

Practice Question Set For A-Level

Subject : Chemistry

Paper-2 Topic: Optical isomerism

Name of the Student: _____

Max. Marks : 26 Marks

Time : 26 Minutes

Mark Schemes

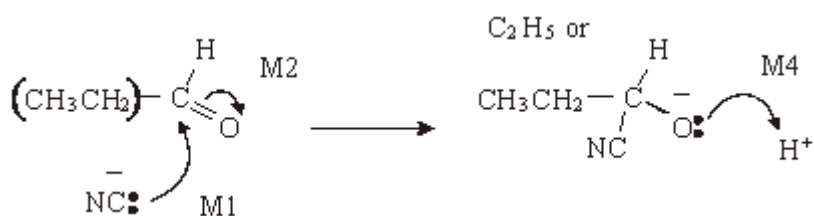
Q1.

D

[1]

Q2.

(a) nucleophilic addition;



1

M3 structure;

(be lenient on position of charge on CN-)

(M2 not allowed independent of M1,

but allow M1 for correct attack on C+

if M2 show as independent first.)

(+on C of C=O loses M2 but ignore $\delta+$ if correct)

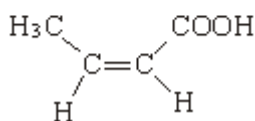
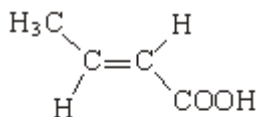
(M4 for arrow and lone pair (only allow for correct M3 or close))

4

(b) (i) 2-hydroxybutanoic acid

1

(ii)

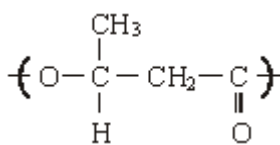


1

geometric(al) or cis-trans

1

(c) (i)



(one unit only) (ignore brackets or n) (trailing bonds are needed)

1

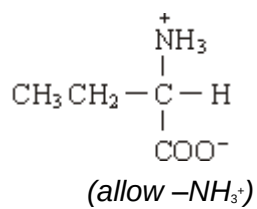
(ii) can be hydrolysed

OR

can be reacted with/attacked by acid/base/nucleophiles/H₂O/OH⁻;

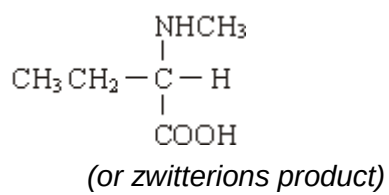
1

(d) (i)



1

(ii)



1

(iii) nucleophilic substitution;

1

[14]

Q3.
D

[1]

Q4.

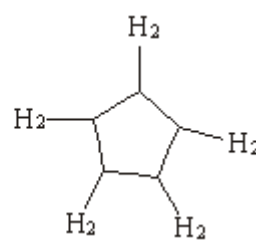
(a) **A** any C₅ alkene

1

B

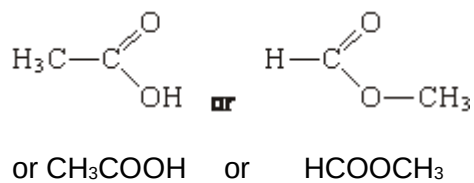


penalise



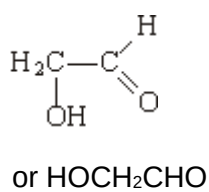
1

(b) **C**



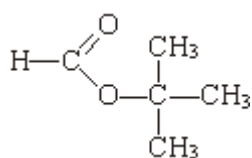
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D



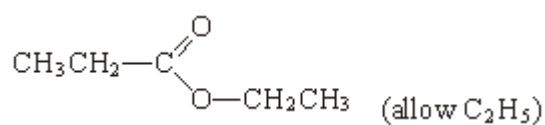
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(c) **E**



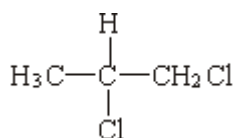
1

F



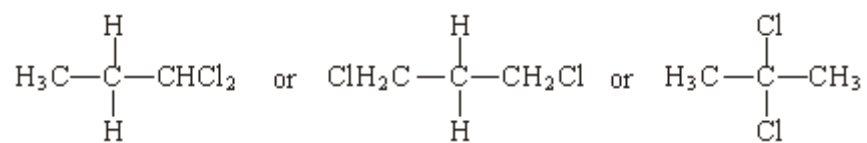
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(d) **G**



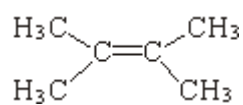
1

H



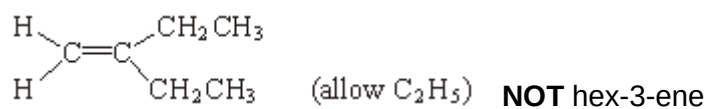
1

(e) I



1

J



1

[10]