Solutions

Marking: **M1** a correct method, **A1** the correct answer, **B1** an independent mark.

Each answer shows the steps, then the **result**.

2.1

economic: e.g. pollination of crops, tourism income, new medicines; ethical: e.g. every species has a right to exist / duty to future generations

2.2

(i) 100 km^2: larger populations and more habitats; (ii) round: less edge for the same area; (iii) with a corridor: animals can move, find mates and recolonize

3.1

(a) species-based: captive breeding and release / bans on hunting and trade; habitat-based: a network of nature reserves and replanting of bamboo forest

(b) it is popular and appealing, so it attracts public attention and money; protecting its forest habitat also protects many other species there

3.2

award up to [5]: strengths: fish and reef species recover inside the zone; larger fish spill over into fished areas, so catches nearby can rise; protects the whole community, not one species; limitations: cannot stop warming or acidification; fishing communities lose access, so the MPA needs their support and enforcement; conclusion for the case, e.g. effective if well enforced and linked to local incomes such as tourism

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