

Name of the Student: _____

Max. Marks : 16 Marks

Time : 16 Minutes

Mark Schemes

- Q1.
- (a) (temperature) thermometer or temperature probe / sensor 1
- (oxygen concentration) oxygen probe / sensor / meter 1
- (b) (i) 13 (arbitrary units)
allow values in the range 12.5 – 13.5 1
- (ii) the greater the concentration of oxygen the faster the rate of decay 1
- (c) line drawn below line on graph following similar pattern
line starts at 0% oxygen concentration and from 0 – 3 arbitrary units 1
- (d) microorganisms / bacteria / fungi
accept any correct organism
allow decomposers / detritivores or named example e.g. worms 1
- plants
allow crops or named plants 1
- respiration 1
- [8]

Q2.

A – respiration

ignore breathing

1

B – feeding / eating

allow consumption / ingestion / feeds

ignore nutrition / food

*do **not** accept digestion*

1

C – photosynthesis

1

D– combustion / burning

1

[4]

Q3.

- (a) (i) photosynthesis
allow phonetic spellings

1

- (ii) respiration
allow phonetic spellings
ignore breathing / decay

1

(b) any **two** from:

- burn / use less fossil fuels
or
reduce industrial processes
or
use cars less
allow cycle / use buses / walk / trains / public transport
allow stop for reduce in all cases
- reduce deforestation
accept named example
or
plant more trees
allow plants
- use alternative sources of energy
accept solar / wind / nuclear / hydroelectric / wave / tidal / geothermal
ignore renewable / biomass
- trap CO₂ in sedimentary rocks / underground / under sea
or
carbon capture / CCS
- rear less cattle / animals
allow eat less meat
allow reduce growth of human population
ignore reduce the human population

2

[4]