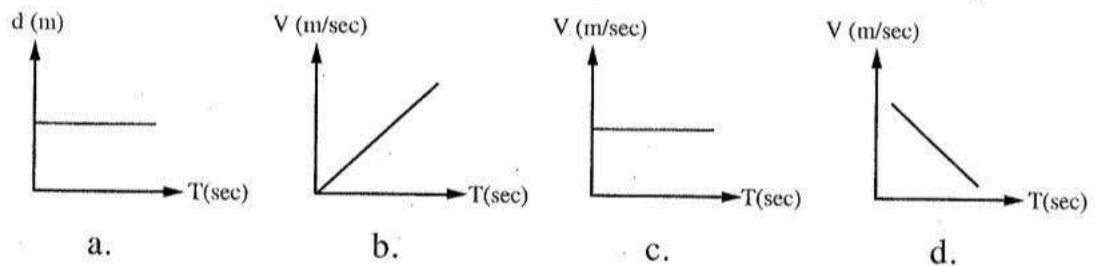


الاجابات نهاية الصفحة

Choose the correct answer :

1. The distance and displacement are equal when the body moves in a..... in one direction.
 - a. zigzag
 - b. circular
 - c. straight line
 - b. bud.
2. The following cells containing complete genetic material excep....
 - a. germs.
 - c. zygote.
 - d. curved
 - d. pollen grain.
3. If the distance between two centers of curvatures to the lens is 20 cm. so its focal length equal....
 - a. 5 cm.
 - b. 10 cm.
 - c. 15 cm.
 - d. 20 cm.
4. The ratio between final and initial speed for moving body with accelerating motion....
 - a. more than one.
 - b. less than one.
 - c. equal to one.
 - d. equal zero.

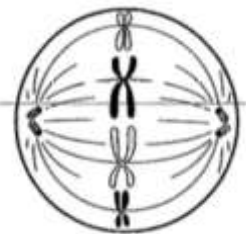
5. Which of the following graphs represents object moves with constant speed:



B Compare between each of the following:

1. Distance and displacement (as in type of physical quantity).
2. Crossing star theory and modern theory (as in origin of the solar system).
3. Somatic cell and reproductive cell (as in number of produced cells when cell division takes place in each of them).

C Through your study the stages of mitotic division answer the following:



1. Name the phase that preceding this phase the figure.
2. In which phase the centromere of each chromosome is split lengthwise into two halves?
3. In which phase the spindle fibers disappear?
4. What the importance of interphase?

Question 2

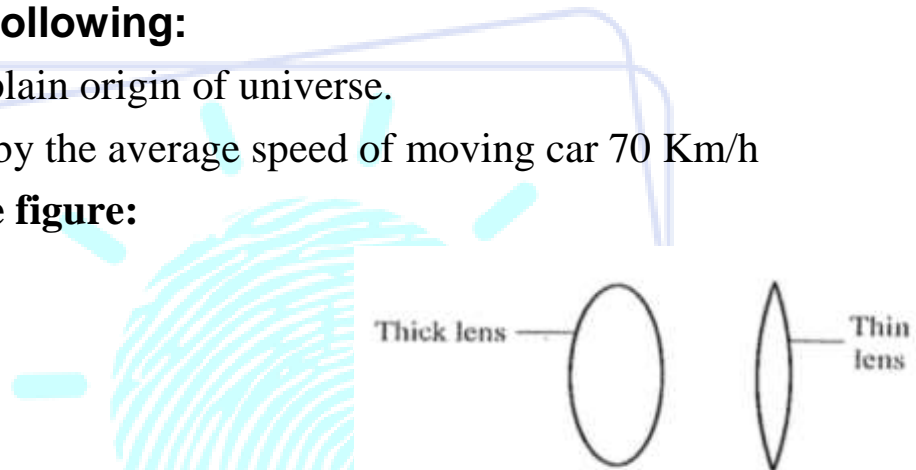
A Correct the underline words :

1. Meiotic division aims to growth of living organisms.
2. Light rays is passing when falling on reflected surface.

3. The old stars are gather in the edges of the galaxy.
4. The word ambulance is written on ambulance cars minimized.
5. Number of chromosomes in an ovum cell containing double number of chromosomes in the one of liver cells.

B Mention the following:

1. Theory that explain origin of universe.
2. What is meant by the average speed of moving car 70 Km/h
3. In the opposite figure:



Which one of these lenses has largest focal length ?

