

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.944015444015444, 'recall_score_pos': 0.9209039548022598,
'f1_score_pos': 0.9323164918970449, 'precision_score_neg': 0.9283276450511946,
'recall_score_neg': 0.9493891797556719, 'f1_score_neg': 0.9387402933563417}

MUC: R=0.9227871939736346 P=0.9477756286266924 F₁=0.9351145038167938

B³: R=0.9181221605249874 P=0.9407196294976844 F₁=0.929283539157085

CEAF_m: R=0.8963486454652533 P=0.9488778054862843 F₁=0.9218655360387644

CEAF_e: R=0.859072709192946 P=0.958544286046866 F₁=0.906086638551764

BLANC: R=0.8838371314222966 P=0.9386483617602469 F₁=0.9097000903652066

CoNLL-2012 average score: 0.9234948938418809

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.2619047619047619, 'recall_score_pos': 0.023255813953488372,
'f1_score_pos': 0.04271844660194175, 'precision_score_neg': 0.5126582278481012,
'recall_score_neg': 0.9400386847195358, 'f1_score_neg': 0.6634812286689419}

MUC: R=0.023255813953488372 P=0.2619047619047619 F₁=0.04271844660194175

B³: R=0.0867294318717586 P=0.6025641025641025 F₁=0.15163363551486642

CEAF_m: R=0.05816831683168317 P=0.6025641025641025 F₁=0.10609480812641083

CEAF_e: R=0.07708599857853589 P=0.7173280423280423 F₁=0.13921191117956616

BLANC: R=0.012769296209779662 P=0.6458333333333334 F₁=0.024578380899832396

CoNLL-2012 average score: 0.11118799776545811

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.8739054290718039, 'recall_score_pos': 0.4327840416305291,
'f1_score_pos': 0.5788863109048724, 'precision_score_neg': 0.6269252709640616,
'recall_score_neg': 0.9385140905209223, 'f1_score_neg': 0.7517099863201095}

MUC: R=0.4336513443191674 P=0.8802816901408451 F₁=0.5810575246949448
B³: R=0.3787584585868518 P=0.8708467621895184 F₁=0.5279116505408408
CEAF_m: R=0.41358399029714976 P=0.8032979976442874 F₁=0.5460368294635708
CEAF_e: R=0.4091005343050682 P=0.7221133986310101 F₁=0.5223008108502286
BLANC: R=0.26310007833635674 P=0.8654655590812546 F₁=0.40189785899123753
CoNLL-2012 average score: 0.5437566620286713

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.0666666666666667, 'recall_score_pos': 0.006711409395973154,
'f1_score_pos': 0.012195121951219511, 'precision_score_neg': 0.5621301775147929,
'recall_score_neg': 0.9313725490196079, 'f1_score_neg': 0.7011070110701106}

MUC: R=0.006711409395973154 P=0.0666666666666667 F₁=0.012195121951219513

B³: R=0.11304909560723515 P=0.5333333333333333 F₁=0.18655473382637086

CEAF_m: R=0.06201550387596899 P=0.5333333333333333 F₁=0.1111111111111111

CEAF_e: R=0.09480122324159021 P=0.6888888888888888 F₁=0.1666666666666666

BLANC: R=0.007958504020345385 P=0.5333333333333333 F₁=0.015615513985720511

CoNLL-2012 average score: 0.12180550748141901

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.5912938331318017, 'recall_score_pos': 0.9209039548022598,
'f1_score_pos': 0.7201767304860088, 'precision_score_neg': 0.9907550077041603,
'recall_score_neg': 0.9301508576152098, 'f1_score_neg': 0.9594969089746322}

MUC: R=0.9246704331450094 P=0.6099378881987577 F₁=0.7350299401197604
B³: R=0.9426665790511236 P=0.5217607724502399 F₁=0.6717252883108028
CEAF_m: R=0.578656853725851 P=0.5979087452471483 F₁=0.5881252921926133
CEAF_e: R=0.3593167585288474 P=0.8088263876195918 F₁=0.49758435303123083
BLANC: R=0.9102545419655751 P=0.6027595413339624 F₁=0.6489169898758835
CoNLL-2012 average score: 0.6347798604872646

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.03741496598639456, 'recall_score_pos': 0.023255813953488372,
'f1_score_pos': 0.02868318122555411, 'precision_score_neg': 0.8972419928825622,
'recall_score_neg': 0.9344452165855919, 'f1_score_neg': 0.9154657891750824}

MUC: R=0.040169133192389 P=0.06529209621993128 F₁=0.04973821989528796

B³: R=0.36896599245219014 P=0.38888809084887516 F₁=0.37866519044904645

CEAF_m: R=0.1647373107747106 P=0.40305010893246185 F₁=0.23388116308470291

CEAF_e: R=0.15926123664599165 P=0.6161893084517535 F₁=0.2531046548163681

BLANC: R=0.09636471640248152 P=0.513542331476491 F₁=0.155706727603199

CoNLL-2012 average score: 0.2271693550535675

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.4086814086814087, 'recall_score_pos': 0.4327840416305291,
'f1_score_pos': 0.4203875315922494, 'precision_score_neg': 0.9369273796894589,
'recall_score_neg': 0.9308230334387276, 'f1_score_neg': 0.9338652311833125}

MUC: R=0.49609713790112747 P=0.5066430469441984 F₁=0.5013146362839614
B³: R=0.5422252212846825 P=0.2826017984000571 F₁=0.3715538386011853
CEAF_m: R=0.2185089974293059 P=0.32221379833206976 F₁=0.2604166666666667
CEAF_e: R=0.1471318784005443 P=0.6133076194380583 F₁=0.2373288140391672
BLANC: R=0.37742822550852806 P=0.5051615562143464 F₁=0.29436990816777003
CoNLL-2012 average score: 0.37006576297477134

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.008695652173913044, 'recall_score_pos':  
0.006711409395973154, 'f1_score_pos': 0.007575757575757576, 'precision_score_neg':  
0.8968641114982578, 'recall_score_neg': 0.9186295503211992, 'f1_score_neg':  
0.9076163610719323}
```

MUC: R=0.013422818791946308 P=0.017391304347826087
F₁=0.015151515151515152

B³: R=0.46860649247822644 P=0.4498381877022654 F₁=0.45903057608324327

CEAF_m: R=0.2209026128266033 P=0.45145631067961167 F₁=0.2966507177033493

CEAF_e: R=0.21151960784313725 P=0.6322344322344322 F₁=0.31698806244260785

BLANC: R=0.1221453201271427 P=0.5068727081380626 F₁=0.19657138518996153

CoNLL-2012 average score: 0.2637233845591221

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.30624263839811544, 'recall_score_pos': 0.9252669039145908,
'f1_score_pos': 0.4601769911504425, 'precision_score_neg': 0.9972435518802913,
'recall_score_neg': 0.9280522811946498, 'f1_score_neg': 0.9614046187915217}

MUC: R=0.9466357308584686 P=0.34285714285714286 F₁=0.5033929673041333
B³: R=0.9769724854227405 P=0.3703894938185768 F₁=0.5371390167238722
CEAF_m: R=0.43686224489795916 P=0.44307891332470895 F₁=0.43994861913937056
CEAF_e: R=0.20534301512715458 P=0.6558286747179066 F₁=0.31275955552521734
BLANC: R=0.9454300710057139 P=0.5702666306176442 F₁=0.6140846130683528
CoNLL-2012 average score: 0.4510971798510743

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.0017667844522968198, 'recall_score_pos':
0.012295081967213115, 'f1_score_pos': 0.003089598352214212, 'precision_score_neg':
0.9841832381702434, 'recall_score_neg': 0.8984482655323228, 'f1_score_neg':
0.9393635680280632}

MUC: R=0.29411764705882354 P=0.0546218487394958 F₁=0.09213323883770376
B³: R=0.8513943477447127 P=0.2452837387872473 F₁=0.38084683438427935
CEAF_m: R=0.23189219539584502 P=0.26714100905562743 F₁=0.2482717162608957
CEAF_e: R=0.1137736405145312 P=0.49855864944569855 F₁=0.18526814113013432
BLANC: R=0.5174724966129474 P=0.5088802914978692 F₁=0.44554231111850995
CoNLL-2012 average score: 0.2194160714507058

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.4193168433451119, 'recall_score_pos': 0.5728077232502011,
'f1_score_pos': 0.48418905134308055, 'precision_score_neg': 0.965150620200827,
'recall_score_neg': 0.937165434616365, 'f1_score_neg': 0.9509521808011898}

MUC: R=0.6848484848484848 P=0.47478991596638653 F₁=0.5607940446650124
B³: R=0.7614161998227641 P=0.44929433166744875 F₁=0.5651226675943107
CEAF_m: R=0.4224457384859714 P=0.5161707632600259 F₁=0.46462882096069863
CEAF_e: R=0.2253167819564347 P=0.6734186966338386 F₁=0.33765782535443173
BLANC: R=0.6357478169012467 P=0.6170815735855828 F₁=0.5691784990340041
CoNLL-2012 average score: 0.48785817920458496

Model_Name : Model_ANCOR_balanced_ANAPHORE.model

Train Dataset : balanced_ANAPHORE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.0005889281507656066, 'recall_score_pos':
0.012195121951219513, 'f1_score_pos': 0.0011235955056179774, 'precision_score_neg':
0.9946839929119905, 'recall_score_neg': 0.8993057615854744, 'f1_score_neg':
0.9445933312558429}

MUC: R=0.3 P=0.01764705882352941 F₁=0.03333333333333333
B³: R=0.9497624948368443 P=0.23558235282038645 F₁=0.3775226822750327
CEAF_m: R=0.23358116480793062 P=0.24385510996119017 F₁=0.23860759493670886
CEAF_e: R=0.11094967134951134 P=0.48119745102147615 F₁=0.18032241322489
BLANC: R=0.5833827288312115 P=0.5026963472658027 F₁=0.482853560138591
CoNLL-2012 average score: 0.19705947627775203

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.3148148148148148, 'recall_score_pos': 0.032015065913371,  
'f1_score_pos': 0.05811965811965812, 'precision_score_neg': 0.5104761904761905,  
'recall_score_neg': 0.9354275741710296, 'f1_score_neg': 0.660505237215034}
```

MUC: R=0.032015065913371 P=0.3148148148148148 F₁=0.05811965811965812

B³: R=0.10285929270127916 P=0.6509433962264151 F₁=0.17764748868079466

CEAF_m: R=0.07562076749435666 P=0.6320754716981132 F₁=0.1350806451612903

CEAF_e: R=0.10143527833668674 P=0.6924908424908421 F₁=0.17695097695097686

BLANC: R=0.014746761917771283 P=0.651422671991287 F₁=0.02855316772347834

CoNLL-2012 average score: 0.1375727079171432

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.9171717171717172, 'recall_score_pos': 0.959830866807611,
'f1_score_pos': 0.9380165289256198, 'precision_score_neg': 0.9616161616161616,
'recall_score_neg': 0.9206963249516441, 'f1_score_neg': 0.9407114624505928}

MUC: R=0.959830866807611 P=0.9171717171717172 F₁=0.9380165289256198

B³: R=0.9574541896459705 P=0.9173101673101673 F₁=0.9369523797880848

CEAF_m: R=0.8991282689912827 P=0.9292149292149292 F₁=0.9139240506329114

CEAF_e: R=0.8200708046162591 P=0.9596573245509415 F₁=0.8843900834096912

BLANC: R=0.9402557831319588 P=0.9209324257135222 F₁=0.9285799443344318

CoNLL-2012 average score: 0.9197863307077986

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.8411764705882353, 'recall_score_pos': 0.3720728534258456,
'f1_score_pos': 0.5159350571256766, 'precision_score_neg': 0.6008820286659317,
'recall_score_neg': 0.9308283518360376, 'f1_score_neg': 0.7303182579564489}

MUC: R=0.37294015611448394 P=0.8447937131630648 F₁=0.5174488567990373
B³: R=0.37583920444609703 P=0.8521475256769374 F₁=0.5216187443475739
CEAF_m: R=0.39554485249849486 P=0.8051470588235294 F₁=0.5304804198627372
CEAF_e: R=0.4527188385142238 P=0.7491243321342856 F₁=0.5643709692398177
BLANC: R=0.20291551819116216 P=0.8443547863731979 F₁=0.32719760351106053
CoNLL-2012 average score: 0.534479523462143

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.8117647058823529, 'recall_score_pos': 0.46308724832214765,
'f1_score_pos': 0.5897435897435898, 'precision_score_neg': 0.7014925373134329,
'recall_score_neg': 0.9215686274509803, 'f1_score_neg': 0.7966101694915254}

MUC: R=0.46308724832214765 P=0.8117647058823529 F₁=0.5897435897435898
B³: R=0.4807479098509633 P=0.8921568627450981 F₁=0.6248103373009267
CEAF_m: R=0.46946564885496184 P=0.803921568627451 F₁=0.5927710843373495
CEAF_e: R=0.45146534881048156 P=0.7502291825821237 F₁=0.5637081150893305
BLANC: R=0.3147347195978861 P=0.9171823555777711 F₁=0.46864145535978824
CoNLL-2012 average score: 0.5927540140446157

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.05379746835443038, 'recall_score_pos': 0.032015065913371,
'f1_score_pos': 0.04014167650531287, 'precision_score_neg': 0.8982983775227542,
'recall_score_neg': 0.938210374044224, 'f1_score_neg': 0.9178206812898009}

MUC: R=0.032015065913371 P=0.054140127388535034 F₁=0.040236686390532544

B³: R=0.36946813551291163 P=0.40846456692913385 F₁=0.3879889391271319

CEAF_m: R=0.17412935323383086 P=0.41338582677165353 F₁=0.24504084014002334

CEAF_e: R=0.17218812463256908 P=0.5991081656030111 F₁=0.26749593585036624

BLANC: R=0.09607074860376591 P=0.5154194517152686 F₁=0.16046939957195705

CoNLL-2012 average score: 0.23190718712267688

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.6340782122905028, 'recall_score_pos': 0.959830866807611,
'f1_score_pos': 0.7636669470142976, 'precision_score_neg': 0.9953362788414335,
'recall_score_neg': 0.9393097058142228, 'f1_score_neg': 0.9665117387677273}

