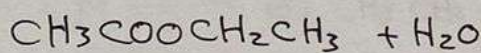
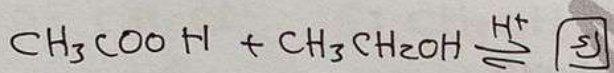
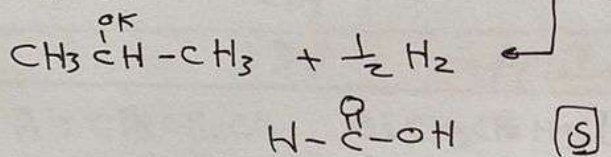
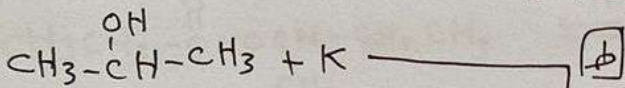
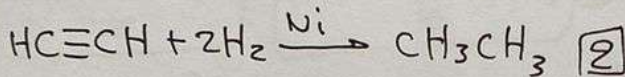
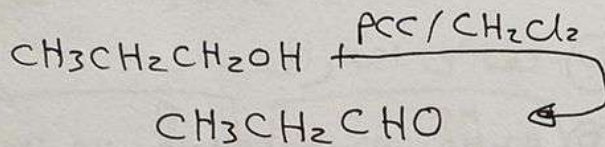
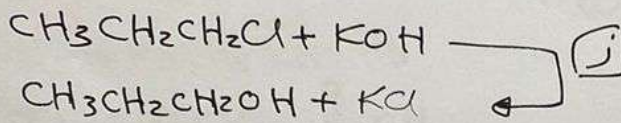


الكيمياء العضوية د. هاني السلاق

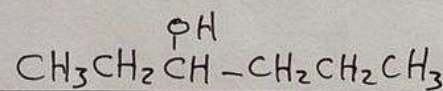
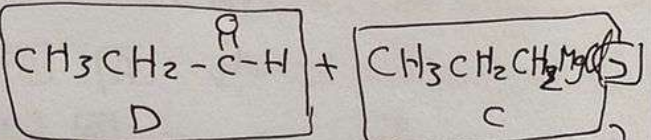
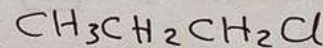
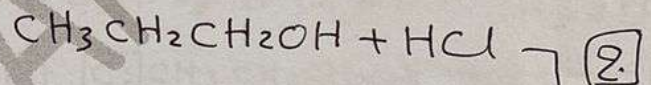
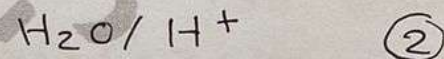
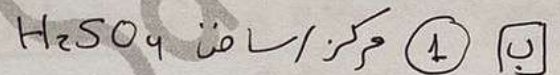
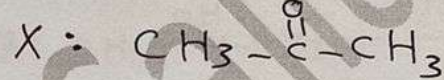
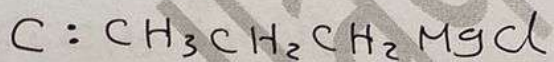
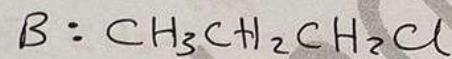
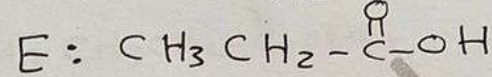
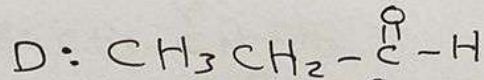
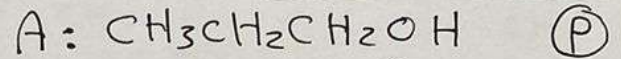
الممتاز في الكيمياء / حلول لدرس 2:

أ) $(CH_3CH_2CH_2Cl)$ فلان - محترق
تفاعل

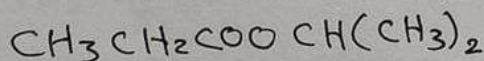
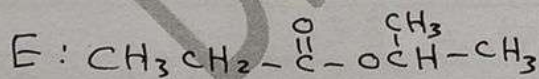
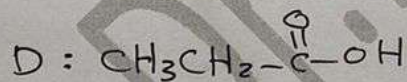
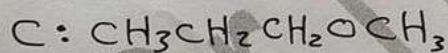
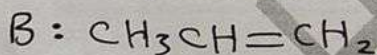
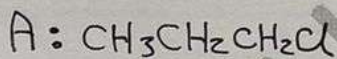


