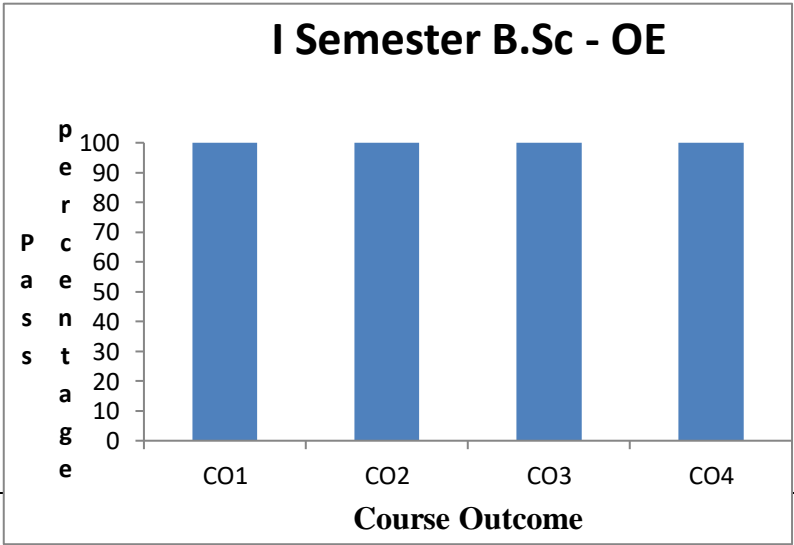


**Department of Mathematics- Course Outcomes**  
**Odd Semester 2021-2022**

Semester	Paper Code	Title of the Paper	Course Outcome	CO Attainment																																									
I Sem BSc		Mathematics-OE	<ul style="list-style-type: none"> <li>Students will be able to learn row and column operations, rank of matrix and to solve the system of homogeneous and non-homogeneous linear equations. Finding eigenvalues and eigenvectors.</li> <li>Students will be able to calculate the limit and examine the continuity</li> </ul>	<p>Class &amp; Sec: I Semester B.Sc</p> <p>Paper code: Batch: 2020-2023</p> <p style="text-align: right;">Subject: Mathematics - OE</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Questions</th> <th>CO1</th> <th>CO2</th> <th>CO3</th> <th>CO4</th> </tr> </thead> <tbody> <tr> <td>No.of students appeared</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> </tr> <tr> <td>No.of students Passed</td> <td>5</td> <td>5</td> <td>5</td> <td>5</td> </tr> <tr> <td>No. of students Failed</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Pass %</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> </tbody> </table> <p><b>Over all Result Analysis</b></p> <table border="1" style="width: 50%; text-align: center;"> <tbody> <tr> <td>Total No.of Studens</td> <td>7</td> </tr> <tr> <td>No.of students appeared</td> <td>5</td> </tr> <tr> <td>No.of students absent</td> <td>2</td> </tr> <tr> <td>No.of students Passed</td> <td>5</td> </tr> <tr> <td>No. of students Failed</td> <td>0</td> </tr> <tr> <td>Pass %</td> <td>100</td> </tr> </tbody> </table>					Questions	CO1	CO2	CO3	CO4	No.of students appeared	5	5	5	5	No.of students Passed	5	5	5	5	No. of students Failed	0	0	0	0	Pass %	100	100	100	100	Total No.of Studens	7	No.of students appeared	5	No.of students absent	2	No.of students Passed	5	No. of students Failed	0	Pass %	100
Questions	CO1	CO2	CO3	CO4																																									
No.of students appeared	5	5	5	5																																									
No.of students Passed	5	5	5	5																																									
No. of students Failed	0	0	0	0																																									
Pass %	100	100	100	100																																									
Total No.of Studens	7																																												
No.of students appeared	5																																												
No.of students absent	2																																												
No.of students Passed	5																																												
No. of students Failed	0																																												
Pass %	100																																												



