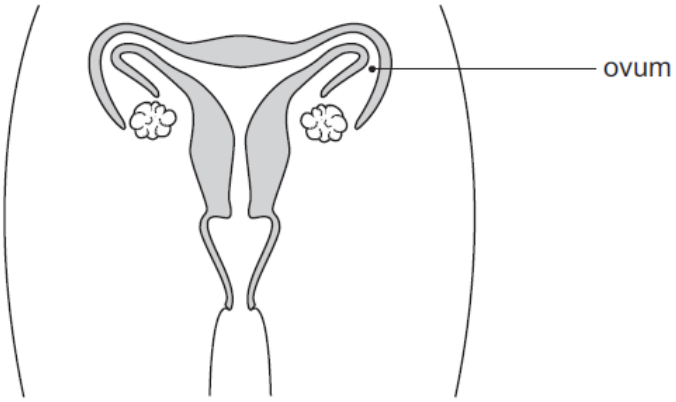
Reproduction – 2020 IGCSE 0610

1. Nov/2020/Paper_11/No.5

The diagram shows the female reproductive system.



At which level of organisation are the ovum and the ovary?

	ovum	ovary
A	cell	organ
B	cell	tissue
C	organ	tissue
D	tissue	organ

2. Nov/2020/Paper_11/No.29

What is an example of asexual reproduction?

A a single bacterium dividing to produce two genetically identical bacteria

B a mammal giving birth to four offspring

C a female bird laying six eggs which will hatch into the same species

D a tomato plant producing fruits which contain many seeds

3. Nov/2020/Paper_11/No.30

What is the sequence of events when a woman gives birth?

	1st	2nd	3rd
A	delivery of afterbirth	cervix dilates	passage of fetus through vagina
B	cervix dilates	passage of fetus through vagina	umbilical cord cut
C	passage of fetus through vagina	amniotic sac breaks	cervix dilates
D	umbilical cord cut	passage of fetus through vagina	delivery of afterbirth

4. Nov/2020/Paper_11/No.31

Some types of birth control are listed.

1 condom

2 diaphragm

3 IUD

4 vasectomy

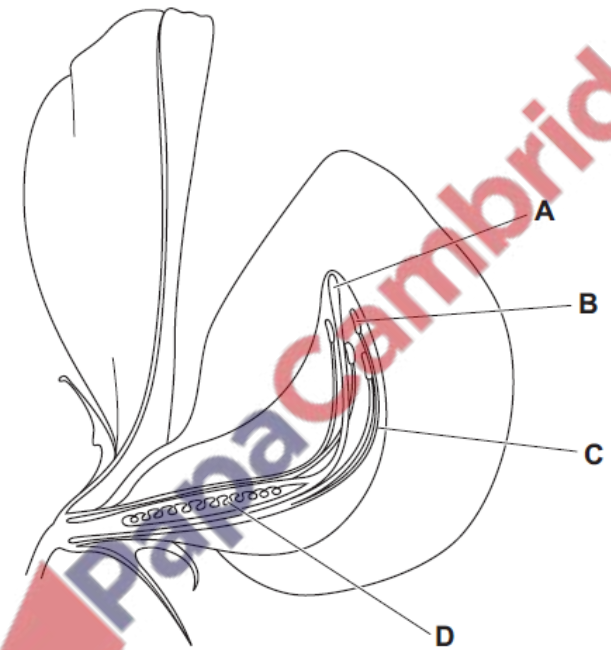
Which types are barrier methods?

A 1, 2 and 4 **B** 1 and 2 **C** 1 only **D** 3 and 4

5. Nov/2020/Paper_12/No.29

The diagram shows a flower cut in half.

Which structure receives the pollen nucleus during fertilisation?



6. Nov/2020/Paper_12/No.30

During childbirth, what must happen to the amniotic sac, cervix and the uterus wall?

	amniotic sac	cervix	uterus wall
A	breaks	contracts	contracts
B	breaks	dilates	contracts
C	expands	contracts	relaxes
D	expands	dilates	relaxes

7. Nov/2020/Paper_12/No.31

What is a barrier method of birth control?

