



## CRITERION 2 – Teaching-Learning and Evaluation

### Key Indicator- 2.6 Student Performance and Learning Outcomes

### 2.6.2: Attainment of Programme outcomes and Course Outcomes are evaluated by the institution.

Assessment is one or more processes which is carried out by the institution, that identify, collect and prepare data to evaluate the achievement of course outcomes and program outcomes.

#### CO -PO Attainment Process

- The Course Outcomes (COs) are defined for each course using Bloom Taxonomy Levels.
- Savitribai Phule Pune University - Board of Studies of respective programmes have framed COs of courses while revisions and finalizing the syllabus.
- All COs are mapped with relevant Program Outcomes (POs) and Programme Specific Outcomes (PSOs)
- This Mapping is done in three levels of relevance as; (a) Slight (Low): 1; (b) Moderate (Medium): 2; (c) Substantial (High): 3.
- The Direct and Indirect assessment tools are used for determining the CO-PO attainment.
- The weightage for direct and indirect assessment tools for the respective academic years are set.
- Direct Assessment Tools are again sub-classified as internal and external assessment tools.
- The Weightage for internal and external assessment tools are set for the respective academic year.
- Various internal assessment tools like assignments, unit tests, class tests, term end exams, quizzes, oral/ viva, case study, project review, and lab performance are used.
- The external assessment tools are examination heads conducted by Savitribai Phule Pune University like theory, practical, Industry projects etc.
- Indirect assessment tools like course exit survey and co-curricular and extra-curricular activities etc. are used.
- Statistical data obtained from these tools is tabulated and using suitable formulation the computation is done for attainment of CO with PO and PSO.
- In this way attainment of Course Outcomes and Program Outcomes are evaluated

<b>Direct CO Attainment (90% Weightage)</b>		<b>Indirect CO Attainment (10% Weightage)</b>
<b>Internal Assessment tools (30% Weightage)</b>	<b>External Assessment tools (70% Weightage)</b>	Course Exit Survey (End of Course Survey)
Concurrent Internal Evaluation (CIE I)	Theory Examination	
Concurrent Internal Evaluation (CIE II)	Summer Internship Projects	
Term End Examination	Viva	



Course Coordinators shall opt for a combination of one of more CIE methods listed below.

### MBA Department

<b>Group A (Individual Assessment) – Not more than 1 per course</b>	
1.	Class Test
2.	Open Book Test
3.	Written Home Assignment
4.	In-depth Viva-Voce
<b>Group B (Individual Assessment) – Atleast 1 per course</b>	
1.	Case Study
2.	Caselet
3.	Situation Analysis
4.	Presentations
<b>Group C (Group Assessment) – Not more than 1 per course</b>	
1.	Field Visit / Study tour and report of the same
2.	Small Group Project & Internal Viva-Voce
3.	Model Development
4.	Role Play
5.	Story Telling
6.	Fish Bowls
<b>Group D (Creative - Individual Assessment) – Not more than 1 per course</b>	
1.	Learning Diary
2.	Scrap Book / Story of the week / Story of the month
3.	Creating a Quiz
4.	Designing comic strips
5.	Creating Brochures / Bumper Stickers / Fliers
6.	Creating Crossword Puzzles
7.	Creating and Presenting Posters
8.	Writing an Advice Column
9.	Library Magazines based assessment
10.	Peer assessment
11.	Autobiography/Biography
12.	Writing a Memo
13.	Work Portfolio
<b>Group E (Use of Literature / Research Publications- Individual Assessment) – Not more than 1 per course</b>	
1.	Book Review
2.	Drafting a Policy Brief
3.	Drafting an Executive Summary
4.	Literature Review
5.	Term Paper
6.	Thematic Presentation
7.	Publishing a Research Paper
8.	Annotated Bibliography
9.	Creating Taxonomy
10.	Creating Concept maps
<b>Group F (Use of Technology - Individual Assessment) – Not more than 1 per course</b>	
1.	Online Exam



ZEAL EDUCATION SOCIETY'S  
**ZEAL INSTITUTE OF MANAGEMENT AND COMPUTER  
APPLICATION (ZIMCA)**

NARHE | PUNE | INDIA



PUN CODE: IMMP015570

DTE CODE: MB6195

AISHE CODE: C-50909

2.	Simulation Exercises
3.	Gamification Exercises
4.	Presentation based on Google Alerts
5.	Webinar based assessment
6.	Creating Webpage / Website / Blog
7.	Creating infographics / infomercial
8.	Creating podcasts / Newscast
9.	Discussion Boards