حلول أسئلة الكيمياء العضوية

الصفحة 134



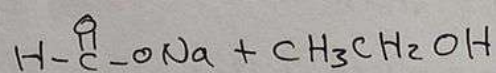
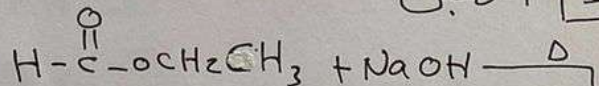
الصفحة 135



الصفحة 134

[3]-د [9]-ر [1]-ب [2]-P

التصبن [ه]



[و] بإضافة محلول (Br_2/CH_2Cl_2)

(البرتقالي المصفر) إلى $CH_2=CH_2$

ويزول اللون ويصبح شفاف

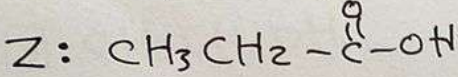
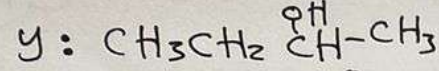
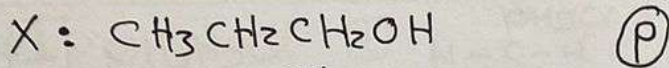
مع كل أمينا 2 الخس
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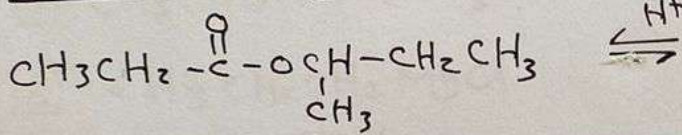
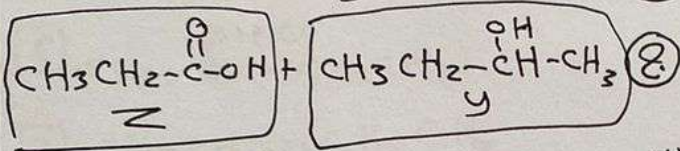
الممتاز في الكيمياء

6 صفحت 137

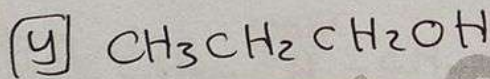
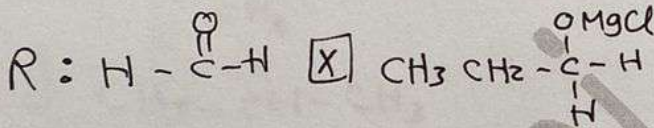
4 صفحت 135



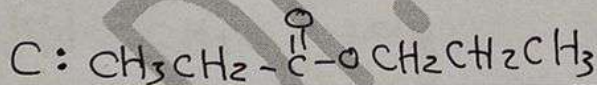
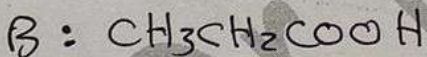
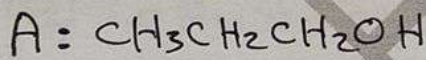
(B) تفاعل اختزال



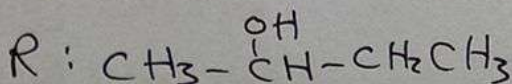
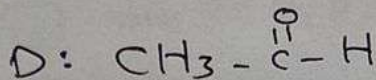
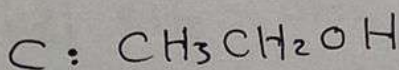
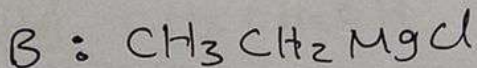
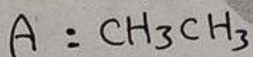
7 صفحت 137



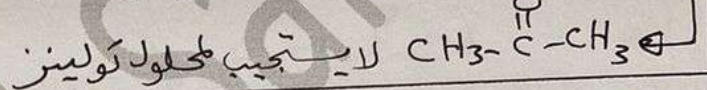
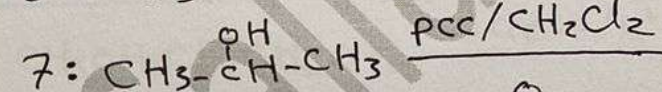
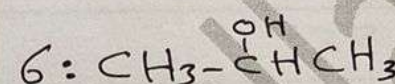
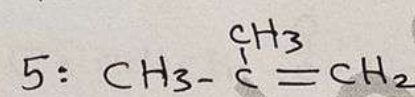
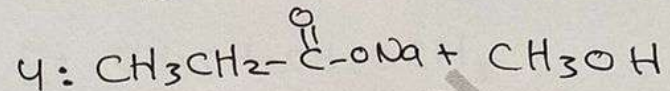
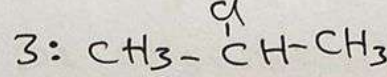
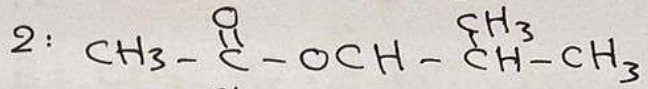
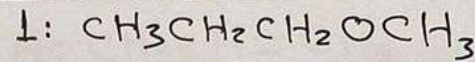
8 صفحت 137



