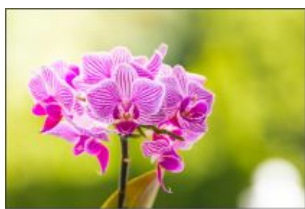




Subject: Grade 11 Life Sciences
Topic: Life Sciences: Term 1 - Mini-Exam
Total: 128 Marks

Name: _____
Date: _____

This image refers to question: 1



A



B



C



D

Question 1: Please Fill In The Blanks

8 marks

Four examples from each of the main plant phyla are shown in the image:

Which letter (A to D) represents the following?

1. A group that can reproduce using seeds, but not using a flower.

ANSWER: (1) .

2. A group that has no true roots, leaves or stems. The body is a thallus.

ANSWER: (2) .

3. A group that has vascular tissue, adventitious roots, but do not reproduce by seeds.

ANSWER: (3) .

4. A group that has adventitious or tap root systems, and reproduce via seeds contained in fruit.

ANSWER (4) .

Possible Answers: A | B | C | D

1	
3	

2	
4	

Question 2: True/False

2 marks

Fungi do not have true roots. They have a mass structure known as the hyphae which is made up of a network of fibres called mycelium.

TRUE

FALSE



Question 3: Multiple Choice

4 marks

Which of the following is a common symptom associated with thrush?

- | | |
|----------|--|
| A | A persistant cough that does not go away |
| B | White sores on the tongue and mouth |
| C | Anemia from a loss of red blood cells |
| D | Dry and flaky skin on the toes |
-

Question 4: Multiple Choice

4 marks

Which of the following describes the specific feeding habits of fungi?

- | | |
|----------|---------------|
| A | Autotrophic |
| B | Heterotrophic |
| C | Saprotrophic |
| D | Symbiosis |
-

Question 5: True/False

2 marks

The type of symbiotic relationship that exists between *E. coli* and humans is mutualism.

TRUE

FALSE

Question 6: Multiple Choice

4 marks

Which of the following would be a CORRECT statement for the plant phylum gymnosperms?

- | | |
|----------|---|
| A | They reproduce using seeds contained inside fruit. |
| B | They contain true roots, stems and leaves. |
| C | Water is absorbed directly through their leaves as they do not have a waxy cuticle. |
| D | Their stems grow horizontally as rhizomes. |
-

This image refers to question: 7



Question 7: Text Input

3 marks

State the name of the phylum the organism in the image belongs to.

Give your answer as ONE word only.

Question 8: True/False

2 marks

The ovary/ovule of the plant is the site for pollination to occur.

TRUE

FALSE

Question 9: True/False

2 marks

Fungi are autotrophic.

