Eur**e**ka

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Q.1 A i) Fill in the blanks :- 1

    (a) Deceleration is _____ acceleration.

ii) Statement True or False :- 1

    (a) The units odd work & energy are the same.

iii) Find the odd man out :- 1

    (a) Ammeters, Voltmeter, Galvanometer, Thermometer

iv) Define : 1

    (a) Valency

v) Complete the anology :- 1

    (a) Acids : Sour to tastes : Bases : _____

Q.1 B Rewrite the following statement by choosing the correct option:- :- 5

    1. Sodium bicarbonate is known as _____

    (a) washing soda   (b) baking Soda   (c) soda Ash   (d) rock salt

    2. Joule is the unit of _____

    (a) force   (b) work   (c) power   (d) displacement

    3. SI unit of speed is _____

    (a) m/s   (b) m   (c) cm   (d) cm/s

    4. 1 A = _____ m A

    (a) 10^{-3} (b) 10^{3} (c) 10^{6} (d) 10^{-6}

    5. The atomic mass of calcium is _____

    (a) 40   (b) 32   (c) 16   (d) 23

Q.2 Attempt any 5 out of 7 : 10

    1. Explain the chemical reaction with the help of balanced chemical equations :

    (a) Sodium bicarbonate reacts with dilute hydrochloric acid.

    2. Write the names of the following compounds & deduce their molecular mass :

    (a) $MgCl_2$ (b) NaOH

    3. **Difference between :** Resistance & Resistivity.

4. **Solve the following :-**

   (a) 500 Kg water is stored in the overhead tank of a 10 m high building. Calculate the amount of potential energy stored in a water.

5. **Give reason:** The velocity of an object at rest is considered to be uniform.

6. State Newton's second law of motion.

7. **Give two example of the following:-** Kinetic energy.

Q.3 Attempt any 5 out of 7 :   15

1. What will happen in the following cases?

   (a) If the mass of a moving body is doubted, how many times will the kinetic energy increases? [velocity is constant]

2. **Difference between :** Distance & Displacement [any 3 points]

3. Write the precautions to be taken while using Electricity.

4. Deduce the number of molecules of the following compound in the given quantities: 90 g of water.

5. Write a short note on indicator.

6. If an object has 0 momentum, does it have kinetic energy? Explain your answer

7. **Solve:** The resistance of a 1 m long nichrome wire is 6 Ω. If we reduce the length of the wire to 70 cm. What will be its resistance.

Q.5 Attempt any 1 out of 2 :   5

1. Take five example from year surrounding & give explanation based on Newton's law of motion.

2. Explain Domestic electric connection.

* BEST OF LUCK *