

الاجابات نهاية الصفحة

Complete the following sentences:

1. Speed measuring unit is..... while the measuring unit of acceleration is....
2. The crossing over phenomenon occurs in of....division.
3.and..... are types of spherical mirrors.
4. The Sun and the planets revolving around it, rotate around the center of.... galaxy.
5. Force is a..... physical quantity, while mass is a..... physical quantity.

B What's meant by ... ?

1. Angle of incidence.
2. Regular (uniform) speed.
3. The pole of the mirror.

C "A car starts movement from rest until its speed reaches 25 m/s after 10 seconds."

1. Calculate the value of acceleration.
2. What kind is the acceleration?

Question 2**Write the scientific term for each of the following statements:**

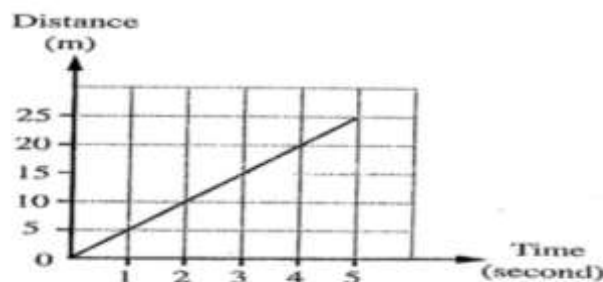
1. The combination of the male gamete and the female gamete to form zygote

2. A disease that infects the eye lens and it becomes opaque.
3. A vector quantity that equals the displacement in one second.
4. Ability of animals to compensate their missing parts.
5. The distance that light travels in a year.

B What happens in the following cases:

1. If an object moves at a regular speed, what is the value of its acceleration?
2. When there is elongation in the ball of the eye.

C An object moves according to the graphical relation shown in the opposite figure, calculate :



1. The speed of the object's motion and mention its kind.
2. The time that the object takes to cover a distance of 15 meters.
3. The distance that the object covers in 4 seconds.

Question 3

Choose the correct answer:

1. A human being stood in front of a plane mirror at a distance of 2 meters, so the distance between him and his image is.....
 - a. 1 meter.
 - b. 2 meters.
 - c. 3 meters.
 - d. 4 meters.

2. Meiotic division in flowering plants occurs in the anther to produce.

- a. ovum.
- b. chromosome.
- c. pollen grains.
- d. sperm.

3. Within minutes of the Big Bang, the percentage of hydrogen in the universe was

- a. 25%
- b. 50%
- c. 75%
- d. 100%

4. If the speed of a car is 36 km/h, it means that its speed is... m/sec.

- a. 10
- b. 20
- c. 40
- d. 80

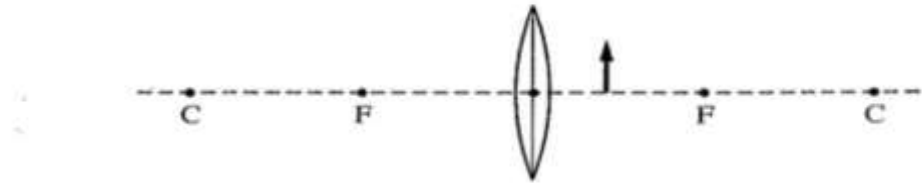
5. The spindle fibres appear during the cell division through the....

- a. telophase.
- b. interphase.
- c. prophase.
- d. metaphase.

B Give reasons for :

- 1. The moving car seems stable to the observer who moves at the same speed and direction.
- 2. The cell passes through interphase before starting meiotic division.
- 3. Pilots take in consideration the velocity and the direction of the wind.

In the shows figure:



1. Complete the ray to get the image.
2. Mention the properties of the image.

Question 4

A Correct the underlined words:

1. The lens is a transparent medium that reflects the light and defined with two spherical surfaces.
2. If the object's speed decreases by time, it is called acceleration.
3. Amoeba reproduces by Budding.
4. Mitotic division leads to form gametes.
5. The scientist who found the modern theory about the evolution of the solar system is Laplace.

B Mention one usage for each of the following:

1. The speedometer.
2. Nano-molecules of gold.

C "Two cells divide, one in a human female stomach and the other in her ovary" Mention:

1. The type of the division in each of the two cells.
2. The number of the cells produced from the stomach cell division.

Answers

Complete the following sentences:

1. Speed measuring unit is **m/sec** while the measuring unit of acceleration is **m/sec²**
2. The crossing over phenomenon occurs in **ProPhase** of **first mitotic** division.
3. **Concave** and **convex** are types of spherical mirrors.
4. The Sun and the planets revolving around it, rotate around the center of **Milky way** galaxy.
5. Force is a **vector** physical quantity, while mass is a **scalar** physical quantity.

B What's meant by ... ?

1. Angle of incidence.
It is the angle between the incident light ray and the normal
2. Regular (uniform) speed.
It is the speed at which the object covers equal distance in equal periods of time
3. The pole of the mirror.
It is the point present in the middle of the reflecting surface of the mirror

C "A car starts movement from rest until its speed reaches 25 m/s after 10 seconds."

1. Calculate the value of acceleration.
 $a = \frac{V_2 - V_1}{t} = \frac{25 - 0}{10} = 2.5 \text{ m/sec}^2$
2. What kind is the acceleration?

It is a Positive acceleration

Question 2

Write the scientific term for each of the following statements:

1. The combination of the male gamete and the female gamete to form zygote **Fertilization**
2. A disease that infects the eye lens and it becomes opaque.

