS	STATUS
90-100	0	OUTSTANDING
80-89	3	EXCELLENT
70-79	28	DISTINCTION
60-69	21	VERY GOOD
50-59	2	GOOD
40-49	0	AVERAGE
0-39	0	REAPPEAR

COURSE OUTCOME ASSESMENT IN PERCENTAGE		
CATEGORY (MARKS)	PERCENTAGE	STATUS
80-89	5.56%	EXCELLENT
70-79	51.85%	DISTINCTION
60-69	38.89%	VERY GOOD
50-59	3.70%	GOOD

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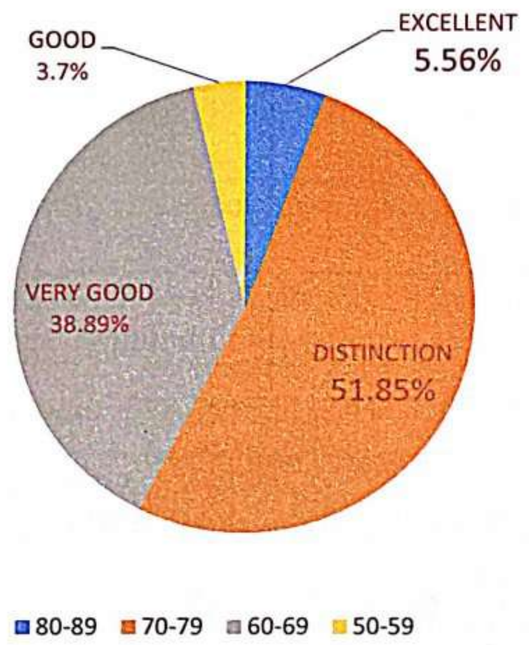
COURSE OUTCOME ASSESSMENT IN PERCENTAGE



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PROGRAM OUTCOME

PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

PROGRAMMIMG IN C (16SCCCA1P)

COURSE OUTCOME

CO1	Develop programming skills using the fundamentals and basics of C Language
CO2	Develop programs using the basic elements like control statements, Arrays and Strings
CO3	Enable effective usage of arrays, structures and unions
CO4	Understanding the concepts of functions and pointers
CO5	Implement files and understanding various file modes.

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PROGRAMMING IN C++ (16SCCCA2P)

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COURSE OUTCOME

CO1	Creating simple programs using classes and objects in C++ and implement the concepts of object oriented programming
CO2	Understanding the concept of constructors and Apply string functions to perform operator overloading
CO3	To be able to program using C++ features such as composition of objects and function overloading
CO4	Demonstrate Virtual functions, Inheritance & Polymorphism
CO5	Implement Object Oriented Programs using templates and exceptional handling concepts.

PROGRAMMING IN JAVA LAB(16SCCCA3P)

COURSE OUTCOME

CO1	Using Graphics, Animations and Multithreading for designing Simulation and Game based applications.
CO2	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.
CO3	Design and develop Web applications.
CO4	Designing Enterprise based applications by encapsulating an application's business logic.
CO5	Designing applications using pre-built frameworks.

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DATABASE SYSTEMS LAB(16SCCCA4P)

COURSE OUTCOME

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CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

COMPUTER GRAPHICS AND ANIMATION LAB (16SCCCA5P)

COURSE OUTCOME

CO1	Use the basic tools found in Adobe Photoshop to Understand image editing and graphic design features
CO2	Enable to know about work with images in different file formats
CO3	Understanding to Develop a commercial brochure
CO4	Enable to do Basic Drawing and Painting in flash
CO5	Understanding about Animation and to Know First movement of animation

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PROGRAMMING IN PHP LAB(16SCCCA6P)

COURSE OUTCOME

CO1	Use PHP to create a data driven website.
CO2	Use PHP to read a file and add records to the database.
CO3	Create a form on a webpage and use PHP to check the validity of the form.
CO4	Use built-in features of PHP such as data and string manipulation.
CO5	Test and debug PHP scripts while working with live data.

MINI PROJECT (16SMBECAPW)

COURSE OUTCOME

CO1	Understand the basics of programming and able to interpret real world problems into software solutions
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills
CO5	Understanding to Implement, evaluate and generate reports.

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