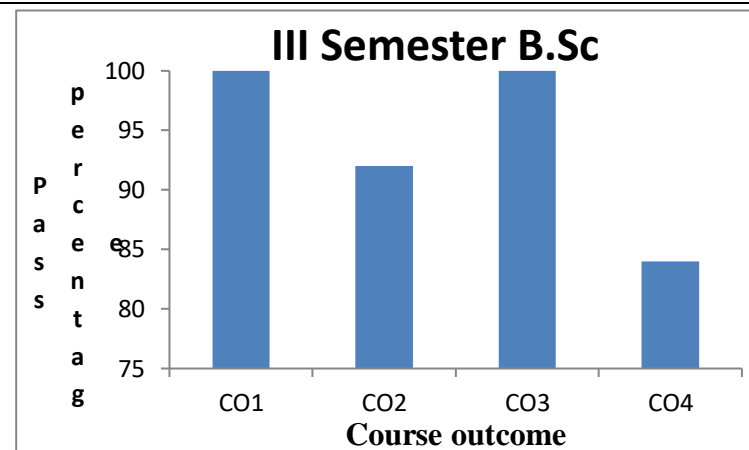
			<p>and differentiability of a function at a point.</p> <ul style="list-style-type: none"> <li>• Students will be able to understand the consequences of the intermediate value theorem for continuous functions.</li> <li>• Learn to evaluate integrals, find arc-lengths, areas and volume</li> </ul>																										
III Sem BSc	<b>11323</b>	Mathematics-III	<ul style="list-style-type: none"> <li>• Students will be able to explain the significance of the notions of cosets,</li> </ul>	<p>Class &amp; Sec: III Semester B.Sc            Paper code: Batch: 2019-2023            Subject: Mathematics-III</p> <table border="1"> <thead> <tr> <th>Questions</th> <th>CO1</th> <th>CO2</th> <th>CO3</th> <th>CO4</th> </tr> </thead> <tbody> <tr> <td>No.of students appeared</td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> </tr> <tr> <td>No.of students Passed</td> <td>12</td> <td>11</td> <td>12</td> <td>11</td> </tr> <tr> <td>No. of students Failed</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Pass %</td> <td>100</td> <td>92</td> <td>100</td> <td>84</td> </tr> </tbody> </table>	Questions	CO1	CO2	CO3	CO4	No.of students appeared	12	12	12	12	No.of students Passed	12	11	12	11	No. of students Failed	0	0	0	0	Pass %	100	92	100	84
Questions	CO1	CO2	CO3	CO4																									
No.of students appeared	12	12	12	12																									
No.of students Passed	12	11	12	11																									
No. of students Failed	0	0	0	0																									
Pass %	100	92	100	84																									

cyclic group, subgroups generated by an element of a group and Index of a group and analyze consequences of Lagrange's theorem.

- Students will be able to assimilate the notions of limit of a sequence and boundedness of a sequence.
- Students will be able to learn convergence of a

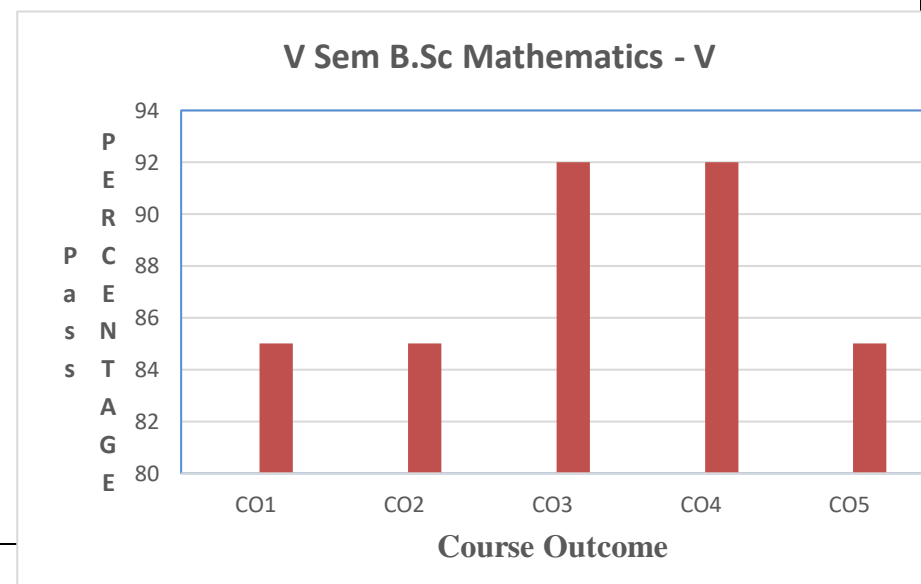
**Over all Result Analysis**

Total No.of Studens	12
No.of students appeared	12
No.of students absent	Nil
No.of students Passed	11
No. of students Failed	1
Pass %	84



