

الاجابات نهاية الصفحة

Answer the following questions:

Question 1**A Complete the following sentences:**

1. The movement path may be.... Or.....or both of them.
2. When the object lies in front of.... lens, a virtual and diminished image is formed.
3. The yeast fungus reproduces by.... while the starfish reproduces by....

B When does this happen ... ?

1. The acceleration of a moving object = zero.
2. The displacement of an object = the distance that the object moved.
3. The person suffers from short-sightedness.

C There are two types of cell division. One of them includes the following Phases:

(Anaphase Metaphase - Telophase - Prophase)

1. What is the type of division that include these phases.
2. Arrange the previous phases according to the sequence of their occurrence.

Question 2**A Choose the correct answer :**

1. The number of chromosomes in the gamete is....the number of the chromosomes in the original cell.
 - a. quarter.
 - b. half.
 - c. double.
 - d. equals.

2. Our solar system is located in one of the arms of the Milky way galaxy.

- a. spiral
- b. straight
- c. circular
- d. oval

3. The reproduction which considered as a source of genetic variation is a.....

reproduction.

- a. budding.
- b. vegetative
- c. sexual
- d. asexual

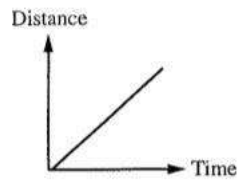
4. The distance from the center of mirror curvature and its focus equals...

- a. radius of curvature.
- b. quarter of the diameter of curvature.
- c. diameter of curvature.
- d. half of the focal length.

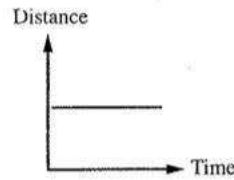
5. From the scalar quantities

- a. the time.
- b. the force.
- c. the acceleration.
- d. the displacement.

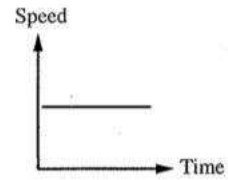
B Describe the case of the body in each of the following graphs:



(1)



(2)



(3)

C What happens in the following cases:

1. Explosion of the expanded part from the Sun towards the crossing star
(according to the crossing star theory).
2. The combination of the male gamete and female gamete.

Question 3

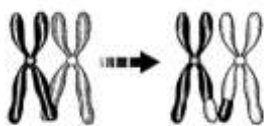
A Write the scientific term for the following:

1. Changing the position of an object as the time passes according to the position of another fixed object.
2. A point located inside the lens and lies on its principal axis.
3. The speed of the moving object relative to the observer.
4. It contains all the galaxies, stars, planets and living organisms.
5. It's a mirror that its reflecting surface is a part of a hollow sphere.

B 1. What is the name of this phenomenon in front of you?

2. What is the importance of its occurrence.

3. Mention the name of the phase that this phenomenon occurs?



C A driver used brakes to stop the car moved by 20 m/sec. Calculate the time taken by the car to stop. Given that the car moved with a decelerating motion equals 2 m/sec?

Question 4 A Correct the underlined words:

1. When the light ray falls by an angle of 30° on the reflecting surface, so the reflected ray

will be perpendicular on the reflecting surface.

2. The parent individual disappears during the reproduction by **sporogony**.

3. The measuring unit of the speed is **meter/second²**.

4. **Relative speed** represents the regular speed by which the moving object moves to cover the equal distance at the same period of time.

5. The universe emerged from the particles of **oxygen and nitrogen**.

B An object is put at a distance of 4 cm. from the optical centre of a lens a (real - magnified) image is formed for the object and when the object moved a distance of 2 cm away from the lens a (real-equal to the object) image is formed.

1. What is the kind of the lens?

2. Draw the path of the rays that formed the image when the object was at a distance of 4 cm from the optical centre of the lens?

C Give reasons for:

1. When you look at the mirror you see your face image.

2. There are no new species of grapes when they reproduce by vegetative reproduction.

Answer the following questions:

Question 1

A Complete the following sentences:

1. The movement path may be... **straight** . Or... **curved** .or both of them.
2. When the object lies in front of... **concave**. lens, a virtual and diminished image is formed.
3. The yeast fungus reproduces by **budding** while the starfish reproduces by.... **Regeneration**

B When does this happen ... ?

1. The acceleration of a moving object = zero. **when the object moves at uniform speed where $a_v = \text{Zero}$**
2. The displacement of an object = the distance that the object moved. **when the object moves in a straight Line in one direction**
3. The person suffers from short-sightedness. **when the eyeball is elongated, or when the convexity of the eye lens surface increased**

C There are two types of cell division. One of them includes the following Phases:

(Anaphase Metaphase - Telophase - Prophase)

1. What is the type of division that include these phases. **Mitosis Cell division**
2. Arrange the previous phases according to the sequence of their occurrence.

prophase - meta Phase- anaphase- telophase

Question 2

A Choose the correct answer :

1. The number of chromosomes in the gamete is....the number of the chromosomes in the original cell.

a. quarter.

b. **half.**

c. double.

d. equals.