A contraceptive pill

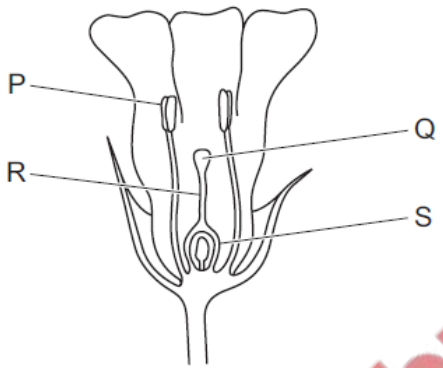
B diaphragm

C contraceptive implant

D vasectomy

8. Nov/2020/Paper_13/No.29

The diagram shows half a flower.

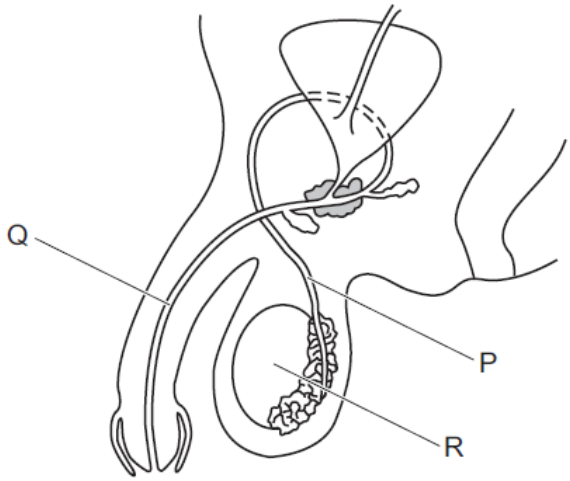


Which row identifies the parts of the flower?

	P	Q	R	S
A	anther	stigma	style	ovary
B	anther	style	stigma	anther
C	style	anther	ovary	style
D	style	ovary	anther	stigma

9. Nov/2020/Paper_13/No.30

The diagram shows the human male reproductive system.



What are structures P, Q and R?

	P	Q	R
A	sperm duct	urethra	testis
B	sperm duct	ureter	testis
C	ureter	penis	sperm duct
D	urethra	penis	testis

10. Nov/2020/Paper_13/No.31

Which method of birth control would also help to protect against HIV?

A condom

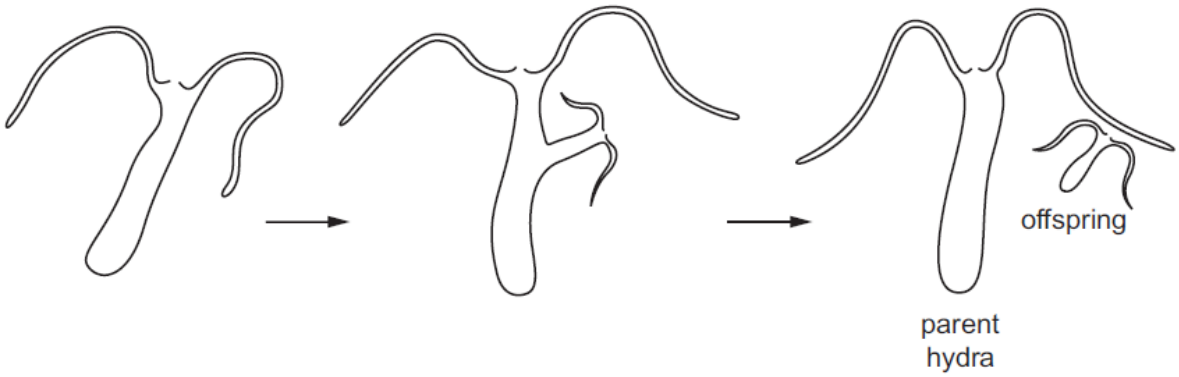
B contraceptive pill

C diaphragm

D IUD

11. Nov/2020/Paper_21/No.27

The diagram shows one parent *Hydra* growing and releasing an offspring from the side of its body.



