

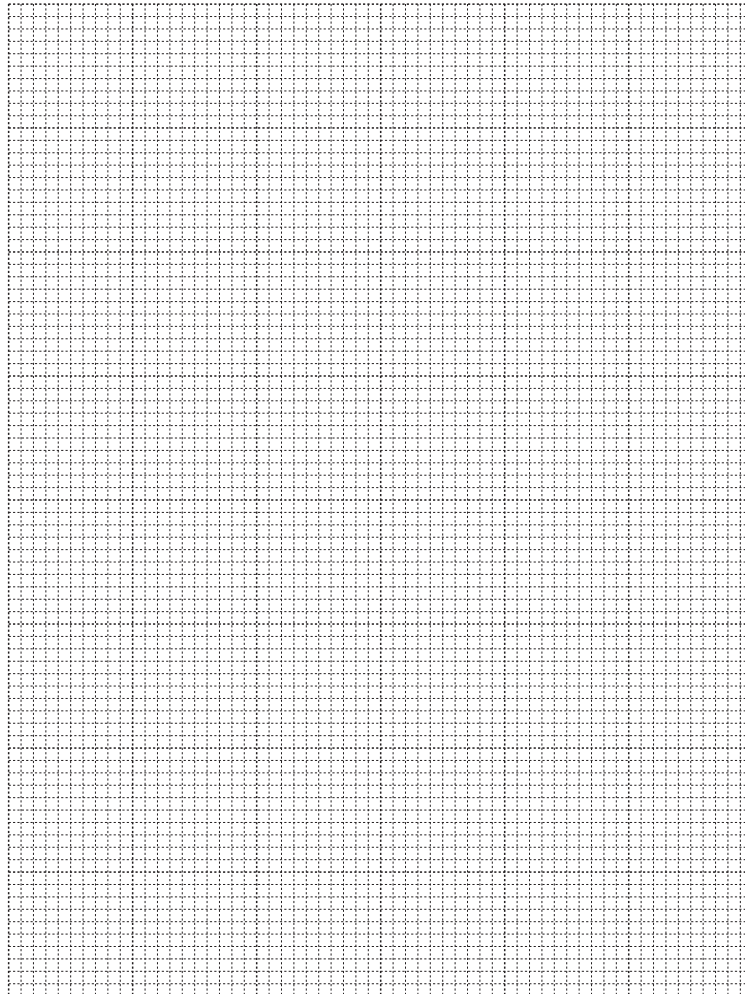
Section A

Answer **both** questions in this section.

- 1 The table shows the estimated populations of Atlantic cod and green sea urchins in an area of the Atlantic Ocean around New England from 1980 to 2010.

year	estimated population / thousand	
	Atlantic cod	green sea urchins
1980	157	0
1985	139	0
1990	142	12
1995	116	59
2000	117	64
2005	98	14
2010	54	8

- (a) (i) Plot a graph to show the populations of Atlantic cod and green sea urchins from 1980 to 2010.



- (ii) Calculate the percentage decrease in population of Atlantic cod between 1980 and 2010.
Show your working.

..... [2]

- (iii) The population estimates were based on the catches of fishermen.
Suggest **one** reason why this estimate may be inaccurate.

.....
..... [1]

- (c) The blue crab is restricted to estuarine conditions. The mussel is restricted to marine conditions.

Use the information in Fig. 2.1 to explain each of these ecological distributions.

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.....[2]

[Total: 7]

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