

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	94.78 %	62.28 %	94.74 %	94.79 %	19	211
B (رقم)	99.47 %	49.87 %	100.0 %	99.45 %	5	182
C (إسم معرف)	93.38 %	92.28 %	60.0 %	97.06 %	15	136
D (إضافة)	87.33 %	86.67 %	53.85 %	90.51 %	13	137
E (منعوت)	90.65 %	88.13 %	37.5 %	93.89 %	8	131
F (نعت)	68.26 %	47.29 %	50.0 %	69.93 %	14	153
G (حرف جر)	100.0 %	100.0 %	100.0 %	100.0 %	2	27
H (إسم مجرور)	71.43 %	49.44 %	66.67 %	72.0 %	3	25
I (وحدة قياس)	98.04 %	49.5 %	100.0 %	98.0 %	2	100
J (واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	18
K (فعل مبني للمجهول)	81.25 %	29.89 %	100.0 %	78.57 %	2	14
L (المفعول المطلق)	0.0 %	0.0 %	NULL	0.0 %	0	1
M (أداة عطف غير واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	8
.	100.0 %	100.0 %	NULL	100.0 %	0	786

Table 1: Performances for each tag using a second 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	93.72 %	64.13 %	70.0 %	94.81 %	78	9.67 %
1	92.53 %	63.0 %	64.75 %	94.19 %	107	13.26 %
2	94.14 %	65.6 %	70.87 %	95.39 %	88	10.9 %
2	93.94 %	86.92 %	68.67 %	95.02 %	75	9.29 %
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

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