Which row is correct?

	parent and offspring are genetically identical	involves asexual reproduction
A	✓	✓
B	✓	✗
C	✗	✓
D	✗	✗

key
✓ = yes
✗ = no

12. Nov/2020/Paper_21/No.28

Which row describes self-pollination?

	pollen transferred from anther to stigma of		
	a different flower on the same plant	a flower on a different plant of the same species	same flower
A	✓	✓	✗
B	✓	✗	✓
C	✗	✗	✓
D	✗	✓	✓

key
✓ = yes
✗ = no

13. Nov/2020/Paper_22/No.27

Some flowers can only be pollinated by specific insect species.

What will happen if none of these insects are present?

A genetically different seed produced

B genetically identical seed produced

C no seed produced

D only small amounts of seed produced

14. Nov/2020/Paper_22/No.28

Which hormone is used in contraceptive pills?

A insulin

B LH

C FSH

D progesterone

15. Nov/2020/Paper_22/No.29

Which hormone causes the lining of the uterus to become thick and glandular before ovulation?

A adrenaline

B FSH

C oestrogen

D progesterone

16. Nov/2020/Paper_23/No.28

Which organ secretes progesterone?

A ovary

B pancreas

C salivary gland

D testis

17. Nov/2020/Paper_23/No.29

Which statement explains why the hormone FSH is used in fertility treatment?

A It causes the formation of a zygote during *in vitro* fertilisation (IVF).

B It stimulates ovulation for artificial insemination (AI).

C It stimulates the production of large numbers of eggs for use in *in vitro* fertilisation (IVF).

D It is used to maintain the uterus wall ready for artificial insemination (AI).

18. Nov/2020/Paper_31/No.7

(a) Pollination occurs when pollen is transferred from one flower to another.

Fig. 7.1 is a diagram of part of a flower.

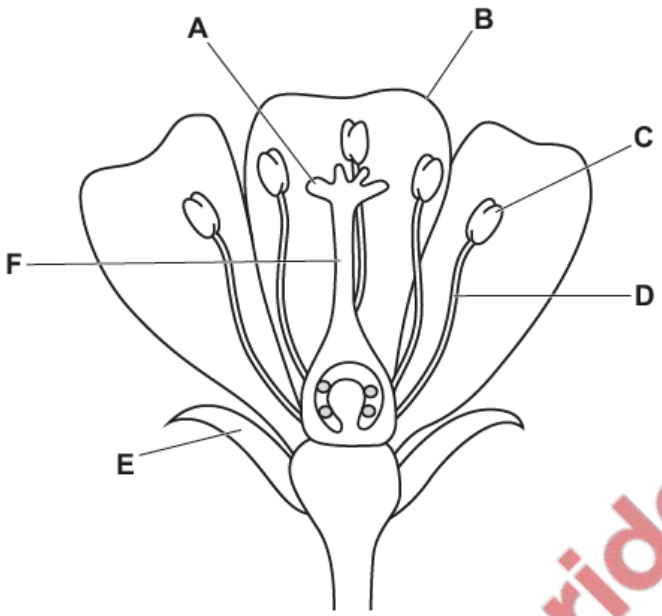


Fig. 7.1

(i) State the letter from Fig. 7.1 that identifies the structure which:

attracts insect pollinators .....

produces pollen .....

receives the pollen during pollination .....

[3]

(ii) Draw a label line and the letter **X on** the flower in Fig. 7.1 to show where fertilisation occurs. [1]

(iii) State the name of the part labelled **E** in Fig. 7.1.

..... [1]

(b) The flower shown in Fig. 7.1 represents an insect-pollinated flower.

Describe **two** ways the pollen from an insect-pollinated flower differs from the pollen from a wind-pollinated flower.

1 .....

.....

2 .....

.....

[2]

(c) A student wrote an **incorrect** statement about fertilisation in plants.