			<p>sequences and series of real numbers and to find the summation of the Binomial, Exponential and Logarithmic series.</p> <ul style="list-style-type: none"><li>• Students will be able to find the Laplace transform of a function and Inverse Laplace transform of a function using definition and calculate the Laplace transform</li></ul>	
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			of derivative s, integrals and periodic functions.																																											
V Sem BSc	11525	Mathematics-V	<ul style="list-style-type: none"> <li>Students will be able to understand the concepts and calculation of Rings, Integral Domains and Fields.</li> <li>Students will be able to know the operation of divergence and curl of a vector field.</li> <li>Students will be able know the</li> </ul>	<p><b>Subject Name:</b> Mathematics - V <span style="float: right;"><b>Semester:</b> V Sem B.Sc</span></p> <p><b>Paper Code :</b> <span style="float: right;"><b>Batch:</b> 2019 - 2022</span></p> <table border="1"> <thead> <tr> <th>Questions</th> <th>CO1</th> <th>CO2</th> <th>CO3</th> <th>CO4</th> <th>CO5</th> </tr> </thead> <tbody> <tr> <td>No.of students appeared</td> <td>13</td> <td>13</td> <td>13</td> <td>13</td> <td>13</td> </tr> <tr> <td>No.of students Passed</td> <td>11</td> <td>11</td> <td>12</td> <td>12</td> <td>11</td> </tr> <tr> <td>No. of students Failed</td> <td>2</td> <td>2</td> <td>1</td> <td>1</td> <td>2</td> </tr> <tr> <td>Pass %</td> <td>85</td> <td>85</td> <td>92</td> <td>92</td> <td>85</td> </tr> </tbody> </table> <p><b>Over all Result Analysis</b></p> <table border="1"> <tbody> <tr> <td>Total No.of Studens</td> <td>13</td> </tr> <tr> <td>No.of students appeared</td> <td>13</td> </tr> <tr> <td>No.of students absent</td> <td>0</td> </tr> <tr> <td>No.of students Passed</td> <td>11</td> </tr> <tr> <td>No. of students Failed</td> <td>2</td> </tr> <tr> <td>Pass %</td> <td>85</td> </tr> </tbody> </table>	Questions	CO1	CO2	CO3	CO4	CO5	No.of students appeared	13	13	13	13	13	No.of students Passed	11	11	12	12	11	No. of students Failed	2	2	1	1	2	Pass %	85	85	92	92	85	Total No.of Studens	13	No.of students appeared	13	No.of students absent	0	No.of students Passed	11	No. of students Failed	2	Pass %	85
Questions	CO1	CO2	CO3	CO4	CO5																																									
No.of students appeared	13	13	13	13	13																																									
No.of students Passed	11	11	12	12	11																																									
No. of students Failed	2	2	1	1	2																																									
Pass %	85	85	92	92	85																																									
Total No.of Studens	13																																													
No.of students appeared	13																																													
No.of students absent	0																																													
No.of students Passed	11																																													
No. of students Failed	2																																													
Pass %	85																																													



process of calculation of Numerical Methods: forward and backward formula and numerical integration.

