

### 30.4.3 Biology Paper 3 (231/3)

1. (a) **A:** Liver.  
**B:** Stomach.  
**C:** Spleen.  
**D:** Small intestines.  
**G:** Duodenum. (5 mark)
- (b) **E:** Store faeces/undigested food/indigestible food materials.  
**F:** It contains/stores/harbours bacteria; which produce cellulose/enzymes to breakdown/digest cellulose/digestion of cellulose. (3 marks)
- (c) Colon/large intestines. (1 mark)
- (d) (i) Male. (1 mark)  
(ii) Presence of the prostate gland/testis/seminal vesicles. (1 mark)
- (e) (i)  $\frac{9}{15} = X 0.6 / \frac{3}{5}$
- (ii)  $\frac{14.6cm}{0.6} = 24.3cm$  (4 marks)

2.

Substance	Food substance being tested	Procedure	Observation	Conclusion
S	Protein.	To 1 ml of food substance add equal amount of sodium hydroxide. Add a few drops of copper sulphate solution dropwise. Shaking after each drop.	Purple violet colour.	Protein present.
T	“	”	No colour change/ blue colour.	Protein absent.
U	“	“	Light pale purple colour	Trace protein present.

(9 marks)

3. (a)

Specimen	Mode of dispersal	Feature that adapts the specimen to mode of dispersal
K	Animal(s).	Hooks.
L	Animal(s).	Fleshy/succulent/juicy
M	Wind.	Parachute hairs/pappus
N	Wind.	Winged/pericarp
P	Animal(s).	Fleshy/succulent
Q	Self mechanism/explosive	Lines of dehiscence/weakness/sutures

(12 marks)



- (b) (i)
  - Epicarp.
  - Mesocarp.
  - Endocarp.
  - Seed. (2 marks)
- (ii) Axile/central. (1 mark)
- (c) Seed/endocarp. (1 mark)