

Course Outcome		CO1								
CIE Assessment Type		T1	T2	AS1	AS2	SP	LAB			
Ref.Number		Q1/Q2		Q1-Q8		Q1-Q9				
Max.Marks		12		80		25		117	%	Level
1	ASHWINI	10		77		20		107	91%	3
2	BHOOMIKA M.	8		74		18		100	85%	3
3	DEEKSHITHA P.	12		70		23		105	90%	3
4	DEEPTHI SRINIVASA	4		64		22		90	77%	3
5	DHANUSHREE R.	9		74		23		106	91%	3
6	DISHA B.G.	9		70		23		102	87%	3
7	KAVYA N.	10		70		22		102	87%	3
8	KEERTHANA T.R.	9		74		20		103	88%	3
9	KULSUM F.	12		77		23		112	96%	3
10	RANJITHA N.S.	12		77				89	97%	3
11	RUCHITHA P.	12		74				86	93%	3
12	SANA MUNIR	12		77				89	97%	3
13	SANIYA SUBHAN	6		64				70	76%	3
14	SHARADA KUMARI J.	12		77				89	97%	3

15	SIMRAN	10		77				87	95%	3
16	SUPRIYA GURU NAIK	10		71				81	88%	3
17	TASMIYA FATHIMA KHANUM AZEEZ	9		70				79	86%	3
18	TEJASHWINI	10		77				87	95%	3
19	VARSHITHA A.S.	7		74				81	88%	3
20	VIJAYA LAKSHMI R.	8		67				75	82%	3
21	VYSHALINI	11		67				78	85%	3
22	ZAINAB TAJ	12		80				92	100%	3
23	ANKITHA GURU G.K.	8		80				88	96%	3
24	CHANDANA T.	4		74				78	85%	3
25	INDUMATHI R.	10		77				87	95%	3
26	JYOTHI MANJUNATH GULYANAVAR	9		80				89	97%	3
27	KEERTHANA R.	9		77				86	93%	3
28	MEHAK TAJ	10		80				90	98%	3
29	MONIKA R.	3		70				73	79%	3
30	PRARTHAVI S.P.	10		67				77	84%	3
31	RITU V. CHETTY	10		67				77	84%	3
32	SARITHA A.	11		61				72	78%	3

33	SHAIK AATIKA KULSUM	10		74				84	91%	3
34	SIRI A.C. NAIK	5		80				85	92%	3
35	SUSHMITHA R.	6		64				70	76%	3
36	VARSHINI V.H.	11		70				81	88%	3
						Average % Value			89%	
Percentage of Students achieved CO1				89%						
Average Level of Grading.				3						

Total No. of Students				
Course Outcomes	Average Level Grading	3	2	1
CO1	3	36/36 = 100%	0/36 = 0%	0/36 = 0%

Course Outcome		CO2								
CIE Assessment Type		T1	T2	AS1	AS2	SP	LAB			
Ref.Number		Q3/Q4		Q9-Q14		Q10-Q17				
Max.Marks		13		60		25		98	%	Level
1	ASHWINI	4		58				62	85%	3
2	BHOOMIKA M.	9		55				64	88%	3
3	DEEKSHITHA P.	9		53				62	85%	3
4	DEEPTHI SRINIVASA	8		48				56	77%	3
5	DHANUSHREE R.	7		55				62	85%	3
6	DISHA B.G.	5		53				58	79%	3
7	KAVYA N.	9		53				62	85%	3
8	KEERTHANA T.R.	7		55				62	85%	3
9	KULSUM F.	8		58				66	90%	3
10	RANJITHA N.S.	11		58		22		91	93%	3
11	RUCHITHA P.	8		55		20		83	85%	3
12	SANA MUNIR	7		58		23		88	90%	3
13	SANIYA SUBHAN	3		48		21		72	73%	3
14	SHARADA KUMARI J.	0		58		20		78	80%	3