V Sem BSc

11526

Mathematics-VI

- Students will be able to evaluate line integrals in the plane and in space, including line integrals of vector fields. Use the Fundamental Theorem of Line Integrals.
- Students will be able

**Subject Name:** Mathematics - VI

**Semester:** V Sem B.Sc

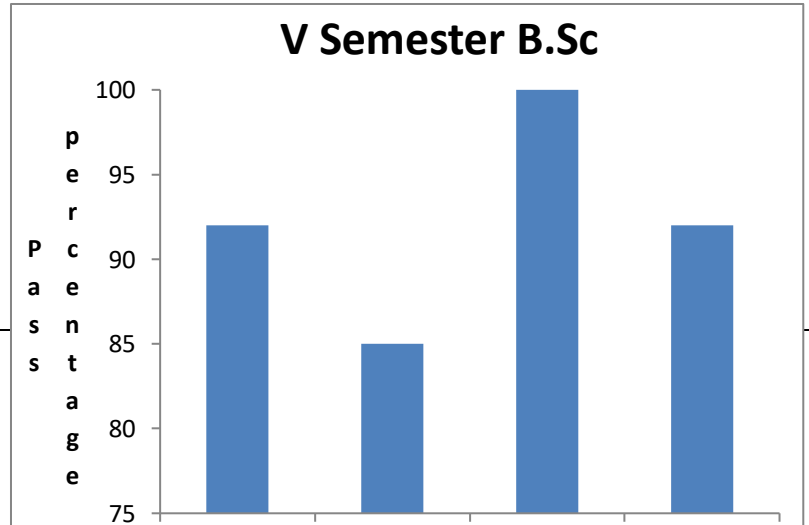
Paper Code :

**Batch:** 2019 - 2022

Questions	CO1	CO 2	CO3	CO4	CO5
No.of students appeared	13	13	13	13	13
No.of students Passed	12	11	13	12	11
No. of students Failed	1	2	0	1	2
Pass %	92	85	100	92	85

**Over all Result Analysis**

Total No.of Studens	13
No.of students appeared	13
No.of students absent	0



to compute double integrals over rectangles and over general regions. Use double integrals to compute volume of solids and areas of plane.

- Students will be able to compute triple integrals over rectangular boxes and general surfaces. Evaluate triple integrals in cylindrical and spherical coordinates
- Students

No.of students Passed	11
No. of students Failed	2
Pass %	85

			<p>will be able to gain the knowledge about Green's Theorem , Gauss Divergence theorem and Stoke's Theorem and applications</p> <ul style="list-style-type: none"> <li>• Students will be able to solve ordinary differential equations using Laplace transform.</li> </ul>																	
I Sem BCA		MATOET 1: Corporate Mathematics	<ul style="list-style-type: none"> <li>• Students will be able to learn types of equations and methods</li> </ul>	<p>Class &amp; Sec: I Sem BCA 'A' &amp; 'B'  Subject: OE - Corporate Mathematics  Batch: 2021-2024                      Paper code:</p> <table border="1"> <thead> <tr> <th>Questions</th> <th>CO1</th> <th>CO2</th> <th>CO3</th> </tr> </thead> <tbody> <tr> <td>No.of students appeared</td> <td>36</td> <td>36</td> <td>36</td> </tr> <tr> <td>No.of students Passed</td> <td>36</td> <td>34</td> <td>31</td> </tr> <tr> <td>No. of students Failed</td> <td>0</td> <td>2</td> <td>5</td> </tr> </tbody> </table>	Questions	CO1	CO2	CO3	No.of students appeared	36	36	36	No.of students Passed	36	34	31	No. of students Failed	0	2	5
Questions	CO1	CO2	CO3																	
No.of students appeared	36	36	36																	
No.of students Passed	36	34	31																	
No. of students Failed	0	2	5																	



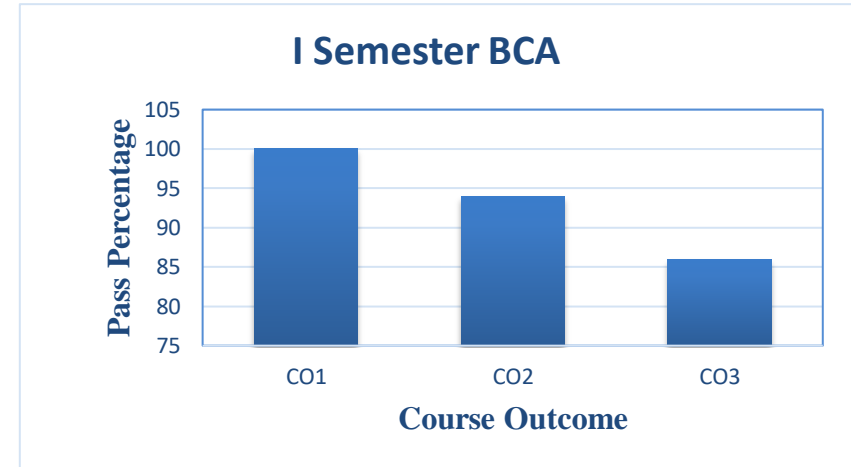
to solve linear, quadratic equations and learn to use mathematical equations in real world situations.