MUC: R=0.9619450317124736 P=0.647226173541963 F₁=0.7738095238095237

B³: R=0.9685392727100771 P=0.6263821006968215 F₁=0.7607593381880573

CEAF_m: R=0.6663356504468719 P=0.6812182741116751 F₁=0.6736947791164659

CEAF_e: R=0.44436920545631053 P=0.8414650911832263 F₁=0.58160087184723

BLANC: R=0.950725671008275 P=0.6534710745286727 F₁=0.719900026600639

CoNLL-2012 average score: 0.7053899112816037

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.3921389396709324, 'recall_score_pos': 0.3720728534258456,
'f1_score_pos': 0.3818424566088117, 'precision_score_neg': 0.9310213414634146,
'recall_score_neg': 0.9362843729040912, 'f1_score_neg': 0.9336454402140161}

MUC: R=0.4006938421509107 P=0.4489795918367347 F₁=0.42346471127406055

B³: R=0.5062570293115243 P=0.3525086242914704 F₁=0.41561971695480415

CEAF_m: R=0.24592668024439918 P=0.37734375 F₁=0.2977805178791615

CEAF_e: R=0.20627876583947846 P=0.6665023071546495 F₁=0.31505099641396805

BLANC: R=0.28795269508489446 P=0.5050264445646643 F₁=0.29146021934028404

CoNLL-2012 average score: 0.3847118082142776

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.418181818181815, 'recall_score_pos': 0.46308724832214765,  
'f1_score_pos': 0.4394904458598726, 'precision_score_neg': 0.9422382671480144,  
'recall_score_neg': 0.9314775160599572, 'f1_score_neg': 0.9368269921033741}
```

MUC: R=0.46308724832214765 P=0.418181818181815 F₁=0.4394904458598726

B³: R=0.6607932458697765 P=0.6552901023890785 F₁=0.6580301685556319

CEAF_m: R=0.4744897959183674 P=0.6348122866894198 F₁=0.5430656934306569

CEAF_e: R=0.37108236984780185 P=0.7044766865079364 F₁=0.4861079022804089

BLANC: R=0.4237600077310132 P=0.7106822133644353 F₁=0.5297436314454333

CoNLL-2012 average score: 0.5278761722319711

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.013157894736842105, 'recall_score_pos': 0.03558718861209965,
'f1_score_pos': 0.019212295869356386, 'precision_score_neg': 0.9648394421018488,
'recall_score_neg': 0.9083857570390277, 'f1_score_neg': 0.9357619227381402}

MUC: R=0.0951276102088167 P=0.03785780240073869 F₁=0.05416116248348745

B³: R=0.6953324887597188 P=0.2605308026856144 F₁=0.3790406704624789

CEAF_m: R=0.2039645279081899 P=0.27266387726638774 F₁=0.23336317517159058

CEAF_e: R=0.1198814311654787 P=0.5075322128544197 F₁=0.1939507966378893

BLANC: R=0.31781975975816856 P=0.5065459237399405 F₁=0.36915271417040885

CoNLL-2012 average score: 0.2090508765279519

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.15197368421052632, 'recall_score_pos': 0.9467213114754098,
'f1_score_pos': 0.2619047619047619, 'precision_score_neg': 0.9991566655854687,
'recall_score_neg': 0.9227727517823977, 'f1_score_neg': 0.9594468323677816}

MUC: R=0.9819004524886877 P=0.20036934441366575 F₁=0.3328220858895705
B³: R=0.9954998840176293 P=0.32810436115875447 F₁=0.49354307327065416
CEAF_m: R=0.36673625608907445 P=0.36750348675034866 F₁=0.3671194705677464
CEAF_e: R=0.17471527311488705 P=0.6052814020162469 F₁=0.2711598878209351
BLANC: R=0.9781006250716991 P=0.5331263405563798 F₁=0.5600289303562542
CoNLL-2012 average score: 0.3658416823270533

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.2131578947368421, 'recall_score_pos': 0.2606596942880129,
'f1_score_pos': 0.23452768729641693, 'precision_score_neg': 0.9403827440804411,
'recall_score_neg': 0.9237828192709661, 'f1_score_neg': 0.9320088726010223}

MUC: R=0.3939393939393939 P=0.30009233610341646 F₁=0.34067085953878407

B³: R=0.6307706112982495 P=0.3703304211672412 F₁=0.46667326986310187

CEAF_m: R=0.3035175879396985 P=0.4211994421199442 F₁=0.352803738317757

CEAF_e: R=0.1835890337280031 P=0.6093482173593265 F₁=0.2821652035529335

BLANC: R=0.3804371184791156 P=0.5518793036207309 F₁=0.41380665931484867

CoNLL-2012 average score: 0.36316977765160646

Model_Name : Model_ANCOR_balanced_DIRECTE.model

Train Dataset : balanced_DIRECTE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.028289473684210528, 'recall_score_pos': 0.524390243902439,
'f1_score_pos': 0.05368289637952559, 'precision_score_neg': 0.9974699967564061,
'recall_score_neg': 0.9123598172432208, 'f1_score_neg': 0.9530184703111442}

MUC: R=0.5571428571428572 P=0.036011080332409975 F₁=0.06764960971379012

B³: R=0.9666894042746703 P=0.2579153064508713 F₁=0.4071909764230693

CEAF_m: R=0.26330150068212826 P=0.2691771269177127 F₁=0.26620689655172414

CEAF_e: R=0.12768299891836085 P=0.5078218418519422 F₁=0.20405891985120977

BLANC: R=0.7239220881073464 P=0.5058013360147657 F₁=0.4993440701786092

CoNLL-2012 average score: 0.22629983532935638

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.8938547486033519, 'recall_score_pos': 0.903954802259887,
'f1_score_pos': 0.8988764044943819, 'precision_score_neg': 0.91005291005291,
'recall_score_neg': 0.900523560209424, 'f1_score_neg': 0.9052631578947368}

MUC: R=0.9058380414312618 P=0.8973880597014925 F₁=0.901593252108716
B³: R=0.9102086677367577 P=0.9069527214938418 F₁=0.9085777776520625
CEAF_m: R=0.8651685393258427 P=0.9177592371871275 F₁=0.8906882591093117
CEAF_e: R=0.7852961677146505 P=0.9304334132328698 F₁=0.8517260550137751
BLANC: R=0.8674835581063531 P=0.9172926755708599 F₁=0.8907135083403793
CoNLL-2012 average score: 0.8872990282581845

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

```
{'precision_score_pos': 0.8850102669404517, 'recall_score_pos': 0.9112050739957717,  
'f1_score_pos': 0.8979166666666667, 'precision_score_neg': 0.9165009940357853,  
'recall_score_neg': 0.8916827852998066, 'f1_score_neg': 0.903921568627451}
```

MUC: R=0.9112050739957717 P=0.8850102669404517 F₁=0.8979166666666666

B³: R=0.9095864661654135 P=0.9057871220467621 F₁=0.9076828183360794

CEAF_m: R=0.8504784688995215 P=0.9138817480719794 F₁=0.8810408921933085

CEAF_e: R=0.7497769906860815 P=0.9352888234331532 F₁=0.83232124654143

BLANC: R=0.8739813414112004 P=0.9199891883503746 F₁=0.8943007002702674

CoNLL-2012 average score: 0.8793069105147253

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.8853383458646616, 'recall_score_pos': 0.8169991326973114,
'f1_score_pos': 0.8497970230040595, 'precision_score_neg': 0.8325396825396826,
'recall_score_neg': 0.8958155422715628, 'f1_score_neg': 0.863019333607569}

MUC: R=0.8196010407632264 P=0.8931947069943289 F₁=0.8548168249660787

B³: R=0.7818069604042842 P=0.8504910598059741 F₁=0.8147039597980739

CEAF_m: R=0.7387440758293838 P=0.8280212483399735 F₁=0.7808390732623669

CEAF_e: R=0.6954840434955073 P=0.830544560870751 F₁=0.7570375651477038

BLANC: R=0.697837406779154 P=0.8307640432084871 F₁=0.7577377208853988

CoNLL-2012 average score: 0.8088527833039522

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.75, 'recall_score_pos': 0.46308724832214765, 'f1_score_pos': 0.5726141078838175, 'precision_score_neg': 0.6934865900383141, 'recall_score_neg': 0.8872549019607843, 'f1_score_neg': 0.7784946236559138}

MUC: R=0.46308724832214765 P=0.75 F₁=0.5726141078838175

B³: R=0.5037223947550035 P=0.8662790697674418 F₁=0.6370273008452588

CEAF_m: R=0.4673913043478261 P=0.75 F₁=0.5758928571428572

CEAF_e: R=0.4492790673893037 P=0.7132305194805195 F₁=0.5512892904197253

BLANC: R=0.3228179809992028 P=0.8892834065650039 F₁=0.47312402078563665

CoNLL-2012 average score: 0.5869768997162672

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.5090137857900318, 'recall_score_pos': 0.903954802259887,
'f1_score_pos': 0.6512890094979648, 'precision_score_neg': 0.9884797831488593,
'recall_score_neg': 0.904319074188882, 'f1_score_neg': 0.9445283833369308}

MUC: R=0.9077212806026366 P=0.5285087719298246 F₁=0.668052668052668
B³: R=0.9408335214022417 P=0.5004299734247835 F₁=0.6533452013491473
CEAF_m: R=0.5560821484992101 P=0.5732899022801303 F₁=0.5645549318364074
CEAF_e: R=0.3266793245265517 P=0.7598395681234668 F₁=0.45691589634065743
BLANC: R=0.8932196761405217 P=0.5968107424416187 F₁=0.6412185032123785
CoNLL-2012 average score: 0.592771255247491

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.49257142857142855, 'recall_score_pos': 0.9112050739957717,
'f1_score_pos': 0.6394658753709198, 'precision_score_neg': 0.989272030651341,
'recall_score_neg': 0.8971507991660875, 'f1_score_neg': 0.9409620991253643}

MUC: R=0.9112050739957717 P=0.5262515262515263 F₁=0.6671826625386997

B³: R=0.9407479083587458 P=0.5679637238712582 F₁=0.7083006107214456

CEAF_m: R=0.590311986863711 P=0.615582191780822 F₁=0.6026823134953898

CEAF_e: R=0.36749726104132296 P=0.784485557237208 F₁=0.5005218637582918

BLANC: R=0.8992242291654589 P=0.6099354306080693 F₁=0.6541013869044305

CoNLL-2012 average score: 0.6253350456728124

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.46131243878550443, 'recall_score_pos': 0.8169991326973114,
'f1_score_pos': 0.5896713615023476, 'precision_score_neg': 0.9779011311269376,
'recall_score_neg': 0.89460572961579, 'f1_score_neg': 0.9344008006004504}

MUC: R=0.8742411101474414 P=0.5698134539287734 F₁=0.6899383983572897
B³: R=0.8741453155301786 P=0.25619444194914753 F₁=0.39625461249656463
CEAF_m: R=0.2849002849002849 P=0.29850746268656714 F₁=0.2915451895043732
CEAF_e: R=0.18434296066601924 P=0.7289578486087815 F₁=0.2942694162725567
BLANC: R=0.7210124564701146 P=0.5031414736027392 F₁=0.4295722904504768
CoNLL-2012 average score: 0.4601541423754703

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.33014354066985646, 'recall_score_pos': 0.46308724832214765,
'f1_score_pos': 0.38547486033519557, 'precision_score_neg': 0.9403430275913497,
'recall_score_neg': 0.9000713775874375, 'f1_score_neg': 0.9197665937272064}

MUC: R=0.46308724832214765 P=0.33014354066985646 F₁=0.3854748603351955

B³: R=0.7091124138640338 P=0.600455373406193 F₁=0.650276164995244

CEAF_m: R=0.4535637149028078 P=0.5737704918032787 F₁=0.5066344993968637

CEAF_e: R=0.33676574663835807 P=0.6735314932767161 F₁=0.4490209955178108

BLANC: R=0.4412045725760318 P=0.6460717840655338 F₁=0.5213466296402133

CoNLL-2012 average score: 0.49492400694941674

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.18400837988826815, 'recall_score_pos': 0.9377224199288257,
'f1_score_pos': 0.3076474022183304, 'precision_score_neg': 0.9975126145973989,
'recall_score_neg': 0.8572650094668051, 'f1_score_neg': 0.922086453816844}

MUC: R=0.9605568445475638 P=0.23562891291974958 F₁=0.37842778793418647

B³: R=0.9882338515343441 P=0.29547040874815567 F₁=0.4549238778523005

CEAF_m: R=0.35467980295566504 P=0.3567567567567568 F₁=0.3557152481473165

CEAF_e: R=0.15397707238345146 P=0.599280095971878 F₁=0.24500369486532408

BLANC: R=0.9607152801791544 P=0.5335419889989415 F₁=0.5587876447802895

CoNLL-2012 average score: 0.35945178688393703

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.07856145251396648, 'recall_score_pos': 0.9221311475409836,
'f1_score_pos': 0.14478764478764478, 'precision_score_neg': 0.9986497050671594,
'recall_score_neg': 0.8418908393745133, 'f1_score_neg': 0.913594694753267}

MUC: R=0.9411764705882353 P=0.11838360842344905 F₁=0.2103134479271992

B³: R=0.9917526544040677 P=0.2506416903370288 F₁=0.4001540456913

CEAF_m: R=0.28084342754598474 P=0.281981981981982 F₁=0.28141155315801303

CEAF_e: R=0.12495424807292556 P=0.5419182076251285 F₁=0.20308225830063498

BLANC: R=0.9599447316823322 P=0.5136803560242176 F₁=0.5236236742871053

CoNLL-2012 average score: 0.2711832506397114

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.37814245810055863, 'recall_score_pos': 0.8712791633145616,
'f1_score_pos': 0.5273922571219869, 'precision_score_neg': 0.988629095302395,
'recall_score_neg': 0.8865026765230691, 'f1_score_neg': 0.934784799919363}

MUC: R=0.9175757575757576 P=0.43084803642572567 F₁=0.5863671572424477
B³: R=0.9470967065240192 P=0.3964841813465565 F₁=0.5589672579182559
CEAF_m: R=0.4577092511013216 P=0.468018018018018 F₁=0.4628062360801782
CEAF_e: R=0.2187744010701508 P=0.6827840378971229 F₁=0.3313721274070942
BLANC: R=0.898738265947542 P=0.576937208998717 F₁=0.6182326087647714
CoNLL-2012 average score: 0.4922355141892659

Model_Name : Model_ANCOR_balanced_Full.model

Train Dataset : balanced_Full_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.01606145251396648, 'recall_score_pos': 0.5609756097560976,
'f1_score_pos': 0.031228784792939578, 'precision_score_neg': 0.9974415464430388,
'recall_score_neg': 0.8327894143475939, 'f1_score_neg': 0.9077092226102703}

MUC: R=0.6857142857142857 P=0.02731929425156517 F₁=0.05254515599343186

B³: R=0.9844424594312937 P=0.21632281768602524 F₁=0.3547027395482079

CEAF_m: R=0.2264403751674855 P=0.22837837837837838 F₁=0.2274052478134111

CEAF_e: R=0.1033683822440356 P=0.48424626584732877 F₁=0.17036931693564836

BLANC: R=0.7949368396935782 P=0.5030596403216271 F₁=0.5008478184934285

CoNLL-2012 average score: 0.19253907082576271

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.010309278350515464, 'recall_score_pos':  
0.0018832391713747645, 'f1_score_pos': 0.003184713375796178, 'precision_score_neg':  
0.47368421052631576, 'recall_score_neg': 0.8324607329842932, 'f1_score_neg':  
0.6037974683544304}
```