Fertilisation is the fusion of zygote nuclei.

Circle the incorrect word. [1]

(d) Plants can reproduce asexually or sexually.

Table 7.1 compares asexual and sexual reproduction.

Place ticks (✓) in the boxes to show the correct features of asexual and sexual reproduction.

Table 7.1

features of reproduction	asexual reproduction	sexual reproduction
involves gametes		
makes more of the same kind of organism		
produces genetically identical offspring		
involves fertilisation		

[4]

[Total: 12]

19. Nov/2020/Paper_32/No.7

Fig. 7.1 shows part of the female human reproductive system.

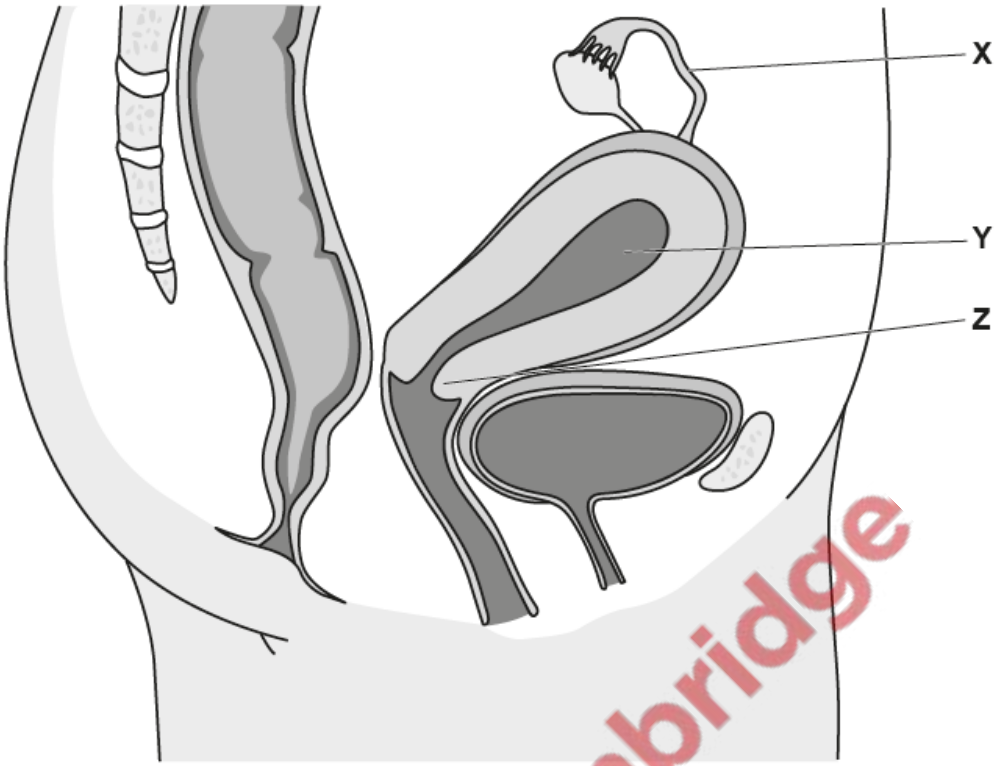


Fig. 7.1

(a) State the names of the structures labelled **X**, **Y** and **Z** on Fig. 7.1.

X .....

Y .....

Z .....

[3]

(b) The box on the left shows the beginning of a sentence.

The boxes on the right show some endings of sentences.

Draw **three** lines from the word oestrogen to make complete three correct sentences.

Oestrogen	is a hormone.
	is produced in the ovaries.
	makes breasts grow.
	makes hair grow on the chest.
	travels down the oviduct.
	widens the pupils.

[3]

(c) The average menstrual cycle is 28 days.

(i) State the day in an average menstrual cycle when:

ovulation occurs .....

the uterus lining starts to shed .....

the uterus lining is at its thinnest .....

[3]

(ii) Describe **one** change, other than ovulation, that occurs in the ovary during the menstrual cycle.

.....

.....

