

- 14 The rise and fall of water level in a harbour is simple harmonic with a period of 12.5 hours. The depth of water varies between 1.0 m at low tide and 3.0 m at high tide. A boat which requires a minimum depth of water of 1.5 m approaches the harbour at low tide.

How long will the boat have to wait before entering the harbour?

- A** 1.0 hours **B** 1.1 hours **C** 2.0 hours **D** 2.1 hours

