IGCSE Biology: **w25 21**

Question 19 (Answer: **C**)

- In human muscle, anaerobic respiration converts glucose into lactic acid only.
- No carbon dioxide and no water are produced – that is the yeast pathway and the aerobic pathway respectively.
- So lactic acid is the only product listed that is formed.

IGCSE Biology: **w25 22**

Question 17 (Answer: **B**)

- Lactic acid is produced in the muscles during vigorous exercise, when oxygen runs short.
- It is then carried in the blood to the liver.
- There it is broken down using the oxygen taken in during the recovery period.

IGCSE Biology: **w25 42**

6(a)	20 ; 90 ; muscles / blood ; debt ; liver ; oxygen ; aerobic ;
6(b)(i)	liver ;
6(b)(ii)	kidney ;
6(c)	$C_6H_{12}O_6 \rightarrow$; $2C_2H_5OH + 2CO_2$;
6(d)	bread / **AVP** ;

IGCSE Biology: **s25 22**

Question 22 (Answer: **B**)

- Vigorous exercise makes the muscles respire anaerobically, producing lactic acid.
- The lactic acid is carried in the blood to the liver.
- Faster, deeper breathing supplies the extra oxygen needed to break it down there.

IGCSE Biology: **s25 23**

Question 20 (Answer: **A**)

- Vigorous exercise outstrips the oxygen supply, so muscles respire anaerobically and make lactic acid.
- That creates the oxygen debt – the oxygen still needed to deal with the lactic acid.
- Faster, deeper breathing afterwards supplies that oxygen, so the lactic acid can be broken down.

IGCSE Biology: **m25 22**

Question 19 (Answer: **C**)

- Aerobic respiration of one glucose gives six molecules of carbon dioxide.
- Anaerobic respiration in yeast gives only two, plus ethanol.
- So aerobic respiration produces $6 - 2 = 4$ more.