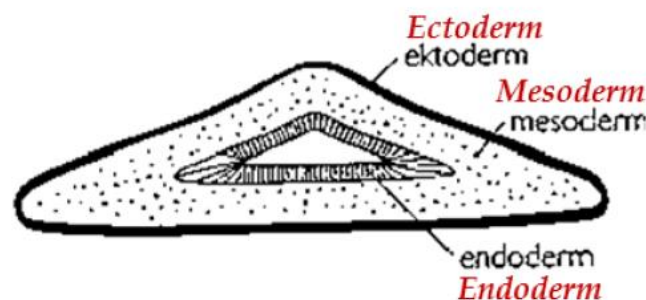


- 1.4 1.4.1 X - Arthropoda✓
Y - Platyhelminthes✓
Z - Cnidaria✓ (3)
- 1.4.2 $Z \rightarrow Y \rightarrow X$ ✓ (all or nothing) (1)
- 1.4.3 Coelenteron✓ (1)
- 1.4.4 (a) Z✓ (1)
- (b) X and Y✓ (both must be mentioned) (1)
- (c) Z✓ (1)
- 1.4.5 Absorbs nutrients over its entire body ✓
OR
Through diffusion✓ from the environment (1)
(9)
- 1.5 1.5.1 (a) 1✓ (1)
- (b) 2✓ (1)

1.5.2



- ✓ectoderm at correct place
- ✓endoderm at correct place
- ✓mesoderm at correct place

(3)
(5)

- 2.2 2.2.1 The presence / absence of petals✓ (1)
- 2.2.2 The flowers with petals attract more insects for pollination than the flowers without petals✓✓ / attract more pollinating agents/pollinators
OR
The flowers without petals could not attract insects for pollination✓✓ / pollinating agents /pollinators
OR
The presence of petals prevents pollen from being blown away by the wind✓✓
OR
The absence of petals causes the most pollen to be blown away by the wind✓✓ (2)

2.2.3 A – will be feather-like✓ / longer/ hang outside the flower ✓
C – elongated✓ / hangs outside the flower / produces large amounts of light pollen (2)

2.2.4 Part C (anther) is shorter / sits lower / sits below part A✓ (the stigma)
Therefore pollen will not be able to fall from the anther onto the stigma✓ (2)
(7)

2.3 2.3.1 A – Fungus / Mould / Bread mould / Rhizopus✓
B – Bryophyte / Moss plant✓ (2)

2.3.2 Spores ✓ (1)

2.3.3 Moist / Damp / Wet / Shady ✓ (1)

2.3.4 **3 (Rhizoids)** release digestive enzymes✓ to digest the substrate on which the mould is growing
6 (Rhizoids) anchor the moss plant and absorb minerals / does not release any digestive enzymes ✓ (2)

2.3.5 Meiosis ✓ (1)

2.3.6 Diploid ✓ (1)

2.3.7 Pteridophyta ✓ (1)

2.3.8 **ANY 5 OF THE FOLLOWING:**

- Spores germinate in favourable conditions ✓
- forms a protonema ✓
- grows to the gametophyte ✓
- Contains male and female branches ✓
- The sperm cell swims through water ✓
- To the egg cells / ovum ✓
- Fertilisation leads to the development of the sporophyte ✓
- That lives semi-parasitically on the gametophyte ✓
- It produces spores in the sporangium✓
- That are released and spread through the wind ✓

(5)
(14)

- 2.4 2.4.1 White blood cells ✓ / Lymphocytes (1)
- 2.4.2 X – Antibody ✓
Y – Memory cell ✓ (2)
- 2.4.3 **MARK ANY THREE:**
Antibodies are **proteins**✓, that **attack/destroy/neutralise pathogens**✓
They **defend**✓ the body/ Part of the **specific immune response** ✓ (3)
- 2.4.4 After the first exposure: It takes longer ✓ for the body to respond and produce a few plasma cells ✓.
- After the second exposure: The response is quicker and more intense✓.
Memory cells can quickly produce lots of plasma cells that produce lots of antibodies ✓ (4)
- (10)
- 2.5 2.5.1 Mast cells✓
Release histamines✓ (2)
- 2.5.2 Plasmodium✓ (1)
- 2.5.3 26 November 2020✓ (1)
- 2.5.4 P. faciparum✓ (1)
- 2.5.5 **ANY THREE**
Causes prolonged / continuous fever / constantly elevated body temperature / fever attacks last for two days ✓
Which can denature✓
Enzymes/proteins✓ and
Cause death✓ (3)
- 2.5.6 (a) Anopheles✓ (1)
- (b) **COMPULSORY MARK + ANY TWO OTHER FACTS**
Malaria cases will **decrease**✓*
As there are fewer fertile males to mate with the females✓
Fewer eggs will be laid / fewer mosquito larvae / lower chance of fertilisation ✓
fewer new mosquitos develop ✓ (3)
- (12)