15	SIMRAN	9		58		25		92	94%	3
16	SUPRIYA GURU NAIK	2		53		21		76	78%	3
17	TASMIYA FATHIMA KHANUM AZEEZ	9		50		24		83	85%	3
18	TEJASHWINI	8		58				66	90%	3
19	VARSHITHA A.S.	7		55				62	85%	3
20	VIJAYA LAKSHMI R.	0		50				50	68%	3
21	VYSHALINI	7		50				57	78%	3
22	ZAINAB TAJ	9		60				69	95%	3
23	ANKITHA GURU G.K.	5		60				65	89%	3
24	CHANDANA T.	5		55				60	82%	3
25	INDUMATHI R.	6		58				64	88%	3
26	JYOTHI MANJUNATH GULYANAVAR	6		60				66	90%	3
27	KEERTHANA R.	3		58				61	84%	3
28	MEHAK TAJ	6		60				66	90%	3
29	MONIKA R.	1		53				54	74%	3
30	PRARTHAVI S.P.	2		50				52	71%	3
31	RITU V. CHETTY	7		50				57	78%	3
32	SARITHA A.	0		46				46	63%	3

33	SHAIK AATIKA KULSUM	9		55				64	88%	3
34	SIRI A.C. NAIK	1		60				61	84%	3
35	SUSHMITHA R.	1		48				49	67%	3
36	VARSHINI V.H.	3		53				56	77%	3
						Average % Value			83%	
Percentage of Students achieved CO2				83%						
Average Level of Grading.				3						

Total No. of Students				
Course Outcomes	Average Level Grading	3	2	1
CO2	3	36/36 = 100%	0/36 = 0%	0/36 = 0%

Course Outcome		CO3							
CIE Assessment Type		T1	T2	AS1	AS2	SP	LAB		
Ref.Number			Q1	Q15-Q18	Q1-Q2	Q18-Q25			
Max.Marks			12	40	20	25		97	% Level
1	ASHWINI			38	20			58	97% 3
2	BHOOMIKA M.			37	20			57	95% 3
3	DEEKSHITHA P.		6	35	20			61	85% 3
4	DEEPTHI SRINIVASA		8	32	20			60	83% 3
5	DHANUSHREE R.			37	20			57	95% 3
6	DISHA B.G.		11	35	20			66	92% 3
7	KAVYA N.			35	20			55	92% 3
8	KEERTHANA T.R.			37	20			57	95% 3
9	KULSUM F.			38	20			58	97% 3
10	RANJITHA N.S.			38	20			58	97% 3
11	RUCHITHA P.			37	20			57	95% 3
12	SANA MUNIR			38	20			58	97% 3
13	SANIYA SUBHAN			32	20			52	87% 3
14	SHARADA KUMARI J.		8	38	20			66	92% 3

15	SIMRAN			38	20			58	97%	3
16	SUPRIYA GURU NAIK		8	35	20			63	88%	3
17	TASMIYA FATHIMA KHANUM AZEEZ		8	34	20			62	86%	3
18	TEJASHWINI			38	20	23		81	95%	3
19	VARSHITHA A.S.		8	37	20	21		86	89%	3
20	VIJAYA LAKSHMI R.		11	34	20	20		85	88%	3
21	VYSHALINI			34	20	20		74	87%	3
22	ZAINAB TAJ		8	40	20	24		92	95%	3
23	ANKITHA GURU G.K.		11	40	20	20		91	94%	3
24	CHANDANA T.		12	37	20	20		89	92%	3
25	INDUMATHI R.			38	20	22		80	94%	3
26	JYOTHI MANJUNATH GULYANAVAR			40	20			60	100%	3
27	KEERTHANA R.		8	38	20			66	78%	3
28	MEHAK TAJ			40	20			60	100%	3
29	MONIKA R.		5	35	20			60	83%	3
30	PRARTHAVI S.P.			34	20			54	90%	3
31	RITU V. CHETTY			34	20			54	90%	3
32	SARITHA A.			30	20			50	83%	3

