Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B2 Organisation

Merit Minds
www.merit-minds.com
Exam Preparation and Free Resources

Name of the Student:_____
Max. Marks : 26 Marks **Time : 26 Minutes**

Mark Schemes

Q1.

(a) no oxygen (reacting with the glucose)
ignore there is no air
1

(b) produces ethanol / alcohol
1

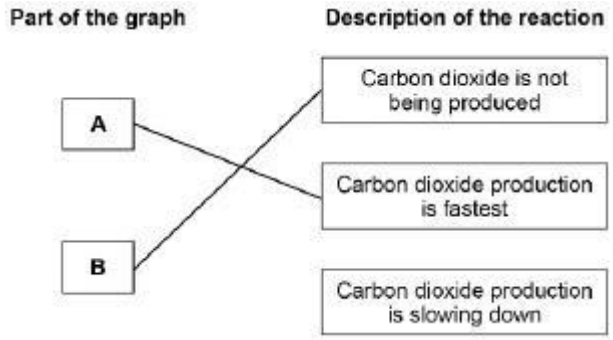
(c) produces carbon dioxide / gas
1

(which) makes the bread / dough rise
*allow idea related to making the bread lighter **or** affecting its texture*
1

(d) 45 (cm^3)
1

(e) to allow time for the mixture to reach 35 °C
1

(f)



do **not** accept more than one line from a box on the left
1
1

(g) any **one** from:
- glucose / sugar / food ran out
- ethanol / alcohol killed the cells / yeast

ignore yeast / cells died unqualified
ignore produced ethanol / alcohol unqualified
1

(h) (2 °C) too cold (for enzymes / yeast to work)

Downloaded from www.merit-minds.com

allow yeast / enzyme was inactive

ignore yeast killed

allow no / few successful collisions

*do **not** accept enzymes are denatured*

1

(75 °C) enzymes denatured

allow enzymes destroyed

allow description eg change in shape of active site or of enzyme

allow yeast killed

*do **not** accept enzymes killed ignore references to collisions unqualified*

1

(i) glucose → lactic acid

***1** mark for each chemical must be in this order ignore formulae*

2

[13]

Downloaded from www.merit-minds.com

Q2.

(a) eat less fatty food

1

(b) any **two** from:

- strengthens muscles
  - *ignore references to losing weight / mass*
  - *ignore references to immediate effects of exercise on body eg increases heart rate*
  - *ignore makes you healthier*
  - *allow makes you stronger*
  - *allow improves stamina*
- strengthens heart (muscle)
  - *allow keeps your heart healthy*
- reduces risk of (coronary) heart disease / CHD / cardiovascular disease
  - *allow reduces (blood) cholesterol*
  - *allow improves circulation*
- reduces blood pressure
- reduces risk of (Type 2) diabetes
- improves mental health / mood
- improves mobility
  - *allow strengthens bones*
  - *allow boosts immunity*
  - *allow reduces risk of (some) cancers*
  - *allow makes you fitter*
  - *ignore improves a person's appearance*

2

(c) glucose + oxygen → carbon dioxide + water

1

(d) C

1

(e) any **two** from:

- lowest / lower resting breathing rate
  - *statements must be comparative*
- lowest / lower breathing rate after exercise
- lowest / lower increase in breathing rate
- least amount of time for breathing rate to return to resting rate
  - *allow less time for breathing rate to return to resting rate*
  - *allow shortest recovery time*

2

(f) any **two** from:

- only based on one measurement
- person B may have done less intense exercise

Downloaded from www.merit-minds.com

allow person B may have done a different type of exercise

- other factors (besides breathing rate) indicate fitness
  eg stamina / strength / speed
  allow age / sex / body mass may not have been controlled
  ignore references to medical conditions

2

(g) deeper breathing
allow heavier breathing
ignore breathing rate increases

1

increased heart rate
allow blood flows faster
ignore more blood flows around body
allow increased (body) temperature
allow (increased) sweating
allow increased blood flow to skin
*do **not** accept lactic acid is produced 1*

1

(h) oxygen
word takes precedence
allow O_2
ignore O / O^2

1

lactic acid

1

[13]

Downloaded from www.merit-minds.com