C If an object moves from rest regularly until its speed reaches to 12 m/sec after 2 sec from the start of moving so:

1. The change of speed through 2 sec=..... m/sec.
2. Acceleration=.....m/sec².

Question 3

A Complete the following with suitable words:

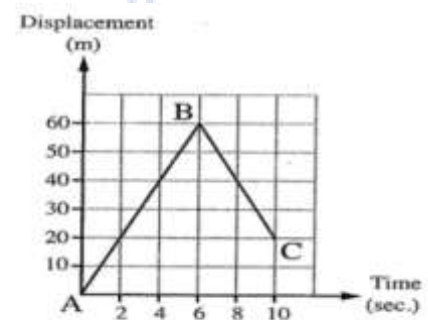
1. From the multicellular organisms that reproduce by budding is.....
2. ...reproduction doesn't required neither special systems nor structures in the living organisms.
3. are used instead of medical glasses to treat vision defects.
4. When the object is placed at.... of the convex lense, there is no image will be formed.

5. The moving car with 50 Km/h in constant direction its speed appears at 110 Km/h related to observer moves with 60 Km/h in direction of the car motion.

B What would happen in the following cases ...?

1. Light ray that falls passing through center of curvature of the mirror.
2. A plane mirror is placed at the left side of the drivers instead of the convex mirror.
3. The parts of the inner chromatids are exchanged in the first prophase.

C In the opposite figure, that represents the movement of an object from point (A) to point (C) passing by point (B), Calculate the following:



1. Speed.
2. Velocity.

Question 4

A Write the scientific term:

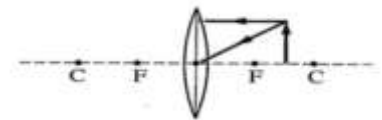
1. Chemically consists of DNA and protein.
2. Change of object position as time passes according to the location of another object.
3. A physical quantity that represents change in the object speed in unit time.
4. A method used by physicists to predict the mathematical relation between physical quantities.

5. It containing genetic materials from both parents and during growth it gives new individuals carries the traits of both parents.

B Give reasons for :

1. It's hard to measure the regular speed of a car practically.
2. The Sun escaped from the gravity of the huge star in the crossing star theory.
3. The number of chromosomes is constant in the same species which reproduce sexually.

C Transfer the following drawing to your answer sheet, then complete the direction of rays, then mention the properties of formed image.



Answers

Choose the correct answer :

1. The distance and displacement are equal when the body moves in a..... in one direction.

- a. zigzag
- b. circular
- c. **straight line**
- b. bud.

2. The following cells containing complete genetic material excep....

- a. germs.
- c. zygote.
- d. curved
- d. **pollen grain.**

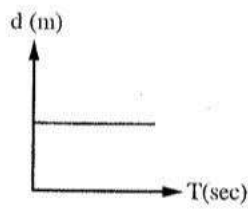
3. If the distance between two centers of curvatures to the lens is 20 cm. so its focal length equal....

- a. **5 cm.**
- b. 10 cm.
- c. 15 cm.
- d. 20 cm.

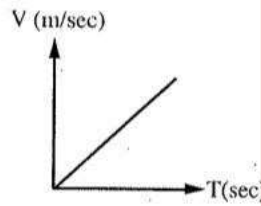
4. The ratio between final and initial speed for moving body with accelerating motion....

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

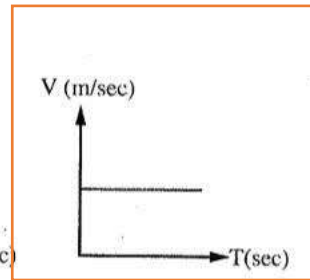
5. Which of the following graphs represents object moves with constant speed:



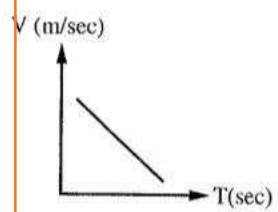
a.



b.



c.



d.

B Compare between each of the following:

1. Distance and displacement (as in type of physical quantity).

Distance: is a scalar physical quantity.

-Displacement: is a vector physical quantity

1. Crossing star theory and modern theory (as in origin of the solar system)

-crossing star theory: The Sun

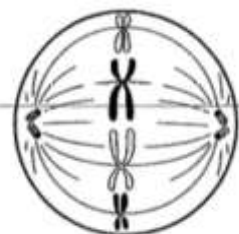
-Modern theory: star rather than the sun

3. Somatic cell and reproductive cell (as in number of produced cells when cell division takes place in each of them).

- somatic cell: 2 cells.

