



Subject: Grade 7 Natural Sciences

Topic: Natural Sciences: Term 1 - Mini-Exam

Total: 90 Marks

1. cold-blooded | gills

4 marks

Explanation:

The body **temperature of a fish** is the **same** as the **temperature of its surroundings**.

A **fish** is **adapted to live in water** so it has **gills** and not lungs. Just like humans use their lungs to exchange oxygen for carbon dioxide from the air, the gills of a fish perform a similar function from water.

2. biodiversity

3 marks

Explanation:

Biodiversity refers to the amount of different species of living organisms in a specific area or habitat. Earth's biodiversity refers to the total of all the species of living organisms found on our planet. Biodiversity is a measure of how healthy an environment is.

3. true

2 marks

Explanation:

Invertebrates do not have a backbone or a skeleton inside its body.

4. dicotyledonous | tap

4 marks

Explanation:

Dicotyledons have a main root (called a tap root), which grows out of the stem. Smaller, lateral roots grow out of the main root.

5. two | seed lobe

4 marks

Explanation:

Dicotyledons are plants with **two seed lobes**, also known as seed leaves.

The two cotyledons in the seeds of the plants emerge above the soil when the seed germinates. They then turn green and form the first two leaves of the new plant.

6. D: A locust's body is divided into two parts, namely the cephalothorax and the abdomen.

4 marks

Explanation:

The locust belongs to the group of animals called Insecta. The **body of insects** are divided into **three parts**.



7. false 2 marks

Explanation:

It is a dicotyledon because the leaf is green, broad and flat, and the leaf veins are branched.

8. true 2 marks

Explanation:

Sepals are normally green and their main function is to protect flower buds. When a flower blooms, the sepals support the colourful petals.

9. D: A female's eyesight and hearing weakens slightly. 4 marks

Explanation:

Changes in eyesight and hearing are not related to puberty.

10. true 2 marks

Explanation:

These bacteria are unicellular and do not have a cell nucleus.

Bacteria is also called eubacteria. Archaeobacteria is also called archaea.

11. true 2 marks

Explanation:

In South Africa maize is a staple food. Maize plants are generally pollinated by the wind. If the plants are not pollinated, the cobs will not develop.

12. Plants | Fungi | Protista 6 marks

Explanation:

Plants rely totally on the process of photosynthesis to make their food.

Fungi lives on dead organic material such as bread. Bacteria feeds on decaying materials.

Some Protista and Bacteria are parasites, living on other living organisms.

13. true 2 marks

Explanation:

Some bacteria help in the production of food, e.g. cheese and yoghurt. They also decompose dead organic material (plants and animals).

14. scrotum | testicle | penis | urethra 8 marks

Explanation:

The scrotum holds and protects the testis. The testis produce sperm cells. The urethra carries semen and urine out of the body. The penis delivers semen into the woman's body during sex.

15. decomposers | fungi

4 marks

Explanation:

Decomposers are micro-organisms which break down the substances into matter which can be used to make food so that nothing is wasted.

16. B: reproduction

4 marks

Explanation:

The changes in the reproductive organs and the strange feelings are normal and are caused by the secretion of certain hormones.

17. false

2 marks

Explanation:

In the classification system that biologists use, a class is subdivided into smaller groups called orders. Only some mammals are primates, so mammalia is a larger group than primata.

18. mono | monocotyledonous | monocotyledon

3 marks

Explanation:

Dicotyledon stems have a circular arrangement of vascular tissues, while the stems of **monocotyledon stems** have vascular-tissue bundles scattered throughout.

19. B: B

4 marks

Explanation:

Insects (such as bees), crustaceans (such as crabs) and arachnids (such as spiders) all belong to the phylum arthropoda. Octupi belong to the phylum mollusca.

20. grass | impala | lion

6 marks

Explanation:

This chain has the producer as the grass, the herbivore (primary consumer) as the impala and then the carnivore as the lion (secondary consumer).

21. B: the end of each of the long tentacles

4 marks

Explanation:

There is an **eye** at the **end of each long tentacle**. The **short tentacles** are for **smelling**.

Both sets of tentacles are for feeling.

22. Bacteria | Monera

3 marks

Explanation:

Bacteria are unicellular organisms without a nucleus. An older, yet acceptable name for this Kingdom is also Monera.

23. C: woody

4 marks

Explanation:

The King Protea is a woody shrub with thick, woody stems leading to clusters of pink or crimson coloured flowers.

The woody stem is a good indication that the King Protea is a dicotyledonous plant.

24. B: Plant

4 marks

Explanation:

The protea is a plant and therefore belongs to the Plant Kingdom.

25. 5 | five

3 marks

Explanation:

Crustaceans like crabs and crayfish have **four pairs of legs** for walking and **one pair of strong, gripping legs** in the front. Shrimps have ten jointed legs.

Not all crustaceans have five pairs of legs.

Total: 90 Marks