Cataract

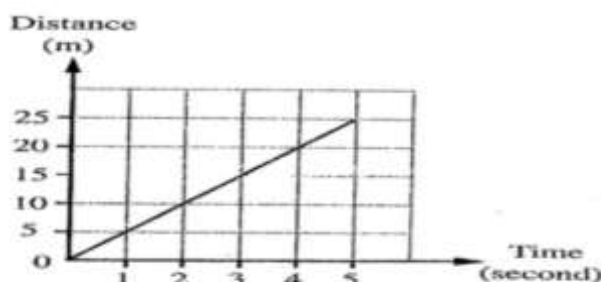
2. A vector quantity that equals the displacement in one second.
velocity
4. Ability of animals to compensate their missing parts. **Regeneration**
5. The distance that light travels in a year. **The light year**

B What happens in the following cases:

1. If an object moves at a regular speed, what is the value of its acceleration?
Acceleration = Zero
2. When there is elongation in the ball of the eye.

short - sighted ness occurs

C An object moves according to the graphical relation shown in the opposite figure, calculate :



1. The speed of the object's motion and mention its kind.
 $v = 5/1 = 10/2 = 15/3 = 20/4 = 5 \text{ m/sec}$ It's a kind of regular speed.
2. The time that the object takes to cover a distance of 15 meters.
3 Seconds

3. The distance that the object covers in 4 seconds.

20 meters

Question 3

Choose the correct answer:

1. A human being stood in front of a plane mirror at a distance of 2 meters, so the distance between him and his image is.....

- a. 1 meter.
- b. 2 meters.
- c. 3 meters.
- d. **4 meters.**

2. Meiotic division in flowering plants occurs in the anther to produce.

- a. ovum.
- b. chromosome.
- c. **pollen grains.**
- d. sperm.

3. Within minutes of the Big Bang, the percentage of hydrogen in the universe was a. 25%

- b. 50%
- c. **75%**
- d. 100%

4. If the speed of a car is 36 km/h, it means that its speed is... m/sec.

- a. 10**
- b. 20
- c. 40
- d. 80

5. The spindle fibres appears during the cell division through the....
- telophase.
 - interphase.
 - prophase.**
 - metaphase.

B Give reasons for :

1. The moving car seems stable to the observer who moves at the same speed and direction.

Because the relative speed equals the difference between the speed of the car and the Speed of the observer equals zero

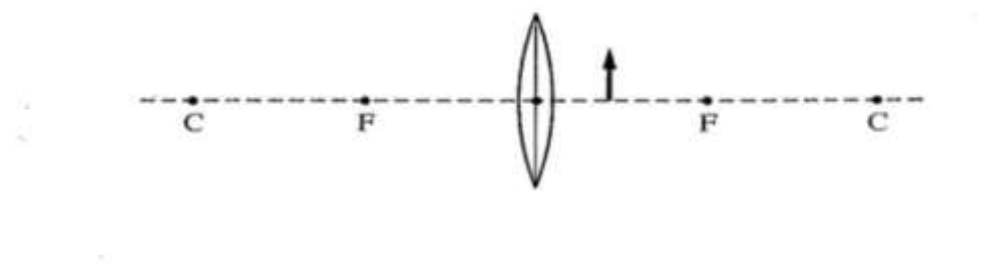
2. The cell passes through interphase before starting meiotic division.

Because some important biological processes occur to prepare the cell for division, and also the amount of the genetic material duplicated

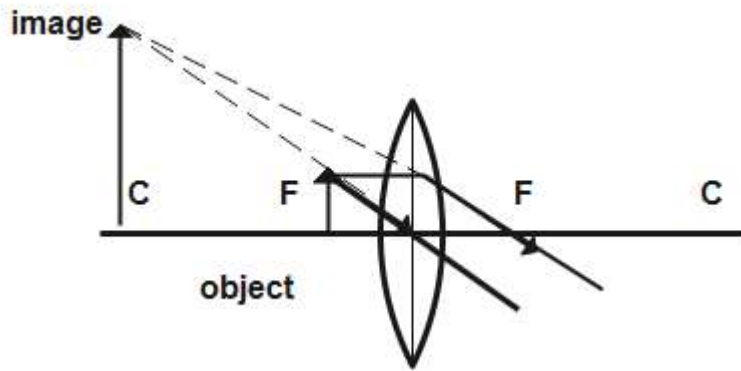
3. Pilots take in consideration the velocity and the direction of the wind.

To calculate the amount of fuel necessary to complete the trip, and also the time needed for it

In the shows figure:



1. Complete the ray to get the image.



2. Mention the properties of the image.

The prop's of formed image: virtual, upright and enlarged

Question 4

A Correct the underlined words:

1. The lens is a transparent medium that **refract** the light and defined with two spherical surfaces.
2. If the object's speed decreases by time, it is called **deceleration**
3. Amoeba reproduces by **binary fission**
4. **Meiotic** division leads to form gametes.
5. The scientist who found the modern theory about the evolution of the solar system is **Fred Hoyle**.

B Mention one usage for each of the following:

1. The speedometer.
It helps in identifying the speed of car directly
2. Nano-molecules of gold.

It used to detect and to kill the cancer cells

C "Two cells divide, one in a human female stomach and the other in her ovary" Mention:

1. The type of the division in each of the two cells.

The stomach cell divided mitotically, the Ovary cell divided meiotically

2. The number of the cells produced from the stomach cell division.

Two cells

