ALADWAA

Gem



Science

الصف 4 الابتدائى

نماذج امتحانات الأضواء النهائية

الفصل الدراسى الثانى

2024 - 2025

Model (1)

20 Marks

1 (A) Complete the following sentence using the words between brackets:

- Mobile phone batteries stores ..... energy. (chemical - electrical)

(B) What happens when ...?

1. You approach your hand near a lighted electric bulb.

.....

2. The dead remains of sea creatures are pressed and exposed to extreme heat and pressure for millions of years.

.....

3. Wind blows weakly in a desert.

.....

4. A flood occurs near a farmland.

.....

2 (A) Put (✓) or (✗):

- Canyons are deep valleys that have steep sides. ( )

(B) Answer the following questions:

1. Charcoal is considered a biofuel. Why?

.....

2. What are the environmental effects when rain washes chemical pesticides off farmland?

.....

.....

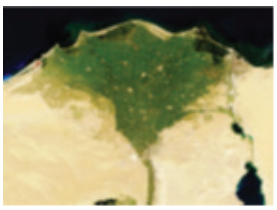
3. Weather is different from weathering. Explain.

.....

.....

4. What are the processes that are responsible for the formation of the opposite land form?

.....



3 (A) Write the scientific term:

1. A force that pulls down the broken rocks along the mountainsides. (.....)
2. The type of weathering where the structure of rocks is changed. (.....)

ALNAWA Gem

(B) Answer the following questions:

1. Identify the input and the output energies of a solar heater.

.....

2. Mention the importance of modern wind turbines.

.....

3. Mention two factors which determine the shape of a formed valley.

.....

.....

4 (A) Correct the underlined words:

1. Modern wind turbines have <u>shorter</u> blades than the old windmills. (.....)
2. Sand dunes are constantly <u>stable</u> landforms. (.....)

(B) Give a reason for:

1. Wood is considered as fuel.

.....

2. Erosion and weathering processes are always connected.

.....

3. Breaking down of rocks by water is considered mechanical weathering.

.....

Model (2)

20 Marks

1 (A) Put (✓) or (✗):

- Oil and coal are produced from the decomposition of the same remains of dead organisms. ( )

(B) What happens when ...?

1. The using of fossil fuel is reduced.

.....

2. Large amounts of silt are deposited along the banks of Nile Delta.

.....

3. Oxygen in air reacts with iron in rocks.

.....

.....

4. Sea waves hit sand on the beaches.

.....

2 (A) Complete the following sentence using the words between brackets:

- Buring of fuel produces ..... energy. (chemical - thermal)

(B) Give a reason for:

1. Natural gas is a nonrenewable energy resource.

.....

2. We must conserve using of fossil fuel.

.....

.....

3. Some small canyons have plants and trees on their sides.

.....

4. Sand dunes are not fixed in their places, but they are always moving.

.....

3 (A) Mention the type of weathering:

1. Breaking down of rocks by the effect of acid rain.

.....

2. Breaking down of rocks due to the change in temperature and cycle of melting and freezing of water.

.....

NILE WING Gem

(B) Answer the following questions:

1. Write the energy chain that represents the energy conversions that occur when an electric lamp is turned on.

.....

2. Mention the importance of water turbines.

.....

3. Explain how Nile delta is formed.

.....

.....

4 (A) Choose the correct answer:

1. The ..... on Mars rover curiosity convert solar energy into ..... which is used to recharge the batteries.

a) solar panels - electrical
b) batteries - electrical
c) solar panels – sound
d) batteries - sound

2. Dissolving of minerals forming rocks then combine again forming new rocks is an example of ..... .

a) mechanical weathering
b) erosion by wind
c) deposition in rivers
d) chemical weathering

(B) Answer the following questions:

1. Explain how global warming phenomenon occurs.

.....

.....

2. List some ways to conserve fossil fuel.

.....

.....

3. Sand dunes are formed as a result of several process, what is the sequence for their formation?

.....

Model (3)

20 Marks

1 (A) Correct the underlined word:

- Most energy chains start with the Moon. (.....)

(B) Give a reason for:

1. Smog has harmful effect on the human health.

.....

.....

2. Plants of wetlands and their roots help in the formation of a delta.

.....

3. Iron in rocks may rust.

.....

4. The formation of drippings in the limestone caves is considered chemical weathering.

.....

.....

2 (A) Cross out the odd word:

- Charcoal - Gasoline - Liquid fuel from corn - Wood. (.....)

(B) Answer the following questions:

1. Generators are important in the electric power stations. Mention their importance.

.....

