

الاجابات نهاية الصفحة

Answer the following questions:

Question 1

A Choose the correct answer :

1. The ratio between initial speed and final speed for a moving object by increasing accelerations is.....

- a. more than one.
- b. less than one.
- c. equal to one.
- d. equal zero.

2. A short sighted person sees the far objects distorted as their images formed.

- a. on the retina.
- b. behind the retina.
- c. in front of the retina.
- d. in front of the lens.

3. From examples of the scalar physical quantities is

- a. the velocity.
- b. the mass.
- c. the force.
- d. the acceleration

4. The cell that never divide is.....

- a. adult red blood cells.
- c. the liver.
- b. the stomach.
- d. the skin.

5. Paramecium is a protozoan that reproduces by

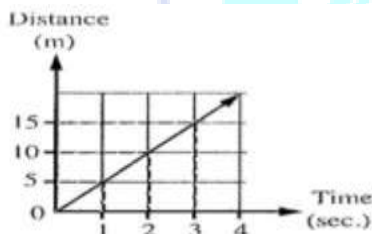
- a. spores.

- b. budding.
- c. regeneration.
- d. binary fission.

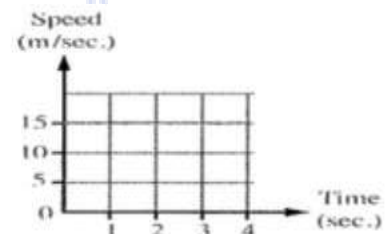
B When each of the following values equal "Zero":

- 1. Reflecting angle of a light ray incident on a plane mirror.
- 2. The velocity of a moving object.
- 3. Reflecting angle for an incident ray falls on reflecting surface of a concave mirror.

C The following graphs represent the motion of two trains :



(1)



(2)

- 1. Describe the motion of the train in figure (2)?
- 2. Calculate the speed of the train in figure (1)?

Question 2

A Write the scientific term for each :

- 1. Asexual reproduction occurs by different parts of the plant without seeds.
- 2. A point inside the lens lies on the principal axis in the mid distance between its faces.
- 3. Are formed of reproductive cell inside living organisms by meiotic division.
- 4. Is the speed of the moving object relative to the observer.
- 5. A series of adverse changes occur which lead to the formation of a complete set of chromosomes that have the same number of the mother cell's chromosomes.

B 1. According to your study, copy the following table in your answer sheet and complete it by two applications of (LASER) in our practical life.

(The user)

The application	Who benefits of the application	The importance of the application
1 st		
2 ^{sd}		

2. An object moved (8) meters to east then (5) meters to west, determine :
The magnitude and the direction of the object's displacement ?

C A thin walled glass sphere its diameter (42 cm.) A suitable part of it was cut. its inner surface was the reflecting surface:

1. What is the type of the mirror produced in the cut part? find its focal length ?
2. By drawing only show properties of the image formed by using the cutting part of the sphere if an object placed at a distance of (10 cm.) of its pole ?

Question 3

Correct the underlined words :

1. The clear vision for a normal vision person remains, if the object comes closer at a distance not less than 60 cm.
2. The ratio of number of cells produced due to the 3rd division to number of cells produced due the 2^{sd} division equals (6/2).
3. A phase where some important biological processes occur to prepare the cell for division is called prophase.

B Give reasons for :

1. The force is a vector quantity.

2. Wind direction may affect the amount of consumed fuel by the airplane between two cities in going flight than return.
3. Uniform speed for a car hard to done practically.
4. Crossing over phenomenon is an important factor in genetic variation among individuals of the same species.
5. Every galaxy has a definite shape differs of other galaxies.

C A moving car by a uniform speed covers (80) meters in (4) seconds. Then the driver press the brakes, so it stopped after other (4) seconds. Find:

1. The magnitude of the acceleration within 1st (80) meters.
2. The magnitude of the acceleration after pressing the brakes.

Question 4

A Complete the following by suitable words :

1. Velocity and displacement of an object are similar in.... and for the measuring units they are....
2. The result of dividing the total distance over the total time to cover it is equal...
and it is equal... if the object moves by it. The object covers the same distance in the same time.
3. The Big Bang theory explain the origin of.... while the nebular theory is one of the theories which explain the origin of...
4. In animal cell spindle fibers formed from....., while in plant cell spindle fibers form.....at the poles.

B Compare between :

1. The crossing star theory and the modern theory.
(in term of the scientist developing the theory)

2. Sexual reproduction and asexual reproduction. (in term of properties of the offsprings)

C In the figure convex lens formed an image for the object at its left side at a distance of (12 cm), and this image is (real - inverted - equal to the object) in front of a reflecting surface of a plane mirror a way of the lens (20 cm).

