

231/3

**BIOLOGY PAPER 3
MARKING SCHEME****Question 1**

- A (a) No bubbles/effervescence;
(b) Bubbles/effervescence/foam observed
- B (a) Catalase enzyme denatured by high temperatures hence no reaction
(b) Catalase enzyme; broke down hydrogen peroxide into water and oxygen hence bubbles;
- C (i) Broken down into small droplets;
(ii) Emulsification;
(iii) Duodenum;
(iv) Increases the surface area for enzymes to speed up the rate of digestion;
- D (i) Liquid forms solid particles/liquid curdles;
(ii) Part of body – stomach;
Enzyme –Renin;
(iii) Gastric glands
(iv) Gastrin hormone;

Question 2

- (A) Dicotyledonae;
(B) Vascular bundles arranged around the cambium ring/has pith/has cambium ring;
(C)
A- Epidermis
Protect inner tissues from mechanical injury/prevents excessive loss of water;
B- Vascular bundles;
Transport of water and mineral salts and manufactured food;
C- Pith
Stores food;
(D)(i) Berry;
(ii) Many seeds
(iii) Basal placentation;
Placenta occurs at base of the ovary;

Question 3

- (a) Cervical/Neck region;
(b) 3.01; 3.02; 3.03;
(c) (i) Neural canal
Passage of the vertebral column

(ii) It vertebral canal;
Passage of vertebral artery;
(iii) Odontoid peg process;
Articulate into the neural canal of atlas allowing turning/rotation of the head;
- (d) Thoracic vertebrate;
(e) Broad and wing like to offer large surface area for attachment of neck muscles