

Delhi Public School, Jammu

Assignment for Half-Yearly Exam (2018-19)

Subject: Science

Class: 9th

Physics:

Chapters covered:

1. Motion

2. Force and laws of motion.

3. Gravitation (including Floatation)

Q1: Name the device used in vehicles to measure speed and distance.

Q2: Define average velocity and uniform circular motion.

Q3: Derive equations of motion by graphical method.

Q4: Define Newton's second law of motion and find expression for it.

Q5: Define momentum and give its formula and SI unit.

Q6: An athlete complete one round of a circular track of diameter 49m in 20s. Calculate the distance and displacement at the end of 30s.

Q7: Define Archimede's Principle and give its applications.

Q8: State and prove law of conservation of linear momentum.

Q9: Define acceleration due to gravity and buoyant force. What are the factors affecting these two?

Q10: A body of mass 400g and volume 350cm^3 is immersed in water of density 1gcm^{-3} , and then find the
(a) Density of the body.

(b) Find the amount of water displaced by a body.

(c) Give reason whether the body sinks or floats?

Chemistry:

Chapters Covered:

1. Matter in our surroundings.

2. Is matter around us pure?

Q1: A driver is able to cut through water in a swimming pool. which property of matter does this observation shows?

Q2: What are the characteristics of particles of matter?

Q3: Why does a gas fill completely in the vessel in which it is kept?

Q4: A gas exerts pressure on walls of the container. Assign reason.

Q5: Convert the following temperature to Kelvin scale (a) 25°C and (b) 373°C .

Q6: List point of difference between homogeneous and heterogeneous mixtures.

Q7: To make a saturated solution 36g of sodium chloride is dissolved in 100g water at 293K. Find its concentration at this temperature.

Q8: Explain the following giving examples.

1. saturated solution

2. Pure substance.

3. Colloid

4. suspension.

Q9: How would you confirm that the colourless liquid given to you is pure water?

Q10: How would you separate a mixture of common salt, camphor and iron filings? Describe the process.

Biology:

Chapters covered:

1. Fundamental unit of life: cell

2. Tissues

3. Improvement in food resources

4. Why do we fall ill.

Q1: What is tissue? What are the different types of tissue?

Q2: Differentiate between prokaryotic and eukaryotic cells.

Q3: Differentiate between plant and animal cell.

Q4: Write short note on;

- (a) Tendon
- (b) Ligament
- (c) Bone
- (d) Cartilage

Q5: What are the advantages of composite fish culture?

Q6: What is Pasturage?

Q7: Explain cause, symptoms and preventive measures of polio.

Q8: Differentiate between acute and chronic diseases.

Q9: What are communicable and non-communicable diseases?

Q10: What is immunization?

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