



الاجابات نهاية الصفحة

A Choose the correct answer .

1. The accurate definition of the speed is the distance covered through....
 - a. the time.
 - b. a unit time.
 - c. an hour.
 - d. a minute.
2. (Speed - time) graph for a regular motion at a constant speed is a straight line is..
 - a. curved.
 - b. passing by the origin point.
 - c. parallel to x-axis.
 - d. parallel to y-axis.
3. When an object is placed to face a convex mirror, the image formed. is.....
 - a. lies behind the mirror.
 - b. is real.
 - c. is erect.
 - d. (a) and (c).
4. Fred Hoyle relates controlling the Sun in the orbits of the planets around it to the Sun.
 - a. temperature
 - b. rotation speed
 - c. attraction force
 - d. glowing
5. The chemical structure of the chromosome is
 - a. the nucleic acid only.

- b. protein and nucleic acid.
- c. protein, fats and nucleic acid.
- d. all the previous.

B Pierre Simon Laplace is affected by two observations during the assumption of the nebular theory, mention them.

A runner covered a distance of 60 meters of a straight track in 10 seconds, and then he returned back walking. He took 50 seconds to come back to the starting point of running. Calculate the runner's average speed:

- 1. While running.
- 2. While returning.
- 3. During the whole trip.

Question 2

A Complete the following sentences:

- 1. The contact lenses are used instead of the.....and it is made of....
- 2. The convex lens..... the light, while the convex mirror..... the light.
- 3. The force is considered...physical quantity, while the distance is considered....
physical quantity,
- 4. The solar system is located in one of the spiral arms of the....on the...
- 5. There are two types of reproduction in living organisms which are.....
and.

B Compare between : reproduction by budding and reproduction by sporogony according to site of occurrence and give examples for each.

C Two cars move in the same direction, if the speed of the first car is 50 km/h and the second car is 70 km/h. Calculate the relative speed of the second car relative to an observer:

1. Standing on the ground.
2. Sitting in the first car.
3. What are you conclude from the resultants.

Question 3

A Write the scientific term of each of the following:

1. The regular speed by which the moving object moves to cover the same distance at the same period of time.
2. The change of the object speed by equal values through equal period of time.
3. Bouncing of the light to the same side when it strikes a reflecting surface.
4. The ability of some animals to compensate their missing parts.
5. The point inside the lens on the principal axis in the mid distance between its faces.

B Show by drawing what happen in anaphase 1 for meiosis division.

C A car moves at speed 40 m/sec. If the driver used the brakes to decrease the speed so, it decreases by 2 m/sec^2 ? Calculate its speed after 15 seconds from using the brakes.

Question 4

A Correct the underlined words:

