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Practice questions created by actual examiners and assessment experts

Detailed mark scheme

Suitable for all boards

Designed to test your ability and thoroughly prepare you

Level: IGCSE Oxford AQA Biology (9201) Subject: Biology Topic: IGCSE AQA Biology Type: Mark Schemes

> To be used by all students preparing for IGCSE Oxford AQA Biology (9201) Students of other Boards may also find this useful

Biology

IGCSE AQA

Key skills



1

1

1

1

1

1

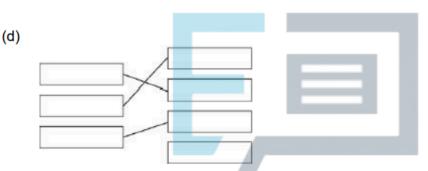
Mark schemes



(a) to allow implantation of the embryo

- (b) oestrogen
- (c) 13 / 14 / 15 / 16

allow any number in range 13 to 16 allow any range within these values e.g. 14–16



extra line from a method cancels the mark



(e) more reliable than diaphragm / spermicidal cream

allow fewer pregnancies than diaphragm / spermicidal cream

low chance of pregnancy

allow only 1 more pregnancy than the pill (per 100 women per year) allow almost as good as the pill

allow reference to one named example



		no side effe	ects					
			allow easy	to get / buy				
			allow easy	to use				
			allow preve HIV	ent / reduce spr	ead of STDs / gonorrl	hoea /		
			ignore cost	t				
							1	101
								[9]
2.	(a)	pancreas					1	
	<i>a</i> ,							
	(b)	liver 1						
		glycogen						
								1
		in this orc	ler					
	(C)	would be o	digested / b	roken down (b	y enzymes / proteas	e / pepsin / acid or to amino		
	-	acids)						
	E	XAI	allow den	atured (by acid	#RS PF	RACTICE		
								1
	(d)	use of 14.	2 and 6.8					
								1
		7.4						
		T.T	allow an	answer of 7 2 /	or 7.3 (using 14.1 an	d / or 6 9)		
			for 1 mar					
				-				1



- (e) any one from:
 - (person A's) results are higher
 ignore A peaks at a higher level than B
 - (A) increases for a longer time or peaks later
 - (A) takes longer to decrease or takes longer to return to normal allow other correct comparisons allow a description using pairs of figures from graph at a given time

allow converse comparisons with person B as the subject

1

1

1

1

[10]

1

(f) a negative correlation

(g) less carbohydrate / sugar / fat in diet allow go on a diet allow eat less allow balanced / healthy diet

or

lose weight or maintain a healthy weight ignore diet unqualified

(more) exercise

allow examples of exercise

3. ^(a) A

(b) E



	(c)	28 allow 27–29					
	(d)) progesterone					
	(e)	any two from:					
	•	inhibits FSH production / release					
	•	prevents egg maturation allow prevents egg growth					
	•	prevents ovulation allow prevents egg release ignore prevents egg production					
	(f)	oestrogen 1					
4.		testosterone allow in this order only					
	(a)	 A chemical messenger a (chemical) messenger or an organic substance allow correct named example – e.g. protein / modified amino acid / catecholamine / steroid made by the endocrine system / an endocrine gland / endocrine organ allow made by / released from a (ductless) gland affects (a) specific / target organ(s) / tissue(s) 	[8]				
		 released into the blood allow carried by the blood 3 					
	(b)	insulin and glucagon both required for 1 mark correct spelling only for glucagon 1					



(c) Level 2 (3-4 marks):

Relevant points (reasons / causes) are identified, given in detail and logically

linked to form a clear account.

Level 1 (1-2 marks):

Relevant points (reasons / causes) are identified, and there are attempts at logically linking. The resulting account is not fully clear.

No relevant content (0 marks)

Indicative content

5.

(0-0.5 h:) glucose from meal enters blood or increase in blood glucose (to 6.5 mmol / dm³) glucose detected by pancreas pancreas secretes insulin (insulin causes) glucose to move (out of blood) into cells / liver liver converts glucose to glycogen causing a fall in blood glucose (after 0.5h) low blood glucose (< 5.0 mmol / dm³) detected by pancreas pancreas releases glucagon liver converts glycogen to glucose (which enters blood) blood glucose rises (after 1 h or to 5.2 mmol / dm³ (at 1.5 h)) [8] A – pituitary (a) 1 B – adrenal 1 (b) ovary 1 (c) diaphragm allow phonetic spelling 1 (d) condom 1



(e) Level 2 (3–4 marks):

A detailed and coherent evaluation is provided which considers a range of advantages and disadvantages and comes to a conclusion consistent with the reasoning.

Level 1 (1–2 marks):

An attempt to describe the advantages and disadvantages is made, which may not come to a conclusion. The logic may be inconsistent at times.

0 marks:

No relevant content.

Indicative content

advantages of the plastic IUD:

- is effective for longer than the copper IUD
- does not need to be replaced as often as the copper IUD
- although the pain of periods are more severe, the pain with the copper IUD is likely to be worse
- can reduce the bleeding during a period
- most of the possible side effects are not serious, eg feeling sick, acne and headaches.

disadvantages of the plastic IUD:

- needs to be implanted for a period of time before it is effective ie not emergency
- contraception
- can make the pain of period more severe
- can cause more side effects than the copper IUD

AF

can cause some more severe side effects such as cysts on the ovaries

an understanding that the side effects are only possible and may not necessarily occur

additional examiner guidance:

- pupils should add value to the points in the table and should not just be copies verbatim
- credit can also be given for other correct advantages and disadvantages from the candidates' own knowledge and understanding
- allow converse points if clearly made

4



6.	(a)	(i)	follicle stimulating hormone / FSH	1
		(ii)	oestrogen	1
	(b)	(i)	 any one from: to help them have a baby / get pregnant ignore to make them fertile to stimulate egg production / release / maturation own levels of FSH / LH / hormone (too) low allow to increase hormone / FSH / LH levels do not allow to increase oestrogen levels 	1
		(ii)	through the bloodstream	1
	(c) o	estrog	jen	1
		pro	ogesterone	1
	E	X	AM PAPERS PRACTICE	1 [6]