- Students will be able to learn frequency distribution, Geometric Mean, Harmonic Mean, and Arithmetic

Pass %	100	94	86
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**Over all Result Analysis**

Total No.of Studens	36
No.of students appeared	33
No.of students absent	3
No.of students Passed	31
No. of students Failed	2
Pass %	94.00%



			<p>ic Mean, Median and Mode concepts .</p> <ul style="list-style-type: none"><li>• Students will be able to understand the formulation of linear programming problems, analyze and solve linear programming models of real life situations,</li></ul>	
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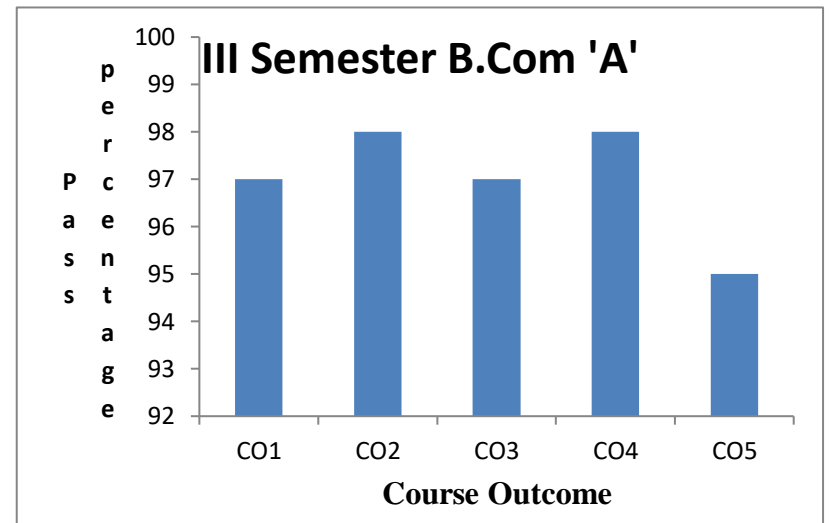
			<p>provide graphical solutions of linear programming problems with two variables and illustrate the concept of convex set and extreme points.</p>																															
III Sem B.Com	35325	Business Data Analysis	<ul style="list-style-type: none"> <li>Students will be able to understand the basic statistical tools for analysis, interpretation</li> </ul>	<p>Subject : Business Data Analysis Batch : 2020-2023 Paper code:</p> <table border="1"> <thead> <tr> <th>Questions</th> <th>CO1</th> <th>CO2</th> <th>CO3</th> <th>CO4</th> <th>CO5</th> </tr> </thead> <tbody> <tr> <td>No.of students appeared</td> <td>62</td> <td>62</td> <td>62</td> <td>62</td> <td>62</td> </tr> <tr> <td>No.of students Passed</td> <td>60</td> <td>61</td> <td>60</td> <td>61</td> <td>59</td> </tr> <tr> <td>No. of students Failed</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>3</td> </tr> <tr> <td>Pass %</td> <td>97</td> <td>98</td> <td>97</td> <td>98</td> <td>95</td> </tr> </tbody> </table> <p>Class &amp; Sec: III Semester B.Com A</p>	Questions	CO1	CO2	CO3	CO4	CO5	No.of students appeared	62	62	62	62	62	No.of students Passed	60	61	60	61	59	No. of students Failed	2	1	2	1	3	Pass %	97	98	97	98	95
Questions	CO1	CO2	CO3	CO4	CO5																													
No.of students appeared	62	62	62	62	62																													
No.of students Passed	60	61	60	61	59																													
No. of students Failed	2	1	2	1	3																													
Pass %	97	98	97	98	95																													

on of qualitative & quantitative data, conceptual overview of Statistics, recognize and appreciate the connections between theory and application

