

# Puberty and Menstrual Cycle MS

## QUESTION 1

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	pituitary		1
b)	ovary		1
Total marks			2

## QUESTION 2

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	any one from: chemical messenger / message chemical / substance produced by a gland chemical / substance transported to / acting on a target organ chemical / substance that controls body functions	allow substance / material which is a messenger allow material produced by a gland	1
a)ii)	gland / named endocrine gland	brain alone is insufficient allow phonetic spelling	1
a)iii)	in blood / plasma or circulatory system or bloodstream	accept blood vessels / named do not accept blood cells / named	1
b)	FSH stimulates oestrogen (production) / egg maturation / egg ripening  oestrogen inhibits FSH  LH stimulates egg / ovum release / ovulation	each hormone must be linked to correct action apply list principle ignore the gland producing hormone ignore production / development of egg allow oestrogen stimulates LH / build up of uterine lining  accept LH inhibits oestrogen accept LH controls / stimulates growth of corpus luteum ignore production of egg	1  1  1
Total marks			6

## QUESTION 3

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a	any four from: ✗ cells used to treat diseases do not go on to produce a baby ✗ produces identical cells for research ✗ cells would not be rejected ✗ allow cells can form different types of cells ✗ (immature) egg contains only genetic information / DNA / genes / chromosomes from mother or there is only one parent ✗ asexual / no mixing of genetic material / no sperm involved / no fertilisation or chemical causes development ✗ baby is a clone ✗ reference to ethical / moral / religious issues ✗ risk of damage to the baby	allow ethically wrong NB cloning is illegal gains 2 marks  ignore unnatural in correct context	4
Total marks			8

#### QUESTION 4

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
----------	--------	-------------------	-------

a)i)		<p>mark each line from left hand box</p> <p>two lines from left hand box</p> <p>cancels mark for that box</p>	3
b)i)	implant		1
b)ii)	any one from: lasts for 5 years / long(est) cannot forget to take / replace it / lose it (hormone) there all the time	<p>allow explanation for their method in (b)(i)</p> <p>ignore expense</p> <p>ignore STDs</p> <p>ignore side effects</p>	1
b)iii)	any one from: needs surgery / operation painful  infection have to wait five years for a child or more difficult to have a change of mind	<p>accept correct disadvantage for wrong method in 5bi</p> <p>allow it could go wrong</p> <p>ignore expense</p> <p>ignore STDs</p> <p>ignore side effects</p>	1
Total marks			6

### QUESTION 5

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	ovaries / ovary	allow placenta	1
a)ii)	any one from: •inhibits follicle stimulating hormone / FSH production • inhibits maturation of eggs	<p>ignore ref to site of production of FSH</p> <p>allow stimulates LH production or stimulates preparation of womb lining</p>	1
a)iii)	any one from: stimulate muscle growth • used in (oral) contraceptives		1
Total marks			3