2. Our solar system is located in one of the arms of the Milky way galaxy.

a. **spiral**

b. straight

c. circular

d. oval

3. The reproduction which considered as a source of genetic variation is a.....

reproduction.

a. budding.

b. vegetative

c. **sexual**

d. asexual

4. The distance from the center of mirror curvature and its focus equals...

a. radius of curvature.

b. **quarter of the diameter of curvature.**

c. diameter of curvature.

d. half of the focal length.

5. From the scalar quantities

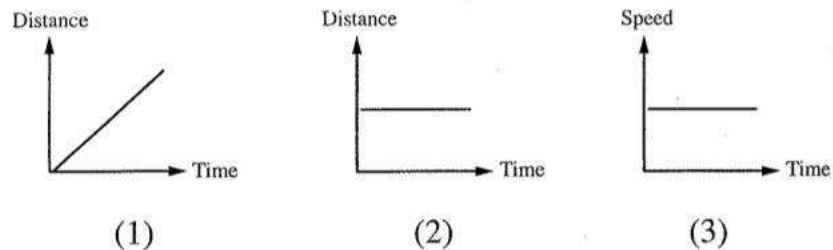
a. **the time.**

b. the force.

c. the acceleration.

d. the displacement.

B Describe the case of the body in each of the following graphs:



- 1- The body moves in a uniform speed
- 2- The body is at rest ($v=0$)
- 3- The body moves in a Constant Speed $a=0$

C What happens in the following cases:

1. Explosion of the expanded part from the Sun towards the crossing star

(according to the crossing star theory).

A gaseous line was formed of a great length from the sun, then the sun escaped From the gravity of the crossing star, after that the gaseous Line started to condense due to the Sun attraction, and cools forming the planets.

2. The combination of the male gamete and female gamete.

Fertilization is happened and the zygote is formed.

Question 3

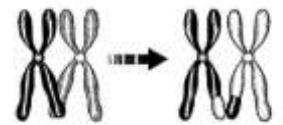
A Write the scientific term for the following:

1. Changing the position of an object as the time passes according to the position of another fixed object. **Motion**

2. A point located inside the lens and lies on its principal axis. **The optical centre of the lens**
3. The speed of the moving object relative to the observer. **Relative speed**
4. It contains all the galaxies, stars, planets and living organisms. **The universe**
5. It's a mirror that its reflecting surface is a part of a hallow sphere. **The spherical mirror**

B 1. What is the name of this phenomenon in front of you? **Crossing over Phenomenon**

2. What is the importance of its occurrence. **It works on the variation of the genetic traits among the members of the same species**



3. Mention the name of the phase that this phenomenon occurs?

prophase 1 (at its end)

C A driver used brakes to stop the car moved by 20 m/sec. Calculate the time taken by the car to stop. Given that the car moved with a decelerating motion equals 2 m/sec?

$$- a = v_2 - v_1 / t =$$

$$t = v_2 - v_1 / a = 20 - 0 / -2 = 10 \text{ sec}$$

Question 4

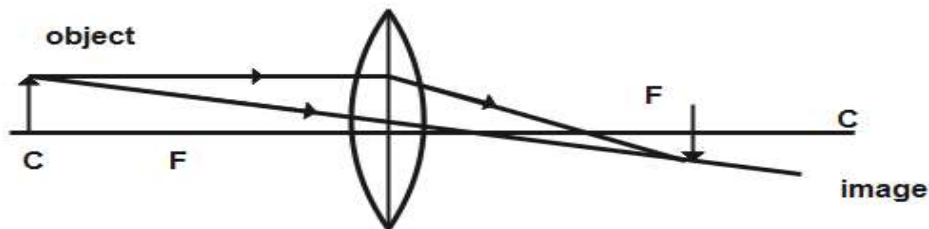
A Correct the underlined words:

1. When the light ray falls by an angle of 0° on the reflecting surface, so the reflected ray will be perpendicular on the reflecting surface.
2. The parent individual disappears during the reproduction by **binary Fission**
3. The measuring unit of the speed is **meter / second**.

4. Average speed represents the regular speed by which the moving object moves to cover the equal distance at the same period of time.
5. The universe emerged from the particles of hydrogen and helium

B An object is put at a distance of 4 cm. from the optical centre of a lens a (real - magnified) image is formed for the object and when the object moved a distance of 2 cm away from the lens a (real-equal to the object) image is formed.

1. What is the kind of the lens? **convex lens**
2. Draw the path of the rays that formed the image when the object was at a distance of 4 cm from the optical centre of the lens?



C Give reasons for:

1. When you look at the mirror you see your face image. **Due to light reflection**
2. There are no new species of grapes when they reproduce by vegetative reproduction.

Because the new off spring gets a Full copy of the parental individual's genetic traits