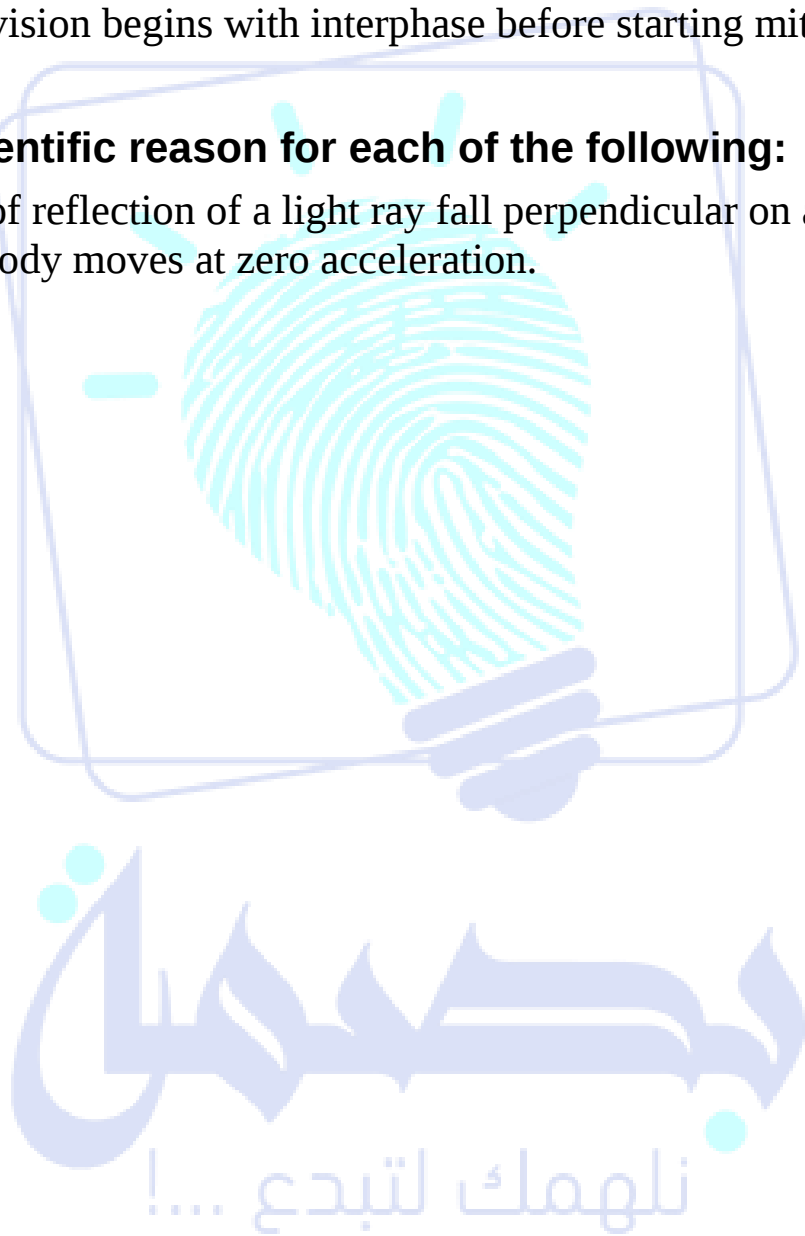
1. When an object is placed at the center of curvature of a concave mirror, its formed image is real, inverted and enlarged.
2. Crossing star is a glowing gaseous sphere revolving around itself, from which the solar system was originated.
3. Concave mirror is a transparent medium that refracts the light and is limited with two spherical surfaces.
4. Average speed is the speed of a moving object relative to a constant or a moving observer.

B Give reasons for :

1. The word ambulance is written in a laterally inverted way on the ambulance car.
2. The short-sightedness is corrected by using a concave lens.
3. The lens had two foci, while the spherical mirror has one focus.
4. Cellular division begins with interphase before starting mitosis division.

C Show scientific reason for each of the following:

1. The angle of reflection of a light ray fall perpendicular on a plane mirror = zero.
2. A body moves at zero acceleration.



A Choose the correct answer :

1. The accurate definition of the speed is the distance covered through....
 - a. the time.
 - b. **a unit time.**
 - c. an hour.
 - d. a minute.
2. (Speed - time) graph for a regular motion at a constant speed is a straight line is..
 - a. curved.
 - b. passing by the origin point.
 - c. **parallel to x-axis.**
 - d. parallel to y-axis.
3. When an object is placed to face a convex mirror, the image formed. is.....
 - a. lies behind the mirror.
 - b. is real.
 - c. is erect.
 - d. **(a) and (c).**
4. Fred Hoyle relates controlling the Sun in the orbits of the planets around it to the Sun.
 - a. temperature
 - b. rotation speed
 - c. **attraction force**
 - d. glowing
5. The chemical structure of the chromosome is
 - a. the nucleic acid only.
 - b. **protein and nucleic acid.**
 - c. protein, fats and nucleic acid.

d. all the previous.

B Pierre Simon Laplace is affected by two observations during the assumption of the nebular theory, mention them.

- **There is something that looks like clouds or nebula in space**
- **The space contains many cloudy rings surrounding some planets, as rings of Saturn**

A runner covered a distance of 60 meters of a straight track in 10 seconds, and then he returned back walking. He took 50 seconds to come back to the starting point of running.