..... [1]

[Total: 10]

20. Nov/2020/Paper_41/No.5

(a) The activities of the ovaries and the uterus are regulated by the hormones FSH, LH, oestrogen and progesterone during the menstrual cycle.

Complete Table 5.1 to show the sites of production and the roles of these four hormones.

Table 5.1

hormone	site of production	target organ	role
FSH	pituitary gland	ovary	
LH	pituitary gland	ovary	
oestrogen		uterus	stimulates growth of the lining of the uterus
progesterone		uterus	

[5]

(b) Fig. 5.1 shows the changes in the lining of the uterus of a human female.

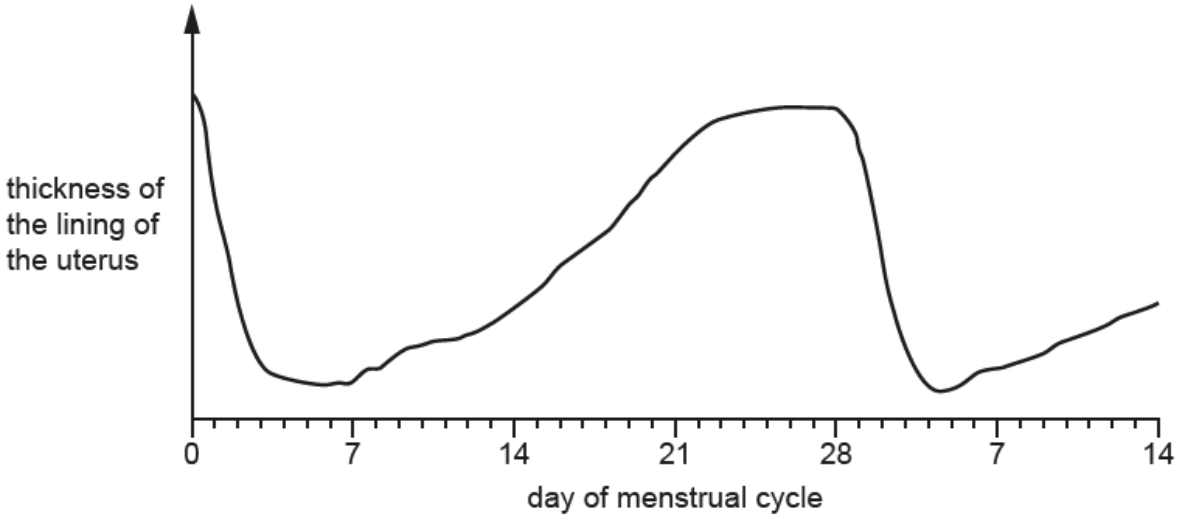


Fig. 5.1

Describe the changes in the lining of the uterus between days 0 and 28 of the menstrual cycle.

between days 0 and 7 .....

.....

.....

.....

between days 7 and 28 .....

.....

.....

.....

.....

[3]

(c) Some people are infertile.

Artificial insemination (AI) and *in vitro* fertilisation (IVF) are two methods of fertility treatment

These two methods are outlined in Fig. 5.2.