33	SHAIK AATIKA KULSUM			37	20			57	95%	3
34	SIRI A.C. NAIK			40	20			60	100%	3
35	SUSHMITHA R.		7	32	20			59	69%	3
36	VARSHINI V.H.			35	20			55	92%	3
						Average Value			91%	
Percentage of Students achieved CO3				91%						
Average Level of Grading.				3						

Total No. of Students				
Course Outcomes	Average Level Grading	3	2	1
CO3	3	36/36 = 100%	0/36 = 0%	0/36 = 0%

Course Outcome		CO4							
CIE Assessment Type		T1	T2	AS1	AS2	SP	LAB		
Ref.Number			Q2		Q3-Q11	Q26-Q33			
Max.Marks			12		90	25		127	% Level
1	ASHWINI		7		68			75	74% 3
2	BHOOMIKA M.		12		72			84	82% 3
3	DEEKSHITHA P.				83			83	92% 3
4	DEEPTHI SRINIVASA				83			83	92% 3
5	DHANUSHREE R.		12		90			102	100% 3
6	DISHA B.G.				83			83	92% 3
7	KAVYA N.		12		86			98	96% 3
8	KEERTHANA T.R.		7		83			90	88% 3
9	KULSUM F.		12		90			102	100% 3
10	RANJITHA N.S.		12		90			102	100% 3
11	RUCHITHA P.		12		90			102	100% 3
12	SANA MUNIR		12		90			102	100% 3
13	SANIYA SUBHAN		8		65			73	72% 3
14	SHARADA KUMARI J.				83			83	81% 3

15	SIMRAN		12		90			102	100%	3
16	SUPRIYA GURU NAIK				79			79	77%	3
17	TASMIYA FATHIMA KHANUM AZEEZ				86			86	84%	3
18	TEJASHWINI		12		86			98	96%	3
19	VARSHITHA A.S.				72			72	71%	3
20	VIJAYA LAKSHMI R.				90			90	88%	3
21	VYSHALINI		6		90			96	94%	3
22	ZAINAB TAJ				90			90	88%	3
23	ANKITHA GURU G.K.				72			72	71%	3
24	CHANDANA T.				83			83	81%	3
25	INDUMATHI R.		12		79			91	89%	3
26	JYOTHI MANJUNATH GULYANAVAR		12		72	21		105	83%	3
27	KEERTHANA R.				76	20		96	83%	3
28	MEHAK TAJ		12		79	21		112	88%	3
29	MONIKA R.				79	21		100	87%	3
30	PRARTHAVI S.P.		12		83	21		116	91%	3
31	RITU V. CHETTY		6		65	22		93	73%	3
32	SARITHA A.		12		86	25		123	97%	3

33	SHAIK AATIKA KULSUM		12		83	23		118	93%	3
34	SIRI A.C. NAIK		4		65			69	68%	3
35	SUSHMITHA R.				79			79	88%	3
36	VARSHINI V.H.		6		90			96	94%	3
						Average Value			88%	3
Percentage of Students achieved CO4				88%						
Average Level of Grading.				3						

Total No. of Students				
Course Outcomes	Average Level Grading	3	2	1
CO4	3	36/36 = 100%	0/36 = 0%	0/36 = 0%