- Students will be able to interpret data through statistical tools like mean, median and mode.
- Students will be able to perform calculation and

**Over all Result Analysis**

Total No.of Studens	64
No.of students appeared	62
No.of students absent	2
No.of students Passed	59
No. of students Failed	3
Pass %	95



Subject : Business Data Analysis

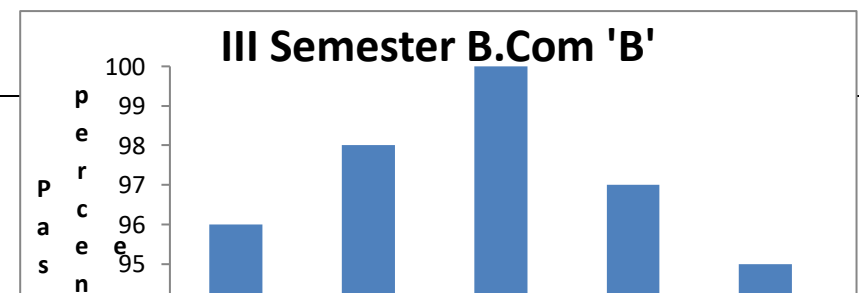
Class & Sec: III Semester B.Com B

Batch : 2020-

Paper code:

2023

Questions	CO1	CO2	CO3	CO4	CO5
No.of students appeared	66	66	66	66	66
No.of students Passed	64	65	66	64	63
No. of students Failed	2	1	0	2	3
Pass %	96	98	100	97	95



interpretation of the sample product moment correlation coefficient and the linear regression equation are discussed and illustrated.

- Students will be able to understand time series methods and the applications of these methods to different types of data in various contexts
- Students will be able

**Over all Result Analysis**

Total No.of Studens	67
No.of students appeared	66
No.of students absent	1
No.of students Passed	63
No. of students Failed	3
Pass %	95

Subject : Business Data Analysis

Class & Sec: III Semester B.Com C

Batch : 2020-

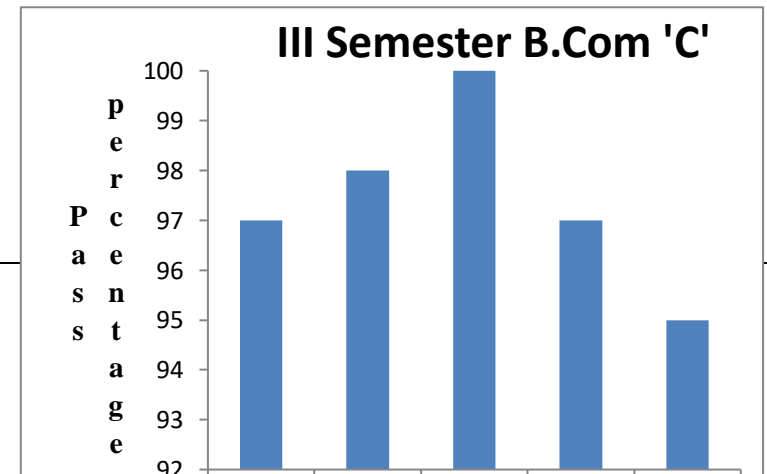
Paper code:

2023

Questions	CO1	CO 2	CO3	CO 4	CO 5
No.of students appeared	65	65	65	65	65
No.of students Passed	2	1	0	2	3
No. of students Failed	63	64	65	63	62
Pass %	97	98	100	97	95

**Over all Result Analysis**

Total No.of Studens	77
No.of students appeared	70
No.of students absent	7



to understand filling the missing data by Binomial expansion method and Newton's Method.