9 صفحت 138

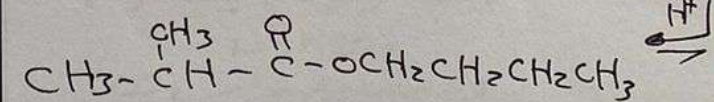
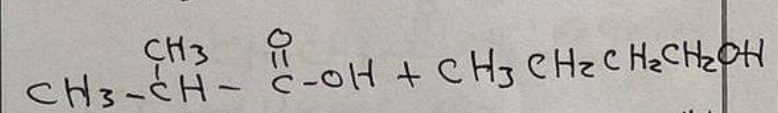
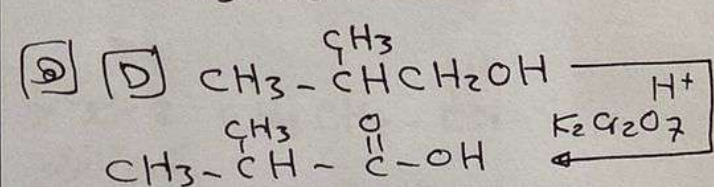
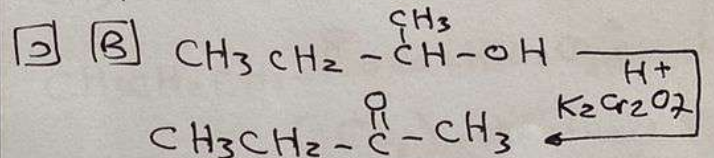
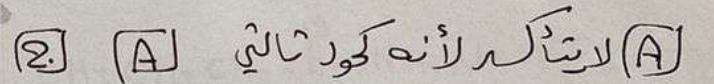
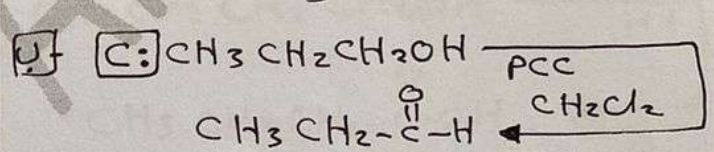


2



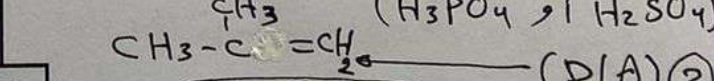
5 صفحت 136

(P): [A: كود ثاني] - [B: كود ثانوي]



