4 Fig. 4.1 is a photograph of a bee on a flower. One of the bee's legs is covered with pollen.

Fig. 4.1

(a) (i) State **three** features of flowers that attract pollinating insects such as bees.

1 .....

2 .....

3 .....

[3]

(ii) State **one** way that pollen grains are adapted for pollination by bees.

.....

.....

..... [1]

(b) Describe **two** ways the structure of a monocotyledonous plant differs from the structure of a dicotyledonous plant.

1 .....

.....

2 .....

.....

[2]

(c) Fig. 4.2 is a diagram of a cross-section of an insect-pollinated flower.

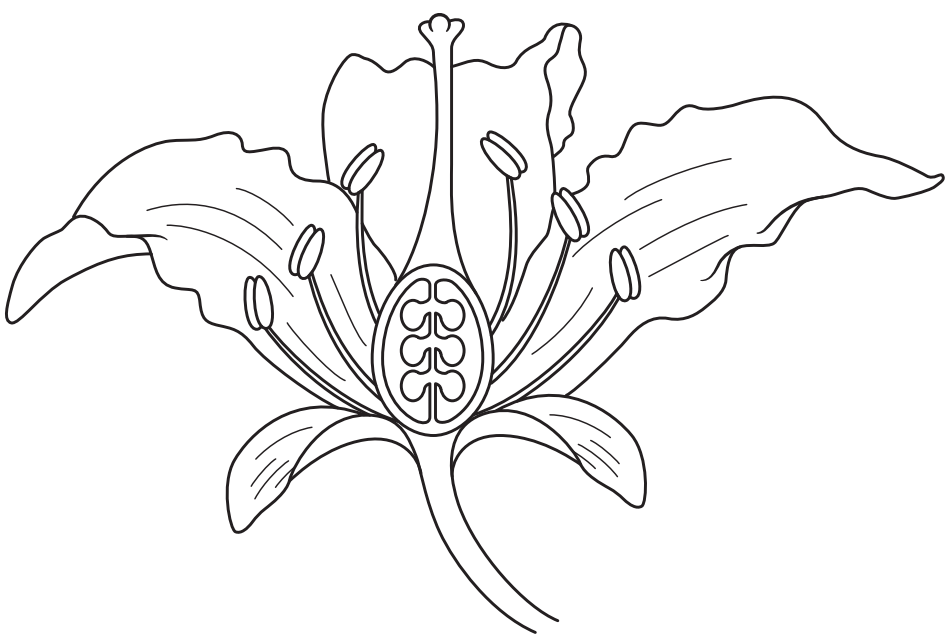

Fig. 4.2

On Fig. 4.2, name and draw label lines to:

- the structure that supports an anther
- a structure that protects the flower bud
- an ovule.

[3]

(d) Describe sexual reproduction in a flower, from the release of pollen to the formation of a zygote.

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.....

.....

[5]

(e) Sexual reproduction also occurs in humans.

(i) State the name of the male gamete in a human.

..... [1]

(ii) State where gametes are formed in the human male reproductive system.

..... [1]

(iii) Human male gametes are haploid.

State the name of the process that produces haploid male gametes.

..... [1]

(iv) Describe the function of the prostate gland in the male reproductive system.

.....

.....

..... [1]

[Total: 18]