TRUE

FALSE

This image refers to question: 10



Question 10: Text Input

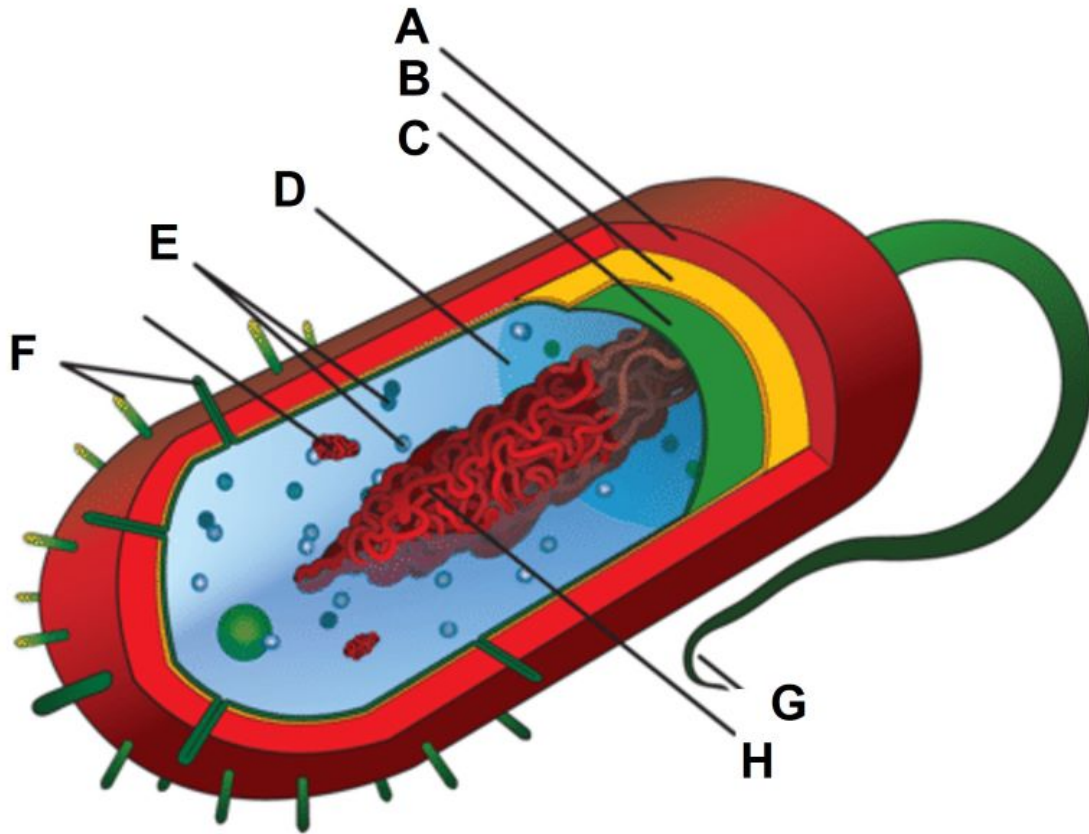
3 marks

The image shows a longitudinal section through a daffodil flower.

Which letter (A, B, C or D) represents the structure that produces the male gamete for this flower?

Write ONLY the letter of your choice.

This image refers to question: 11



Question 11: Text Input

3 marks

What does label **A** represent on this image of a bacterial cell?

Give your answer as TWO words only.