MUC: R=0.0018832391713747645 P=0.010309278350515464
F₁=0.0031847133757961785

B³: R=0.16944160708205652 P=0.4666666666666667 F₁=0.24861412195013158

CEAF_m: R=0.08580183861082738 P=0.4666666666666667 F₁=0.14495254529767043

CEAF_e: R=0.11786777210884355 P=0.636201950659782 F₁=0.19888799210833114

BLANC: R=0.01720065227743254 P=0.5044642857142857 F₁=0.03323219713550315

CoNLL-2012 average score: 0.1502289424780863

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.828, 'recall_score_pos': 0.8752642706131079, 'f1_score_pos': 0.8509763617677287, 'precision_score_neg': 0.8795918367346939, 'recall_score_neg': 0.8336557059961315, 'f1_score_neg': 0.8560079443892751}

MUC: R=0.8752642706131079 P=0.8296593186372746 F₁=0.8518518518518519

B³: R=0.8922436974789916 P=0.8324805917232104 F₁=0.8613267243800439

CEAF_m: R=0.7835294117647059 P=0.8549422336328626 F₁=0.8176795580110496

CEAF_e: R=0.679507767505115 P=0.9149086726765299 F₁=0.7798308321139371

BLANC: R=0.8119472308539949 P=0.8332770473475505 F₁=0.8166802254811961

CoNLL-2012 average score: 0.8310031361152777

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos' : 0.6965408805031447, 'recall_score_pos' : 0.3842150910667823,
'f1_score_pos' : 0.49524874231414195, 'precision_score_neg' : 0.5793838862559242,
'recall_score_neg' : 0.8351836037574722, 'f1_score_neg' : 0.6841552990556138}

MUC: R=0.38508239375542064 P=0.7003154574132492 F₁=0.4969222160044767

B³: R=0.4165211309229648 P=0.6851994754039964 F₁=0.5180987970345644

CEAF_m: R=0.37722829212190917 P=0.7061356297093649 F₁=0.49175412293853077

CEAF_e: R=0.37199207022126224 P=0.7389401801683378 F₁=0.49486345777448276

BLANC: R=0.23761816161719068 P=0.6955896067839681 F₁=0.34975048988604224

CoNLL-2012 average score: 0.503294823604508

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.8397435897435898, 'recall_score_pos': 0.8791946308724832,
'f1_score_pos': 0.8590163934426228, 'precision_score_neg': 0.9086294416243654,
'recall_score_neg': 0.8774509803921569, 'f1_score_neg': 0.8927680798004988}

MUC: R=0.8791946308724832 P=0.8397435897435898 F₁=0.8590163934426229
B³: R=0.879689366786141 P=0.899070385126162 F₁=0.8892742900636519
CEAF_m: R=0.8028673835125448 P=0.8924302788844621 F₁=0.8452830188679246
CEAF_e: R=0.6516450216450218 P=0.8917247664616088 F₁=0.7530120250120251
BLANC: R=0.8521841524531344 P=0.9569419799994956 F₁=0.8994032889936028
CoNLL-2012 average score: 0.8337675695061

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.00129366106080207, 'recall_score_pos':  
0.0018832391713747645, 'f1_score_pos': 0.0015337423312883436, 'precision_score_neg':  
0.8847074178812269, 'recall_score_neg': 0.8404629055589998, 'f1_score_neg':  
0.8620178041543027}
```

MUC: R=0.0018832391713747645 P=0.0013089005235602095
F₁=0.0015444015444015444

B³: R=0.5359449192782526 P=0.21177685950413222 F₁=0.3035908143715497

CEAF_m: R=0.12515262515262515 P=0.21177685950413222 F₁=0.1573292402148887

CEAF_e: R=0.09737479057305706 P=0.5284014370802655 F₁=0.16444529849637554

BLANC: R=0.16286037096634035 P=0.5000128970583405 F₁=0.24520625779705518

CoNLL-2012 average score: 0.15652683813744228

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.366696191319752, 'recall_score_pos': 0.8752642706131079,
'f1_score_pos': 0.5168539325842697, 'precision_score_neg': 0.983884184649003,
'recall_score_neg': 0.8343757238823257, 'f1_score_neg': 0.9029832038104788}

MUC: R=0.8900634249471459 P=0.40019011406844107 F₁=0.5521311475409836
B³: R=0.9410141230405206 P=0.24208957614366894 F₁=0.38510522847519185
CEAF_m: R=0.27251552795031053 P=0.2851340373679935 F₁=0.278682016673283
CEAF_e: R=0.15666827349664397 P=0.7133220273729879 F₁=0.2569107503013377
BLANC: R=0.8026481934199177 P=0.5033452956091724 F₁=0.4479412595014254
CoNLL-2012 average score: 0.3980490421058377

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.2099526066350711, 'recall_score_pos': 0.3842150910667823,
'f1_score_pos': 0.2715292675452038, 'precision_score_neg': 0.9251054852320675,
'recall_score_neg': 0.8402797738813835, 'f1_score_neg': 0.8806547170758648}

MUC: R=0.48048568950563747 P=0.37712729748127977 F₁=0.4225781845919146

B³: R=0.6077349590189428 P=0.09097492843476157 F₁=0.1582592300376297

CEAF_m: R=0.08538812785388128 P=0.12033462033462033 F₁=0.0998931623931624

CEAF_e: R=0.050103152344013246 P=0.6112584585969616 F₁=0.0926149179692366

BLANC: R=0.2988381026378839 P=0.5011118385427189 F₁=0.2330245486610225

CoNLL-2012 average score: 0.2244841108662603

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.37110481586402266, 'recall_score_pos': 0.8791946308724832,
'f1_score_pos': 0.5219123505976095, 'precision_score_neg': 0.9849624060150376,
'recall_score_neg': 0.841541755888651, 'f1_score_neg': 0.9076212471131639}

MUC: R=0.8791946308724832 P=0.37110481586402266 F₁=0.5219123505976095

B³: R=0.9436438195664908 P=0.5417773727137913 F₁=0.6883500410513522

CEAF_m: R=0.5553602811950791 P=0.5808823529411765 F₁=0.5678346810422282

CEAF_e: R=0.32488145452431166 P=0.7143990099487482 F₁=0.44664553486157416

BLANC: R=0.9035765163446514 P=0.6619502595683092 F₁=0.7144865884565044

CoNLL-2012 average score: 0.5523026421701787

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.0017029972752043597, 'recall_score_pos':  
0.008896797153024912, 'f1_score_pos': 0.0028587764436821044, 'precision_score_neg':  
0.9602114436745481, 'recall_score_neg': 0.82098576925426, 'f1_score_neg':  
0.8851573817990254}
```

MUC: R=0.018561484918793503 P=0.005131494547787043

F₁=0.008040201005025126

B³: R=0.7233704753317016 P=0.10007823903777661 F₁=0.17583036339682323

CEAF_m: R=0.08070333633904418 P=0.10346820809248555 F₁=0.09067882472137792

CEAF_e: R=0.033770717477163495 P=0.35291387211515296 F₁=0.06164277030816258

BLANC: R=0.3087241836150648 P=0.5003085031468469 F₁=0.37607329542581913

CoNLL-2012 average score: 0.08183777823667031

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.0752724795640327, 'recall_score_pos': 0.9057377049180327,
'f1_score_pos': 0.1389937106918239, 'precision_score_neg': 0.9983570255018216,
'recall_score_neg': 0.8373374872685878, 'f1_score_neg': 0.9107852720755947}

MUC: R=0.9411764705882353 P=0.1334188582424631 F₁=0.2337078651685393

B³: R=0.9877955758962624 P=0.12341507678481475 F₁=0.2194163033855039

CEAF_m: R=0.16247139588100687 P=0.16416184971098266 F₁=0.1633122484186314

CEAF_e: R=0.048660146827872265 P=0.43452657430503483 F₁=0.0875194866974805

BLANC: R=0.9552378257226526 P=0.5073634247275991 F₁=0.5063788133520125

CoNLL-2012 average score: 0.1802145517505079

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.1141008174386921, 'recall_score_pos': 0.26950925181013674,
'f1_score_pos': 0.16032543670734625, 'precision_score_neg': 0.9351382241588685,
'recall_score_neg': 0.8342467499362732, 'f1_score_neg': 0.8818160385301943}

MUC: R=0.38303030303030305 P=0.2026940346375882 F₁=0.2651006711409396

B³: R=0.6744437467294611 P=0.14009689482289875 F₁=0.23200186664582848

CEAF_m: R=0.14725274725274726 P=0.1936416184971098 F₁=0.16729088639200998

CEAF_e: R=0.0531272135638954 P=0.450493916185078 F₁=0.09504560107050997

BLANC: R=0.4135936440275386 P=0.5123871802659574 F₁=0.38633532691704076

CoNLL-2012 average score: 0.19738271295242601

Model_Name : Model_ANCOR_balanced_INDIRECTE.model

Train Dataset : balanced_INDIRECTE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.025544959128065394, 'recall_score_pos': 0.9146341463414634,
'f1_score_pos': 0.049701789264413515, 'precision_score_neg': 0.9994999642831631,
'recall_score_neg': 0.8302379398326707, 'f1_score_neg': 0.9070400622325943}

MUC: R=0.9714285714285714 P=0.04361770365618987 F₁=0.08348680171884591

B³: R=0.9981235565819861 P=0.1079977731982405 F₁=0.19490650543549345

CEAF_m: R=0.12702078521939955 P=0.12716763005780346 F₁=0.1270941652224148

CEAF_e: R=0.03988645301137089 P=0.3876683327771837 F₁=0.07233091642651218

BLANC: R=0.9718907668376786 P=0.5025577604137388 F₁=0.501534971578723

CoNLL-2012 average score: 0.11690807452695051

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.9732739420935412, 'recall_score_pos': 0.8229755178907722,
'f1_score_pos': 0.8918367346938776, 'precision_score_neg': 0.8564885496183207,
'recall_score_neg': 0.9790575916230366, 'f1_score_neg': 0.9136807817589577}

MUC: R=0.8248587570621468 P=0.9776785714285714 F₁=0.8947906026557712
B³: R=0.8131942053930006 P=0.9715224681421865 F₁=0.8853354184643984
CEAF_m: R=0.827710843373494 P=0.967605633802817 F₁=0.8922077922077922
CEAF_e: R=0.8350716024235599 P=0.9530015615444444 F₁=0.8901476261128143
BLANC: R=0.7504465293210015 P=0.9623505113427728 F₁=0.8424222280357194
CoNLL-2012 average score: 0.8900912157443279

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.2, 'recall_score_pos': 0.006342494714587738, 'f1_score_pos': 0.012295081967213116, 'precision_score_neg': 0.517948717948718, 'recall_score_neg': 0.97678916827853, 'f1_score_neg': 0.6769436997319036}

MUC: R=0.006342494714587738 P=0.2 F₁=0.012295081967213116

B³: R=0.0322407883461868 P=0.5714285714285714 F₁=0.06103774302299054

CEAF_m: R=0.02056555269922879 P=0.5714285714285714 F₁=0.03970223325062035

CEAF_e: R=0.029586260733801717 P=0.6941391941391941 F₁=0.05675351901766996

BLANC: R=0.0029490442203003184 P=0.6176470588235294 F₁=0.005804597989898717

CoNLL-2012 average score: 0.043362114669291206

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.927437641723356, 'recall_score_pos': 0.3547267996530789,
'f1_score_pos': 0.5131744040150564, 'precision_score_neg': 0.6048858204992034,
'recall_score_neg': 0.9726729291204099, 'f1_score_neg': 0.7459070072036673}

MUC: R=0.3547267996530789 P=0.9337899543378996 F₁=0.51414204902577
B³: R=0.2989618460360322 P=0.933037454747981 F₁=0.4528291529300467
CEAF_m: R=0.355775169857937 P=0.8421052631578947 F₁=0.5002171081198437
CEAF_e: R=0.37401001418635355 P=0.7084905146782144 F₁=0.4895749062102268
BLANC: R=0.19273994411127665 P=0.9295798182456376 F₁=0.3182398890811675
CoNLL-2012 average score: 0.4855153693886812

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.5706051873198847, 'recall_score_neg': 0.9705882352941176,  
'f1_score_neg': 0.7186932849364791}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.04938271604938271 P=0.5 F₁=0.0898876404494382

CEAF_m: R=0.024691358024691357 P=0.5 F₁=0.047058823529411764

CEAF_e: R=0.042553191489361694 P=0.6666666666666666 F₁=0.07999999999999999

BLANC: R=0.0010315304473403706 P=0.5 F₁=0.0020588134371890333

CoNLL-2012 average score: 0.05662921348314606

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.7693661971830986, 'recall_score_pos': 0.8229755178907722,
'f1_score_pos': 0.7952684258416743, 'precision_score_neg': 0.9804248229904207,
'recall_score_neg': 0.9729282909692085, 'f1_score_neg': 0.9766621719738616}

