



# NPET'S ENGLISH MEDIUM SCHOOL BELGAUM

## SA-I RIVISION

### Class: IX

### **Subject: Science**

## **Chapter: Motion**

### **I. One mark questions:**

1. Define Motion.
2. Define Rest.
3. When do you say a body is in motion?
4. What is a scalar quantity? / Define scalars.
5. Define vectors.
6. Give one example for scalars and vectors.
7. Define distance.
8. Define displacement.
9. What is positive displacement?
10. What is negative displacement?
11. What is zero displacement?
12. What is the SI unit for distance and displacement?
13. Define uniform and non – uniform motion.
14. Define speed.
15. What is the SI Unit of speed?
16. Define average speed.
17. Define velocity.
18. What is the SI unit of speed and velocity?
19. Define acceleration.
20. Define uniform and non-uniform acceleration.
21. Define uniform circular motion.
22. What is the SI unit of acceleration?

### **II. Two mark questions:**

1. Differentiate between distance and displacement
2. State any two differences between speed and velocity
3. Give an example of a body which may appear to be moving for one person and stationary for the other.
4. What do you mean by average speed? What are its units?
5. What is the difference between uniform velocity and non-uniform velocity?
6. What is negative acceleration?
7. Define uniform circular motion. Give one example.

### **III. Three / four marks questions:**

1. Prove  $v=u+at$
2. Prove  $s=ut+\frac{1}{2}at^2$
3. Prove  $v^2-u^2=2as$
4. Numerical based on all equations of motion.



# NPET'S ENGLISH MEDIUM SCHOOL BELGAUM

## SA-I RIVISION

### Class: IX

### **Subject: Science**

## **Chapter: Force and laws of Motion**

### **I. One mark questions:**

1. Define fore.
2. What is balanced force?
3. What is inertia?
4. What do you understand by the term inertia of rest?
5. What do you understand by the term inertia of motion?
6. What do you understand by the term inertia of motion?
7. State the law of inertia.
8. Give one example of inertia of rest, motion and direction.
9. State the Newton's first law of motion.
10. Define momentum.
11. What is the SI unit of momentum?
12. State Newton's second law of motion.
13. What is the SI unit of force?
14. What do you understand by the term impulse of force?
15. State Newton's third law of motion.
16. State the law of conservation of momentum.
17. Give any on example from everyday life where the Newton's third law of motion comes into play.
18. What is the other name for Newton's first law of motion?
19. State the relation between the momentum of a body and the force acting on it.
20. Define one Newton of force.

### **II. Two / three / four mark questions:**

1. Name the various effects of force.
2. Why do passengers in a bus tend to fall backward when it starts suddenly?
3. Explain, how can we walk easily on a hard and rough surface than on a slippery surface?
4. Explain the law of inertia. Name the three types of inertia.
5. Define momentum of a body. State its SI unit.
6. From Newton's second law of motion, obtain a mathematical expression for force.
7. It is dangerous to jump out of a moving bus. why?
8. Explain why a cricket player moves his hands backwards while catching a fast cricket ball.
9. Numerical based on  $F=ma$ ,  $p=mv$
10. Give reasons:
  - a. Why does dust flies off when a carpet is hit with stick?
  - b. Why do fruits fall, when a branch laden with fruit is jerked?
  - c. Why does a rider fall forward, when a galloping horse stops suddenly?
  - d. Why does a long jump athlete run a long distance before taking jump?
  - e. Why do passengers tend to fall sideways, when speeding bus takes a sharp turn?
  - f. Why it is important to run in the direction of moving bus, while jumping out of it?



