**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 prostrate gland/testis/seminal vesicles. ***(1 mark)***

(e) (i) 

(ii)  ***(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)***