MUC: R=0.8267419962335216 P=0.7867383512544803 F₁=0.8062442607897153

B³: R=0.8403928058292283 P=0.7722451033508142 F₁=0.8048790438305601

CEAF_m: R=0.7144396551724138 P=0.8055893074119077 F₁=0.7572815533980582

CEAF_e: R=0.5874497831729991 P=0.880066278942191 F₁=0.7045847852558327

BLANC: R=0.7791137107304862 P=0.7877318411577675 F₁=0.7696982847889766

CoNLL-2012 average score: 0.7719026966253694

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

```
{'precision_score_pos': 0.025423728813559324, 'recall_score_pos':  
0.006342494714587738, 'f1_score_pos': 0.01015228426395939, 'precision_score_neg':  
0.8994006849315068, 'recall_score_neg': 0.9733611304146398, 'f1_score_neg':  
0.9349204583379686}
```

MUC: R=0.014799154334038054 P=0.059322033898305086
F₁=0.023688663282571912

B³: R=0.19744325526084486 P=0.438943894389439 F₁=0.2723704004166316

CEAF_m: R=0.0988056460369164 P=0.4504950495049505 F₁=0.1620658949243099

CEAF_e: R=0.11859764739229024 P=0.6325207860922146 F₁=0.19974340613438357

BLANC: R=0.02849123682644256 P=0.5222469750166443 F₁=0.05318715731501979

CoNLL-2012 average score: 0.16526748994452903

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.5801418439716312, 'recall_score_pos': 0.3547267996530789,
'f1_score_pos': 0.4402583423035522, 'precision_score_neg': 0.9316490583371613,
'recall_score_neg': 0.9716393599693398, 'f1_score_neg': 0.9512240877966419}

MUC: R=0.37814397224631396 P=0.6402349486049926 F₁=0.47546346782988
B³: R=0.38719090234689785 P=0.555205214674544 F₁=0.4562209121509967
CEAF_m: R=0.3089337175792507 P=0.5948945615982242 F₁=0.40667678300455234
CEAF_e: R=0.2502734868862267 P=0.662087133489927 F₁=0.3632398238598103
BLANC: R=0.2642662552544714 P=0.5894558460447858 F₁=0.31693996605257346
CoNLL-2012 average score: 0.431641401280229

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,
'precision_score_neg': 0.901062416998672, 'recall_score_neg': 0.9685938615274804,
'f1_score_neg': 0.9336085311317509}

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.2594086021505376 P=0.47619047619047616 F₁=0.33585660837031234

CEAF_m: R=0.12903225806451613 P=0.47619047619047616 F₁=0.20304568527918782

CEAF_e: R=0.16190476190476188 P=0.6516666666666666 F₁=0.25936981757877275

BLANC: R=0.036121912769311613 P=0.5 F₁=0.06737630361483572

CoNLL-2012 average score: 0.19840880864969504

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.46893203883495144, 'recall_score_pos': 0.8594306049822064,
'f1_score_pos': 0.6067839195979898, 'precision_score_neg': 0.9950330084878969,
'recall_score_neg': 0.9665913394002321, 'f1_score_neg': 0.9806059855009603}

MUC: R=0.8816705336426914 P=0.5177111716621253 F₁=0.6523605150214592
B³: R=0.9231583793738489 P=0.5516605524196122 F₁=0.6906204559184373
CEAF_m: R=0.5755064456721916 P=0.6121449559255632 F₁=0.5932605600379687
CEAF_e: R=0.34019795725902596 P=0.7764099721416794 F₁=0.47309907007359236
BLANC: R=0.8707169381180919 P=0.6513393463641408 F₁=0.6924054944863178
CoNLL-2012 average score: 0.605360013671163

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,
'precision_score_neg': 0.9846589122917322, 'recall_score_neg': 0.9382900964591696,
'f1_score_neg': 0.9609154497484353}

MUC: R=0.167420814479638 P=0.05040871934604905 F₁=0.07748691099476439

B³: R=0.7584853090172239 P=0.29771218008240535 F₁=0.42759108450539846

CEAF_m: R=0.2454407294832827 P=0.31635651322233105 F₁=0.2764227642276423

CEAF_e: R=0.13848985586294207 P=0.5283846417070438 F₁=0.2194593229666014

BLANC: R=0.3862076971178043 P=0.5124591316055258 F₁=0.3966817479098093

CoNLL-2012 average score: 0.24151243948892143

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.6174757281553398, 'recall_score_pos': 0.5116653258246179,
'f1_score_pos': 0.559612846458425, 'precision_score_neg': 0.9618359006601698,
'recall_score_neg': 0.974891664542442, 'f1_score_neg': 0.9683197771940375}

MUC: R=0.5866666666666667 P=0.659400544959128 F₁=0.6209108402822322
B³: R=0.6112961831649039 P=0.6658104546449306 F₁=0.6373898272641195
CEAF_m: R=0.47488278633623576 P=0.6944172380019589 F₁=0.564041368337311
CEAF_e: R=0.3299354091792142 P=0.7679332868700873 F₁=0.4615640907470473
BLANC: R=0.49302865646232874 P=0.732703162723009 F₁=0.5636244508380367
CoNLL-2012 average score: 0.5732882527644664

Model_Name : Model_ANCOR_representative_ANAPHORE.model

Train Dataset : representative_ANAPHORE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9948443885570575, 'recall_score_neg': 0.9388832848750964,  
'f1_score_neg': 0.9660540936565115}
```

MUC: R=0.2 P=0.01907356948228883 F₁=0.03482587064676617

B³: R=0.9159090909090909 P=0.2877501049391353 F₁=0.43791953392267563

CEAF_m: R=0.2736363636363636 P=0.2948090107737512 F₁=0.2838283828382838

CEAF_e: R=0.14295546226728406 P=0.5130457356630752 F₁=0.22360535479924462

BLANC: R=0.5186742368658366 P=0.5044084728352061 F₁=0.4703126531348684

CoNLL-2012 average score: 0.23211691978956214

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.5, 'recall_score_pos': 0.009416195856873822, 'f1_score_pos': 0.018484288354898334, 'precision_score_neg': 0.5191956124314442, 'recall_score_neg': 0.9912739965095986, 'f1_score_neg': 0.6814637072585483}

MUC: R=0.009416195856873822 P=0.5 F₁=0.018484288354898334

B³: R=0.01838529176658673 P=0.75 F₁=0.03589076723016905

CEAF_m: R=0.015587529976019185 P=0.65 F₁=0.030444964871194382

CEAF_e: R=0.020462046204620464 P=0.62 F₁=0.03961661341853035

BLANC: R=0.002520691536813951 P=0.7388888888888889 F₁=0.005000390393317027

CoNLL-2012 average score: 0.03133055633453258

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.9691211401425178, 'recall_score_pos': 0.8625792811839323,
'f1_score_pos': 0.9127516778523489, 'precision_score_neg': 0.8857644991212654,
'recall_score_neg': 0.9748549323017408, 'f1_score_neg': 0.9281767955801105}

MUC: R=0.8625792811839323 P=0.9691211401425178 F₁=0.912751677852349
B³: R=0.849515503875969 P=0.9687621832358674 F₁=0.9052286128361678
CEAF_m: R=0.8475452196382429 P=0.9590643274853801 F₁=0.8998628257887517
CEAF_e: R=0.8315583088008337 P=0.9517074180572279 F₁=0.8875852870533723
BLANC: R=0.7956333638365151 P=0.9661389119034944 F₁=0.8720058985724126
CoNLL-2012 average score: 0.9018551925806297

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.9378238341968912, 'recall_score_pos': 0.3139635732870772,
'f1_score_pos': 0.4704353476283301, 'precision_score_neg': 0.5918472652218782,
'recall_score_neg': 0.9795046968403074, 'f1_score_neg': 0.7378578321003538}

MUC: R=0.3139635732870772 P=0.9402597402597402 F₁=0.47074122236671
B³: R=0.3088077167938004 P=0.9517216117216116 F₁=0.4663104162522044
CEAF_m: R=0.35599505562422745 P=0.8861538461538462 F₁=0.507936507936508
CEAF_e: R=0.44349968077721996 P=0.7782164209864426 F₁=0.5650064426339926
BLANC: R=0.14886199028534203 P=0.9452004485316593 F₁=0.25719518535660707
CoNLL-2012 average score: 0.5006860270843023

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.9591836734693877, 'recall_score_pos': 0.31543624161073824,
'f1_score_pos': 0.4747474747474748, 'precision_score_neg': 0.6644736842105263,
'recall_score_neg': 0.9901960784313726, 'f1_score_neg': 0.7952755905511811}

MUC: R=0.31543624161073824 P=0.9591836734693877 F₁=0.4747474747474747

B³: R=0.2667983789260385 P=0.9772727272727273 F₁=0.41916378912080365

CEAF_m: R=0.30638297872340425 P=0.8181818181818182 F₁=0.44582043343653255

CEAF_e: R=0.31061612805798855 P=0.684948384948385 F₁=0.42740779220779224

BLANC: R=0.16072475850965962 P=0.9780318294768633 F₁=0.27524217268071277

CoNLL-2012 average score: 0.4404396853586902

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.09433962264150944, 'recall_score_pos': 0.009416195856873822,
'f1_score_pos': 0.017123287671232876, 'precision_score_neg': 0.901072033101373,
'recall_score_neg': 0.9900805951642901, 'f1_score_neg': 0.9434816857030327}

MUC: R=0.009416195856873822 P=0.09433962264150944 F₁=0.017123287671232876

B³: R=0.09538441074753924 P=0.5339805825242718 F₁=0.16185654988506237

CEAF_m: R=0.05921787709497207 P=0.5145631067961165 F₁=0.1062124248496994

CEAF_e: R=0.088003663003663 P=0.6406666666666666 F₁=0.1547504025764895

BLANC: R=0.008774684403943009 P=0.5442580197366612 F₁=0.017162967373737605

CoNLL-2012 average score: 0.11124341337759491

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.8736616702355461, 'recall_score_pos': 0.8625792811839323,
'f1_score_pos': 0.8680851063829788, 'precision_score_neg': 0.9849641452694888,
'recall_score_neg': 0.9863331016909891, 'f1_score_neg': 0.9856481481481482}

MUC: R=0.864693446088795 P=0.8891304347826087 F₁=0.8767416934619506
B³: R=0.8587530712530712 P=0.8925624970267827 F₁=0.8753314359672013
CEAF_m: R=0.800982800982801 P=0.8956043956043956 F₁=0.8456549935149157
CEAF_e: R=0.7261748189900682 P=0.9239761689388555 F₁=0.8132204048460207
BLANC: R=0.8054733154874507 P=0.883390774892681 F₁=0.8385014670245673
CoNLL-2012 average score: 0.8550978447583909

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos' : 0.7056530214424951, 'recall_score_pos' : 0.3139635732870772,
'f1_score_pos' : 0.43457382953181267, 'precision_score_neg' : 0.9285907736751828,
'recall_score_neg' : 0.9855322410654402, 'f1_score_neg' : 0.9562145579622572}

MUC: R=0.32003469210754554 P=0.738 F₁=0.44646098003629764

B³: R=0.3469077791395715 P=0.7584190231362468 F₁=0.47606094131018006

CEAF_m: R=0.34661117717003564 P=0.7493573264781491 F₁=0.47398373983739833

CEAF_e: R=0.3902645433546661 P=0.7426256958079798 F₁=0.5116479391192524

BLANC: R=0.17676009885185806 P=0.7416986146409256 F₁=0.28451897523062325

CoNLL-2012 average score: 0.47805662015524336

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.71212121212122, 'recall_score_pos': 0.31543624161073824,
'f1_score_pos': 0.43720930232558136, 'precision_score_neg': 0.931266846361186,
'recall_score_neg': 0.9864382583868665, 'f1_score_neg': 0.9580589254766031}

MUC: R=0.31543624161073824 P=0.71212121212122 F₁=0.43720930232558136

B³: R=0.35160082972582973 P=0.836111111111111 F₁=0.4950314134292463

CEAF_m: R=0.32954545454545453 P=0.725 F₁=0.45312499999999994

CEAF_e: R=0.3157651044607565 P=0.6724627224627222 F₁=0.42973949127795263

BLANC: R=0.19417610332596813 P=0.8656338526912182 F₁=0.31673967580084905

CoNLL-2012 average score: 0.4539934023442601

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.011686143572621035, 'recall_score_pos':
0.012455516014234875, 'f1_score_pos': 0.01205857019810508, 'precision_score_neg':
0.9660259549461312, 'recall_score_neg': 0.9638429121114029, 'f1_score_neg':
0.9649331988137821}

MUC: R=0.013921113689095127 P=0.012024048096192385
F₁=0.012903225806451611

B³: R=0.5325107618380218 P=0.39448529411764705 F₁=0.45322234793743343

CEAF_m: R=0.2263489838822705 P=0.3958333333333333 F₁=0.2880071333036112

CEAF_e: R=0.1887350991266654 P=0.5929973461519203 F₁=0.28633687544578634

BLANC: R=0.16974928854604898 P=0.5054611650485437 F₁=0.251971710593656

CoNLL-2012 average score: 0.2508208163965571

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.3572621035058431, 'recall_score_pos': 0.8770491803278688,
'f1_score_pos': 0.5077105575326216, 'precision_score_neg': 0.9981635651322233,
'recall_score_neg': 0.9769336768318255, 'f1_score_neg': 0.9874345232688406}

MUC: R=0.9004524886877828 P=0.39879759519038077 F₁=0.5527777777777778

B³: R=0.9571626984126984 P=0.5954549875505758 F₁=0.7341759762495588

CEAF_m: R=0.6 P=0.6176470588235294 F₁=0.608695652173913

CEAF_e: R=0.3884586693148891 P=0.7585360135833322 F₁=0.5137946929613597

BLANC: R=0.904464478470901 P=0.6462258048427078 F₁=0.7037605123925407

CoNLL-2012 average score: 0.6002494823295654

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.44240400667779634, 'recall_score_pos': 0.21319388576025744,
'f1_score_pos': 0.28773072747014117, 'precision_score_neg': 0.94013222331048,
'recall_score_neg': 0.9787152689268417, 'f1_score_neg': 0.9590358436368178}

MUC: R=0.2921212121212121 P=0.48296593186372744 F₁=0.36404833836858
B³: R=0.4407859808967404 P=0.6380923202614378 F₁=0.5213973605497105
CEAF_m: R=0.3379746835443038 P=0.6544117647058824 F₁=0.4457429048414024
CEAF_e: R=0.30589372493930345 P=0.7285481461488141 F₁=0.4308764222559218
BLANC: R=0.22118131430902188 P=0.6843846195814813 F₁=0.32946432642463214
CoNLL-2012 average score: 0.4387740403914041

Model_Name : Model_ANCOR_representative_DIRECTE.model

Train Dataset : representative_DIRECTE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.05342237061769616, 'recall_score_pos': 0.3902439024390244,
'f1_score_pos': 0.09397944199706314, 'precision_score_neg': 0.9969392752203722,
'recall_score_neg': 0.96635613837299, 'f1_score_neg': 0.9814095031486335}

MUC: R=0.4 P=0.056112224448897796 F₁=0.0984182776801406

B³: R=0.9176190476190476 P=0.4136476812947401 F₁=0.5702403329334427

CEAF_m: R=0.392 P=0.42034313725490197 F₁=0.40567711413364876

CEAF_e: R=0.24102784723902734 P=0.6120738707489496 F₁=0.34585992340003036

BLANC: R=0.6127655121900177 P=0.5206069494912408 F₁=0.5015501659495618

CoNLL-2012 average score: 0.33817284467120456

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.9705882352941176, 'recall_score_pos': 0.4971751412429379,
'f1_score_pos': 0.6575342465753425, 'precision_score_neg': 0.6790865384615384,
'recall_score_neg': 0.9860383944153578, 'f1_score_neg': 0.804270462633452}

MUC: R=0.4971751412429379 P=0.9705882352941176 F₁=0.6575342465753425
B³: R=0.46759375440264866 P=0.9724770642201835 F₁=0.6315303326041186
CEAF_m: R=0.4963942307692308 P=0.9472477064220184 F₁=0.6514195583596214
CEAF_e: R=0.49254672975603214 P=0.9040034491254004 F₁=0.6376626479852288
BLANC: R=0.33945582626823856 P=0.9742043582974171 F₁=0.49881742416493313
CoNLL-2012 average score: 0.6422424090548966

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.975, 'recall_score_pos': 0.8245243128964059, 'f1_score_pos': 0.8934707903780068, 'precision_score_neg': 0.8593220338983051, 'recall_score_neg': 0.9806576402321083, 'f1_score_neg': 0.9159891598915989}

MUC: R=0.8245243128964059 P=0.975 F₁=0.8934707903780068

B³: R=0.8116512059369202 P=0.9790780141843972 F₁=0.887537704740479

CEAF_m: R=0.8272727272727273 P=0.9680851063829787 F₁=0.8921568627450981

CEAF_e: R=0.822541842743863 P=0.946879563158633 F₁=0.8803420803420804

BLANC: R=0.7473874993445174 P=0.9821456482796387 F₁=0.848474263056057

CoNLL-2012 average score: 0.8871168584868554

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.9546191247974068, 'recall_score_pos': 0.5108412836079792,
'f1_score_pos': 0.6655367231638418, 'precision_score_neg': 0.6695957820738138,
'recall_score_neg': 0.9760888129803587, 'f1_score_neg': 0.7943015983321752}

MUC: R=0.5108412836079792 P=0.9577235772357724 F₁=0.6662895927601811
B³: R=0.4644145360004941 P=0.949274099883856 F₁=0.623697014242552
CEAF_m: R=0.5231624459542927 P=0.8607723577235772 F₁=0.650787552823665
CEAF_e: R=0.598263061876251 P=0.7555300456214985 F₁=0.6677618846331328
BLANC: R=0.32166419275404434 P=0.9252690447525982 F₁=0.4769519193593666
CoNLL-2012 average score: 0.6525828305452887

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.9534883720930233, 'recall_score_pos': 0.2751677852348993,  
'f1_score_pos': 0.4270833333333333, 'precision_score_neg': 0.6516129032258065,  
'recall_score_neg': 0.9901960784313726, 'f1_score_neg': 0.7859922178988327}
```

