

Name of the Student: _____

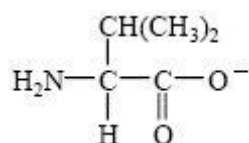
Max. Marks : 19 Marks

Time : 19 Minutes

Mark Schemes

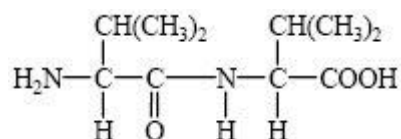
Q1.

(a) (i)



1

(ii)

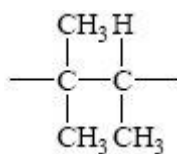


1

(iii) hydrogen bonding (do not allow H-bonding) QWC
do not penalise any error twice.

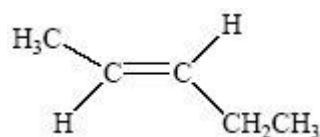
1

(b) (i)



1

(ii)

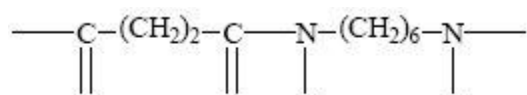


1

(iii) Isomer must be saturated or must not contain a double bond

1

(c)



2

(d) (i) heat/reflux with aq. NaOH

1

poly(alkene) is inert/ no reaction

1

polyamide is hydrolysed (or undergoes hydrolysis)
to form acid salt and alcohol QWC

1

(ii) e.g combustion

1

heat energy produced

1

toxic gases produced

1

[14]

Q2.

- (a) *polyamide or nylon (2,4)*

(allow nylon without numbers but if numbers are present they must be correct)

1

condensation

1

- (b) $\text{H}_3\text{N}^+ - \text{CH}_2 - \text{COO}^-$

1

- (c) *ionic bonding in aminoethanoic acid*

(can only score if includes that aminoethanoic is ionic)

1

stronger attractions than Hydrogen bonding in hydroxyethanoic acid

(e.g. stronger Hydrogen bonding in aminoethanoic acid scores 0)

(mention of electrostatic forces between molecules scores 0)

1

[5]