

General exams

on Sixth primary second term science curriculum

2017/2018

Model Exam (1)

Question (1)

A-Write the scientific term:

- 1-A fixed point on which a solid bar is placed.
 - 2- The structure that extends from the root to absorb water.
 - 3- The loss of water from the plant in the form of water vapour.
 - 4- A way of connecting the electric lamps, in which the light intensity decreases with the increase in their number.
- B- In a first class lever, the acting force is 500 Newton, its force arm is of length 20 cm, and the resistance is of 200 Newton. Calculate the resistance arm.

Question (2)

A) Put (√) or (x) in front of the following statements:

- 1- The phenomena of solar and lunar eclipse attract people attention, but it doesn't affect life on Earth.
- 2- Fires resulted from electricity are extinguished by water.
- 3- The root system in plants is responsible for photosynthesis process.
- 4-The crowbar is an example of the first class levers.
- 5-If the force arm is smaller than the resistance arm, the lever saves effort.
- 6-In the third class levers, the force arm may be equal to the resistance arm.
- 7- Touching an electric spark by a part of the body leads to an electric shock.

8- Root hair extend from the root and are lined from inside with a thin layer of xylem and have a small vacuole.

9-The phenomenon of the solar eclipse occurs when the Earth, the moon and the Sun are in one straight line.

10- The root hair of the plant has a long lifetime.

B) Give reaasons for the following:

1- The heater should not be placed in a situation of touching textiles and carpets.

2-Force and resistance can be equal only in first class levers.

3- The phenomena of solar and lunar eclipse are regularly repeated and can be predicted.

Question (3)

A- Complete the following sentences:

1- The nutcracker is an example of the..... levers.

2-The electric shock occurs as a result of the passing ofthrough the human body.

3- The..... in the plant is surrounded by two guard cells.

4- Force X its arm =×.....

B- The acting force in a first-class lever equals 30 Newton, the length of its arm 20 cm and the resistance of 20 Newtons. Calculate the length of the resistance arm.

Question (4)

Choose the correct answer

1- All the following are third class lever, except

a)Wheel barrow b) Fish hook c)Manual broom d)Sweet holder

2-When an electric lamp is connected in parallel to others, the light intensity

a)decreases b) increases c) vanishes d) doesn't change

- 3- Biological process through which plants lose water in the form of vapor is called....
 a) Transpiration b) selective permeability c) respiration
 d) Osmosis feature.
- 4- Which lever saves more effort?
 a) Scissors b) Nutcrackers c) Fish hook d) Sweat holder
- 5- Which statement is correct?
 a) Solar eclipse takes a time less than that of lunar eclipse.
 b) Solar eclipse takes a time more than that of lunar cclipse.
 c) Solar eclipse takes a time equals that of lunar eclipse
 d) There is no relation between the time of solar eclipse and that of lunar eclipse.
- 6- On connecting the electric lamp in series to others, the brightness of the bulbs
 a) decreases. b) increases. c) are doubled. d) are unchanged.
- 7- All the following are functions for levers, except
 a) amplifying force b) Decreasing speed
 c) Increasing distance d) Saving effort

Answers Model Exam (1)

1-A-Write the scientific term:

- 1- (Fulcrum)
 2- (Root hair)
 3- (Transpiration)
- 4- (Series connection)
- B- $\text{Force} \times \text{its arm} = \text{resistance} \times \text{its arm}$
- $500 \times 20 = 200 \times ?$
- Arm of resistance = $500 \times 20 \div 200 = 50 \text{ cm}$

2- A) Put (✓) or (x) in front of the following statements:

1-(✓)

2- (x)

3- (x)

4- (✓)

5- (x)

6- (x)

7- (x)

8- (x)

9- (✓)

10- (x)

B) Give reasons for the following:

1- In order not to cause electric fires .

2-Because the fulcrum may lies in the middle of the lever so, the force arm and resistance arm are equal.

3- Due to rotation of the earth around the sun and the moon and their rotation together in fixed orbits.

3- A- Complete the following sentences:

1- second class

2- electric current

3- stoma

4- resistance X its arm

B- Solution: Force × its arm = resistance × its arm

$$30 \times 20 = 20 \times ?$$

$$\text{resistance arm} = 30 \times 20 \div 20 = 30\text{cm}$$

4- Choose the correct answer

1- a)Wheel barrow

2- d) doesn't change

3 - a) Transpiration

4- b) Nutcrackers

5- a)Solar eclipse takes a time less than that of lunar eclipse.