MUC: R=0.2751677852348993 P=0.9534883720930233 F₁=0.4270833333333333
B³: R=0.22389057750759878 P=0.9746835443037974 F₁=0.36413678161436097
CEAF_m: R=0.2680851063829787 P=0.7974683544303798 F₁=0.4012738853503185
CEAF_e: R=0.26871539313399784 P=0.641931216931217 F₁=0.3788446526151445
BLANC: R=0.13010579576816927 P=0.9740613658858462 F₁=0.2288822159907375
CoNLL-2012 average score: 0.3900215891876129

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.7313019390581718, 'recall_score_pos': 0.4971751412429379,
'f1_score_pos': 0.5919282511210763, 'precision_score_neg': 0.9466959472948693,
'recall_score_neg': 0.9799545360611697, 'f1_score_neg': 0.963038180341186}

MUC: R=0.4971751412429379 P=0.75 F₁=0.5979614949037373

B³: R=0.5231559153314879 P=0.7694650970673276 F₁=0.6228433752981422

CEAF_m: R=0.4580152671755725 P=0.7806691449814126 F₁=0.5773195876288659

CEAF_e: R=0.3937203268809486 P=0.8170755170755171 F₁=0.5313847768393223

BLANC: R=0.37403863202223725 P=0.788488251507681 F₁=0.4934085086871107

CoNLL-2012 average score: 0.5840632156804005

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.8108108108108109, 'recall_score_pos': 0.8245243128964059,
'f1_score_pos': 0.8176100628930817, 'precision_score_neg': 0.9807379902529589,
'recall_score_neg': 0.9789205466759323, 'f1_score_neg': 0.9798284256897751}

MUC: R=0.8266384778012685 P=0.8301486199575372 F₁=0.8283898305084746
B³: R=0.8338245088245089 P=0.853177790527188 F₁=0.8433901393017644
CEAF_m: R=0.752913752913753 P=0.8647925033467202 F₁=0.8049844236760124
CEAF_e: R=0.6477846675860427 P=0.9036126703645885 F₁=0.7546054372787486
BLANC: R=0.7632526040442122 P=0.8271260022619746 F₁=0.7844448522276968
CoNLL-2012 average score: 0.8087951356963292

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.7165450121654501, 'recall_score_pos': 0.5108412836079792,
'f1_score_pos': 0.5964556962025316, 'precision_score_neg': 0.9476225854383358,
'recall_score_neg': 0.9776755772731628, 'f1_score_neg': 0.9624145248762084}

MUC: R=0.5255854293148309 P=0.7789203084832905 F₁=0.6276540652511652
B³: R=0.5145111328266975 P=0.7190137181279771 F₁=0.5998104737746456
CEAF_m: R=0.4716646989374262 P=0.7089618456078084 F₁=0.5664657922722439
CEAF_e: R=0.47503756024009247 P=0.7363762753291978 F₁=0.577517573235708
BLANC: R=0.375038329364834 P=0.571165318590385 F₁=0.4024745378563001
CoNLL-2012 average score: 0.6016607040871729

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.5857142857142857, 'recall_score_pos': 0.2751677852348993,
'f1_score_pos': 0.3744292237442922, 'precision_score_neg': 0.927027027027027,
'recall_score_neg': 0.979300499643112, 'f1_score_neg': 0.9524470669906282}

MUC: R=0.2751677852348993 P=0.5857142857142857 F₁=0.3744292237442922
B³: R=0.3579096763260464 P=0.7769230769230769 F₁=0.4900603832514372
CEAF_m: R=0.3096085409252669 P=0.6692307692307692 F₁=0.4233576642335766
CEAF_e: R=0.2924963924963925 P=0.6434920634920634 F₁=0.40218253968253964
BLANC: R=0.18093285494618144 P=0.7977122215532811 F₁=0.2946856840993133
CoNLL-2012 average score: 0.42222404889275633

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.29316888045540795, 'recall_score_pos': 0.5498220640569395,
'f1_score_pos': 0.38242574257425743, 'precision_score_neg': 0.984069013286317,
'recall_score_neg': 0.9544982593293837, 'f1_score_neg': 0.9690581013207664}

MUC: R=0.5591647331786543 P=0.30544993662864384 F₁=0.3950819672131147

B³: R=0.7875786317264757 P=0.4954682156796585 F₁=0.6082711323562825

CEAF_m: R=0.43668720054757015 P=0.5290215588723052 F₁=0.478440194975628

CEAF_e: R=0.2750245170148083 P=0.6793171523387351 F₁=0.3915345577405011

BLANC: R=0.6092296963044463 P=0.6075289277877125 F₁=0.5584810297716684

CoNLL-2012 average score: 0.46496255243663276

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.19639468690702086, 'recall_score_pos': 0.8483606557377049,
'f1_score_pos': 0.31895223420647145, 'precision_score_neg': 0.9976701719035326,
'recall_score_neg': 0.9492540890300162, 'f1_score_neg': 0.9728601252609604}

MUC: R=0.8687782805429864 P=0.24334600760456274 F₁=0.3801980198019802

B³: R=0.9608876374363101 P=0.47346283254243454 F₁=0.6343562359377133

CEAF_m: R=0.48189863234111024 P=0.4966832504145937 F₁=0.4891792568395264

CEAF_e: R=0.27932107031911335 P=0.6845710644271795 F₁=0.3967562666659261

BLANC: R=0.8869988939999791 P=0.5683538530161238 F₁=0.6018613855694783

CoNLL-2012 average score: 0.4704368408018732

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.6280834914611005, 'recall_score_pos': 0.5325824617860017,
'f1_score_pos': 0.5764040052242055, 'precision_score_neg': 0.9634154020527674,
'recall_score_neg': 0.975019118021922, 'f1_score_neg': 0.9691825293763658}

MUC: R=0.610909090909091 P=0.6387832699619772 F₁=0.6245353159851301
B³: R=0.6641867697700511 P=0.7028091265653454 F₁=0.6829523406613327
CEAF_m: R=0.5339987523393637 P=0.7097844112769486 F₁=0.6094695621217515
CEAF_e: R=0.4080304630447505 P=0.76126546822258 F₁=0.5312932221737504
BLANC: R=0.527950203843774 P=0.7494111304382541 F₁=0.6084973724205086
CoNLL-2012 average score: 0.6129269596067377

Model_Name : Model_ANCOR_representative_Full.model

Train Dataset : representative_Full_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.028462998102466792, 'recall_score_pos': 0.36585365853658536,
'f1_score_pos': 0.0528169014084507, 'precision_score_neg': 0.9967256469995592,
'recall_score_neg': 0.9392393045748532, 'f1_score_neg': 0.9671289790431967}

MUC: R=0.44285714285714284 P=0.03929024081115336 F₁=0.07217694994179277

B³: R=0.9485645933014354 P=0.3623134328358209 F₁=0.5243473263157321

CEAF_m: R=0.35566188197767146 P=0.36981757877280264 F₁=0.36260162601626017

CEAF_e: R=0.20484356881415708 P=0.5816181905898369 F₁=0.3029791198950181

BLANC: R=0.6614034239041877 P=0.511182433975102 F₁=0.5011259637948968

CoNLL-2012 average score: 0.299834465384181

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.0625, 'recall_score_pos': 0.0018832391713747645,
'f1_score_pos': 0.0036563071297989027, 'precision_score_neg': 0.5128676470588235,
'recall_score_neg': 0.9738219895287958, 'f1_score_neg': 0.6718844069837447}

MUC: R=0.0018832391713747645 P=0.0625 F₁=0.003656307129798903
B³: R=0.03525264394829612 P=0.5161290322580645 F₁=0.06599752509280901
CEAF_m: R=0.01880141010575793 P=0.5161290322580645 F₁=0.036281179138321996
CEAF_e: R=0.031770833333333325 P=0.6777777777777776 F₁=0.0606965174129353
BLANC: R=0.0010745443054421971 P=0.5294117647058824 F₁=0.0021337856232737404
CoNLL-2012 average score: 0.04345011654518107

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.9539295392953929, 'recall_score_pos': 0.7441860465116279,
'f1_score_pos': 0.836104513064133, 'precision_score_neg': 0.8051529790660226,
'recall_score_neg': 0.9671179883945842, 'f1_score_neg': 0.8787346221441126}

MUC: R=0.7441860465116279 P=0.9539295392953929 F₁=0.836104513064133
B³: R=0.7384307777164919 P=0.962506753106429 F₁=0.8357092454887447
CEAF_m: R=0.749034749034749 P=0.9432739059967585 F₁=0.8350071736011477
CEAF_e: R=0.7537496312167364 P=0.9239511608463221 F₁=0.8302169851082893
BLANC: R=0.6229167495254452 P=0.9635822289193345 F₁=0.756552204138675
CoNLL-2012 average score: 0.8340102478870557

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.9146005509641874, 'recall_score_pos': 0.28794449262792715,
'f1_score_pos': 0.4379947229551451, 'precision_score_neg': 0.5813360530341662,
'recall_score_neg': 0.9735269000853971, 'f1_score_neg': 0.727969348659004}

MUC: R=0.2896790980052038 P=0.9201101928374655 F₁=0.44063324538258575

B³: R=0.28373145620751766 P=0.9318869241507678 F₁=0.4350142088705705

CEAF_m: R=0.3337446020974707 P=0.8811074918566775 F₁=0.48411633109619684

CEAF_e: R=0.4105671719942975 P=0.7655196673041085 F₁=0.5344796564487656

BLANC: R=0.1326476625107969 P=0.9176961597624737 F₁=0.23178905268404712

CoNLL-2012 average score: 0.47004237023397394

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.9384615384615385, 'recall_score_pos': 0.40939597315436244,
'f1_score_pos': 0.5700934579439253, 'precision_score_neg': 0.6944444444444444,
'recall_score_neg': 0.9803921568627451, 'f1_score_neg': 0.8130081300813009}

