**231/3**

**BIOLOGY FORM THREE**

**Marking scheme**

**Question 1**

(a) Omnivorous; (1mk)

(b) I – Molar; (1mk)

II – Canine; (1mk)

(c) H – Enamel / crown; (1mk)

J – Neck; (1mk)

(d) Teeth II has flat top / ridged while tooth IV has chisel shaped top. (1mk)

(e) Cutting / biting (1mk)

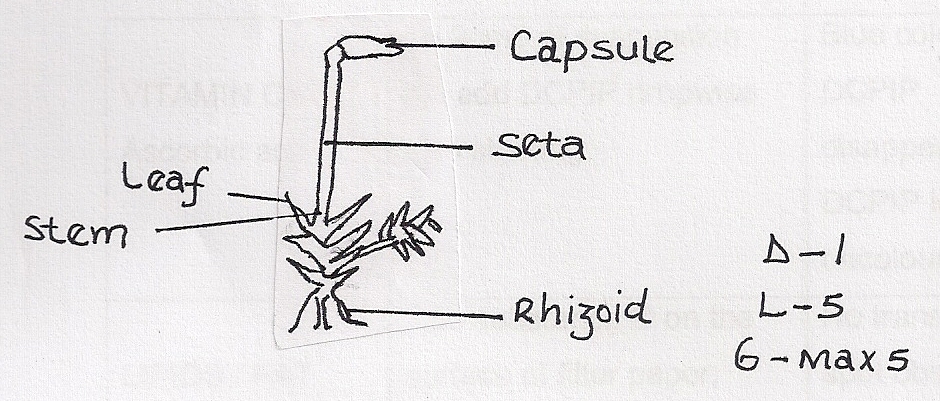
(f) i2 c3 pm2 m3 x 2 = 32 (1mk)

2 3 2 3

(g) Used more for chewing / has greater contact with food particles; // is flat broad ridged / cusped holds food remains;

**Question 2**

(a) (i)



(ii) mg = Drawing length = 20mm

Objects length 10mm

= x 2;

1. (i) Plantae;
   1. Bryophyta;
   2. Presence of;

Rhizoids;

Male and female branches

1. - Leaves – photosynthesis
   * + Capsule – spore producing
     + Rhizoids – anchorage, absorption of water and mineral salts.
     + Green contains chlorophyll for photosynthesis;
2. Sporulation
3. Green hence carry out photosynthesis / autotrophic

**Question 3**

|  |  |  |
| --- | --- | --- |
| Test - tube | OBSERVATIONS | CONCLUSION |
| A | Blue black/blue /black/bluish black; | Starch present; |
| B | Blue black/blue /black/bluish black; | Starch present; |
| C | Blue black/blue /black/bluish black; | Starch present; |

***6/2 = 3 marks***

(b)

|  |  |  |
| --- | --- | --- |
| Test - tube | OBSERVATIONS | CONCLUSION |
| A | Blue black/blue /black/ dark blue /  bluish black; | Starch present; |
| B | No colour change /brown/yellow colour / colour of iodine; | Starch present; |
| C | Blue black/blue /black/bluish black; | Starch present; |

***6 marks***

(c) Control experiment

(d) (i) Distase / enzyme /starch digesting enzyme/ ptyalin / saliva enzyme /salivary enzyme; ***(1mark)***

(ii) Because it is converted / digested / changed starch / can be denatured by boiling / acts within a range of temperature between 35 0C – 380C / optimum temperature; ***only 1 (1 mark)***

(e) Mouth / duodenum / ileum;

**NB (f) tied to table (b)**

1. B – Starch absent / No colour change /colour of iodine remains because starch has been digested / converted / hydrolysed / broken down into glucose / maltose / simple sugar; ***(1mark)***

C - Starch present because boiling denatured enzyme /L2 ; thus starch not broken down / not digested / not acted upon;