

Communities and interdependence: practice questions

5 questions • 12 marks • mark scheme at the back

For Edexcel GCSE Biology 1BI0 and Combined Science 1SC0. **Triple only** is not in Combined Science. **Higher tier** is only on the Higher paper.

Name

Total / 12

1 All the individuals of one species living in the same area are called a [1 mark]

- A. ☐ community
- B. ☐ population
- C. ☐ ecosystem
- D. ☐ habitat

2 State two abiotic factors that can affect a community. [2 marks]

3 Two species of plant in a meadow need the same resources. Explain how competition between them could affect the number of each species. [3 marks]

4 Explain why the organisms in a community are said to be interdependent. [2 marks]

5 Compare parasitism and mutualism. Give one example of each.

[4 marks]

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Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [1]

B population (1)

2. [2]

- temperature (1)
- light (1) allow light intensity
- water (1) allow water availability
- pollutants (1)
- Max 2

3. [3]

- both need the same limited resources, such as light, water or mineral ions (1)
- the better adapted species gets more of the resources, so grows and reproduces more (1)
- so the number of the other species decreases (1)

4. [2]

- organisms depend on other species for food / shelter / pollination / seed dispersal (1)
- so a change in the number of one species affects other species in the community (1)

5. [4]

- in parasitism the parasite benefits and the host is harmed (1)
- in mutualism both organisms benefit (1)
- parasitism example: tapeworm in human gut / flea on dog / any correct parasite (1)
- mutualism example: nitrogen-fixing bacteria in root nodules of legumes / cleaner fish / any correct example (1)