No. of students Passed	65
No. of students Failed	5
Pass %	93

| |

BBA

Analytics-II

will be able to understand the basic statistical tools for analysis , interpretation of qualitative & quantitative data, conceptual overview of Statistics, recognize and appreciate the connections between theory and applications

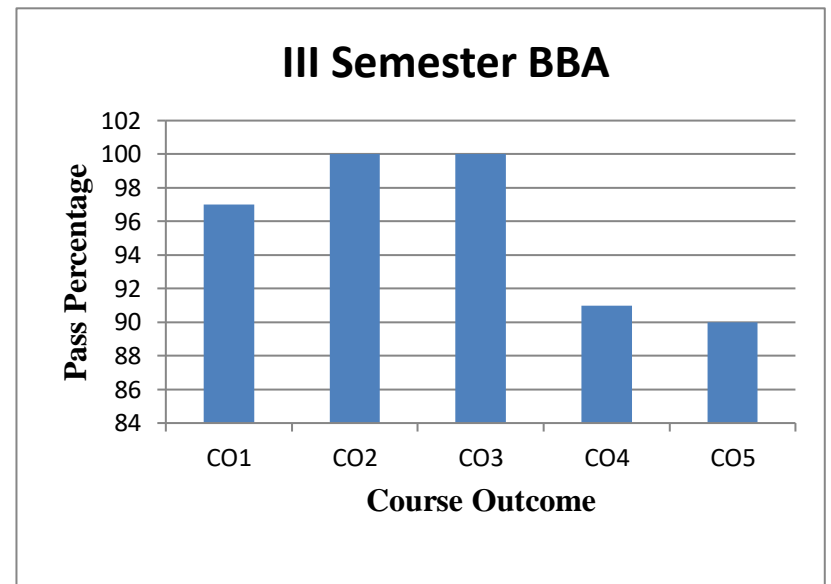
- Students will be able to interpret data through statistical

Subject: Business Data Analysis (BDA)  
 Batch: 2020-2023 Paper code:

Questions	CO1	CO2	CO 3	CO 4	CO5
No.of students appeared	69	69	69	64	67
No.of students Passed	67	69	69	58	60
No. of students Failed	2	0	0	6	7
Pass %	97	100	100	91	90

**Over all Result Analysis**

Total No.of Studens	78
No.of students appeared	69
No.of students absent	9
No.of students Passed	64
No. of students Failed	5
Pass %	93.00 %



			<p>tools like mean, median and mode. Standard Deviation and Skewness.</p> <ul style="list-style-type: none"><li>• Students will be able to perform calculation and interpretation of the sample product moment correlation coefficient and the linear regression equation are discussed and illustrated.</li><li>• Students will be able to understand</li></ul>	
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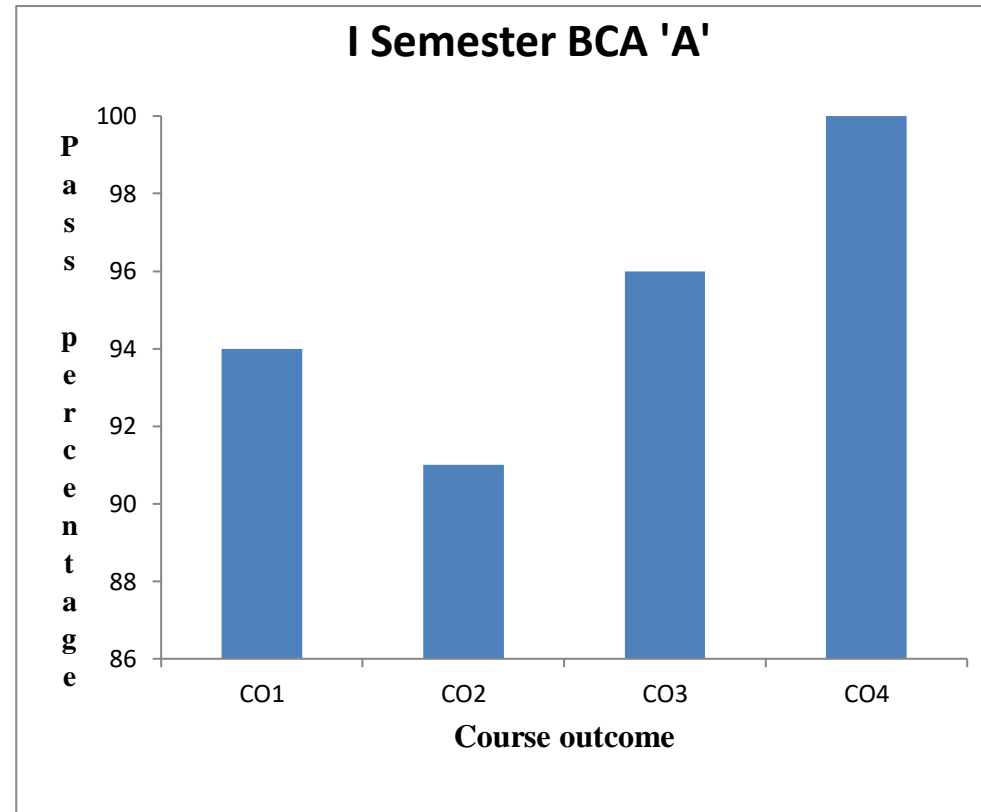
			<p>time series methods and the applications of these methods to different types of data in various contexts</p> <ul style="list-style-type: none"> <li>Students will be able to understand Sampling methods</li> </ul>	
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I Sem BCA			<ul style="list-style-type: none"> <li>Students to learn concepts of set ,types of sets and Venn diagrams, learn concepts of Relations and function.</li> </ul>	Class & Sec: I Semester BCA 'A'				Subject:	
				Paper code:		Batch: 2021-2024			
				Questions	CO1	CO 2	CO 3		CO 4
				Total Number of students	49	49	49		49
				No.of students appeared	47	47	47		47
				No.of students Passed	44	43	45		47
				No. of students Failed	3	4	2		0
				Pass %	94	91	96		100
<b>Over all Result Analysis</b>									

