Solutions

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

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

2.1

pollution that starts in one country and crosses a border to harm another; e.g. smoke from forest fires in Indonesia (2015) covering Singapore and Malaysia / acid rain / river pollution flowing downstream

2.2

$0.03 \times 88 \approx \mathbf{2.6}$ trillion dollars; factories, flights and supply chains link countries, so closures in one place stopped production and trade in others

2.3

a narrow point on a major route through which a large share of trade must pass; e.g. the Suez Canal (blocked for six days in 2021) / the Strait of Malacca / the Strait of Hormuz

2.4

almost every country agreed to phase out the gases (CFCs) that damage the ozone layer; there were substitutes, so the cost of change was low; measurements show the ozone layer is slowly recovering, so the risk of harm from UV radiation is falling

2.5

any two, explained: buy from several suppliers in different countries, so one disaster or blocked route does not stop production; keep stockpiles of key goods, e.g. medicines, chips, grain, to cover a short shock; make more key goods at home or nearby, so long, fragile routes are less important; map the supply chain, so weak points are found before a crisis

3.1

Mark with the markbands: [13-16] a sustained argument, detailed examples at more than one scale, the concepts of the guide (power, places, processes, possibilities) used, a balanced and well-supported judgement; [9-12] a clear argument with examples and some evaluation; [5-8] relevant knowledge, mostly description, a weak judgement; [1-4] little that is relevant. Points that may be included: increases risk: COVID-19 spread along flight routes and cut world GDP by about 3 % in 2020; the 2008 crisis started in the US housing market and spread to banks everywhere; chokepoints: the Suez Canal blockage (2021) delayed trade worldwide for weeks; transboundary pollution: Indonesian fire smoke (2015) harmed health in Singapore and Malaysia; cyber attacks travel through the same networks; builds resilience: the same links let vaccines be developed and shared in under a year; international agreements such as the Montreal Protocol solved a global risk; trade lets a country import food after a bad harvest instead of facing famine; remittances (about US$650 billion a year) support families after disasters; scale and places: rich, well-connected places recover faster; poor places are exposed but have less capacity; judgement: interconnection spreads shocks faster, but also gives the tools to recover; whether risk or resilience wins depends on cooperation and on each place's capacity