MUC: R=0.40939597315436244 P=0.9384615384615385 F₁=0.5700934579439253

B³: R=0.38497398959583834 P=0.9626436781609196 F₁=0.5499969111531604

CEAF_m: R=0.42016806722689076 P=0.8620689655172413 F₁=0.5649717514124294

CEAF_e: R=0.43583345493457853 P=0.7605721076309312 F₁=0.5541311069882499

BLANC: R=0.2501599877165298 P=0.9694866599121919 F₁=0.3972018771634195

CoNLL-2012 average score: 0.5580738253617785

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.010309278350515464, 'recall_score_pos':  
0.0018832391713747645, 'f1_score_pos': 0.003184713375796178, 'precision_score_neg':  
0.8994879575194387, 'recall_score_neg': 0.9801611903285803, 'f1_score_neg':  
0.9380933544303798}
```

MUC: R=0.0018832391713747645 P=0.010309278350515464
F₁=0.0031847133757961785

B³: R=0.16118453618453618 P=0.45454545454545453 F₁=0.23797995669769695

CEAF_m: R=0.08316008316008316 P=0.45454545454545453 F₁=0.140597539543058

CEAF_e: R=0.11492652745552974 P=0.6270042194092825 F₁=0.19424836601307185

BLANC: R=0.01701993346453594 P=0.5041322314049587 F₁=0.03288763745870403

CoNLL-2012 average score: 0.14513767869552166

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

```
{'precision_score_pos': 0.7272727272727273, 'recall_score_pos': 0.7441860465116279,  
'f1_score_pos': 0.735632183908046, 'precision_score_neg': 0.9718996748722712,  
'recall_score_neg': 0.9694232105628909, 'f1_score_neg': 0.9706598631566741}
```

MUC: R=0.7505285412262156 P=0.7802197802197802 F₁=0.7650862068965517

B³: R=0.771167893386863 P=0.79382702403979 F₁=0.782333421055367

CEAF_m: R=0.6627634660421545 P=0.8028368794326242 F₁=0.7261064785118666

CEAF_e: R=0.5721342646539497 P=0.8719326193326193 F₁=0.6909133275218854

BLANC: R=0.6503644461237064 P=0.6975858730532303 F₁=0.6460764801609803

CoNLL-2012 average score: 0.7461109851579347

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos' : 0.5505804311774462, 'recall_score_pos' : 0.28794449262792715,
'f1_score_pos' : 0.37813211845102507, 'precision_score_neg' : 0.9252753253845454,
'recall_score_neg' : 0.9740346842962537, 'f1_score_neg' : 0.9490291262135923}

MUC: R=0.30789245446660884 P=0.6396396396396397 F₁=0.41569086651053866

B³: R=0.35454845945205116 P=0.6421314915194964 F₁=0.45685022732113645

CEAF_m: R=0.3182608695652174 P=0.6719706242350061 F₁=0.43194335169158143

CEAF_e: R=0.3287130171751471 P=0.7176482665045196 F₁=0.45089651276782766

BLANC: R=0.17877248577432622 P=0.6350980619671309 F₁=0.2722825346914665

CoNLL-2012 average score: 0.4411458688665009

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.6703296703296703, 'recall_score_pos': 0.40939597315436244,
'f1_score_pos': 0.5083333333333333, 'precision_score_neg': 0.9396847155586018,
'recall_score_neg': 0.9785867237687366, 'f1_score_neg': 0.9587412587412587}

MUC: R=0.40939597315436244 P=0.6703296703296703 F₁=0.5083333333333333
B³: R=0.4799240484724355 P=0.8076131687242799 F₁=0.6020687811692056
CEAF_m: R=0.43010752688172044 P=0.7407407407407407 F₁=0.5442176870748299
CEAF_e: R=0.392993672993673 P=0.7195658801292604 F₁=0.5083500247679352
BLANC: R=0.3001768431008034 P=0.8438254052768117 F₁=0.4424428879055162
CoNLL-2012 average score: 0.5395840464234913

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.00546448087431694, 'recall_score_pos':  
0.0071174377224199285, 'f1_score_pos': 0.0061823802163833074, 'precision_score_neg':  
0.965561932975375, 'recall_score_neg': 0.9555365540829415, 'f1_score_neg':  
0.9605230844793713}
```

MUC: R=0.01160092807424594 P=0.008517887563884156 F₁=0.009823182711198428
B³: R=0.556206742576468 P=0.3484747023809524 F₁=0.4284911117873898
CEAF_m: R=0.2103148024112525 P=0.35044642857142855 F₁=0.2628714943491
CEAF_e: R=0.1660785866513511 P=0.5707943657726048 F₁=0.2572946156436687
BLANC: R=0.18312671910201095 P=0.5016756032171582 F₁=0.26640334829475587
CoNLL-2012 average score: 0.23186963671408564

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.2581967213114754, 'recall_score_pos': 0.7745901639344263,
'f1_score_pos': 0.38729508196721313, 'precision_score_neg': 0.9966055668703326,
'recall_score_neg': 0.9674674974537175, 'f1_score_neg': 0.9818203927767982}

MUC: R=0.832579185520362 P=0.313458262350937 F₁=0.45544554455445546

B³: R=0.9337033121916842 P=0.49935161564625846 F₁=0.6507025633422279

CEAF_m: R=0.5 P=0.5279017857142857 F₁=0.5135722041259501

CEAF_e: R=0.30302343633378115 P=0.7109773182588716 F₁=0.4249361534661341

BLANC: R=0.8535945205291486 P=0.5757310070919792 F₁=0.5997644501619869

CoNLL-2012 average score: 0.5103614204542725

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.3510928961748634, 'recall_score_pos': 0.2067578439259855,
'f1_score_pos': 0.260253164556962, 'precision_score_neg': 0.9391470715299636,
'recall_score_neg': 0.9697297986235024, 'f1_score_neg': 0.9541934472487851}

MUC: R=0.2957575757575758 P=0.41567291311754684 F₁=0.3456090651558074
B³: R=0.46310692853246044 P=0.5521205357142857 F₁=0.5037114429603237
CEAF_m: R=0.3161094224924012 P=0.5803571428571429 F₁=0.40928768201495475
CEAF_e: R=0.26108247125105083 P=0.6928402149704261 F₁=0.37925177400506943
BLANC: R=0.23739657166303235 P=0.6034947022435282 F₁=0.32427238614589826
CoNLL-2012 average score: 0.4095240940404002

Model_Name : Model_ANCOR_representative_INDIRECTE.model

Train Dataset : representative_INDIRECTE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.06147540983606557, 'recall_score_pos': 0.5487804878048781,
'f1_score_pos': 0.11056511056511056, 'precision_score_neg': 0.9977164722582238,
'recall_score_neg': 0.9592357443778555, 'f1_score_neg': 0.9780977734753147}

MUC: R=0.6 P=0.07155025553662692 F₁=0.1278538812785388

B³: R=0.9480392156862745 P=0.37825255102040817 F₁=0.5407531899125879

CEAF_m: R=0.3732620320855615 P=0.38950892857142855 F₁=0.3812124522119061

CEAF_e: R=0.21537286866567312 P=0.6029046323488908 F₁=0.31737228517173294

BLANC: R=0.725935655769822 P=0.5170761328384446 F₁=0.5099439999485182

CoNLL-2012 average score: 0.32865978545428653

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.9858490566037735, 'recall_score_pos': 0.3935969868173258,
'f1_score_pos': 0.5625841184387618, 'precision_score_neg': 0.6390134529147982,
'recall_score_neg': 0.9947643979057592, 'f1_score_neg': 0.7781569965870307}

MUC: R=0.3935969868173258 P=0.9858490566037735 F₁=0.5625841184387618

B³: R=0.36030581941598894 P=0.9865530303030302 F₁=0.5278367485276074

CEAF_m: R=0.4043583535108959 P=0.9488636363636364 F₁=0.567062818336163

CEAF_e: R=0.41109111227755296 P=0.866227700870558 F₁=0.5575718534339223

BLANC: R=0.25262482101521294 P=0.9873638816843495 F₁=0.3965505236782805

CoNLL-2012 average score: 0.5493309068000972

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.6666666666666666, 'recall_score_pos': 0.004228329809725159,
'f1_score_pos': 0.008403361344537815, 'precision_score_neg': 0.5227963525835866,
'recall_score_neg': 0.9980657640232108, 'f1_score_neg': 0.6861702127659575}

MUC:	R=0.004228329809725159	P=0.6666666666666666	F ₁ =0.008403361344537815
B ³ :	R=0.004934210526315789	P=0.8	F ₁ =0.009807928075194114
CEAF _m :	R=0.005263157894736842	P=0.8	F ₁ =0.01045751633986928
CEAF _e :	R=0.005309440849510536	P=0.7619047619047619	F ₁ =0.01054539462843961
BLANC:	R=0.001773064476276575	P=0.875	F ₁ =0.003529636052227413

CoNLL-2012 average score: 0.009585561349390512

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.9540816326530612, 'recall_score_pos': 0.16218560277536861,
'f1_score_pos': 0.2772424017790957, 'precision_score_neg': 0.5460526315789473,
'recall_score_neg': 0.9923142613151152, 'f1_score_neg': 0.7044558957259776}

MUC: R=0.16218560277536861 P=0.958974358974359 F₁=0.27744807121661724

B³: R=0.13011618637563366 P=0.9539732770745429 F₁=0.22899837864333228

CEAF_m: R=0.1770573566084788 P=0.8987341772151899 F₁=0.2958333333333334

CEAF_e: R=0.18354150385649015 P=0.6841092416469179 F₁=0.28943083300446526

BLANC: R=0.060915135458412734 P=0.9405938025497305 F₁=0.11321340511023424

CoNLL-2012 average score: 0.2652924276214716

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.5767045454545454, 'recall_score_neg': 0.9950980392156863,  
'f1_score_neg': 0.7302158273381295}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.008583690987124463 P=0.5 F₁=0.016877637130801686

CEAF_m: R=0.004291845493562232 P=0.5 F₁=0.00851063829787234

CEAF_e: R=0.007936507936507936 P=0.6666666666666666 F₁=0.01568627450980392

BLANC: R=0.0 P=0.0 F₁=0.0

CoNLL-2012 average score: 0.010854637213535202

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.842741935483871, 'recall_score_pos': 0.3935969868173258,
'f1_score_pos': 0.5365853658536587, 'precision_score_neg': 0.9371339320577899,
'recall_score_neg': 0.9919404835709857, 'f1_score_neg': 0.9637586587691999}

MUC: R=0.3973634651600753 P=0.871900826446281 F₁=0.5459249676584734
B³: R=0.3813809942356042 P=0.8664091523134076 F₁=0.5296274935941488
CEAF_m: R=0.37943262411347517 P=0.8537234042553191 F₁=0.5253682487725041
CEAF_e: R=0.35285553952220616 P=0.8294738429066786 F₁=0.4950979730489752
BLANC: R=0.26541831235468377 P=0.8572866489084549 F₁=0.39198925136516277
CoNLL-2012 average score: 0.5235501447671992

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.0666666666666667, 'recall_score_pos': 0.004228329809725159,
'f1_score_pos': 0.007952286282306162, 'precision_score_neg': 0.9010504201680672,
'recall_score_neg': 0.9935140143618253, 'f1_score_neg': 0.945025889611105}

MUC: R=0.006342494714587738 P=0.1 F₁=0.011928429423459246

B³: R=0.06374378109452736 P=0.5089285714285714 F₁=0.11329700589512876

CEAF_m: R=0.036069651741293535 P=0.5178571428571429 F₁=0.06744186046511629

CEAF_e: R=0.052438498057833405 P=0.6675824175824177 F₁=0.09723889555822329

BLANC: R=0.004684353399776093 P=0.5564784053156147 F₁=0.009161305963915279

CoNLL-2012 average score: 0.0741547769589371

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.6925925925925925, 'recall_score_pos': 0.16218560277536861,
'f1_score_pos': 0.2628250175685172, 'precision_score_neg': 0.9146643109540636,
'recall_score_neg': 0.992047523234646, 'f1_score_neg': 0.9517856322103231}

MUC: R=0.1673894189071986 P=0.7338403041825095 F₁=0.2725988700564972
B³: R=0.15560964196211202 P=0.6877637090235516 F₁=0.25379664745301705
CEAF_m: R=0.16279069767441862 P=0.6981627296587927 F₁=0.26401985111662535
CEAF_e: R=0.15561005133488698 P=0.6343087685769545 F₁=0.2499113011421724
BLANC: R=0.07163738940708199 P=0.6438728043908082 F₁=0.11927537357371056
CoNLL-2012 average score: 0.25876893955056224

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9030579050097592, 'recall_score_neg': 0.9907209136331192,  
'f1_score_neg': 0.944860449285228}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.09765625 P=0.48 F₁=0.1622937516905599

CEAF_m: R=0.046875 P=0.48 F₁=0.08540925266903915

CEAF_e: R=0.07320872274143303 P=0.6527777777777778 F₁=0.1316526610644258

BLANC: R=0.004424504950495049 P=0.5 F₁=0.008771391768386186

CoNLL-2012 average score: 0.09798213758499523

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.6105769230769231, 'recall_score_pos': 0.45195729537366547,
'f1_score_pos': 0.5194274028629857, 'precision_score_neg': 0.9813548035595375,
'recall_score_neg': 0.990105661760215, 'f1_score_neg': 0.9857108111394869}

MUC: R=0.4733178654292343 P=0.6355140186915887 F₁=0.5425531914893617
B³: R=0.5326563122262047 P=0.6842757656422254 F₁=0.5990207876041493
CEAF_m: R=0.42054958183990443 P=0.7287784679089027 F₁=0.5333333333333333
CEAF_e: R=0.3201657674564079 P=0.8023907505388987 F₁=0.45770176615247044
BLANC: R=0.394303684674868 P=0.7262600888669322 F₁=0.47633709837047855
CoNLL-2012 average score: 0.5330919150819938