6- a) decrease.

7- b) Decreasing speed

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Model Exam (2)

Question (1)

A) Choose the correct answer:

- 1- A lever from the third class is
a) Scissors b) Nutcracker c) Sweet holder
- 2- is a good conductor of electricity.
a) Iron b) Plastic c) Wood
- 3- absorb water and salts from the soil.
a) Leaves b) Root hairs c) Stems

B) A force of 50 Newton affected a lever of the second class whose force arm was 20 cm .Calculate the resistance given that the resistance arm is 5 cm.

Question (2)

A-Put (✓) or (X) in front of each statement of the following and correct the wrong one:

- 1- Root hairs have thick walls.
- 2-Stomata are wide spread on the upper surface of leaf.
- 3- Looking directly at the lunar eclipse is harmful to the eye.
- 4- In the second class lever, the resistance is between the force and the fulcrum.
- 5-The nutcracker is considered as a first-class lever.
- 6-The force x its arm = The resistance x its arm.
- 7-The light bulb is filled with oxygen gas.
- 8 -The solar eclipse lasts for a long time.

B-Give reasons for each of the following:

- 1-In the plant, the root hairs secrete a viscous substance.
- 2- In houses, electric lamps are connected in parallel.
- 3-The third-class levers never conserve effort.
- 4- The glass bulb of electric lamps contains inert gas.
- 5- The force is always less than the resistance in the second class lever.

6- The concentration of the solution inside the root hair vacuoles is higher than the concentration of soil solution.

7-No annular lunar eclipse happens .

Question (3)

A- A force of 200 Newton affected a lever of the third class where its force arm was 5 cm. If the value of the resistance was 100 Newton calculate the length of the arm of resistance .

B- Complete the following statements:

- 1- In the second class levers, the resistance is found between and
- 2- The solar eclipse occurs when , and Earth are in one straight line.
- 3- On the lower surface of the plant leaves, there are tiny holes called to make process.

Question (4)

A- **Write the scientific term which indicates the following statements:**

- 1- Type of levers in which fulcrum is found between force and resistance.
- 2-A part of the plant that penetrates through the soil particles in order to fix it.
- 3- A tool used to convert electric energy to light energy.

B- A force of 500 Newton affects a first class lever where the resistance equals 200 Newton and the length of the resistance arm is 20cm, calculate the force arm .

Answers Model Exam (2)

Question (1)

A) Choose the correct answer:

- 1-c) Sweet holder
- 2-a) Iron
- 3-b) Root hairs

B - Solution: Force $\times$ its arm = resistance $\times$ its arm

$$50 \times 20 = ? \times 5$$

$$\text{resistance arm} = 50 \times 20 \div 5 = 200 \text{ N}$$

Question (2)

A-Put (✓) or (X) in front of each and correct the wrong one:

- 1-(X) Thin
- 2-(X) lower
- 3- (X) to the solar eclipse
- 4- (✓)
- 5- (X) second-class
- 6- (✓)
- 7- (X) Argon (inert gas)
- 8- (X) 7 minutes and few seconds

B-Give reasons for each of the following:

- 1-To help the root penetrates the soil particles.
- 2- Because light intensity of lamps does not affected by increase in its number or at turn off one lamp or its damage.
- 3-Because the resistance arm is always longer than force arm so , the exerted force is more than resistance.
- 4- To avoid burning of the filament and increase its life time.
- 5- Because the force arm is always longer than resistance arm
- 6- To help it absorb water by osmosis.
- 7- Because the earth has bigger size than the moon so it blocks all sun light from it.

Question (3)

A- Solution: Force $\times$ its arm = resistance $\times$ its arm

$$200 \times 5 = 100 \times ?$$

$$\text{resistance arm} = 200 \times 5 \div 100 = 10 \text{ cm}$$

B- Complete the following statements:

- 1- force - fulcrum
- 2- sun, moon
- 3- stomata- transpiration

Question (4)

B- Write the scientific term which indicates the following statements:

- 1- (first class levers)
- 2- (the root system)
- 3 - (the electric lamp)

B- Solution: Force $\times$ its arm = resistance $\times$ its arm

$$500 \times ? = 200 \times 20$$

$$\text{resistance arm} = 200 \times 20 \div 500 = 8 \text{ cm}$$

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