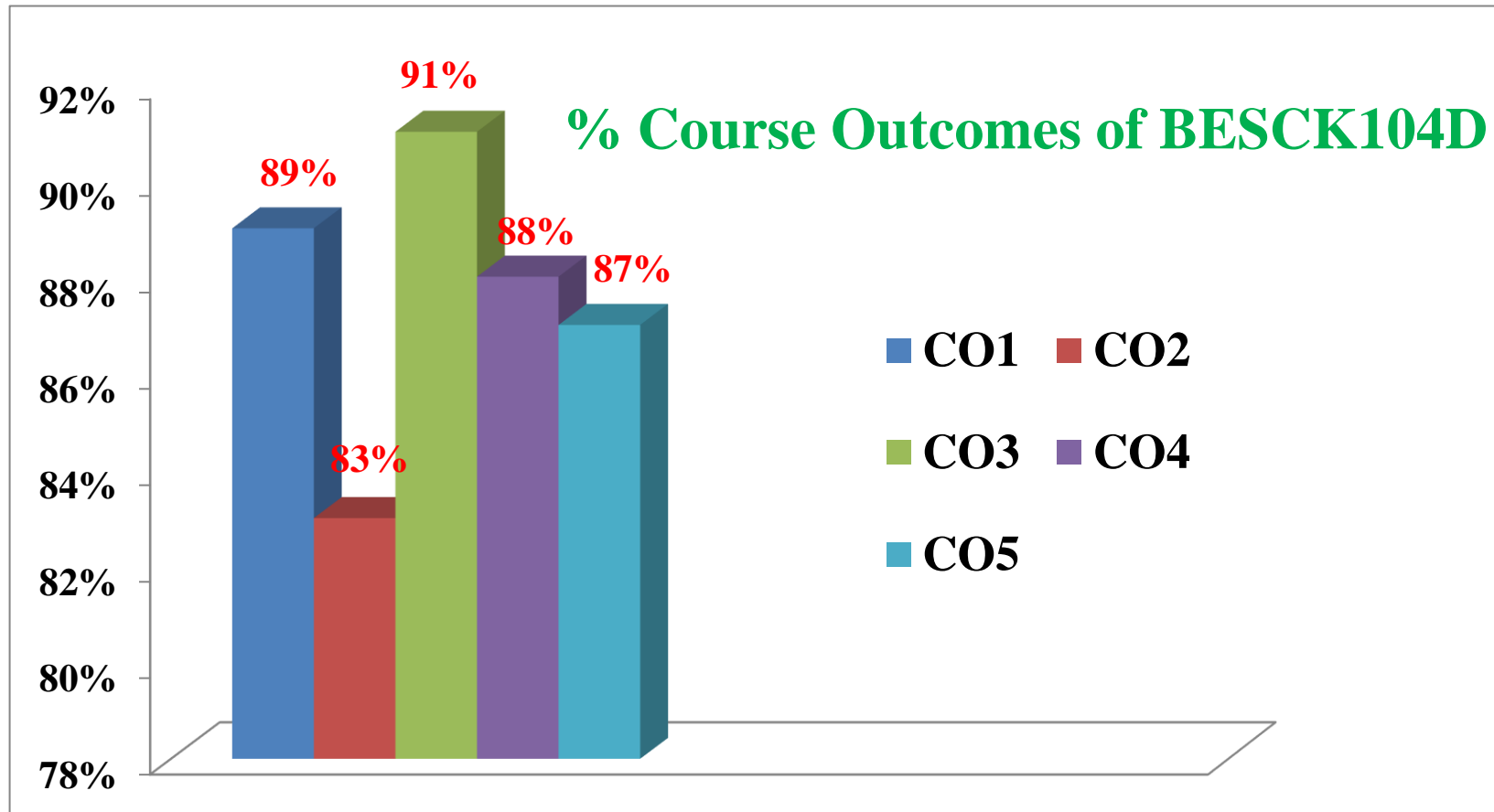
Course Outcome		CO5							
CIE Assessment Type		T1	T2	AS1	AS2	SP	LAB		
Ref.Number			Q3/Q4		Q12-Q16	Q34-Q36			
Max.Marks			12		50	25		87	% Level
1	ASHWINI		2		38			40	65% 3
2	BHOOMIKA M.		13		40			53	85% 3
3	DEEKSHITHA P.		12		46			58	94% 3
4	DEEPTHI SRINIVASA		10		46			56	90% 3
5	DHANUSHREE R.		12		50			62	100% 3
6	DISHA B.G.		11		46			57	92% 3
7	KAVYA N.		12		48			60	97% 3
8	KEERTHANA T.R.		5		46			51	82% 3
9	KULSUM F.		12		50			62	100% 3
10	RANJITHA N.S.		12		50			62	100% 3
11	RUCHITHA P.		13		50			63	102% 3
12	SANA MUNIR		12		50			62	100% 3
13	SANIYA SUBHAN		5		36			41	66% 3
14	SHARADA KUMARI J.		5		46			51	82% 3