2. Mention the effect of acid rains on the environment.

.....

.....

.....

3. What are the similarities between valleys and canyons?

.....

.....

4. What are the main factors that help in the erosion of weathered rocks?

.....

3 (A) Put (✓) or (✗):

1. The output energy of an operating solar panel is light energy. ( )
2. Wind and flowing water that carry sand are from the factors of mechanical weathering. ( )

NILE WAN Gem

(B) Mention the role of ...:

1. Concave mirrors in cooking food.

.....

.....

2. Lichens in chemical weathering.

.....

.....

3. Wind deposition.

.....

4 (A) Complete the following sentences using the words between brackets:

1. Hydroelectric energy is generated by ..... . (wind - dams)
2. The ..... pulls down the weathered rocks along the mountainsides.

(Earth's gravity - wind)

(B) Compare between each of the following:

1

P.O.C	Oil	Water
Type of energy resources	.....	.....

2

P.O.C	Electric bell	Washing machine
Input	.....	.....
Output	.....	.....

3

P.O.C	Canyons	Valleys
Shape	....	....

Model (4)

20 Marks

1 (A) Complete the following sentence using the words between brackets:

- The sound energy produced from an operating washing machine is considered a ..... energy. (waste - useful)

(B) What happens when ...?

1. Carbon dioxide reacts with water vapor in the air.

.....

2. Shaking a hand bell. (Regarding the energy conversion)

.....

3. Plant roots grow in the cracks of rocks.

.....

4. A rock blocks the path of flying sand in a desert.

.....

2 (A) Write the scientific term:

- A path that shows the flow of energy from its source to the device. (.....)

(B) Give a reason for:

1. The mobile phone gets warm when being used for long time.

.....

.....

2. Hydroelectric dams are built on rivers.

.....

.....

3. People must not build houses very close to rivers.

.....

.....

4. Chemical weathering has stronger effect than mechanical weathering on rocks.

.....

.....

3 (A) Put (✓) or (✗):

1. Powerplants that use biofuel to generate electricity cause air pollution. ( )
2. Pulling of sand from the seashores happens due to the erosion process. ( )

(B) Define each of the following:

1. Law of conservation of energy.

.....

2. Deposition.

.....

3. Canyons.

.....

4 (A) Cross out the odd word:

1. Solar heater – Hand mixer – Solar panel – Greenhouse. (.....)
2. Plant roots – Oxygen – Temperature changes – wind. (.....)

(B) Answer the following questions:

1. Although trees are a renewable source of energy, we must limit their use. Explain.

.....

.....

2. What is the effect of smog from cars in big cities on the human health?

.....

.....

3. How do plants that grow in wetlands found in deltas increase deposition process?

.....

.....

Model (5)

20 Marks

1 (A) Write the scientific term:

- A phenomenon where the Earth's temperature increases slowly due to the trapping of heat on Earth. (Global warming)

(B) What happens when ... ?

1. The wind rotates the blades of wind turbines.

.....

2. The dead remains of plant are pressed and exposed to extreme heat and pressure for millions of years.

.....

3. Wind that is carrying sand particles hits a big rock.

.....

4. A river erodes the sediments of a mountain over a long period of time.

.....

2 (A) Choose the correct answer:

- All forms of fossil fuel are formed ..... .

a) above the Earth's surface
b) under the Earth's surface
c) above the water surface
d) in the air around us

(B) Give a reason for:

1. You feel warm when you rub your hands together.

.....

2. Greenhouses have an important role.

.....

3. Acid rain has harmful effects on different living organisms.

.....

4. Sand dunes are formed in some places and not formed in others.

.....

.....

3 (A) Complete the following sentences using the words between brackets:

1. ..... is a biofuel. (Charcoal - Coal)
2. Sand dunes in Rub' Al Khali in Arabian Peninsula are formed by ..... process. (weathering - deposition)

(B) Answer the following questions:

1. Write the energy chain of an operated wind turbine, starting from the Sun.

.....

2. Mention the action of rain when it falls on the soil of farms that locate beside downhill.

.....

3. Compare between ... .

P.O.C	Oil	Coal
Living organism each one is formed from	....	....

4 (A) Put (✓) or (✗):

1. Renewable energy resources are replaced faster than they are used. ( )
2. Canyons have the same texture, and rock colors. ( )

(B) Look at the opposite figure, then answer:



1. What is the opposite factor?

.....

2. What is the effect of this factor on rocks?

.....

.....

3. Does the change happen to rocks quickly or slowly?

.....