(1) ظروف حدوث تفاعل الحذف في الكحول

تحت الكحول مع حمض المركز



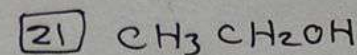
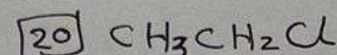
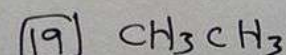
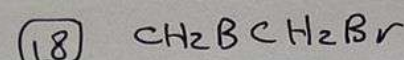
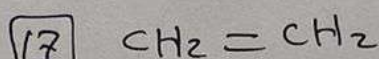
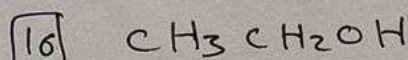
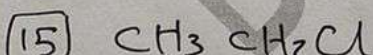
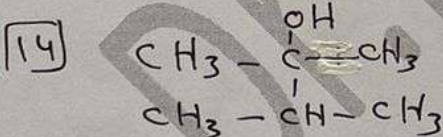
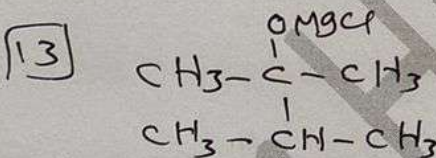
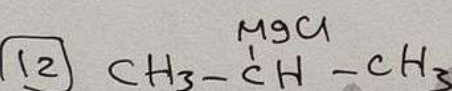
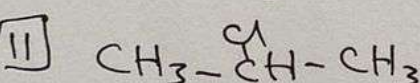
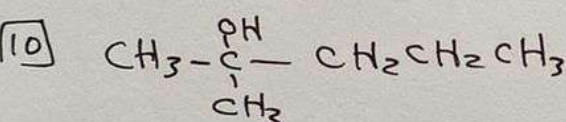
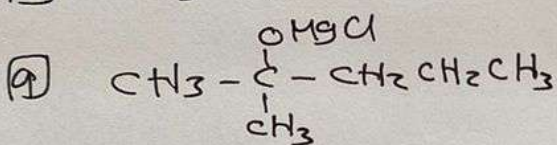
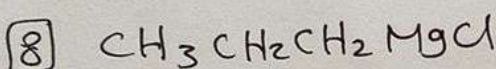
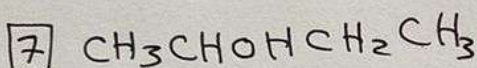
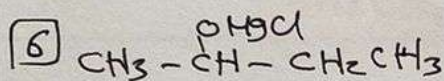
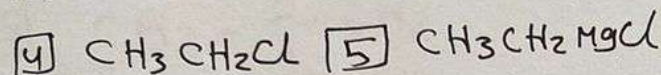
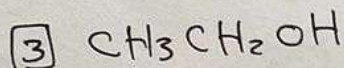
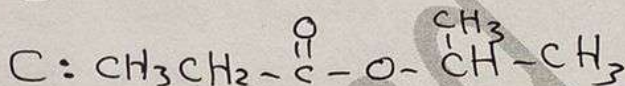
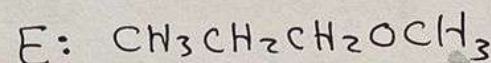
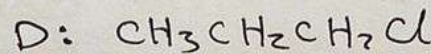
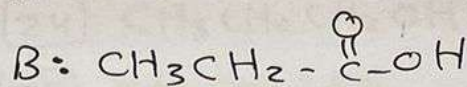
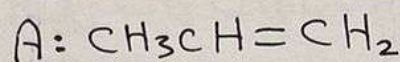
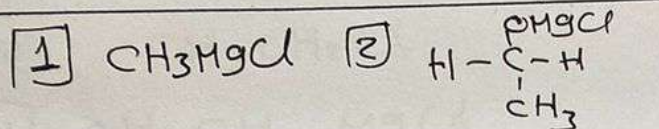
(D/A) (2) (3) المركب C

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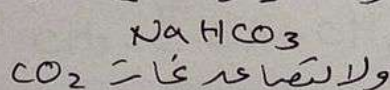
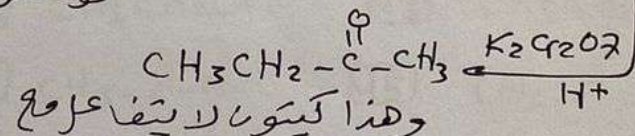
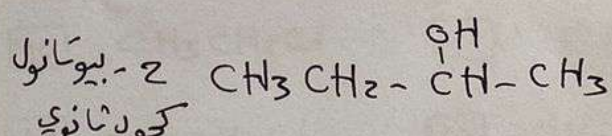
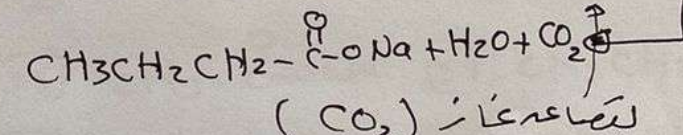
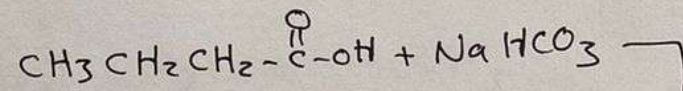
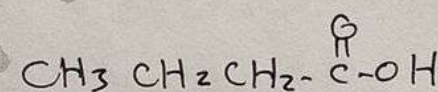
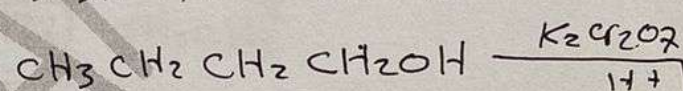
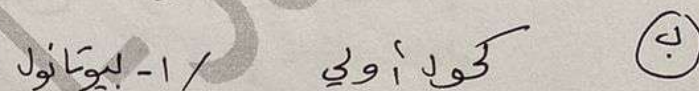
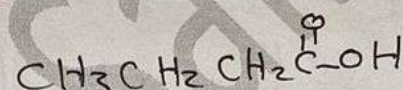
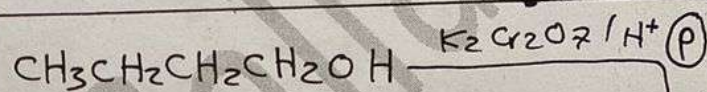
الممتاز في الكيمياء

1 صفحة 141

10 صفحة 138



11 صفحة 138



ملاحظة: عند استخدام (K₂Cr₂O₇/H⁺) في التأكسد وعند حدوث تآكل

يتغير لون المحلول من البرتقالي إلى الأخضر.

د. هاني السلاق

الممتاز في الكيمياء

