Mark schemes

Q1.

(a) bacteria

1

(b) any **two** from:
   • bacteria increase **before** protozoa increase
      or
      when bacteria are high, protozoa increase
         *allow protozoa increase **after** bacteria increase*

   • as protozoa increase, bacteria decrease

   • (after site **A**) as bacteria decrease, protozoa also decrease
         allow when bacteria are low, protozoa are low

2

(c) (aerobic) respiration
         *do **not** accept anaerobic respiration*

1

(d) (algae carry out) photosynthesis

1

   (which) produces oxygen
         allow algae produce oxygen

1

(e) bars plotted correctly
         allow a tolerance of ± ½ a small square
         ignore column widths

1

   suitable shading

1

(f) more sludge worms at **A** (than at **B)**
         *allow fewer sludge worms at **B** (than at **A**)*
         *allow high number of sludge worms at **A** and low
         number at **B***

1

   no mayfly nymphs at **A** and mayfly nymphs present at **B**
         *allow more mayfly nymphs at **B** (than at **A**)*

1

         answers must be comparative

[10]