

tag	accuracy	f1 score	accuracy for unknown words	accuracy for known words	number of unknown words	number of known words
A (إسم)	96.24 %	63.91 %	72.73 %	97.52 %	11	202
B (رقم)	100.0 %	100.0 %	100.0 %	100.0 %	9	178
C (إسم معرف)	90.41 %	60.28 %	66.67 %	91.97 %	9	137
D (إضافة)	86.33 %	64.08 %	78.57 %	87.2 %	14	125
E (منعوت)	96.3 %	95.5 %	83.33 %	96.79 %	6	156
F (نعت)	64.44 %	42.92 %	50.0 %	65.66 %	14	166
G (حرف جر)	95.45 %	48.84 %	0.0 %	97.67 %	1	43
H (إسم مجرور)	66.67 %	47.44 %	52.63 %	80.0 %	19	20
I (وحدة قياس)	98.96 %	49.74 %	100.0 %	98.94 %	2	94
J (واو العطف)	96.15 %	49.02 %	NULL	96.15 %	0	26
K (فعل مبني للمجهول)	100.0 %	100.0 %	100.0 %	100.0 %	3	15
L (المفعول المطلق)	100.0 %	100.0 %	100.0 %	NULL	2	0
M (أداة عطف غير واو العطف)	100.0 %	100.0 %	NULL	100.0 %	0	1
.	100.0 %	100.0 %	NULL	100.0 %	0	784

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

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	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
Avg	-	-	-	-	-	-

Table 2: Performances using a second order HMM for fold 1