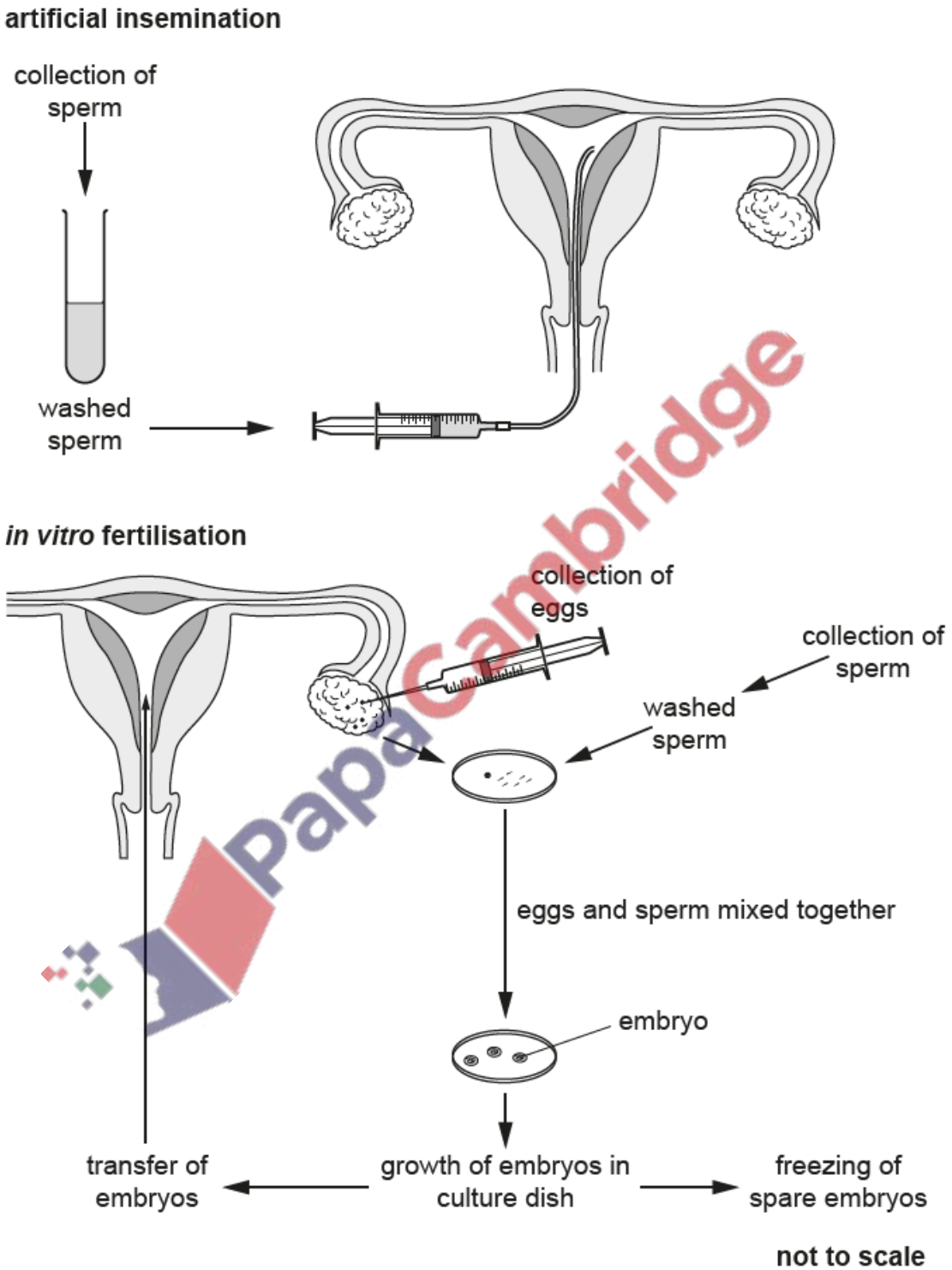


Fig. 5.2

Describe the similarities **and** differences between the two processes of fertility treatment shown in Fig. 5.2.

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..... [6]

[Total: 14]

21. Nov/2020/Paper_43/No.5

Fig. 5.1 shows a photomicrograph of a sperm cell reaching an egg cell.