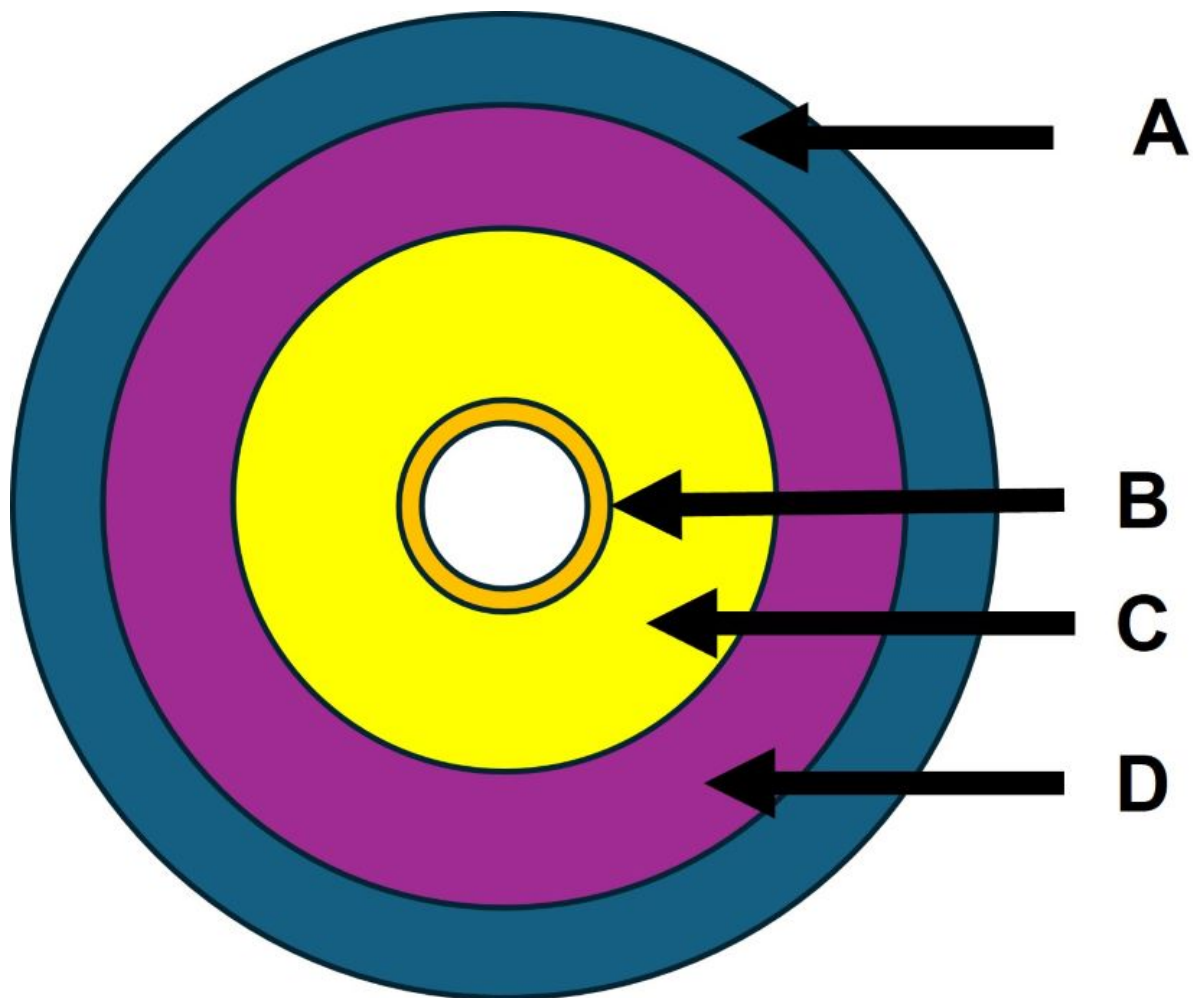
Question 12: Multiple Choice

4 marks

Which of the following statements regarding the immune system IS correct?

- | | |
|----------|---|
| A | The secondary response of the immune system involves an inflammatory response and raised body heat. |
| B | An example of a B-lymphocyte is CD4 cells. |
| C | The protein markers found on the surface of pathogens are called antibodies. |
| D | The immunity present at birth is known as natural immunity. |

This image refers to question: 13



Question 13: Please Fill In The Blanks

12 marks

The image shows the development of a (diploblastic / triploblastic) organism.

ANSWER: (1)

This organism would be described as (coelomate / pseudocoelomate).

ANSWER: (2)

Label A is the (3) .

Label B is the (4) .

Label C is the (5) .

Label D is the (6) .

Possible Answers: diploblastic | triploblastic | coelomate | pseudocoelomate | mesoderm | body cavity | ectoderm | endoderm

1	
3	
5	

2	
4	
6	

Question 14: Text Input

3 marks

What is the biological term for "*an agent that carries or transmits an infectious pathogen to other living organisms but is not affected by it*"

Give your answer as ONE word only.

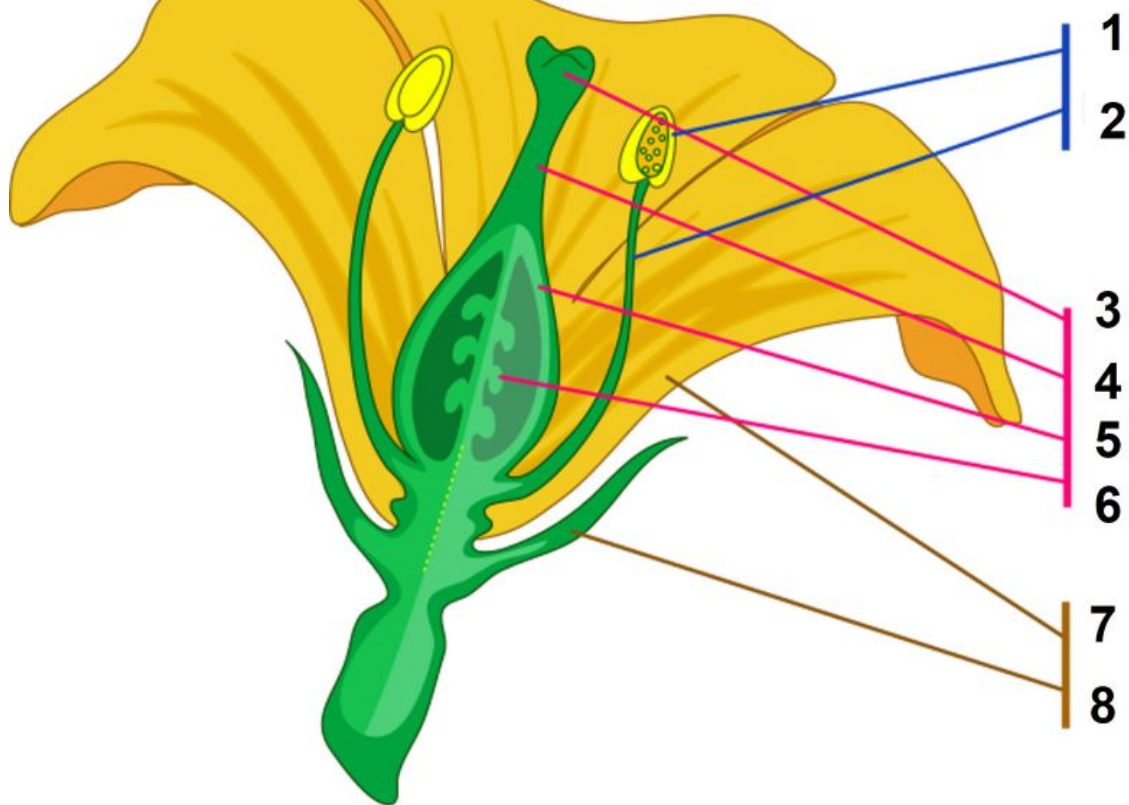
Question 15: True/False

2 marks

Gymnosperms are characterised as only having adventitious root systems, compound leaves called fronds, having the sporophyte generation as dominant and not using seeds or fruit to reproduce.

