The following are the numerical results of the ODEs through the ABM_4 method.

Time (t)	x_1(t)	x_2(t)
0.0000	0.0000	1.0000
0.0400	-0.1200	1.0001
0.0800	-0.2400	1.0005
0.1200	-0.3602	1.0017
0.1600	-0.4801	1.0026
0.2000	-0.5999	1.0038
0.2400	-0.7196	1.0055
0.2800	-0.8393	1.0078
0.3200	-0.9588	1.0107
0.3600	-1.0782	1.0143
0.4000	-1.1976	1.0188
0.4400	-1.3168	1.0241
0.4800	-1.4358	1.0303
0.5200	-1.5548	1.0376
0.5600	-1.6737	1.0459
0.6000	-1.7924	1.0554
0.6400	-1.9111	1.0661
0.6800	-2.0296	1.0782
0.7200	-2.1481	1.0916
0.7600	-2.2665	1.1064
0.8000	-2.3848	1.1228
0.8400	-2.5031	1.1407
0.8800	-2.6214	1.1602
0.9200	-2.7397	1.1815
0.9600	-2.8580	1.2045

1.0000	-2.9764	1.2293
1.0400	-3.0948	1.2560
1.0800	-3.2133	1.2846
1.1200	-3.3319	1.3153
1.1600	-3.4506	1.3480
1.2000	-3.5696	1.3828
1.2400	-3.6887	1.4198
1.2800	-3.8080	1.4590
1.3200	-3.9276	1.5005
1.3600	-4.0475	1.5443
1.4000	-4.1678	1.5906
1.4400	-4.2884	1.6393
1.4800	-4.4094	1.6905
1.5200	-4.5308	1.7443
1.5600	-4.6527	1.8007
1.6000	-4.7751	1.8597
1.6400	-4.8981	1.9215
1.6800	-5.0216	1.9861
1.7200	-5.1458	2.0535
1.7600	-5.2707	2.1238
1.8000	-5.3963	2.1971
1.8400	-5.5226	2.2733
1.8800	-5.6498	2.3526
1.9200	-5.7778	2.4351
1.9600	-5.9067	2.5207
2.0000	-6.0365	2.6095
2.0400	-6.1673	2.7016

2.0800	-6.2991	2.7971
2.1200	-6.4321	2.8960
2.1600	-6.5661	2.9983
2.2000	-6.7013	3.1042
2.2400	-6.8377	3.2137
2.2800	-6.9754	3.3268
2.3200	-7.1143	3.4437
2.3600	-7.2547	3.5643
2.4000	-7.3964	3.6889
2.4400	-7.5396	3.8173
2.4800	-7.6843	3.9498
2.5200	-7.8306	4.0863
2.5600	-7.9784	4.2269
2.6000	-8.1280	4.3718
2.6400	-8.2792	4.5210
2.6800	-8.4321	4.6746
2.7200	-8.5869	4.8326
2.7600	-8.7435	4.9951
2.8000	-8.9020	5.1623
2.8400	-9.0625	5.3341
2.8800	-9.2249	5.5108
2.9200	-9.3894	5.6923
2.9600	-9.5560	5.8788
3.0000	-9.7248	6.0703
3.0400	-9.8957	6.2670
3.0800	-10.0689	6.4689
3.1200	-10.2444	6.6762

3.1600	-10.4222	6.8889
3.2000	-10.6024	7.1071
3.2400	-10.7850	7.3310
3.2800	-10.9702	7.5606
3.3200	-11.1578	7.7961
3.3600	-11.3481	8.0375
3.4000	-11.5409	8.2849
3.4400	-11.7365	8.5386
3.4800	-11.9347	8.7985
3.5200	-12.1357	9.0649
3.5600	-12.3395	9.3377
3.6000	-12.5462	9.6172
3.6400	-12.7558	9.9034
3.6800	-12.9683	10.1965
3.7200	-13.1838	10.4965
3.7600	-13.4022	10.8037
3.8000	-13.6238	11.1181
3.8400	-13.8485	11.4399
3.8800	-14.0762	11.7691
3.9200	-14.3072	12.1059
3.9600	-14.5414	12.4505
4.0000	-14.7788	12.8029

The following are the numerical solutions using adaptive RK_4.

Time (t)	x_1(t)	x_2(t)
0.0000	0.0000	1.0000
0.0400	-0.1500	1.0001
0.0800	-0.4504	1.0034
0.1200	-0.7529	1.0157
0.1600	-1.0613	1.0433
0.2000	-1.2194	1.0650
0.2400	-1.3812	1.0932
0.2800	-1.5477	1.1290
0.3200	-1.7203	1.1735
0.3600	-1.9003	1.2281
0.4000	-2.0893	1.2944
0.4400	-2.2893	1.3743
0.4800	-2.5024	1.4699
0.5200	-2.7312	1.5840
0.5600	-2.9787	1.7198
0.6000	-3.2484	1.8813
0.6400	-3.5446	2.0734
0.6800	-3.8723	2.3024
0.7200	-4.2375	2.5761
0.7600	-4.6478	2.9047
0.8000	-5.1123	3.3011
0.8400	-5.6424	3.7824
0.8800	-6.2524	4.3710
0.9200	-6.9606	5.0971
0.9600	-7.7904	6.0019

1.0000	-8.7729	7.1424
1.0400	-9.9489	8.5991
1.0800	-11.3741	10.4880
1.1200	-13.1252	12.9805
1.1600	-15.3110	16.3366
1.2000	-18.0891	20.9635
1.2400	-21.6954	27.5226
1.2800	-26.4962	37.1357
1.3200	-33.0844	51.8067
1.3600	-42.4717	75.3497
1.4000	-56.5014	115.6220
1.4400	-78.8245	190.5553
1.4800	-117.5298	347.0954
1.5200	-193.5885	734.6627
1.5600	-376.0241	1997.1365
1.6000	-1006.8810	8918.2678
1.6400	-6159.2858	152182.8272
1.6800	-883601.0095	489843344.4828