15	SIMRAN		12		50			62	100%	3
16	SUPRIYA GURU NAIK		7		40			47	76%	3
17	TASMIYA FATHIMA KHANUM AZEEZ		12		48			60	97%	3
18	TEJASHWINI		7		48			55	89%	3
19	VARSHITHA A.S.		12		40			52	84%	3
20	VIJAYA LAKSHMI R.		0		50			50	81%	3
21	VYSHALINI		10		50			60	97%	3
22	ZAINAB TAJ		12		50			62	100%	3
23	ANKITHA GURU G.K.		12		40			52	84%	3
24	CHANDANA T.		6		40			46	74%	3
25	INDUMATHI R.		12		44			56	90%	3
26	JYOTHI MANJUNATH GULYANAVAR		6		42			48	77%	3
27	KEERTHANA R.		5		40			45	73%	3
28	MEHAK TAJ		12		42			54	87%	3
29	MONIKA R.		11		42			53	85%	3
30	PRARTHAVI S.P.		5		42			47	76%	3
31	RITU V. CHETTY		5		44			49	79%	3
32	SARITHA A.		7		50			57	92%	3

33	SHAIK AATIKA KULSUM		13		46			59	95%	3
34	SIRI A.C. NAIK		12		46	23		81	93%	3
35	SUSHMITHA R.		10		42	21		73	84%	3
36	VARSHINI V.H.		6		40	20		66	76%	3
						Average Value			87%	3
Percentage of Students achieved CO5				87%						
Average Level of Grading.				3						

Total No. of Students				
Course Outcomes	Average Level Grading	3	2	1
CO5	3	36/36 = 100%	0/36 = 0%	0/36 = 0%

Total No. of Students				
Course Outcomes	% Grading	% Distribution		
		3	2	1
CO1	89%	36/36 = 100%	0/36 = 0%	0/36 = 0%
CO2	83%	36/36 = 100%	0/36 = 0%	0/36 = 0%
CO3	91%	36/36 = 100%	0/36 = 0%	0/36 = 0%
CO4	88%	36/36 = 100%	0/36 = 0%	0/36 = 0%
CO5	87%	36/36 = 100%	0/36 = 0%	0/36 = 0%
Average %	88%			



Course Outcomes by SEE Aessment				
Max.Marks		50	100	Level
1	ASHWINI	20	40	2
2	BHOOMIKA M.	31	62	3
3	DEEKSHITHA P.	18	36	1
4	DEEPTHI SRINIVASA	30	60	3
5	DHANUSHREE R.	29	58	2
6	DISHA B.G.	31	62	3
7	KAVYA N.	27	54	2
8	KEERTHANA T.R.	22	44	2
9	KULSUM F.	34	68	3
10	RANJITHA N.S.	29	58	2
11	RUCHITHA P.	33	66	3
12	SANA MUNIR	32	64	3
13	SANIYA SUBHAN	19	38	1
14	SHARADA KUMARI J.	29	58	2
15	SIMRAN	29	58	2
16	SUPRIYA GURU NAIK	24	48	2
17	TASMIYA FATHIMA KHANUM AZEEZ	24	48	2
18	TEJASHWINI	37	74	3

