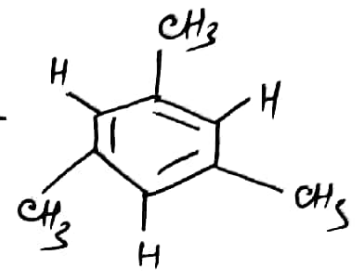
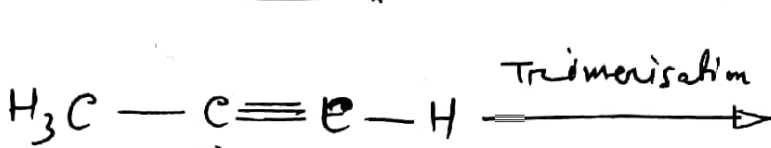


Solved Answer of Mock Test question

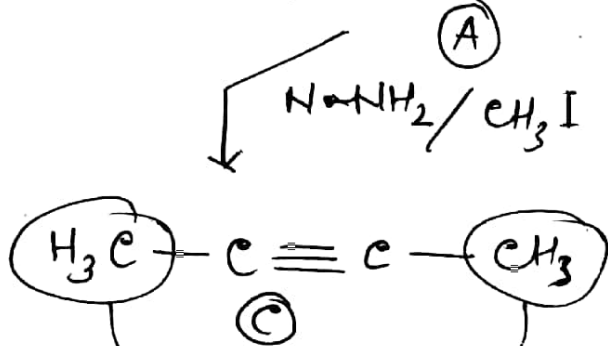
①

3. (b)



Two types of H's
 CH_3 H's = 9
 aromatic H's = 3.

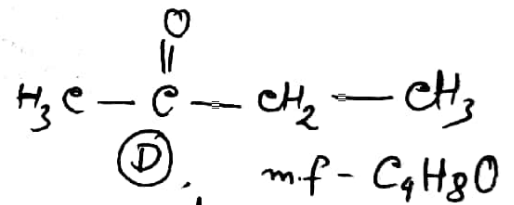
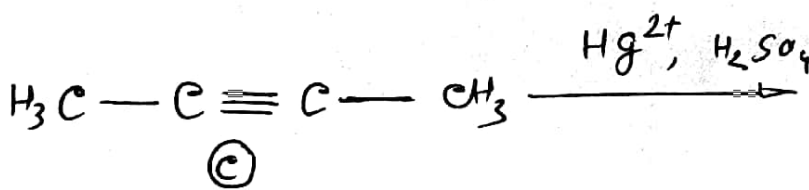
So, it shows 2 signals in the ratio 3:9 = 1:3.



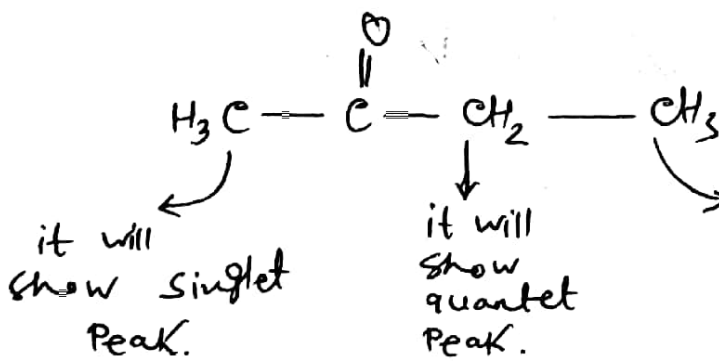
$\text{NaNH}_2 / \text{CH}_3\text{I}$

→ This H's are equivalent and shows a singlet (Peak with single line)

at δ - 2.1.



↓
it shows 3 type of Peak.



it will show quartet Peak.

$(3+1) = 4$
 quartet (i.e. peak of 4 lines).

no. of H's on adjacent carbon

it will show triplet

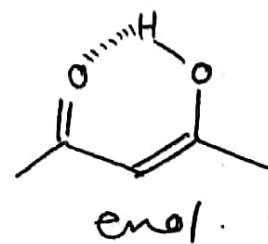
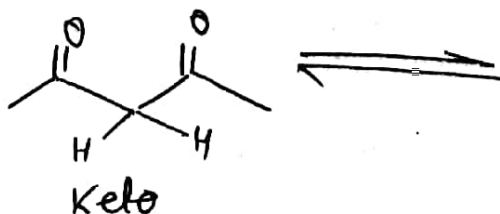
$(2+1) = 3$
 ↓
 no. of H's on adjacent carbon

→ a peak with 3 lines.