**Director**  
**Zeal Institute of Management**  
**& Computer Application**  
**Pune - 411 041.**



ZEAL EDUCATION SOCIETY'S  
**ZEAL INSTITUTE OF MANAGEMENT AND COMPUTER APPLICATION (ZIMCA)**



NARHE | PUNE | INDIA  
 PUN CODE: IMMP015570      DTE CODE: MB6195      AISHE CODE: C-50909

## Direct Assessment Tools –Sample Copy

Attainment_Batch 22-24- 105 BOM-D *																								
Direct Assessment Tools																								
Internal Assessment Tools 104-BOM																		External Assessment Tools						
		CIE1		CIE2		Termend		Termend		Theory														
		1	2	2	3	4	1	2	3	4	5													
		10	15	5	10	10	10	10	10	10	10	100												
Sr. No.	Roll Number	Name of Student	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%						
1	HMB2224001	ALAKATVAR ANKUSH PURUSHOTTAM	3	28	7	43	2	34	5	50	5	50	1	12	3	31	3	31	2	19	59	59		
2	HMB2224002	AMBAT LOKESH GOVIND	3	32	8	50	2	38	6	58	6	58	1	14	4	36	4	36	4	36	2	22	68	68
3	HMB2224003	AMBHOPE UMESH YIJAY	2	18	4	28	2	36	3	32	3	32	1	8	2	20	2	20	2	20	1	12	50	50
4	HMB2224005	ANIKET DEEPAK KANGLE	3	25	6	39	2	35	4	45	4	45	1	11	3	28	3	28	3	28	2	17	57	57
5	HMB2224110	VIPUL SANJAY BADAWE	3	28	7	43	2	48	5	50	5	50	1	12	3	31	3	31	3	31	2	19	71	71
6	HMB2224010	BAGALKOTE SHRIDHARIRAPPA	3	30	7	46	2	40	5	53	5	53	1	13	3	33	3	33	3	33	2	20	66	66
7	HMB2224011	BANDIVADAR DEEPAK DURGAPPA	2	21	5	32	1	12	4	37	4	37	1	9	2	23	2	23	2	23	1	14	33	33
8	HMB2224084	SANJEEVANI BABASAHEB BHANDWALE	3	29	7	45	2	48	5	51	5	51	1	13	3	32	3	32	3	32	2	19	72	72
9	HMB2224012	BHOSEKAR ABHISHEK PRASHANT	3	26	6	41	1	24	5	46	5	46	1	12	3	29	3	29	3	29	2	17	49	49
10	HMB2224013	BHOSEKAR SVAPNIL RAJENDRA	3	27	6	42	1	28	5	48	5	48	1	12	3	30	3	30	3	30	2	18	53	53
11	HMB2224068	NIKRAJAN SHIVAJI BINAGE	3	33	8	52	2	38	6	59	6	59	1	15	4	37	4	37	4	37	2	22	69	69
12	HMB2224085	SANKET BANDU BINAGE	3	25	6	39	2	44	4	45	4	45	1	11	3	28	3	28	3	28	2	17	65	65
13	HMB2224015	BOBADE MADHURA SOMMATH	4	37	9	57	2	47	7	66	7	66	2	16	4	41	4	41	4	41	2	25	80	80
14	HMB2224017	CHANDANSHIVE VAIBHAV SHAHAJI	1	12	3	18	2	31	2	21	2	21	1	5	1	13	1	13	1	13	1	8	39	39
15	HMB2224023	DHIRAJ GARBAD CHAUDHARI	3	27	6	42	2	36	5	48	5	48	1	12	3	30	3	30	3	30	2	18	60	60

Direct Assessment Tools																								
Internal Assessment Tools 104-BOM																		External Assessment Tools						
		CIE1		CIE2		Termend		Termend		Theory														
		1	2	2	3	4	1	2	3	4	5													
		10	15	5	10	10	10	10	10	10	10	100												
Sr. No.	Roll Number	Name of Student	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%						
		Class Strength	115		115		115		115		115		115		115		115							
		Marks (%)	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%						
		>=60	90	78	65	57	67	58	58	50	59	51	61	53	50	43	64	56	60	52	56	49	57	50
		55 to 60	0	0	2	2	0	0	8	7	6	5	0	0	0	0	0	0	0	0	0	0	24	21
		50 to 54	0	0	5	4	0	0	5	4	5	4	10	9	0	0	0	0	0	0	0	0	12	10
		45 to 49	0	0	5	4	10	9	10	9	10	9	0	0	0	0	0	0	0	0	0	0	7	6
		40 to 44	0	0	12	10	6	5	15	13	21	18	0	0	3	3	3	3	2	2	0	0	7	6
		<40	25	22	26	23	32	28	19	17	14	12	44	38	62	54	48	42	53	46	59	51	8	7
		Category of Attainment	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks	student	% Marks
		No attainment	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60	0	60
		1 Low	40	60	40	60	40	60	40	60	40	60	40	60	40	60	40	60	40	60	40	60	40	60
		2 Medium	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60	50	60
		3 High	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
		Number of students scoring >Target%	90		65		67		58		59		61		50		64		60		56		57	
		% students scoring >Target%	78.26		56.52		58.26		50.43		51.30		53.04		43.48		55.65		52.17		48.70		49.57	
		Category of attainment	High		Medium		Medium		Medium		Medium		Medium		Low		Medium		Medium		Low		Low	
		Attainment level	3		2		2		2		2		2		1		2		2		1		1	