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9852291300926206, 'recall_score_neg': 0.9750763884728296,  
'f1_score_neg': 0.980126467931346}
```

MUC: R=0.07239819004524888 P=0.04984423676012461 F₁=0.059040590405904064

B³: R=0.5629211256440745 P=0.35350488021295473 F₁=0.4342857226188216

CEAF_m: R=0.2116527942925089 P=0.36853002070393376 F₁=0.2688821752265861

CEAF_e: R=0.14931899641577062 P=0.5714677640603567 F₁=0.23677181017334473

BLANC: R=0.19810469602909056 P=0.5138642922897257 F₁=0.2666403505028521

CoNLL-2012 average score: 0.24336604106602347

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.7427884615384616, 'recall_score_pos': 0.24859211584875301,
'f1_score_pos': 0.3725135623869801, 'precision_score_neg': 0.9434590471578183,
'recall_score_neg': 0.9931812388478205, 'f1_score_neg': 0.9676818478159634}

MUC: R=0.296969696969697 P=0.7632398753894081 F₁=0.42757417102966844

B³: R=0.2895932425783172 P=0.7856336210373478 F₁=0.42319290094685413

CEAF_m: R=0.282089552238806 P=0.782608695652174 F₁=0.41470104223806914

CEAF_e: R=0.23451093843441073 P=0.7455131684797626 F₁=0.3567891677805658

BLANC: R=0.18392307055885798 P=0.8003756173925461 F₁=0.2852474939627723

CoNLL-2012 average score: 0.40251874658569614

Model_Name : Model_ANCOR_window_ANAPHORE.model

Train Dataset : window_ANAPHORE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9950360191294872, 'recall_score_neg': 0.9753159674835341,  
'f1_score_neg': 0.9850773103200288}
```

MUC: R=0.05714285714285714 P=0.012461059190031152 F₁=0.020460358056265986

B³: R=0.8092623873873873 P=0.3391649413388544 F₁=0.47799877846935585

CEAF_m: R=0.28040540540540543 P=0.34368530020703936 F₁=0.3088372093023256

CEAF_e: R=0.17282430213464697 P=0.556878306878307 F₁=0.26378446115288223

BLANC: R=0.3519761563814823 P=0.502919708029197 F₁=0.4033881110337183

CoNLL-2012 average score: 0.254081199226168

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.5185856754306437, 'recall_score_neg': 0.9982547993019197,  
'f1_score_neg': 0.6825775656324582}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.002421307506053269 P=0.5 F₁=0.004819277108433735

CEAF_m: R=0.0012106537530266344 P=0.5 F₁=0.0024154589371980675

CEAF_e: R=0.0022598870056497176 P=0.6666666666666666 F₁=0.0045045045045045

BLANC: R=0.0 P=0.0 F₁=0.0

CoNLL-2012 average score: 0.0031079272043127468

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.9959349593495935, 'recall_score_pos': 0.5179704016913319,
'f1_score_pos': 0.6815020862308762, 'precision_score_neg': 0.6935483870967742,
'recall_score_neg': 0.9980657640232108, 'f1_score_neg': 0.8183980967486123}

MUC: R=0.5179704016913319 P=0.9959349593495935 F₁=0.6815020862308762
B³: R=0.4994611528822055 P=0.9975786924939467 F₁=0.6656493551359778
CEAF_m: R=0.531578947368421 P=0.9782082324455206 F₁=0.6888320545609548
CEAF_e: R=0.5409783982954716 P=0.9297053910826367 F₁=0.6839682833074905
BLANC: R=0.3874841130960532 P=0.998662379428632 F₁=0.5517492663901632
CoNLL-2012 average score: 0.6770399082247814

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.9776785714285714, 'recall_score_pos': 0.1899392888117953,
'f1_score_pos': 0.31808278867102396, 'precision_score_neg': 0.5552380952380952,
'recall_score_neg': 0.9957301451750641, 'f1_score_neg': 0.7129318251299297}

MUC: R=0.1899392888117953 P=0.9820627802690582 F₁=0.3183139534883721
B³: R=0.18080434070235082 P=0.9856175972927241 F₁=0.30555656415285726
CEAF_m: R=0.22951844903064414 P=0.9314720812182741 F₁=0.3682890115403914
CEAF_e: R=0.29711252248563613 P=0.7749250586467468 F₁=0.4295370665432535
BLANC: R=0.06828417935009672 P=0.9839796723759537 F₁=0.12757623220249772
CoNLL-2012 average score: 0.3511358613948276

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 1.0, 'recall_score_pos': 0.10738255033557047, 'f1_score_pos': 0.1939393939393939, 'precision_score_neg': 0.6053412462908012, 'recall_score_neg': 1.0, 'f1_score_neg': 0.7541589648798521}

MUC: R=0.10738255033557047 P=1.0 F₁=0.19393939393939394

B³: R=0.05512265512265512 P=1.0 F₁=0.10448577680525165

CEAF_m: R=0.09523809523809523 P=0.7333333333333333 F₁=0.1685823754789272

CEAF_e: R=0.07487417731320171 P=0.43854875283446715 F₁=0.12791005291005292

BLANC: R=0.035726447894837116 P=0.9784172661870504 F₁=0.06821955676562926

CoNLL-2012 average score: 0.14211174121823283

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9008958566629339, 'recall_score_neg': 0.9975201487910725,  
'f1_score_neg': 0.9467490438364224}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.02534698713608666 P=0.5 F₁=0.04824808699154248

CEAF_m: R=0.014218009478672985 P=0.5 F₁=0.02764976958525345

CEAF_e: R=0.025559105431309903 P=0.6666666666666666 F₁=0.04923076923076923

BLANC: R=0.00037220528813482857 P=0.5 F₁=0.000743856841369711

CoNLL-2012 average score: 0.0324929520741039

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.9722222222222222, 'recall_score_pos': 0.5179704016913319,
'f1_score_pos': 0.6758620689655173, 'precision_score_neg': 0.9497576024680476,
'recall_score_neg': 0.9983785035904563, 'f1_score_neg': 0.9734613212874083}

MUC: R=0.5179704016913319 P=0.9919028340080972 F₁=0.6805555555555556

B³: R=0.4996808710343533 P=0.9928974979822437 F₁=0.664798441326039

CEAF_m: R=0.5295663600525624 P=0.9757869249394673 F₁=0.686541737649063

CEAF_e: R=0.5357049393507727 P=0.929415798391702 F₁=0.6796608922159583

BLANC: R=0.3870874976722207 P=0.9926529689858972 F₁=0.5499945710350208

CoNLL-2012 average score: 0.6750049630325177

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.9201680672268907, 'recall_score_pos': 0.1899392888117953,
'f1_score_pos': 0.314881380301941, 'precision_score_neg': 0.9177237491190979,
'recall_score_neg': 0.9981795535115454, 'f1_score_neg': 0.9562623342053329}

MUC: R=0.194275802254987 P=0.9572649572649573 F₁=0.3229992790194665
B³: R=0.1877476554124019 P=0.9700245700245701 F₁=0.314603917270169
CEAF_m: R=0.23426791277258566 P=0.9238329238329238 F₁=0.3737574552683896
CEAF_e: R=0.29740066800054743 P=0.7770237106141471 F₁=0.4301603261959918
BLANC: R=0.07208852117903114 P=0.9650417750088092 F₁=0.13396915942519133
CoNLL-2012 average score: 0.3559211741618758

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.8, 'recall_score_pos': 0.10738255033557047, 'f1_score_pos': 0.18934911242603553, 'precision_score_neg': 0.9130718954248366, 'recall_score_neg': 0.9971448965024983, 'f1_score_neg': 0.9532582736267485}

MUC: R=0.10738255033557047 P=0.8 F₁=0.1893491124260355

B³: R=0.08149717514124294 P=0.8947368421052632 F₁=0.14938738834781418

CEAF_m: R=0.11016949152542373 P=0.6842105263157895 F₁=0.18978102189781024

CEAF_e: R=0.10122240467068053 P=0.48924162257495585 F₁=0.167739984882842

BLANC: R=0.04021912623130244 P=0.8958750500600721 F₁=0.07623344431349992

CoNLL-2012 average score: 0.16882549521889723

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9664337335005674, 'recall_score_neg': 0.9882733769009956,  
'f1_score_neg': 0.9772315497040706}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.305998213698115 P=0.45565749235474007 F₁=0.36612442501425224

CEAF_m: R=0.14708785784797632 P=0.45565749235474007 F₁=0.22238805970149256

CEAF_e: R=0.16231386025200456 P=0.6340044742729306 F₁=0.2584587323301413

BLANC: R=0.05185387771049033 P=0.5 F₁=0.09396305762246278

CoNLL-2012 average score: 0.2081943857814645

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.7552083333333334, 'recall_score_pos': 0.5942622950819673,
'f1_score_pos': 0.6651376146788991, 'precision_score_neg': 0.9940870811682494,
'recall_score_neg': 0.9971841111976514, 'f1_score_neg': 0.9956331877729258}

MUC: R=0.6108597285067874 P=0.7584269662921348 F₁=0.6766917293233082
B³: R=0.6682590233545648 P=0.8618756371049948 F₁=0.7528176263021124
CEAF_m: R=0.6029723991507431 P=0.8685015290519877 F₁=0.7117794486215538
CEAF_e: R=0.5330031746031746 P=0.8943006285288164 F₁=0.6679237776982138
BLANC: R=0.5245922004867145 P=0.8708920187793427 F₁=0.6464994382819931
CoNLL-2012 average score: 0.6991443777745447

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.8177083333333334, 'recall_score_pos': 0.1263073209975865,
'f1_score_pos': 0.21881533101045297, 'precision_score_neg': 0.9351370722092814,
'recall_score_neg': 0.9977695641091002, 'f1_score_neg': 0.9654385694465855}

MUC: R=0.17696969696969697 P=0.8202247191011236 F₁=0.29112662013958124

B³: R=0.20586052645549213 P=0.8944954128440367 F₁=0.33469405675643094

CEAF_m: R=0.2219679633867277 P=0.8899082568807339 F₁=0.3553113553113553

CEAF_e: R=0.25406428377561274 P=0.8286928987580389 F₁=0.38889839973211904

BLANC: R=0.08079194067037156 P=0.9036240120045165 F₁=0.1470243014309677

CoNLL-2012 average score: 0.33823969220937705

Model_Name : Model_ANCOR_window_DIRECTE.model

Train Dataset : window_DIRECTE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.057291666666666664, 'recall_score_pos': 0.13414634146341464,
'f1_score_pos': 0.08029197080291971, 'precision_score_neg': 0.9957594218479364,
'recall_score_neg': 0.9892600723906723, 'f1_score_neg': 0.992499107036552}

MUC: R=0.14285714285714285 P=0.056179775280898875 F₁=0.08064516129032258

B³: R=0.7476525821596244 P=0.4841997961264017 F₁=0.5877542378231483

CEAF_m: R=0.3732394366197183 P=0.48623853211009177 F₁=0.42231075697211157

CEAF_e: R=0.27142857142857146 P=0.6485139022051774 F₁=0.3826874115983027

BLANC: R=0.35667774434427324 P=0.5281501774359235 F₁=0.4088519237281065

CoNLL-2012 average score: 0.35036227023725786

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.974910394265233, 'recall_score_pos': 0.512241054613936,
'f1_score_pos': 0.671604938271605, 'precision_score_neg': 0.686060606060606,
'recall_score_neg': 0.987783595113438, 'f1_score_neg': 0.8097281831187411}

MUC: R=0.512241054613936 P=0.974910394265233 F₁=0.671604938271605
B³: R=0.49012855861468646 P=0.9730337078651685 F₁=0.651891618100343
CEAF_m: R=0.5186972255729795 P=0.9662921348314607 F₁=0.6750392464678179
CEAF_e: R=0.512159950414984 P=0.9194196700220797 F₁=0.6578606259640742
BLANC: R=0.3747701583058565 P=0.9756750247378938 F₁=0.5342570634869396
CoNLL-2012 average score: 0.6604523941120074

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

{'precision_score_pos': 0.9922480620155039, 'recall_score_pos': 0.5412262156448203,
'f1_score_pos': 0.7004103967168264, 'precision_score_neg': 0.703551912568306,
'recall_score_neg': 0.9961315280464217, 'f1_score_neg': 0.8246597277822257}

MUC: R=0.5412262156448203 P=0.9922480620155039 F₁=0.7004103967168263

B³: R=0.5243852074338277 P=0.9953917050691244 F₁=0.686901717543456

CEAF_m: R=0.557161629434954 P=0.9769585253456221 F₁=0.709623430962343

CEAF_e: R=0.5673477564102564 P=0.9283872377622376 F₁=0.7042937665782493

BLANC: R=0.41069658278434124 P=0.9975294570445352 F₁=0.5763922933587741

CoNLL-2012 average score: 0.6972019602795105

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

{'precision_score_pos': 0.9623015873015873, 'recall_score_pos': 0.4206418039895924,
'f1_score_pos': 0.5853952926976463, 'precision_score_neg': 0.6329670329670329,
'recall_score_neg': 0.9837745516652434, 'f1_score_neg': 0.7703109327983951}

MUC: R=0.4215091066782307 P=0.9681274900398407 F₁=0.5873111782477342
B³: R=0.3767211775384228 P=0.9619240734482369 F₁=0.541408815195636
CEAF_m: R=0.44216417910447764 P=0.8810408921933085 F₁=0.5888198757763975
CEAF_e: R=0.5043259662943483 P=0.7523551300456671 F₁=0.6038639859577065
BLANC: R=0.24937756614784337 P=0.9326699339131248 F₁=0.39327017742270964
CoNLL-2012 average score: 0.5775279931336922

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.9473684210526315, 'recall_score_pos': 0.12080536912751678,
'f1_score_pos': 0.2142857142857143, 'precision_score_neg': 0.6077844311377245,
'recall_score_neg': 0.9950980392156863, 'f1_score_neg': 0.7546468401486989}

MUC: R=0.12080536912751678 P=0.9473684210526315 F₁=0.2142857142857143
B³: R=0.07982832618025752 P=0.9722222222222222 F₁=0.14754209822541534
CEAF_m: R=0.12446351931330472 P=0.8055555555555556 F₁=0.21561338289962828
CEAF_e: R=0.11198034769463341 P=0.5533146591970122 F₁=0.1862643407197863
BLANC: R=0.04238898457391044 P=0.964696223316913 F₁=0.08043233473575209
CoNLL-2012 average score: 0.1826973844103053