Concepts of Mathematical Induction, Mathematical logic, truth table, Tautology and Contradiction.

- Enable the students to learn concept of permutation and combination with application problem, Recurrence relation, Binomial coefficients and Matrix form of digraph.

Total No.of Studens	49
No.of students appeared	47
No.of students absent	2
No.of students Passed	43
No. of students Failed	4
Pass %	84



- Students will be able
- to learn types of matrix,
- Determinant of a matrix, row and column operations, Inverse of a matrix,
- rank of matrix and to solve the system of linear equations.
- Enable the students to learn vertex, edge, types of graph, Euler graph and Isomorphism of a graph, concepts in applications of graph,

Class & Sec: I Semester BCA 'B'

Subject: Discrete Structures

Paper code:

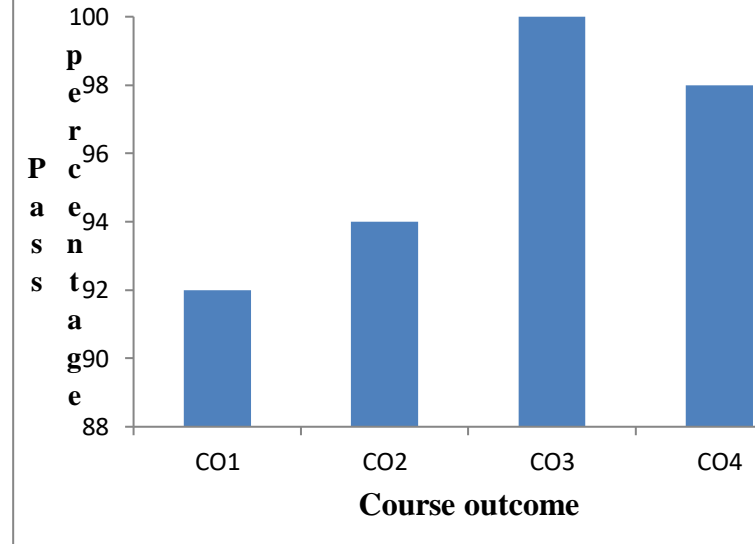
Batch: 2021-2024

Questions	CO1	CO 2	CO 3	CO 4
Total Number of students	49	49	49	49
No.of students appeared	48	48	48	48
No.of students Passed	44	45	48	47
No. of students Failed	4	3	0	1
Pass %	92	94	100	98

**Over all Result Analysis**

Total No.of Studens	49
No.of students appeared	48
No.of students absent	1
No.of students Passed	44
No. of students Failed	4
Pass %	84

**I Semester BCA 'B'**



				HOD Signature	Vice Principal
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