

SUBJECT: SCIENCE

MAX. MARKS : 40

CLASS : IX

DURATION : 1½ HRS

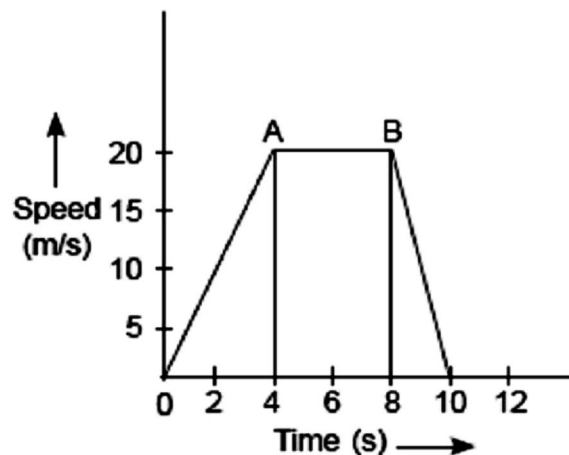
General Instructions:

1. All questions are compulsory.
2. The question paper comprises of **two Sections, A and B**. You are to attempt both the sections.
3. All questions of **Section-A** and **Section-B** are to be attempted separately.
4. Question number **1 to 2** in **Section-A** are **one mark** question. These are to be answered in **one word** or in **one sentence**.
5. Question numbers **3** in **Section-A** is **two marks** questions. These are to be answered in about **30 words** each.
6. Question numbers **4 to 8** in **Section-A** are **three marks** questions. These are to be answered in about **50 words** each.
7. Question numbers **9 to 11** in **Section-A** are **five marks** questions. These are to be answered in about **70 words** each.
8. Question numbers **12 to 14** in **Section-B** are questions based on practical skills and are **two marks** questions.

SECTION – A

1. Name the force responsible for the revolution of moon around the earth.
2. Give reasons for the following observations: an object dropped from a height falls towards the earth; all planets go round the sun.
3. Mass of a planet is twice that of the earth and its radius is four times of the earth. Find the value of 'g' on its surface.
4. (a) Why does the water kept in an earthen pot become cool in summer?
(b) Draw a well labelled diagram showing sublimation of camphor.
(c) Convert: 340 K to degree Celsius.
5. (a) Name the separation technique you would follow to separate
(i) Dyes from black ink
(ii) A mixture of salt and ammonium chloride
(iii) Cream from milk
(iv) Sodium chloride from its solution in water
(b) State the principle used in separating a mixture of two immiscible liquids.
6. Define the following terms: Protoplasm, cytoplasm, nucleoplasm
7. State Archimedes' principle. Explain the reason that a cork floats in water whereas an iron nail sinks.
8. Define animal husbandry. Why live stock production needs to be improved?
9. What is chromatography? How will you separate the components of black ink using chromatography? Write any two applications of chromatography.
10. (a) Explain the formation of complex permanent tissue in plants. Mention two types of complex tissues and write their functions.
(b) How simple permanent tissues are different from complex permanent tissues?

following questions:

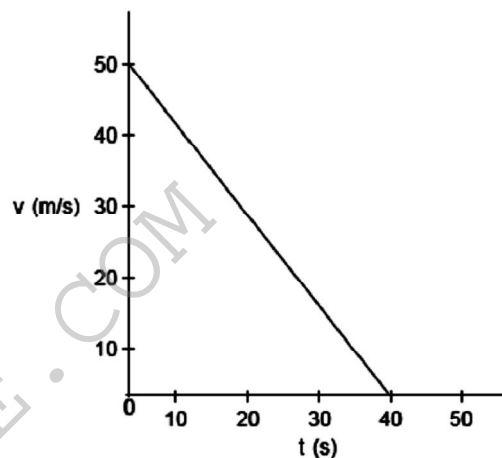


- (i) When is the maximum accelerating force acting on car?
- (ii) What is the retarding force acting on the car?
- (iii) For how long is no force is acting on the car?
- (iv) What is the velocity of the car after 4 seconds?
- (v) Find the acceleration of the car during each of the first two intervals of four second each.

SECTION – B

- 12. (i) Arrange the following substances in increasing order of force of attraction between the particles. (a) water (b) hydrogen (c) sand
- (ii) Why does the temperature remain constant at the melting point?

- 13. (a) What can be depicted from the graph regarding the motion of the object?
- (b) Find the value of acceleration from the graph.



- 14. Given is the diagram showing longitudinal section of collenchyma tissue. Label the parts 'M', 'N', 'O' and 'P' in the given diagram.