19	VARSHITHA A.S.	29	58	2
20	VIJAYA LAKSHMI R.	24	48	2
21	VYSHALINI	18	36	1
22	ZAINAB TAJ	31	62	3
23	ANKITHA GURU G.K.	30	60	3
24	CHANDANA T.	21	42	2
25	INDUMATHI R.	24	48	2
26	JYOTHI MANJUNATH GULYANAVAR	38	76	3
27	KEERTHANA R.	18	36	1
28	MEHAK TAJ	21	42	2
29	MONIKA R.	22	44	2
30	PRARTHAVI S.P.	20	40	2
31	RITU V. CHETTY	21	42	2
32	SARITHA A.	28	56	2
33	SHAIK AATIKA KULSUM	35	70	3
34	SIRI A.C. NAIK	22	44	2
35	SUSHMITHA R.	34	68	3
36	VARSHINI V.H.	7	14	1
Average Value			52.27777778	

Total No. of Students		36		
Course Outcomes by SEE Assessment	% Grading	% Distribution		
		3	2	1
CO1 to CO5	52%	12//36 = 33.33%	19/36 = 52.77%	5//36 = 13.88%

Total No. of Students		36		
Course Outcomes by CIE & SEE Assessment	% Grading	% Distribution		
		3	2	1
By CIE Assessment	88%	36/36 = 100%	0/36 = 0%	0/36 = 0%
By SEE Assessment	52%	33.33	52.77	13.88
Average of CIE & SEE	70%	66.66%	26.38%	6.94%

Attainment of CO1 Level by CIE Assessment														
Parameter	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	CO1	89%	3					1				1		1
T1 - Q1/Q2	Q1.Discuss some of the trends and technologies followed in Energy and Automobile sectors. Explain construction and principle of operation of nuclear power plant with a neat sketch. Q2.Explain operating principle of a solar cell. Explain construction and principle of operation of hydel power plant with a neat sketch.													
AS1 - Q1 to Q8	Discuss the recent trends and technologies developed in energy & manufacturing sector Explain construction & working of thermal power plant with a neat fig. Explain construction & working of hydel power plant with a neat fig. Explain construction & working of nuclear power plant with a neat fig. Explain construction & working of solar cell with a neat fig. Define renewable and non renewable sources of energy with examples. List out any five major comparison between them. Compare any five major comparisons between biofuel and fossil fuel. Explain construction & working of wind power plant with a neat fig.													
SP - Q1 to Q9	Construction & Working of Hydel Power Plant with Applications Construction & Working of Thermal Power Plant with Applications Construction & Working of Wind Power Plant with Applications Construction & Working of Nuclear Power Plant with Applications Construction & Working of Solar Cell with Applications													

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Attainment of CO2 Level by CIE Assessment

Parameter	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	CO2	83%	3					1				1		1
T1 - Q3/Q4	Q3: Explain operating principle of a milling machine with fig. Explain the following operations with neat sketches. i. Drilling ii) Knurling iii) Boring and iv) Slot milling. Q4: Define additive manufacturing. Explain the process with a simple flow chart. Explain the major components of a CNC machine tool with a simple block diagram. List out some of its applications.													
AS1 - Q9 to Q14	Explain turning, facing and knurling lathe operations with neat figures Explain the operating principle of milling machines with neat figure. Explain slab drilling, boring and reaming operations with neat figures. Explain the components of CNC machine tool with a flow chart. What are some of the major advantages and applications of CNC machine tools? What is Additive Manufacturing? Explain the process with a flow chart.													
SP - Q10 to Q17	Turning, facing and knurling lathe operations Drilling, boring and reaming operations Operating principle of milling machines Elements of CNC Machine Tool with block diagram. Process of Additive Manufacturing with flow chart													