TRUE	FALSE
-------------	--------------

This image refers to question: 16



Question 16: Please Fill In The Blanks

8 marks

Label 2 is the (1) .

Label 6 is the (2) .

Label 8 is the (3) .

Together, labels 1 and 2 represent the (4) .

Possible Answers: anther | filament | ovary | ovule | sepals | petals | carpel | stamen

1	
3	

2	
4	

Question 17: Please Fill In The Blanks
EXPLAINING HOW A VACCINE WORKS:

8 marks

1. A person is injected with a (1) version of the pathogen.
2. The (2) - lymphocytes will begin to produce (3) in response.
3. This is an example of (4) immunity.

Possible Answers: weak | strong | T | B | antigens | antibodies | acquired | natural

1	
3	

2	
4	

Question 18: Multiple Choice

4 marks

Study the list of characteristics below:

- 1) Produce large quantities of pollen
- 2) Large flowers
- 3) Flexible stalks that move easily
- 4) Produce large quantities of nectar
- 5) Stamens and stigmas protrude beyond the petals

Which option shows the correct combination for adaptations of **bird pollinated flowers**?

A	1, 3 and 4 only
B	1 and 3 only
C	2 and 4 only
D	2, 4 and 5 only

Question 19: Text Input

3 marks

To which kingdom does algae belong to?

Give your answer as ONE word only.

--

This image refers to question: 20



1



2



3

Question 20: Text Input

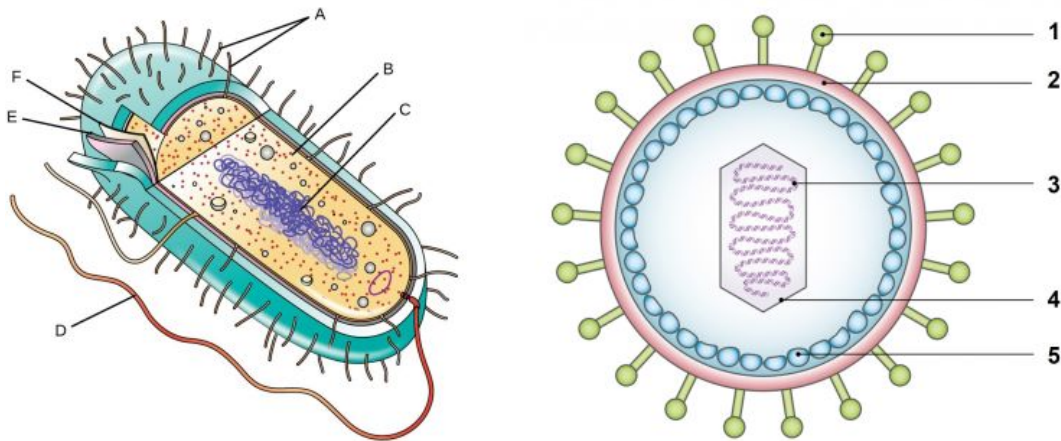
3 marks

In this image, three shapes of bacteria are shown.

What is the scientific term for the shape of bacteria number 2?

Give your answer as ONE word only.

This image refers to question: 21



Question 21: Please Fill In The Blanks

12 marks

Two microbes are shown in the image with various labels.

The image on the left is a (1), while the image on the right is a (2) .

Label E is the (3) .

Label 4 is the (4) .

The label that represents a flagellum is (5) .

Between label C and label 3, which one represents genetic material that could be either DNA or RNA?

ANSWER (6)

Possible Answers: virus | bacteria | cell membrane | cell wall | protein capsid | A | D | C | 3