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.8168168168168168, 'recall_score_pos': 0.512241054613936,
'f1_score_pos': 0.6296296296296297, 'precision_score_neg': 0.9485805042684138,
'recall_score_neg': 0.9873940896879521, 'f1_score_neg': 0.9675982179019847}

MUC: R=0.512241054613936 P=0.8369230769230769 F₁=0.6355140186915889
B³: R=0.515452849867316 P=0.8312536443148687 F₁=0.6363258241876821
CEAF_m: R=0.47876004592422505 P=0.8510204081632653 F₁=0.6127847171197649
CEAF_e: R=0.42018525592055006 P=0.8658362849271941 F₁=0.5657940079722258
BLANC: R=0.3887216446112175 P=0.8337108302383915 F₁=0.5127417737639725
CoNLL-2012 average score: 0.6125446169504989

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.7828746177370031, 'recall_score_pos': 0.5412262156448203,
'f1_score_pos': 0.64, 'precision_score_neg': 0.9513779968630965, 'recall_score_neg':
0.9835533935603429, 'f1_score_neg': 0.9671981776765375}

MUC: R=0.5517970401691332 P=0.8181818181818182 F₁=0.6590909090909092

B³: R=0.5751488095238095 P=0.8543256288870325 F₁=0.6874755577249919

CEAF_m: R=0.5348557692307693 P=0.8674463937621832 F₁=0.6617100371747212

CEAF_e: R=0.478756818581495 P=0.885946896241014 F₁=0.6216046939267874

BLANC: R=0.444414008855185 P=0.8233366845423542 F₁=0.5598944408490711

CoNLL-2012 average score: 0.6560570535808962

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.7461538461538462, 'recall_score_pos': 0.4206418039895924,
'f1_score_pos': 0.5379922351636162, 'precision_score_neg': 0.9389396709323583,
'recall_score_neg': 0.9841908594423685, 'f1_score_neg': 0.9610328858118539}

MUC: R=0.4336513443191674 P=0.8278145695364238 F₁=0.5691519635742743

B³: R=0.41185386127092904 P=0.7574599766346266 F₁=0.5335826978562714

CEAF_m: R=0.3992740471869328 P=0.7457627118644068 F₁=0.5200945626477541

CEAF_e: R=0.4163807646377291 P=0.7408910402806568 F₁=0.5331379828908183

BLANC: R=0.2775314592937477 P=0.5900663263176471 F₁=0.3291719928393275

CoNLL-2012 average score: 0.5452908814404547

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.46153846153846156, 'recall_score_pos': 0.12080536912751678,
'f1_score_pos': 0.19148936170212766, 'precision_score_neg': 0.913302448709464,
'recall_score_neg': 0.9850107066381156, 'f1_score_neg': 0.9478021978021979}

MUC: R=0.12080536912751678 P=0.46153846153846156 F₁=0.1914893617021277
B³: R=0.20387016229712857 P=0.7162162162162162 F₁=0.317394365680673
CEAF_m: R=0.1760299625468165 P=0.6351351351351351 F₁=0.27565982404692085
CEAF_e: R=0.17858488027979555 P=0.6020861678004537 F₁=0.27546425977798533
BLANC: R=0.06881642323321305 P=0.7299245804679161 F₁=0.12495295391204735
CoNLL-2012 average score: 0.2614493290535953

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.4053708439897698, 'recall_score_pos': 0.5640569395017794,
'f1_score_pos': 0.4717261904761904, 'precision_score_neg': 0.984832538847273,
'recall_score_neg': 0.9715995846820986, 'f1_score_neg': 0.9781713091065609}

MUC: R=0.568445475638051 P=0.41737649063032367 F₁=0.481335952848723
B³: R=0.7301120448179271 P=0.5453971422721423 F₁=0.6243797015537278
CEAF_m: R=0.4515570934256055 P=0.5878378378378378 F₁=0.5107632093933464
CEAF_e: R=0.298109438454266 P=0.7180376839845277 F₁=0.42130476194803673
BLANC: R=0.5686014935884125 P=0.6416386646547744 F₁=0.5573221852647309
CoNLL-2012 average score: 0.5090068054501625

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 0.19309462915601022, 'recall_score_pos': 0.6188524590163934,
'f1_score_pos': 0.29434697855750486, 'precision_score_neg': 0.9942425555624342,
'recall_score_neg': 0.9621951950152777, 'f1_score_neg': 0.9779563999512849}

MUC: R=0.6923076923076923 P=0.2606473594548552 F₁=0.3787128712871287
B³: R=0.8750166002656042 P=0.4859336609336609 F₁=0.624857545594805
CEAF_m: R=0.448207171314741 P=0.5067567567567568 F₁=0.47568710359408034
CEAF_e: R=0.2670600224240071 P=0.6947109553421845 F₁=0.38580811357564126
BLANC: R=0.7299212614297348 P=0.5719674865268973 F₁=0.5569892122317653
CoNLL-2012 average score: 0.46312617681919166

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 0.7647058823529411, 'recall_score_pos': 0.48109412711182625,
'f1_score_pos': 0.5906172839506173, 'precision_score_neg': 0.9600693369652696,
'recall_score_neg': 0.9882742798878409, 'f1_score_neg': 0.9739676558329409}

MUC: R=0.5527272727272727 P=0.7768313458262351 F₁=0.6458923512747876

B³: R=0.5512583556543528 P=0.7961299773799774 F₁=0.6514429306794975

CEAF_m: R=0.501072194424589 P=0.7894144144144144 F₁=0.6130301705290774

CEAF_e: R=0.422582865498316 P=0.8058556969967886 F₁=0.5544287195337906

BLANC: R=0.43183283472652517 P=0.8032664936454323 F₁=0.5489029461357178

CoNLL-2012 average score: 0.617254667162692

Model_Name : Model_ANCOR_window_Full.model

Train Dataset : window_Full_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.014066496163682864, 'recall_score_pos': 0.13414634146341464,
'f1_score_pos': 0.02546296296296296, 'precision_score_neg': 0.9956045316659444,
'recall_score_neg': 0.9542514685812615, 'f1_score_neg': 0.9744894867599831}

MUC: R=0.2857142857142857 P=0.034071550255536626 F₁=0.060882800608828

B³: R=0.9106895356895357 P=0.3540791603291603 F₁=0.5099053876531698

CEAF_m: R=0.33367983367983367 P=0.3614864864864865 F₁=0.34702702702702704

CEAF_e: R=0.1937966470939301 P=0.5743076717866633 F₁=0.28980152423769595

BLANC: R=0.5457128039054416 P=0.5087521989811654 F₁=0.4755933424786393

CoNLL-2012 average score: 0.28686323749989795

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : balanced_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,
'precision_score_neg': 0.5190217391304348, 'recall_score_neg': 1.0, 'f1_score_neg':
0.6833631484794276}

MUC: R=0.0 P=0.0 F₁=0.0

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : balanced_DIRECTE_Test.xlsx

```
{'precision_score_pos': 1.0, 'recall_score_pos': 0.0021141649048625794,  
'f1_score_pos': 0.004219409282700422, 'precision_score_neg': 0.5227502527805864,  
'recall_score_neg': 1.0, 'f1_score_neg': 0.6865869853917662}
```

MUC:	R=0.0021141649048625794	P=1.0	F ₁ =0.004219409282700422
B ³ :	R=0.002635046113306983	P=1.0	F ₁ =0.005256241787122208
CEAF _m :	R=0.002635046113306983	P=1.0	F ₁ =0.005256241787122208
CEAF _e :	R=0.0034965034965034965	P=1.0	F ₁ =0.006968641114982578
BLANC:	R=0.0005875440658049354	P=0.5	F ₁ =0.0011737089201877935
CoNLL-2012 average score: 0.005481430728268403			

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : balanced_Full_Test.xlsx

```
{'precision_score_pos': 1.0, 'recall_score_pos': 0.0026019080659150044,  
'f1_score_pos': 0.005190311418685121, 'precision_score_neg': 0.5045239121068505,  
'recall_score_neg': 1.0, 'f1_score_neg': 0.670675830469645}
```

MUC: R=0.0026019080659150044 P=1.0 F₁=0.005190311418685122
B³: R=0.0020574291081492083 P=1.0 F₁=0.0041064095697196925
CEAF_m: R=0.003757044458359424 P=1.0 F₁=0.007485963817841546
CEAF_e: R=0.004316816816816817 P=0.6388888888888888 F₁=0.008575689783743474
BLANC: R=0.00040805608481704473 P=1.0 F₁=0.0008154618909354709
CoNLL-2012 average score: 0.005957470257382763

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : balanced_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.5779036827195467, 'recall_score_neg': 1.0, 'f1_score_neg':  
0.7324955116696589}
```

MUC: R=0.0 P=0.0 F₁=0.0

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : representative_ANAPHORE_Test.xlsx

{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,
'precision_score_neg': 0.9011173184357542, 'recall_score_neg': 1.0, 'f1_score_neg':
0.9479870702321481}

MUC: R=0.0 P=0.0 F₁=0.0

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : representative_DIRECTE_Test.xlsx

{'precision_score_pos': 0.3333333333333333, 'recall_score_pos': 0.0021141649048625794,
'f1_score_pos': 0.004201680672268907, 'precision_score_neg': 0.9013996239816169,
'recall_score_neg': 0.999536715311559, 'f1_score_neg': 0.9479349736379612}

MUC: R=0.006342494714587738 P=1.0 F₁=0.012605042016806723
B³: R=0.004567413263065437 P=1.0 F₁=0.009093293695899273
CEAF_m: R=0.007905138339920948 P=1.0 F₁=0.01568627450980392
CEAF_e: R=0.007242757242757242 P=0.6904761904761904 F₁=0.014335145823035095
BLANC: R=0.0017835519700866098 P=1.0 F₁=0.0035547183569301817
CoNLL-2012 average score: 0.012011160511913697

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : representative_Full_Test.xlsx

{'precision_score_pos': 0.6, 'recall_score_pos': 0.0026019080659150044,
'f1_score_pos': 0.0051813471502590676, 'precision_score_neg': 0.9007337073802331,
'recall_score_neg': 0.9998083740538469, 'f1_score_neg': 0.9476886749614022}

MUC: R=0.0026019080659150044 P=0.6 F₁=0.0051813471502590676

B³: R=0.004136904761904762 P=0.8 F₁=0.008231244679669862

CEAF_m: R=0.005 P=0.8 F₁=0.009937888198757764

CEAF_e: R=0.007270693512304249 P=0.6499999999999999 F₁=0.014380530973451324

BLANC: R=0.00041901458864912147 P=0.8 F₁=0.0008369451266227641

CoNLL-2012 average score: 0.009264374267793418

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : representative_INDIRECTE_Test.xlsx

{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,
'precision_score_neg': 0.9038709677419355, 'recall_score_neg': 1.0, 'f1_score_neg':
0.9495086411385971}

MUC: R=0.0 P=0.0 F₁=0.0

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : window_ANAPHORE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9668103702828796, 'recall_score_neg': 0.999877847676052,  
'f1_score_neg': 0.9830661142136552}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.00554016620498615 P=0.5 F₁=0.010958904109589041

CEAF_m: R=0.002770083102493075 P=0.5 F₁=0.005509641873278237

CEAF_e: R=0.004581901489117983 P=0.6666666666666666 F₁=0.009101251422070534

BLANC: R=7.704071216434325e-06 P=0.5 F₁=1.5407905025673422e-05

CoNLL-2012 average score: 0.006686718510553192

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : window_DIRECTE_Test.xlsx

{'precision_score_pos': 1.0, 'recall_score_pos': 0.00819672131147541, 'f1_score_pos': 0.016260162601626018, 'precision_score_neg': 0.9857083800862222, 'recall_score_neg': 1.0, 'f1_score_neg': 0.9928027599333809}

MUC: R=0.00904977375565611 P=1.0 F₁=0.017937219730941707

B³: R=0.010050251256281407 P=1.0 F₁=0.01990049751243781

CEAF_m: R=0.010050251256281407 P=1.0 F₁=0.01990049751243781

CEAF_e: R=0.011299435028248588 P=1.0 F₁=0.0223463687150838

BLANC: R=0.0036225271925996835 P=1.0 F₁=0.007193664342237295

CoNLL-2012 average score: 0.02006136198615444

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : window_Full_Test.xlsx

{'precision_score_pos': 1.0, 'recall_score_pos': 0.0016090104585679806,
'f1_score_pos': 0.0032128514056224897, 'precision_score_neg': 0.926711155731412,
'recall_score_neg': 1.0, 'f1_score_neg': 0.9619616858237547}

MUC: R=0.0024242424242424242 P=1.0 F₁=0.0048367593712212815
B³: R=0.003167062549485352 P=1.0 F₁=0.006314127861089187
CEAF_m: R=0.003167062549485352 P=1.0 F₁=0.006314127861089187
CEAF_e: R=0.0045662100456621 P=1.0 F₁=0.00909090909090909
BLANC: R=0.0005818892809316283 P=1.0 F₁=0.0011624373924054771
CoNLL-2012 average score: 0.006747265441073186

Model_Name : Model_ANCOR_window_INDIRECTE.model

Train Dataset : window_INDIRECTE_Train.xlsx

Test Dataset : window_INDIRECTE_Test.xlsx

```
{'precision_score_pos': 0.0, 'recall_score_pos': 0.0, 'f1_score_pos': 0.0,  
'precision_score_neg': 0.9951573849878934, 'recall_score_neg': 0.9998813267667478,  
'f1_score_neg': 0.9975137630971409}
```

MUC: R=0.0 P=0.0 F₁=0

B³: R=0.03125 P=0.5 F₁=0.058823529411764705

CEAF_m: R=0.015625 P=0.5 F₁=0.030303030303030304

CEAF_e: R=0.022988505747126436 P=0.6666666666666666 F₁=0.044444444444444446

BLANC: R=0.00024897298643097225 P=0.5 F₁=0.0004976981460744059

CoNLL-2012 average score: 0.03442265795206972

