

Question 38 (Answer: B)

- Fertilisers supply the mineral ions a crop needs, so they increase the yield.
- They do nothing about weeds – weeds take up the extra nutrients too.
- Herbicides are what reduce competition from weeds, so only the yield reason is valid.

Question 38 (Answer: B)

- A monoculture grows one crop over a large area, so it can be sown and harvested by machine.
- That makes it efficient and gives a high yield.
- The disadvantages are the *opposite* of the other options – less biodiversity and more disease risk.

5(a)	<i>any three from:</i> 1 less land required / AW, (than extensive farming) ; 2 (so) fewer trees cut down / less deforestation ; 3 more land available for named use ; 4 improved <u>yield</u> ; 5 more efficient named farming practice ; 6 cheaper (named), products / food / meat / milk ; 7 idea of consistent, quality / growth, of product ; 8 increased food security ; 9 (increased) profits (for farmer) ; 10 AVP ;
5(b)	<i>any two from:</i> treat / prevent, (spread of) bacterial, disease / infection ; caused by close proximity / overcrowding / AW ; AVP ;
5(c)(i)	D and F ;
5(c)(ii)	54 ;;;

5(c)(iii)

any four from:

- 1 *ref. to* (resistance due to) mutation ;
- 2 antibiotics kill non-resistant bacteria / resistant bacteria survive ;
- 3 (resistant bacteria / bacteria that survive the antibiotic) reproduce ;
- 4 passing on alleles (for resistance) ;
- 5 *idea that* over time this increases, the proportion of population of bacteria that is resistant / frequency of resistant allele ;
- 6 *ref. to* natural selection ;
- 7 **AVP** ;

Question 39 (Answer: D)

- Larger fish are the mature adults that have already had a chance to breed.
- Leaving the smaller, younger fish lets them grow and reproduce first.
- That keeps the breeding population going, which is what makes the harvest sustainable.

Question 39 (Answer: D)

- A monoculture is a single species grown over a large area.
- One crop supports far fewer other species, so biodiversity *falls*.
- It also encourages pests, so more insecticide is needed rather than less.