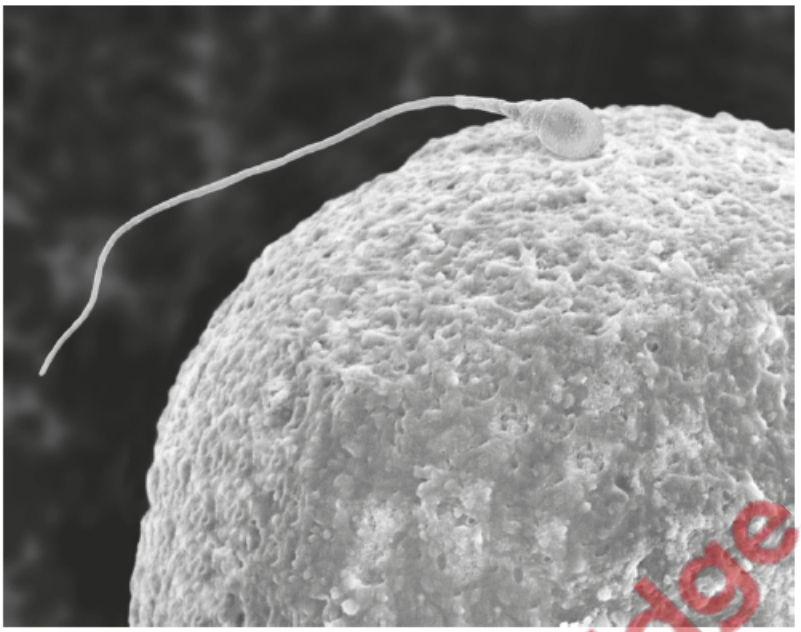

Fig. 5.1

(a) (i) Complete the sentence:

A nucleus containing a single set of unpaired chromosomes in a sperm is called a

..... nucleus. [1]

(ii) State where, in the female reproductive system, the event shown in Fig. 5.1 occurs.

..... [1]

(iii) Describe what happens from the event shown in Fig. 5.1 until an embryo is formed.

.....

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.....

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.....

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..... [4]

(b) Some people use fertility drugs and *in vitro* fertilisation (IVF) to have children.

Outline the use of fertility drugs and the process of IVF.

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..... [6]

[Total: 12]

22. Nov/2020/Paper_33/No.2

(a) Fig. 2.1 is a diagram of the human male reproductive system.

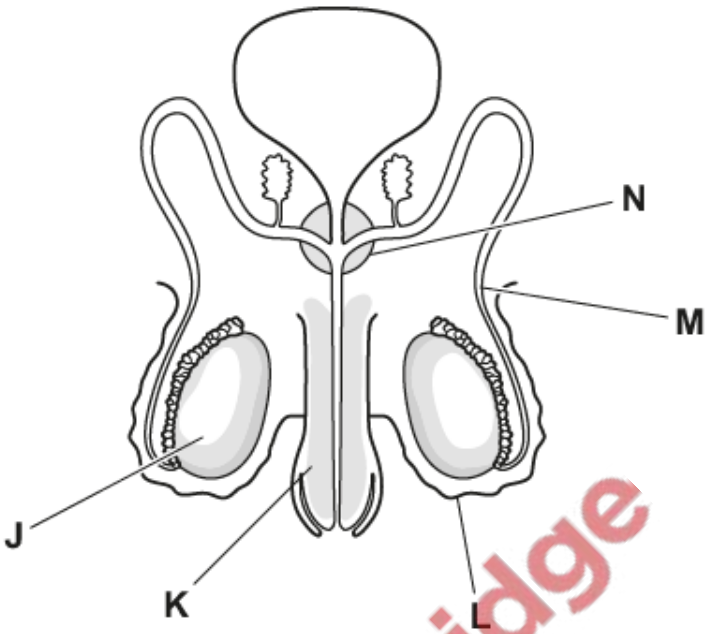

Fig. 2.1

The boxes on the left show the letters from Fig. 2.1.

The boxes in the middle show the names of the parts shown in Fig. 2.1.

The boxes on the right show the function of each part.

Draw **one** line to link each letter from Fig. 2.1 to its correct name.

Draw **one** line to link each name to its correct function.

Draw a total of **ten** lines.

letter from Fig. 2.1	name	function
J	penis	carries sperm cells away from the testis
K	prostate gland	delivers sperm into the vagina
L	scrotum	holds the testes and keeps them cool
M	sperm duct	makes the fluid that sperm cells swim in
N	testis	where sperm are made

[5]

(b) State **two** barrier methods of birth control.

1 .....

2 .....

[2]

[Total: 7]