1	
3	
5	

2	
4	
6	

This image refers to question: 22



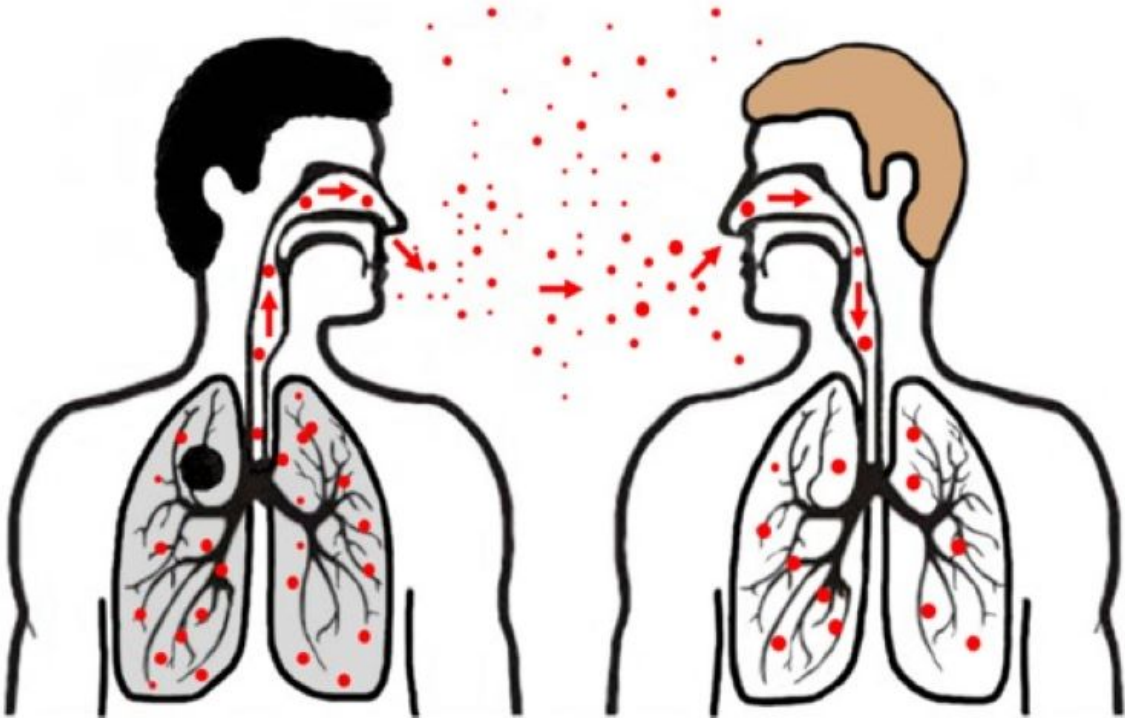
Question 22: Multiple Choice

4 marks

To which animal phylum does the organism in the image belong to?

- | | |
|----------|-----------------|
| A | Cnidaria |
| B | Porifera |
| C | Platyhelminthes |
| D | Annelidia |

This image refers to question: 23



Question 23: Multiple Choice

4 marks

The image shows the transmission of a particular disease.

The disease from the image is caused by which pathogen?

- | | |
|----------|------------------------------|
| A | Plasmodium |
| B | Vibrio cholera |
| C | Human immunodeficiency virus |
| D | Mycobacterium tuberculosis |

This image refers to question: 24



Question 24: True/False

2 marks

The organism in the image belongs to the phylum Cnidaria.

TRUE

FALSE

Question 25: Please Fill In The Blanks

8 marks

Answer the following questions for **PLATYHELMINTHES**:

1. Symmetry? (1) .
2. Do they have cephalization (Yes or No)? (2) .
3. Diploblastic or triploblastic? (3) .
4. Coelomate or acoelomate? (4) .

Possible Answers: Asymmetrical | Bilateral symmetry | Radial symmetry | Yes | No | Diploblastic | Triploblastic | Coelomate | Acoelomate

1	
3	

2	
4	

Question 26: True/False

2 marks

The phylum that is mainly characterised as having an exoskeleton is Arthropoda.

TRUE	FALSE
-------------	--------------

Question 27: Text Input

3 marks

What is the name of the type of medicine used to treat bacterial infections?

Give your answer as ONE word only.

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This image refers to question: 28

	Symmetry	Coelom
Porifera	X	Acoelomate
Annelida	Bilaterally	Y
Arthropoda	Z	Coelomate

Question 28: Multiple Choice

4 marks

A table is shown with some characteristics of animal phyla.

Which option would be the correct phrases for X, Y and Z?

- | | |
|----------|--|
| A | X - Asymmetrical Y - Coelomate Z - Bilaterally |
| B | X - Radial symmetry Y - Coelomate Z - Bilaterally |
| C | X - Asymmetrical Y - Acoelomate Z - Bilaterally |
| D | X - Bilaterally Y - Coelomate Z - Asymmetrical |

Question 29: True/False

2 marks

HIV attacks and destroys the CD4 cells of humans.

TRUE

FALSE

Question 30: Text Input

3 marks

Name the phylum of plants whose:

- plant body is known as a thallus
- dominant generation is the gametophyte generation
- reproduction can be either sexual or asexual

Give your answer as ONE word only.