# NPET'S ENGLISH MEDIUM SCHOOL BELGAUM

## SA-I RIVISION

### Class: IX

### **Subject: Science**

---

#### **Chapter: Matter surrounding us**

##### **I. One mark Questions**

1. Define Matter.
2. Mention three states of matter.
3. Define kinetic energy?
4. What is Boiling Point?
5. What is Melting Point?
6. What is Freezing Point?
7. What is fusion?
8. What is Condensation?
9. What is Solidification?
10. What is Vaporisation?
11. What is Evaporation?
12. What is Sublimation?
13. What is deposition?
14. Define latent heat of vaporisation.
15. Define Latent heat of fusion.
16. Write the unit of  
(a) Temperature b) Length c) Mass d) Weight e) Volume e) density d) Pressure

##### **II. Two / three / four mark questions:**

1. Explain the characteristics of particles of matter
2. Explain Force of attraction of Particles in  
a) Solid b) Liquid c) Gas
2. Explain with a small activity to show how small the particles of matter are.
3. Mention and explain the factors affecting the inter-conversion of states of matter.
4. Convert the following temperatures to the Celsius scale.  
(a) 293K b) 470K
5. Convert the following temperatures to the Kelvin scale.  
(a) 25 degree Celsius b) 373 degree Celsius
6. Give reason for the following observations.  
a) Naphthalene balls disappear with time without leaving  
b) We can get the smell of perfume sitting several meter away.  
c) Water at room temperature is a liquid.  
d) An iron Almirah is a solid at room temperature.



# NPET'S ENGLISH MEDIUM SCHOOL BELGAUM

## SA-I RIVISION

### Class: IX

### **Subject: Science**

---

#### **Chapter: Is Matter around Us Pure?**

##### **I. One mark Questions**

1. What is a Mixture?
2. What is Homogenous Mixture?
3. What is Heterogeneous Mixture?
4. Give An Example of Homogenous Mixture and Heterogeneous Mixture?
5. What is solution?
6. What is concentrated Solution?
7. What is Dilute Solution?
8. Define Concentration of Solution.
9. What is Colloidal Solution?
10. What is Suspensions?
11. What is an Element?
12. What is Compound?

##### **II. Two / three / four mark questions:**

1. Explain Properties of Solution.
2. Explain Properties of Suspension
3. Explain Properties of Colloidal Solution.
4. Explain Saturated and Unsaturated Solution.
5. Write Properties of a) Metals b) Non Metals c) Metalloids.
6. Differentiate between Mixtures and Elements.

#### **Chapter: The Fundamental Unit of Life**

##### **I. One mark Questions**

1. Define cell.
2. What are Living organisms made up of?
3. What is Plasma Membrane?
4. What is Cytoplasm?
5. What are organelles?
5. Which Organelle is known as the powerhouse of cell?
6. Which Organelle is known as Suicide bags of a cell?
7. Define Cell division.

##### **II. Two / three / four mark questions:**

1. Differentiate between Prokaryotic cell and Eukaryotic cell.
2. Explain the terms a) hypotonic solution b) hypertonic solution c) Isotonic solution.
3. Write Note on Endoplasmic Reticulum
4. Mitochondria is known as the powerhouse of cell? Why?
5. Lysosomes is known as the suicide bags of cell? Why?
6. Write short notes on Plastids.
7. Differentiate Between Mitosis and Meiosis
8. Draw a neat labelled diagram of animal or plant cell.



# NPET'S ENGLISH MEDIUM SCHOOL BELGAUM

## SA-I RIVISION

### Class: IX

### **Subject: Science**

---

## **Chapter: Tissues**

### **I. One mark Questions**

1. What is tissue?
2. What is Meristestic Tissues?
3. What are Stomata?
4. What is Simple Permanent tissue?
5. What is Complex Permanent tissue?
6. What is Epithelial Tissue?
7. What are Muscular fibres?
8. What are a) Tendons b) Ligaments?

### **II. Two / three / four mark questions:**

1. Name types of Plant tissues
2. Name types of Simple Permanent tissue.
3. Name types of Complex Permanent tissue.
4. How simple tissues different from complex tissues in plants?
5. How many types of elements together make up xylem? Name them.
6. Difference between parenchyma, collenchyma and Sclerenchyma on bases of their cell wall.
7. Differentiate between Connective tissues and Muscular tissue.
8. Write a short note on epithelial Tissue.
8. Draw a neat labelled Diagram of neuron.
9. Diagrammatically show the difference between the three types of muscle fibres.