

## Assessment Schedule

### Human Biology: Describe functioning of the human reproductive system (90179)

#### Evidence Statement

Question	Evidence Contributing to Achievement	Evidence Contributing to Achievement with Merit	Evidence Contributing to Achievement with Excellence
ONE (a)	Names <b>AND</b> describes process, eg  Ovulation <b>AND ONE</b> of <ul style="list-style-type: none"> <li>• follicle/ ovary released egg</li> <li>• follicle ruptures.</li> </ul>		
(b)  (i)  (ii)	Names hormone <b>AND</b> describes its function, eg  Progesterone <b>AND one of:</b> <ul style="list-style-type: none"> <li>• maintains thickened uterus lining / endometrium</li> <li>• helps uterus lining/ endometrium to thicken <b>more</b>.</li> </ul>		
TWO (a)	Oviduct/ fallopian tube.		
(b)	Describes fertilisation, eg:  <ul style="list-style-type: none"> <li>• egg and sperm fuse/ join/ unite (<b>not meet</b>)</li> <li>• sperm head enters/ penetrates egg.</li> </ul>		
THREE (a)	Recognises idea of lower temperature required for sperm production, eg  Temperature needs to be lower than body temp/ 37°C to make sperm.	Explains why <b>low / high temperature affects sperm</b> , eg:  <ul style="list-style-type: none"> <li>• Sperm production inc / decreased / higher / lower sperm count</li> <li>• Less / more abnormal sperm produced (with head / tail defects).</li> </ul>	
(b)	<b>One of:</b> <ul style="list-style-type: none"> <li>• place where sperm stored</li> <li>• place where sperm mature.</li> </ul>		
(c)	Describes idea of many sperm needed as only a few reach the egg <b>OR</b> Describes <b>ONE</b> way sperm numbers are reduced, eg: <ul style="list-style-type: none"> <li>• many die</li> <li>• poor swimming ability</li> <li>• defective sperm</li> <li>• many sperm trapped in uterus (lining)</li> <li>• many sperm go into wrong oviduct.</li> </ul>	Explains <b>ONE</b> way why sperm numbers are reduced, eg: <ul style="list-style-type: none"> <li>• many sperm die in acid vagina</li> <li>• defective sperm cannot swim distance needed</li> <li>• sperm in wrong oviduct OR trapped sperm in uterus cannot meet egg.</li> </ul> <b>Gives reason why many sperm needed as only a few reach the egg.</b>	

Question	Evidence Contributing to Achievement	Evidence Contributing to Achievement with Merit	Evidence Contributing to Achievement with Excellence
FOUR	<p><i>Describes function of any <b>TWO</b> hormones.</i></p> <ul style="list-style-type: none"> <li>• FSH stimulates (several) follicle(s) to develop in ovary</li> <li>• Oestrogen causes uterus lining/ endometrium to thicken</li> <li>• LH peaks, ovulation occurs</li> <li>• Progesterone causes uterus lining to thicken <b>more</b>.</li> </ul>	<p><i>Explains how <b>TWO</b> hormones work together, eg:</i></p> <ul style="list-style-type: none"> <li>• FSH stimulates follicles to develop in ovary. One follicle begins to secrete oestrogen, which causes uterus lining to thicken.</li> <li>• As oestrogen levels increase this causes a peak/ high level of LH which stimulates ovulation to occur.</li> <li>• Corpus luteum (yellow body) secretes progesterone to thicken uterus lining more. When progesterone levels high, no FSH is released.</li> </ul>	<p><i>Discusses how <b>the FOUR</b> hormones work together in the menstrual cycle, eg:</i></p> <ul style="list-style-type: none"> <li>• FSH stimulates follicles to develop in ovary. One follicle begins to secrete oestrogen, which causes uterus lining to thicken. As oestrogen levels increase this causes a peak of LH, which stimulates ovulation to occur.</li> <li>• Corpus luteum (yellow body) secretes progesterone to thicken uterus lining more. When progesterone levels high, no FSH is released.</li> <li>• If an embryo does not burrow into the thickened endometrium, levels of progesterone and oestrogen fall, menstruation occurs.</li> </ul>

Question	Evidence Contributing to Achievement	Evidence Contributing to Achievement with Merit	Evidence Contributing to Achievement with Excellence
FIVE (a)	<p><i>Describes function of <b>ONE</b> structure eg</i></p> <p><b>amnion</b> – to make a roomy chamber for embryo/ foetus to grow <b>OR</b> hold amniotic fluid</p> <p><b>mucous plug</b> – to protect embryo/ foetus from invading micro-organisms/ bacteria, fungi etc.</p>		
(b)	<p><i>Idea mother provides foetus with oxygen eg <b>ONE</b> of</i></p> <ul style="list-style-type: none"> <li>• foetus gets oxygen from mother's <b>blood / circulation</b></li> <li>• foetus relies on oxygen from mother's <b>blood / circulation</b></li> </ul>	<p><i>Explains how oxygen <b><u>DIFFUSES (or concept of gas exchange)</u></b> across <u>placenta</u> from mother's blood to foetus, blood eg</i></p> <p>Mother's capillaries lie close to foetus capillaries in <b>placenta</b>. Oxygen <b>diffuses</b> from mother's blood/ capillaries into foetus blood/ capillaries.</p>	
(c)	<p><i>Describes general function of any <b>TWO</b> components of the repro. System, eg:</i></p> <p><b>Placenta</b> – place where nutrients and wastes are exchanged between mother and foetus.</p> <p><b>AND</b></p> <p><b>Uterus</b> – place where foetus grows.</p>	<p><i>Gives reason for changes in any <b>TWO</b> components of the repro. System, eg:</i></p> <p><b>Placenta</b></p> <p>Foetus needs more nutrients/ produces more wastes:</p> <ul style="list-style-type: none"> <li>• larger placenta provides more surface area for exchange of materials or</li> <li>• greater blood flow to site/ more capillaries to increase rate of exchange of nutrients/ wastes.</li> </ul> <p><b>Uterus</b> enlarges because growing foetus needs more space (more amniotic fluid to surround it).</p> <p><b>Hormones</b> see examples in the Excellence column.</p>	<p><i><b>Links the reasons</b> for changes during foetal growth, eg enlargement of placenta and uterus</i></p> <p><i><b>AND</b> describes a function of one of the hormones during gestation, eg:</i></p> <ul style="list-style-type: none"> <li>• Growing foetus needs more nutrients and produces more wastes. A larger placenta provides more surface area for the exchange of materials between mother and foetus. A greater network of capillaries allows greater blood flow to the site of material exchange.</li> <li>• Uterus enlarges so the foetus has more space in the uterus to move/ grow.</li> </ul> <p><i><b>AND one of</b></i></p> <ul style="list-style-type: none"> <li>• oestrogen maintains the endometrium/ uterus lining during gestation (pregnancy).</li> <li>• oestrogen increases blood flow to the uterus</li> <li>• progesterone keeps the endometrium thick</li> <li>• progesterone stops uterus movement</li> <li>• oestrogen controls progesterone production during gestation.</li> </ul>

**Judgement Statement****Human Biology: Describe functioning of the human reproductive system (90179)**

<b>Achievement</b>	<b>Achievement with Merit</b>	<b>Achievement with Excellence</b>
SIX questions answered correctly. Minimum of $6 \times A$	SEVEN questions answered correctly, including at least TWO at Merit level.  Minimum of $2 \times M + 5 \times A$	EIGHT questions answered correctly, including at least ONE at Excellence level and at least TWO at Merit level.  Minimum of $1 \times E + 2 \times M + 5 \times A$