

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	93.91 %	61.43 %	73.68 %	95.73 %	19	211
B (رقم)	98.4 %	49.6 %	80.0 %	98.9 %	5	182
C (إسم معرف)	91.33 %	61.44 %	60.0 %	94.81 %	15	135
D (إضافة)	89.26 %	88.64 %	46.15 %	93.38 %	13	136
E (منعوت)	97.86 %	65.19 %	75.0 %	99.24 %	8	132
F (نعت)	78.44 %	51.66 %	57.14 %	80.39 %	14	153
G (حرف جر)	96.55 %	49.12 %	50.0 %	100.0 %	2	27
H (إسم مجرور)	78.57 %	56.75 %	0.0 %	88.0 %	3	25
I (وحدة قياس)	98.04 %	33.0 %	100.0 %	98.0 %	2	100
J (واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	18
K (فعل مبني للمجهول)	87.5 %	46.67 %	100.0 %	85.71 %	2	14
L (المفعول المطلق)	100.0 %	100.0 %	NULL	100.0 %	0	1
M (أداة عطف غير واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	8
.	99.49 %	33.25 %	NULL	99.49 %	0	394

Table 1: Performances for each tag using a first order HMM for fold 3

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	unknown words percentage
0	94.77 %	67.67 %	67.78 %	96.33 %	78	9.67 %
1	92.96 %	65.52 %	63.93 %	95.14 %	107	13.26 %
2	94.03 %	67.36 %	69.9 %	95.68 %	88	10.9 %
3	93.95 %	87.84 %	62.65 %	95.64 %	75	9.29 %
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

Table 2: Performances using a first order HMM for fold 3