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Attainment of CO3 Level by CIE Assessment														
Parameter	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	CO3	91%	3					1				1		1
T2 - Q1	Explain parallel mode of transmission system in E-vehicles with a block diagram. Explain major parts of a hybrid E-Vehicle with a block diagram													
AS1 - Q15 to Q18; AS2: Q1-Q2	AS1: Explain in brief the functions of major components of an IC engine with a neat fig. Explain the working principal of 4-stroke petrol engine . Or Discuss working principal of S.I engine. Or Explain Otto cycle IC engine. Or Explain constant pressure cycle IC Engine. Explain the working principal of 4-stroke diesel engine . Or Discuss working principal of C.I engine. Or Explain Diesel cycle IC engine. Or Explain constant volume cycle IC Engine. List out some major comparisons between petrol and diesel engine. AS2: Explain major components of hybrid vehicle with a neat fig. What are the major advantages and disadvantages of E-vehicles?													
SP - Q18 to Q25	Parts of an IC Engine Working of 4 Stroke Petrol Engine with PV diagram Working of 4 Stroke Diesel Engine with PV diagram Parts of Electric Vehicle Parts of Hybrid Electric Vehicle Parallel mode of transmission in Electric Vehicles Series mode of transmission in Electric Vehicles													
<i>Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped</i>														

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Attainment of CO4 Level by CIE Assessment														
Parameter	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	CO4	88%	3					1				1		1
T2 - Q2	Q2: List out any four comparisons between thermoplastics and thermosetting plastics with examples. Explain characteristics and applications of two major types of ferrous and non ferrous metals.													
AS2 - Q3 to Q11	List out some of the ferrous and non-ferrous metals. What are their applications? What are polymers? List out the major differences between thermoplastics and thermoset polymers. What are shape memory alloys? List out their advantages and applications. What is soldering? Explain iron soldering principle with a neat diagram. What is brazing? Explain torch brazing with a neat diagram. Explain working principle of arc welding with a neat diagram. Explain working principle of gas welding with a neat diagram. Discuss the various flames obtained in gas welding with a neat diagram. List out their applications. List out major comparisons between soldering, brazing and welding.													
SP - Q26 to Q33	Ferrous and Non ferrous materials Ceramics and Glass Silica and Graphite Shape memory alloys Iron soldering method Torch Brazing Gas Welding Arc Welding													

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Attainment of CO5 Level by CIE Assessment

Parameter	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	CO5	87%	3					1				1		1
T2 - Q3/Q4	Q3: Explain closed loop control system in mechatronics with a simple diagram. Explain any two types of robotic configurations with neat figures. Q4: List out any five major benefits of automation. Explain types of automation with a simple chart.													
AS2 - Q12 to Q16	Explain open loop and closed loop mechatronic systems with a neat fig. Explain any two robotic configurations with a neat fig. What are their applications? Explain basic elements of automation with a block diagram. Define automation. Explain different types of automation with their salient features. Explain the scope of IOT in mechanical engineering.													
SP - Q34 to Q36	Cylindrical robot configuration Open loop and closed loop mechatronic systems Fixed Automation and Programmable Automation													

Note: Level 3 - Highly Mapped; Level 2 - Moderately Mapped; Level 1 - Low Mapped; Level 0 - Not Mapped

Attainment of POs Level by CIE Assessment (interms of Garde Level)														
Course Name	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Introduction to Mechanical Engineering / BESCK104D	CO1	89%	3					1				1		1
	CO2	83%	3					1				1		1
	CO3	91%	3					1				1		1
	CO4	88%	3					1				1		1
	CO5	87%	3					1				1		1
Average		88%	3					1				1		1

Attainment of POs Level by CIE Assessment (interms of % Level)														
Course Name	COs	CO Attainment %	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Introduction to Mechanical Engineering / BESCK104D	CO1	89%	89%					89%				89%		89%
	CO2	83%	83%					83%				83%		83%
	CO3	91%	91%					91%				91%		91%
	CO4	88%	88%					88%				88%		88%
	CO5	87%	87%					87%				87%		87%
Average		88%	88%					88%				88%		88%

Reference

<https://www.nbaind.org/files/Some-more-examples-on-attainment-of-COs-and-PO-21-may-2016.pdf?shem=sswnst>