ZEAL EDUCATION SOCIETY'S  
**ZEAL INSTITUTE OF MANAGEMENT AND COMPUTER APPLICATION (ZIMCA)**

NARHE | PUNE | INDIA

PUN CODE: IMMP015570

DTE CODE: MB6195

AISHE CODE: C-50909



## Indirect Assessment Tools –Sample Copy

			Indirect Assessment Tools											
			End of Course Survey											
			ECS Q1		ECS Q2		ECS Q3		ECS Q4		ECS Q5		ECS Q6	
			10		10		10		10		10		10	
Sr. No.	Roll Number	Name of Student	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%
1	HMB2224001	ALAKATWAR ANKUSH PURUSHOTTAM	8	80	6	60	8	80	6	60	6	60	8	80
2	HMB2224002	AMBAT LOKESH GOVIND	8	80	8	80	8	80	8	80	8	80	8	80
3	HMB2224003	AMBHORE UMESH VIJAY	8	80	8	80	8	80	8	80	6	60	8	80
4	HMB2224005	ANIKET DEEPAK KANGLE	6	60	6	60	6	60	8	80	8	80	6	60
5	HMB2224110	VIPUL SANJAY BADAWE	6	60	6	60	6	60	6	60	8	80	6	60
6	HMB2224010	BAGALKOTE SHRIDHAR IRAPPA	8	80	8	80	8	80	8	80	8	80	6	60
7	HMB2224011	BANDIWADAR DEEPAK DURGAPPA	6	60	6	60	8	80	8	80	6	60	6	60
8	HMB2224084	SANJEEVANI BABASAHEB BHANDWALE	8	80	8	80	8	80	8	80	8	80	8	80
9	HMB2224012	BHOSEKAR ABHISHEK PRASHANT	6	60	6	60	6	60	6	60	6	60	8	80
10	HMB2224013	BHOSEKAR SWAPNIL RAJENDRA	6	60	6	60	6	60	6	60	6	60	6	60
11	HMB2224068	NIRANJAN SHIVAJI BINAGE	8	80	8	80	8	80	8	80	8	80	8	80
12	HMB2224085	SANKET BANDU BINAGE	8	80	8	80	8	80	8	80	8	80	8	80
13	HMB2224015	BOBADE MADHURA SOMNATH	6	60	6	60	6	60	6	60	6	60	6	60
14	HMB2224017	CHANDANSHIVE VAIBHAV SHAHAJI	8	80	8	80	8	80	8	80	8	80	8	80

			Indirect Assessment Tools												
			End of Course Survey												
			ECS Q1		ECS Q2		ECS Q3		ECS Q4		ECS Q5		ECS Q6		
			10		10		10		10		10		10		
Sr. No.	Roll Number	Name of Student	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	Marks	%	
<b>Class Strength</b>			115		115		115		115		115		115		
<b>Result Analysis</b>			<b>Marks (%)</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>	<b>Number</b>	<b>%</b>
			≥60	113	98	115	100	115	100	115	100	115	100	115	100
			55 to 60	0	0	0	0	0	0	0	0	0	0	0	0
			50 to 54	0	0	0	0	0	0	0	0	0	0	0	0
			45 to 49	0	0	0	0	0	0	0	0	0	0	0	0
			40 to 44	0	0	0	0	0	0	0	0	0	0	0	0
			<40	1	1	0	0	0	0	0	0	0	0	0	0
<b>Target Setting</b>	<b>Attainment Level</b>	<b>Category of Attainment</b>	% students	% Marks	% students	% Marks	% students	% Marks	% students	% Marks	% students	% Marks	% students	% Marks	
	-	No attainment	0	60	0	60	0	60	0	60	0	60	0	60	
	1	Low	40	60	40	60	40	60	40	60	40	60	40	60	
	2	Medium	50	60	50	60	50	60	50	60	50	60	50	60	
3	High	60	60	60	60	60	60	60	60	60	60	60	60	60	
<b>Calculation</b>			Number of students scoring >Target%		113		115		115		115		115		
			% students scoring >Target%		98.26		100.00		100.00		100.00		100.00		
			Category of attainment		High		High		High		High		High		





### Weightage, Attainment Levels and CO Mapping

Assessment type	% weightage	CO Mapping						
		CO 1	CO 2	CO 3	CO 4	CO 5	CO 6	
Direct	90	CIE1	Y	Y				
External	70	CIE2		Y	Y	Y		
Internal	30	TERMEND	Y	Y	Y			
Indirect	10	TERMEND				Y	Y	