See book

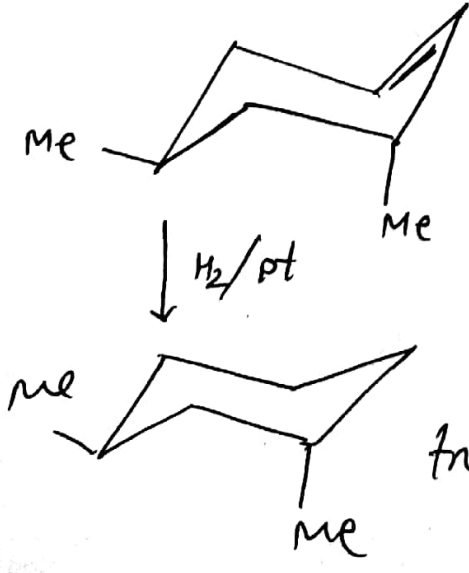
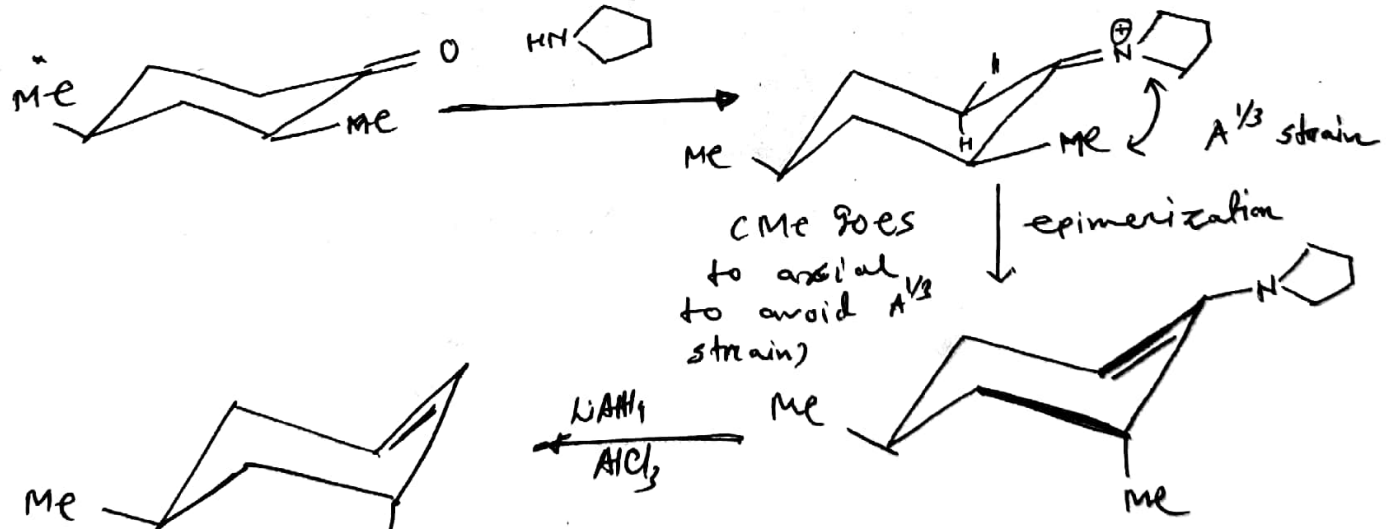
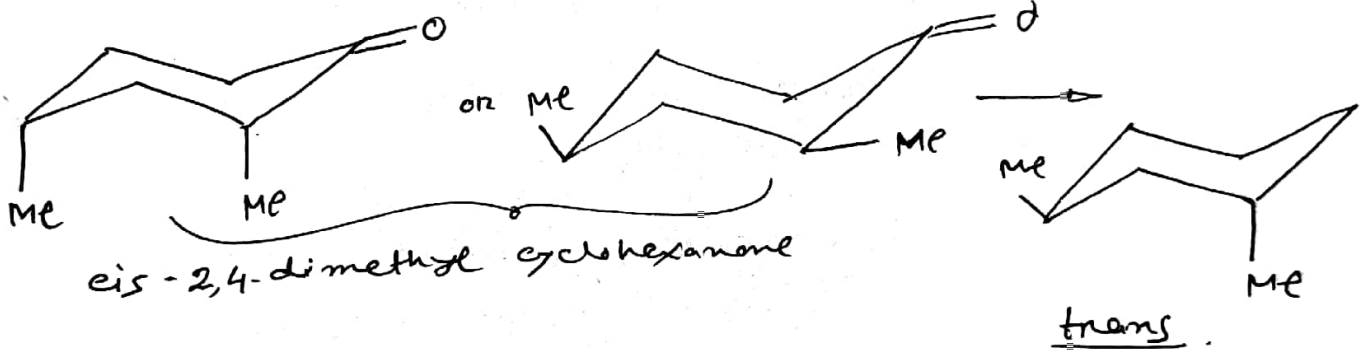
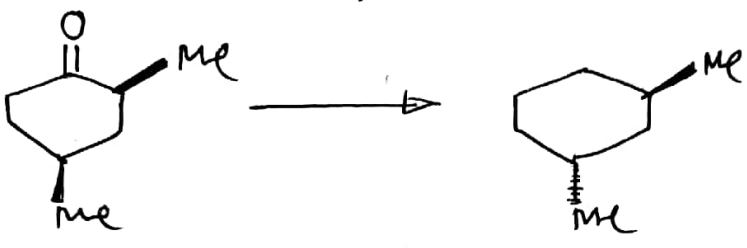
- 1) Temp.
- 2) solvent
- 3) pH.
- 4) substrate str. or substitution