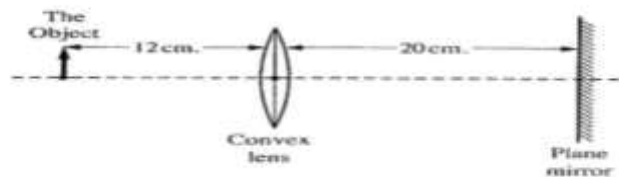
Conclude each of the following:

1. Focal length of the convex lens.

The Object

2. The distance between the object and the image formed by the plane mirror?

is the image upright or inverted for the object?



بسم الله
نلهمك لتبدع....!

Answers

A Choose the correct answer :

1. The ratio between initial speed and final speed for a moving object by increasing accelerations is.....
 - a. more than one.
 - b. **less than one.**
 - c. equal to one.
 - d. equal zero.
2. A short sighted person sees the far objects distorted as their images formed.
 - a. on the retina.
 - b. behind the retina.
 - c. **in front of the retina.**
 - d. in front of the lens.
3. From examples of the scalar physical quantities is
 - a. the velocity.
 - b. **the mass.**
 - c. the force.
 - d. the acceleration
4. The cell that never divide is.....
 - a. **adult red blood cells.**
 - c. the liver.
 - b. the stomach.
 - d. the skin.
5. Paramecium is a protozoan that reproduces by
 - a. spores.
 - b. budding.
 - c. regeneration.
 - d. **binary fission.**

B When each of the following values equal "Zero":

1. Reflecting angle of a light ray incident on a plane mirror.

when the incident Light ray fall perpendicular on the reflecting surface.

And incident angle = Reflecting angle = Zero

2. The velocity of a moving object.

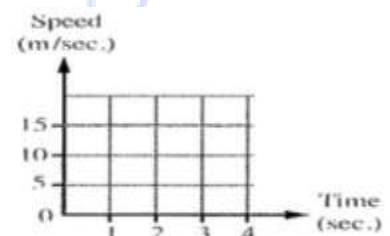
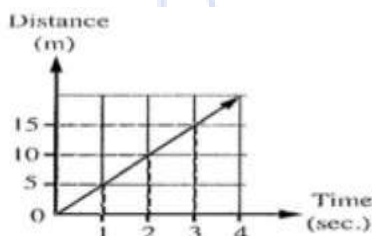
when the moving object returns back to the Same starting point.

The displacement = zero, and so velocity = zero

3. Reflecting angle for an incident ray falls on reflecting surface of a concave mirror.

when the incident light ray Falls passing through the centre of curvature of concave mirror. Incident angle = Reflecting angle = zero.

C The following graphs represent the motion of two trains :



Describe the motion of the train in figure (2)?

The train moves by uniform speed, and acceleration = Zero.

Calculate the speed of the train in figure (1)?

$$V = \frac{d}{t} = \frac{15}{3} = \frac{10}{2} = \frac{5}{1} = 5 \text{ m/sec.}$$

Question 2

A Write the scientific term for each :

1. Asexual reproduction occurs by different parts of the plant without seeds. **vegetable reproduction**
2. A point inside the lens lies on the principal axis in the mid distance between its faces. **optical centre**
3. Are formed of reproductive cell inside living organisms by meiotic division.

Gametes

4. Is the speed of the moving object relative to the observer. **Relative speed**
5. A series of adverse changes occur which lead to the formation of a complete set of chromosomes that have the same number of the mother cell's chromosomes. **Telophase of mitosis**

B 1. According to your study, copy the following table in your answer sheet and complete it by two applications of (LASER) in our practical life.

(The user)

the application	who benefit of the application.	The importance of the application .
1 st	-Land Surveyors and topographical scientist. - Cancer's Patients.	Determine distance and height. -Focusing a loser beam An Nano-molecules of gold to kill cancer cell.

2. An object moved (8) meters to east then (5) meters to west, determine :
The magnitude and the direction of the object's displacement ?

Displacement = 8.5=3m. Direction to the east.