### CO Attainment (%)

<b>Direct Attainment</b>	<b>Internal Assessment Tools</b>	Assignment 1	78.26	56.52				
		Assignment 2		58.26	50.43	51.30		
		Assignment 3	53.04	43.48	55.65			
		Assignment 4				52.17	48.70	
		Assignment 5						
		Assignment 6						
		Class Test 1						
		Class Test 2						
		Seminar Review 1						
		Seminar Review 2						
		Seminar Review 3						
		Project Review 1						
		Project Review 2						
		Project Review 3						
		Project Review 4						
		<b>Internal Attainment</b>		<b>65.65</b>	<b>52.75</b>	<b>53.04</b>	<b>51.74</b>	<b>48.70</b>
	<b>External Assessment Tools</b>	Theory	49.57	49.57	49.57	49.57	49.57	49.57
		TW						
Practical								
Oral								
<b>External Attainment</b>		<b>49.57</b>	<b>49.57</b>	<b>49.57</b>	<b>49.57</b>	<b>49.57</b>	<b>49.57</b>	
<b>Direct Attainment</b>		<b>54.39</b>	<b>50.52</b>	<b>50.61</b>	<b>50.22</b>	<b>49.30</b>	<b>34.70</b>	
<b>Indirect Attainment</b>	<b>End of Course Survey</b>	ECS Q 1	98.26					
		ECS Q 2		100.00				
		ECS Q 3			100.00			
		ECS Q 4				100.00		
		ECS Q 5					100.00	
		ECS Q 6						100.00
<b>Indirect Attainment</b>		<b>98.26</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	
<b>Final % CO Attainment</b>		<b>58.78</b>	<b>55.47</b>	<b>55.55</b>	<b>55.20</b>	<b>54.37</b>	<b>41.23</b>	



## CO Attainment Level

CO Attainment Level		CO 1	CO 2	CO 3	CO 4	CO 5	CO 6	
<b>Direct Attainment</b>	<b>Internal Assessment Tools</b>	Assignment 1	3.00	2.65				
		Assignment 2		2.83	2.04	2.13		
		Assignment 3	2.30	1.35	2.57			
		Assignment 4				2.22	1.87	
		Assignment 5						
		Assignment 6						
		Class Test 1						
		Class Test 2						
		Seminar Review 1						
		Seminar Review 2						
		Seminar Review 3						
		Project Review 1						
		Project Review 2						
		Project Review 3						
		Project Review 4						
		<b>Internal Attainment</b>		<b>2.65</b>	<b>2.28</b>	<b>2.30</b>	<b>2.17</b>	<b>1.87</b>
	<b>External Assessment Tools</b>	Theory	1.96	1.96	1.96	1.96	1.96	1.96
		TW						
		Practical						
		Oral						
<b>External Attainment</b>		<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	
<b>Direct Attainment</b>		<b>2.17</b>	<b>2.05</b>	<b>2.06</b>	<b>2.02</b>	<b>1.93</b>	<b>1.37</b>	
<b>Indirect Attainment</b>	<b>End of Course Survey</b>	ECS Q 1	3.00					
		ECS Q 2		3.00				
		ECS Q 3			3.00			
		ECS Q 4				3.00		
		ECS Q 5					3.00	
		ECS Q 6						3.00
	<b>Indirect Attainment</b>		<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>
<b>Final CO Attainment Level</b>		<b>2.25</b>	<b>2.15</b>	<b>2.15</b>	<b>2.12</b>	<b>2.04</b>	<b>1.53</b>	





ZEAL EDUCATION SOCIETY'S  
**ZEAL INSTITUTE OF MANAGEMENT AND COMPUTER  
APPLICATION (ZIMCA)**

NARHE | PUNE | INDIA



PUN CODE: IMMP015570


DTE CODE: MB6195

AISHE CODE: C-50909

### CO-PO-PSO Mapping

CO-PO-PSO Mapping		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	
	CO 1	3	1	1	2	1	1	1	1	1	2	1	2	1	1
	CO 2	3	2	1	2	1	1	1	1	1	2	1	2	2	2
	CO 3	3	3	2	2	2	2	2	2	1	2	2	3	3	3
	CO 4	3	3	3	3	2	3	3	1	2	3	2	3	3	3
	CO 5	3	2	2	3	2	2	2	2	2	3	2	3	3	3
	CO 6	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PO-PSO Attainment		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2	PSO 3	
		2.04	2.00	1.98	2.01	1.97	1.98	1.95	1.95	2.01	1.97	2.02	2.01	2.01	



  
Director  
Zeal Institute of Management  
& Computer Application  
Pune - 411 041.