Calculate the runner's average speed:

1. While running.

while watching $v_1 = \frac{d_1}{t_1} = \frac{60}{10} = 6 \text{ m/s}$ **To**

2. While returning.

while returning: $V_2 = \frac{d_1}{t_1} = \frac{60}{50} = 1,2 \text{ m/sec}$

3. During the whole trip.

During the whole trip $= v = \frac{d_1 + d_2}{t_1 + t_2} = \frac{60 + 60}{10 + 50} = 2 \text{ m/s.}$

4. _____

Question 2

A Complete the following sentences:

1. The contact lenses are used instead of the... **glasses**..and it is made of...**transparent Plastic** .
2. The convex lens..... **converges**..... the light, while the convex mirror...**diverges**..... the light.
3. The force is considered **vector** ...physical quantity, while the distance is considered... **Scalar** physical quantity, - -
4. The solar system is located in one of the spiral arms of the **Milky way galaxy**on the... **edge of galaxy**.

5. There are two types of reproduction in living organisms which are....
Sexual..... and. - **asexual**

B Compare between : reproduction by budding and reproduction by sporogony according to site of occurrence and give examples for each.

D.O.C	Reproduction by budding.	Reproduction by sporogony
site of occurrence and example.	unicellular organism (yeast, (bread , <u>some fungi</u>). - Multicellular organism (hydra, Sponges)	- Some fungi (bread mould , fungus). - mushroom, some algae.

C Two cars move in the same direction, if the speed of the first car is 50 km/h and the second car is 70 km/h. Calculate the relative speed of the second car relative to an observer:

1. Standing on the ground. **70 m/sec**
2. Sitting in the first car. **$70-50 = 20$ m/sec**
3. What are you conclude from the resultants. **The relative speed of the car depends. the position and direction of the observer**

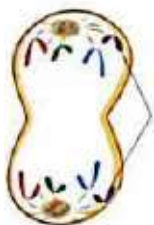
Question 3

A Write the scientific term of each of the following:

1. The regular speed by which the moving object moves to cover the same distance at the same period of time. **Average speed.**
2. The change of the object speed by equal values through equal period of time. **uniform acceleration**
3. Bouncing of the light to the same side when it strikes a reflecting surface. **Light reflection**
4. The ability of some animals to compensate their missing parts.
Regeneration

5. The point inside the lens on the principal axis in the mid distance between its faces. **optical centre**.

B Show by drawing what happen in anaphase 1 for meiosis division.



AnaPhase 1

The spindle fiber shrinks So every 2 homologous chromosomes move each other away from each other .

→ one of the 2 chromosome migrates to ward the cell pole and the other pole Therefore each pole contains half the number of chromosomes of the parent cell.

C A car moves at speed 40 m/sec. If the driver used the brakes to decrease the speed so, it decreases by 2 m/sec²? Calculate its speed after 15 seconds from using the brakes.

$$a = \frac{V_2 - V_1}{\Delta T}$$

$$V_2 - V_1 = a \times \Delta t$$

$$V_2 - 40 = 2 \times 15$$

$$V_2 = 10 \text{ m/se}$$

Question 4

A Correct the underlined words:

1. When an object is placed **Between the focus and the centre of curvature** of a concave mirror, its formed image is real, inverted and enlarged.
2. **Nebula** is a glowing gaseous sphere revolving around itself, from which the solar system was originated.

3. **The lens** is a transparent medium that refracts the light and is limited with two spherical surfaces.
4. **relative speed** is the speed of a moving object relative to a constant or a moving observer.

B Give reasons for :

1. The word ambulance is written in a laterally inverted way on the ambulance car. **To appear in a laterally corrected way, because the mirror of the cars in front of ambulance car form an image which is literally inverted.**

1. The short-sightedness is corrected by using a concave lens. **Because the concave lens diverges the rays before falling exactly on the eye, so the image is formed on the retina.**

2. The lens had two foci, while the spherical mirror has one focus. **because the lens has 2 spherical surface but the spherical mirror a Part of sphere.**

4. Cellular division begins with interphase before starting mitosis division. **To duplicating the genetic material**

C Show scientific reason for each of the following:

1. The angle of reflection of a light ray fall perpendicular on a plane mirror = zero.

Because angle of incidence-zero The incident light ray falls perpendicular on reflecting surface

1. A body moves at zero acceleration.

Because the objects moves at a uniform Speed OR It's speed doesn't change by changing the time