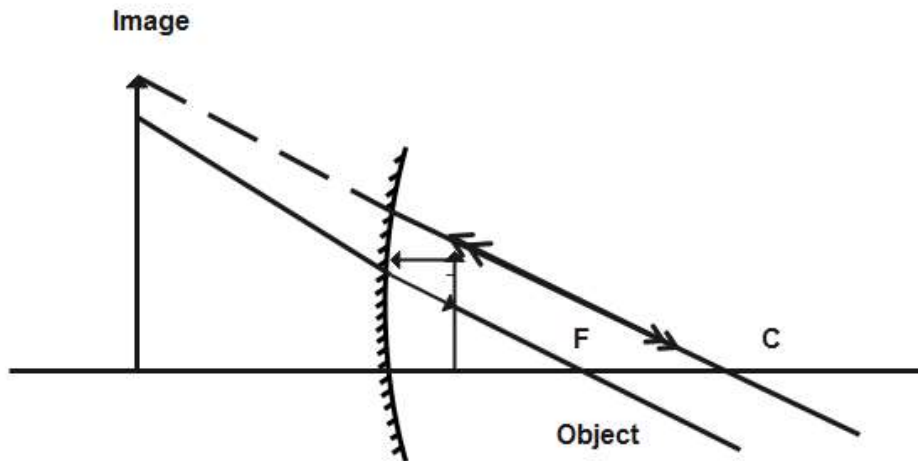
C A thin walled glass sphere its diameter (42 cm.) A suitable part of it was cut. its inner surface was the reflecting surface:

1. What is the type of the mirror produced in the cut part? find its focal length ?

concave mirror Focal length = $\frac{\text{displacement}}{4} = \frac{42}{4} = 10,5 \text{ cm}$

2. By drawing only show properties of the image formed by using the cutting part of the sphere if an object placed at a distance of (10 cm.) of its pole ?

properties of the formed image :- virtual, erect and magnified



Question 3

Correct the underlined words :

1. The clear vision for a normal vision person remains, if the object comes closer at a distance not less than 1,25m.
2. The ratio of number of cells produced due to the 3rd division to number of cells produced due the 2nd division equals (8/2).
3. A phase where some important biological processes occur to prepare the cell for division is called Interphase.

B Give reasons for :

1. The force is a vector quantity.

Because it's determined by its magnitude and direction

2. Wind direction may affect the amount of consumed fuel by the airplane between two cities in going flight than return.

Because the time of the trip decreases if the aeroplane fly in the that consume Same wind direction less Fuel and vice verse.

3. Uniform speed for a car hard to done practically.

Because the speed of a car changes according to the condition of the road

4. Crossing over phenomenon is an important factor in genetic variation among individuals of the same species.

Due to exchange of some parts between the 2 inner chromatins of the tetrad.

5. Every galaxy has a definite shape differs of other galaxies.

Due to the harmony and order of stars. in each galaxy.

C A moving car by a uniform speed covers (80) meters in (4) seconds. Then the driver press the brakes, so it stopped after other (4) seconds. Find:

1. The magnitude of the acceleration within 1st (80) meters. **Acceleration = Zero**

2. The magnitude of the acceleration after pressing the brakes.

$$\text{Acceleration} = \frac{V_2 - V_1}{T} = \frac{0 - 20}{4} = 5 \text{ m/sec}$$

Question 4

A Complete the following by suitable words :

1. Velocity and displacement of an object are similar in... **direction**. and for the measuring units they are...**different**

2. The result of dividing the total distance over the total time to cover it is equal... **average speed** and it is equal **uniform speed** ... if the object moves by it. The object covers the same distance in the same time. -

1) 3. The Big Bang theory explain the origin of... **The universe**. while the nebular theory is one of the theories which explain the origin of...

The solar systems

4. In animal cell spindle fibers formed from.. **The centrosome condensing**....., while in plant cell spindle fibers form... **the cytoplasm** ..at the poles.

B Compare between :

1. The crossing star theory and the modern theory.

(in term of the scientist developing the theory)

The crossing star theory	The modern theory
champerion and moulten	Fred Hoyle

2. Sexual reproduction and asexual reproduction. (in term of properties of the off springs)

sexual reproduction	Asexual reproduction
Gathering between the prop's of 2 Parents	Identical to the parents-

C In the figure convex lens formed an image for the object at its left side at a distance of (12 cm), and this image is (real - inverted - equal to the object) in front of a reflecting surface of a plane mirror a way of the lens (20 cm).

Conclude each of the following:

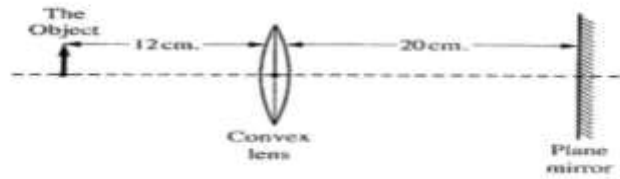
1. Focal length of the convex lens.

The Object

) 1 => The Focal length = $\frac{12-6}{2} = 6\text{cm.}$

2. The distance between the object and the image formed by the plane mirror?

is the image upright or inverted for the object?



Because the object at the centre of curvature.

The distance between the image formed by the plane mirror and the object-

$$8 + 8 + 12 + 2 = 40 \text{ cm}$$

The image formed by the lens is inverted