8. (a)



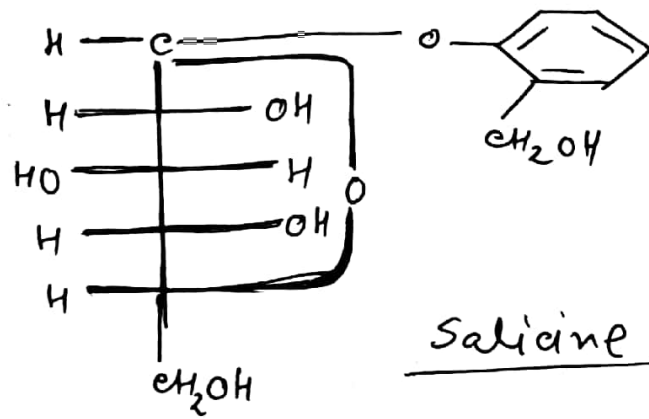
9. (c) Apply Cram's model and differentiate or categorise the group around chiral carbon as small, Large and medium (S) (L) (M)

(d) cis 2,4-dimethyl cyclohexanone to trans 1,3-dimethyl cyclohexane.



trans 1,3-dimethyl cyclohexane.

4. (c)



(3)

Salicine

(Now match all the observation given in the question.)

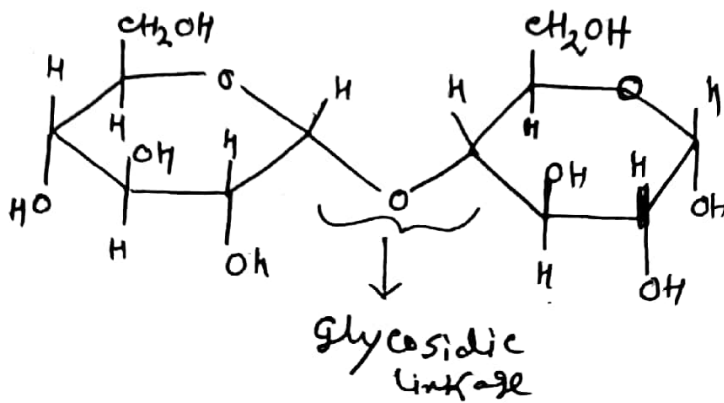
(i) \rightarrow Boat ^{MCQ}

(ii) D-arabinose/D-glucose and α - & β -D-glucose

6. (e)

Glycosidic linkage \rightarrow A ether

(-O-) linkage that joints two carbohydrate molecules that may be same or different. This bond or linkage is covalent in nature.



When the hemiacetal or hemiketal OH group of a saccharide and OH group of some other alcohol form a ether bond, that called glycosidic bond or linkage.

