1.3 Human Reproductive Systems and Fertilisation: 10-minute Pack

Total Marks

EDEXCEL 4BI1 · Calculator allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 State the function of the vagina in human reproduction.

(Total for Question 1 is 1 mark)

2 State the function of the urethra in the male reproductive system as it relates to reproduction.

(Total for Question 2 is 1 mark)

3 Identify the functions of the testes and of the sperm duct in the male reproductive system, as used in human reproduction.

(Total for Question 3 is 2 marks)

4 Describe the function of the prostate gland in the male reproductive system in the context of sperm transport and survival.

(Total for Question 4 is 1 mark)

© Revision Library | revisionlibrary.co.uk

5 Describe the function of the oviduct (fallopian tube) in relation to the egg and fertilisation.

(Total for Question 5 is 2 marks)

6 Define fertilisation in humans, stating what fuses and what is restored in terms of chromosome number.

(Total for Question 6 is 2 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 1.3 Human Reproductive Systems and Fertilisation: 10-minute Pack

Question 1

receives the penis and semen during sexual intercourse and provides a birth canal during childbirth **B1**

Answer: Receives semen during intercourse and serves as the birth canal

Question 2

carries semen out of the body during ejaculation (also carries urine) **B1**

Answer: Carries semen out of the body during ejaculation (also carries urine)

Question 3

testes: produce sperm (or: site of sperm production) **B1**

sperm duct: transports sperm from the testes to the urethra for ejaculation **B1**

Answer: Testes produce sperm; sperm duct transports sperm from the testes to the urethra

Question 4

produces fluid that mixes with sperm to form semen, providing nutrients or a medium that helps sperm survive and move **B1**

Answer: Produces fluid that adds to semen, providing nutrients and a medium to help sperm survive and move

Question 5

carries the egg from the ovary towards the uterus **B1**

is the usual site where fertilisation occurs (egg meets sperm) or provides a suitable environment for fertilisation to occur **B1**

Answer: Carries the egg from the ovary to the uterus and is the usual site where sperm meet the egg for fertilisation

Question 6

fusion of the nucleus of a sperm with the nucleus of an egg (ovum) **B1**

restores the diploid chromosome number in the zygote (from haploid gametes) **B1**

Answer: Fusion of the sperm nucleus with the egg nucleus, restoring the diploid chromosome number in the resulting zygote

© Revision Library | revisionlibrary.co.uk