-Reproductive cell: 4 cells

C Through your study the stages of mitotic division answer the following:



1. Name the phase that preceding this phase the figure. **Prophase**
2. In which phase the centromere of each chromosome is split lengthwise into two halves? **Anaphase**
3. In which phase the spindle fibers disappear? **Telophase**
4. What the importance of interphase? **The cell prepare it self for division.**

Question 2

A Correct the underline words :

1. Meiotic division aims to **Produce gametes**
2. Light rays is **reflecting** when falling on reflected surface.
3. The old stars are gather in the **centre** of the galaxy.
4. The word ambulance is written on ambulance cars **reversed**
5. Number of chromosomes in an ovum cell containing **half** number of chromosomes in the one of liver cells.

B Mention the following:

1. Theory that explain origin of universe. **Big Bang theory**
2. What is meant by the average speed of moving car 70 Km/h
The total distance divided by the total time equal 703
3. In the opposite figure: . . **نلهمك لتبدع**



Which one of these lenses has largest focal length ? **the thin lens**

C If an object moves from rest regularly until its speed reaches to 12 m/sec after 2 sec from the start of moving so:

1. The change of speed through 2 sec=..12..... m/sec.
2. Acceleration=.....6.....m/sec².

Question 3

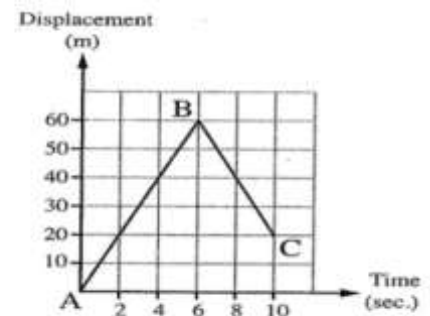
A Complete the following with suitable words:

1. From the multicellular organisms that reproduce by budding is **Hydra**
2. A **Sexual** ...reproduction doesn't required neither special systems nor structures in the living organisms.
3. .. **contact lenses**.... are used instead of medical glasses to treat vision defects.
4. When the object is placed at.. **focus**... of the convex lense, there is no image will be formed.
5. The moving car with 50 Km/h in constant direction its speed appears at 110 Km/h related to observer moves with 60 Km/h in ... **opposite**..... direction of the car motion.

B What would happen in the following cases ...?

1. Light ray that falls passing through center of curvature of the mirror.
It reflects on it self
2. A plane mirror is placed at the left side of the drivers instead of the convex mirror.
An equal image will be formed to the cars behind the driver, so he can not see the whole road behind him.
3. The parts of the inner chromatids are exchanged in the first prophase.
crossing over phenomenon take place

C In the opposite figure, that represents the movement of an object from point (A) to point (C) passing by point (B), Calculate the following:



1. Speed.
2. Velocity.

$$\text{distance} = AB + BC = 60 + (60 - 20) = 100 \text{ m}$$

$$\text{Speed} = d / t = 100 / 10 = 10 \text{ m/sec}$$

$$\begin{aligned} \text{2- velocity} &= \text{displacement} / \text{time} \\ &= 20 / 10 = 2 \text{ m/sec} \end{aligned}$$

Question 4

A Write the scientific term:

1. Chemically consists of DNA and protein. **chromosome.**
2. Change of object position as time passes according to the location of another object. **Motion**
3. A physical quantity that represents change in the object speed in unit time. **Acceleration**
4. A method used by physicists to predict the mathematical relation between physical quantities. **Table and graphs**
5. It containing genetic materials from both parents and during growth it gives new individuals carries the traits of both parents.

Zygote.

B Give reasons for :

1. It's hard to measure the regular speed of a car practically.

Due to the traffic and road condition

2. The Sun escaped from the gravity of the huge star in the crossing star theory.

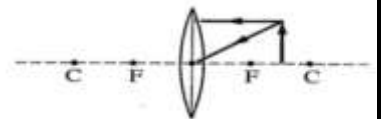
Due to explosion in the expanded part of the Sun that faces the huge star

3. The number of chromosomes is constant in the same species which reproduce sexually.

Because of sexual reproduction depends on combination of male and female gametes which formed by meiosis that includes the reduction of chromosomes number to its half in the formed gametes

C Transfer the following drawing to your answer sheet, then complete the direction of rays, then mention the properties of formed image.

The prop's of Formed Image :-



real, inverted and magnified

